

INCOME IN ONTARIO

Growth, Distribution and Mobility

Winter 2019

About this document

Established by the *Financial Accountability Officer Act, 2013*, the Financial Accountability Office (FAO) provides independent analysis on the state of the province's finances, trends in the provincial economy and related matters important to the Legislative Assembly of Ontario.

The FAO produces independent analysis on the initiative of the Financial Accountability Officer. Upon request from a member or committee of the Assembly, the Officer may also direct the FAO to undertake research to estimate the financial costs or financial benefits to the province of any bill or proposal under the jurisdiction of the legislature.

This report was prepared on the initiative of the Financial Accountability Officer. In keeping with the FAO's mandate to provide the Legislative Assembly of Ontario with independent economic and financial analysis, this report makes no policy recommendations.

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Table of contents

i.	Purpose and scope	1
ii.	Summary	2
1.	Income growth	8
	Summary	8
	Family income in Ontario	8
	After-tax income gains have not been uniform across families	14
	Income growth underperforming the rest of Canada	16
2.	Income distribution	18
	Summary	18
	Income in Ontario is unevenly distributed	18
	After-tax income inequality plateaued after 2000	19
	Ontario's after-tax income distribution is similar to other jurisdictions	22
	Higher income inequality associated with slower income growth	24
3.	Income mobility	26
	Summary	26
	Relative income mobility	26
	Intergenerational income mobility	32
4.	Incomes and the changing economic environment	36
	Summary	36
	Ontario's economic growth not translating into higher median incomes	37
	Ontario's industrial composition has changed	39
	Structural changes in Ontario's labour market	40
	Wage growth uneven among Ontario's occupations	42
5.	Appendices	44
	Ontario's family income distribution	44
	Income by region	45
	Data tables	46
	Glossary	48

Table of abbreviations

Abbreviation	Long Form
EI	Employment Insurance
FAO	Financial Accountability Office
GDP	Gross Domestic Product
IMF	International Monetary Fund
OECD	Organisation for Economic Co-operation and Development
SPSDM	Social Policy Simulation Database and Model
UCCB	Universal Child Care Benefit
US	United States

i. Purpose and scope

This report provides a summary of recent trends in personal incomes in Ontario, consistent with the FAO's mandate to examine trends in the provincial economy for members of provincial parliament and the public.

Assessing shifts in income is an important element in understanding the extent to which the material standard of living of all Ontarians is improving. How have the benefits of Ontario's economic growth been shared across the population? Since incomes are determined by both market earnings and government taxes and transfers, assessing the role of the tax and transfer system is also important.

In addition to examining the existing data on income growth and distribution, this report presents new data on the evolution of income mobility in Ontario. To what extent do Ontarians switch places on the income ladder? Are inequalities in income becoming more permanent over time?

This report cannot explore every issue in detail; instead, it highlights some of the broader trends in personal incomes. In addition, there are a variety of factors that have influenced trends in personal incomes over time, and it is beyond the scope of this report to describe them all in detail. The FAO welcomes feedback on this report, as well as suggestions for related work in the future.

Note

This report draws on a variety of data sources that are available over different time periods. While the report focuses primarily on the post-2000 period, full datasets are displayed wherever possible.

All dollar figures presented in this report are in constant (inflation adjusted) 2016 dollars, unless otherwise noted.

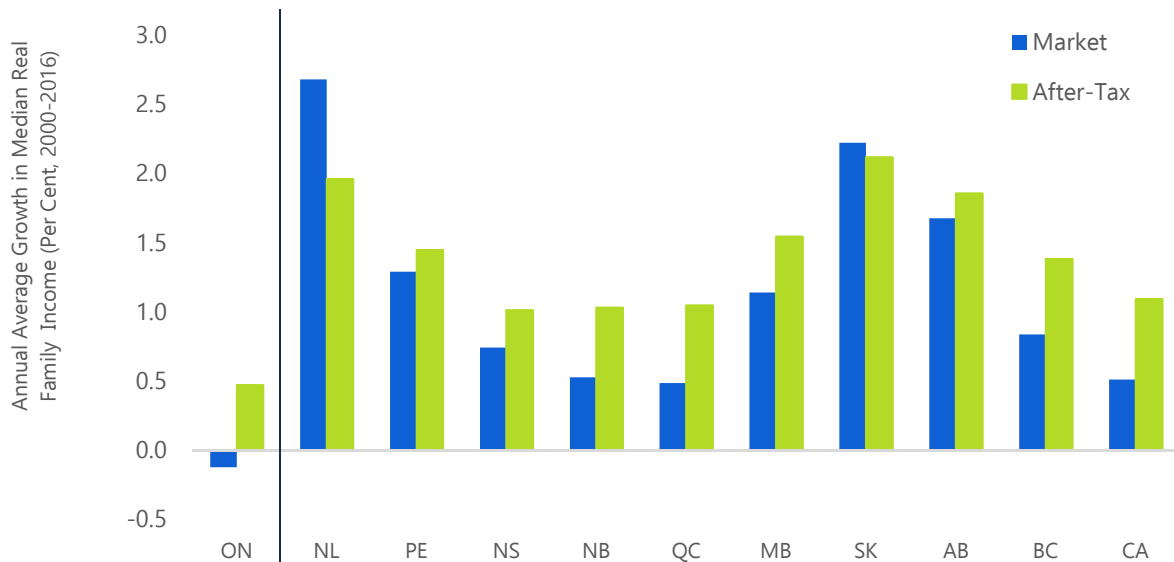
ii. Summary

This report assesses trends in the personal income of Ontarians across three broad areas: growth, distribution and mobility.

Chapter 1 examines the growth in incomes for Ontario families. It shows that between 2000 and 2016, the after-tax income of the median¹ Ontario family grew only modestly.²

Ontario's median income is still higher than the average for all other provinces.³ However, during this period, Ontario recorded the slowest growth in median family income among all provinces by a wide margin. This was the case for both market income (that is, income before taxes and transfers), as well as after-tax income.

Ontario's median income growth slowest among provinces between 2000 and 2016



Source: Statistics Canada Canadian Income Survey and FAO.

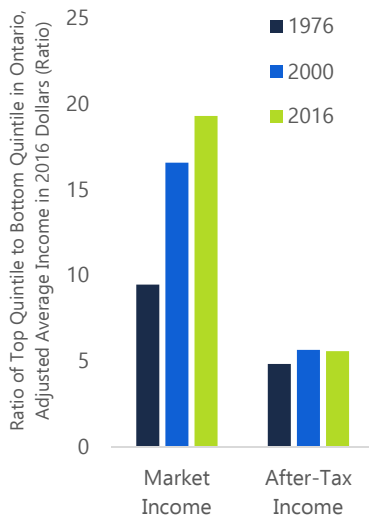
Notably, lower-income Ontario families experienced slower income growth than higher-income families. At the same time, certain family types experienced outright declines in their after-tax income since 2000, particularly working-age people living alone and single-parent families.

¹ The family at the mid-point of the income distribution.

² All dollar figures presented in this report are in constant (inflation adjusted) 2016 dollars, unless otherwise noted.

³ In 2016, Ontario's median market and after-tax incomes were third highest behind Alberta and Saskatchewan.

After 2000, market income inequality grew while after-tax inequality remained constant



Source: Statistics Canada Canadian Income Survey and FAO.

Chapter 2 provides a discussion of recent trends in the distribution of income in Ontario. Since 2000, the inequality of market income has increased modestly. In 2016, the average market income of the top quintile⁴ was roughly 19 times higher than that of the bottom quintile. This was up from 16 times higher in 2000.

However, the tax and transfer system⁵ has played an important role in reducing income inequality in Ontario. On an after-tax basis, the average income of the top quintile was roughly five times higher than that of the bottom quintile in 2016, unchanged since 2000.

In 2016, the tax and transfer system in Ontario reduced income inequality by almost 30 per cent.⁶ Ontario’s income taxes and social assistance programs contributed more than a third of this reduction in income inequality, while federal taxes and transfers accounted for the remaining two-thirds.

Ontario’s after-tax income inequality is similar to other provinces and in line with the average across Organisation for Economic Co-operation and Development (OECD) countries. However, the tax and transfer system in Ontario redistributes less income per capita compared to most other OECD countries.

Chapter 3 presents a discussion of trends in the income mobility of Ontarians and focuses on two measures: relative mobility and intergenerational mobility.

‘Relative income mobility’ measures the extent to which an individual’s position in the income distribution changes over time.⁷ New data from Statistics Canada show that relative income mobility has steadily declined in Ontario.

Significantly, the data suggest that it is becoming harder for lower-income Ontarians to move up the income distribution. For middle-income Ontarians, the risk of downward mobility has increased. At the same time, fewer higher-income Ontarians are falling out of high income.

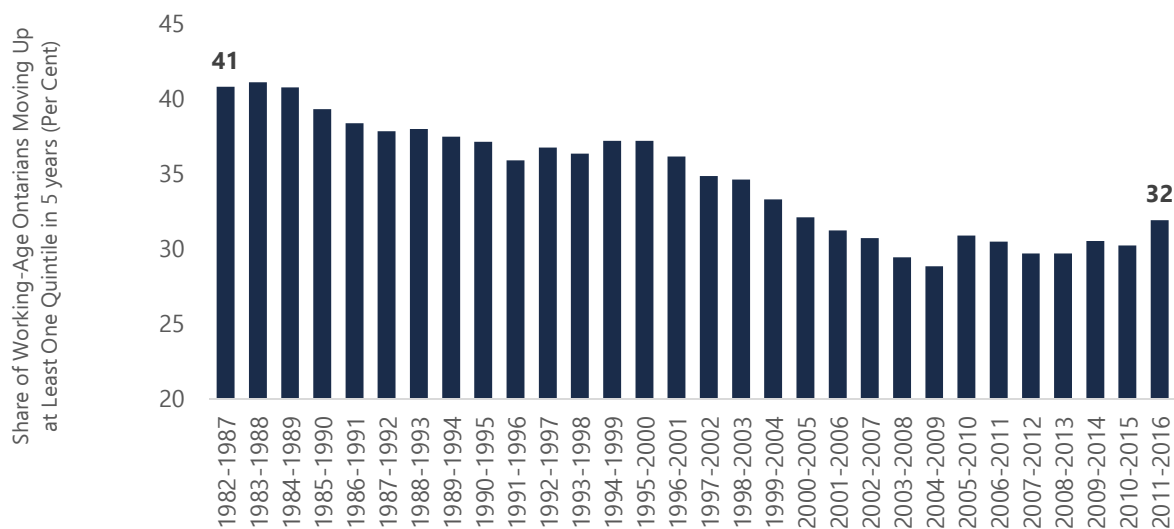
⁴ If all Ontarians were lined up according to their annual income from lowest to highest and divided into five equal groups, this would form five “income quintiles”. The top quintile refers to the richest 20 per cent of Ontarians. Similarly, the bottom quintile refers to the poorest 20 per cent.

⁵ The tax and transfer system in Ontario includes both federal and provincial income taxes, as well as social benefit programs administered by all levels of government. Important transfer programs include the Canada Pension Plan, Guaranteed Income Supplement, Employment Insurance, child benefits and social assistance programs.

⁶ As measured by the difference in the market income and after-tax income Gini coefficients. See Chapter 2 for details and definitions.

⁷ In this report, relative income mobility measures the proportion of taxpayers who have moved from one income quintile to another over a five-year period. Relative income mobility reflects both sustained changes in an individual’s economic circumstance (such as a promotion or career change), as well as temporary income shocks (such as job loss, a severe illness, divorce or child birth).

Achieving upward mobility has become more challenging in Ontario



Source: Statistics Canada Longitudinal Administrative Databank custom tabulation and FAO.

The decline in relative income mobility indicates that the income distribution in Ontario has become more entrenched over the last 35 years. As the share of Ontarians trading places on the income ladder has declined, the differences in income have become more permanent, reinforcing existing income inequalities.

Chapter 3 also explores 'intergenerational income mobility'; this measures the extent to which a family's economic position in one generation influences the economic position of their children in adulthood.

In Ontario, as in the rest of Canada, children of higher-income parents are more likely to become high-income earners themselves when they reach adulthood. Similarly, children raised in lower-income families are more likely to become lower-income earners.⁸

Ontarians continue to enjoy relatively high intergenerational income mobility compared to other advanced economies. OECD research indicates that key contributors to intergenerational income mobility include high quality and universally accessible education and health care, as is the case in Ontario, coupled with a strong tax and transfer system.

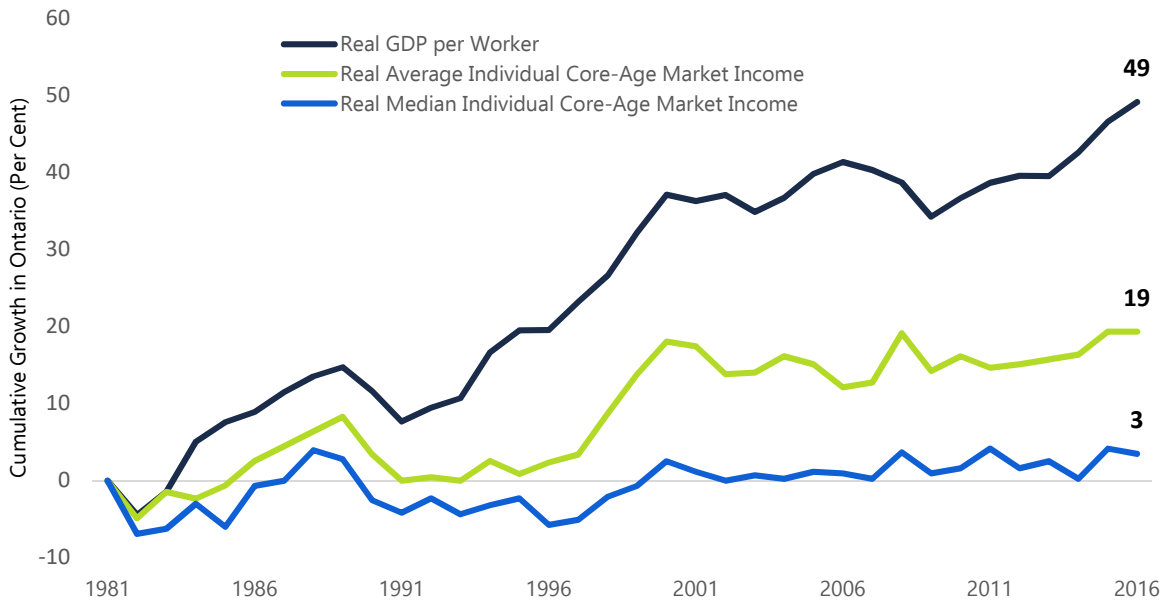
Chapter 4 examines the apparent break in the link between economic growth and gains in the median incomes of working-age Ontarians.

Between 1981 and 2016, output per worker in Ontario has grown by 49 per cent.⁹ Over this same period, the average market earnings of working-age Ontarians increased by 19 per cent. In sharp contrast, the market income of the median, working-age Ontarian increased by just 3 per cent.

⁸ The OECD uses the term "opportunity hoarding" to describe how those at the top of the income distribution can ensure that a variety of economic advantages are passed on to their children. These opportunities can include social connections that facilitate access to good schools and employment, as well as other activities that can enhance human and social capital. The highest-income families are also better able to finance investments in training and skills development, and may also have higher expectations of their children. Many of these advantages are unavailable to lower-income families.

⁹ Defined as real GDP divided by the number of individuals in the labour force.

Economic growth did not raise the median income of working-age Ontarians



Note: Real Gross Domestic Product (GDP) per worker is calculated as real GDP divided by the labour force.

Source: Statistics Canada Labor Force Survey, Income and Expenditure Accounts, Canadian Income Survey and FAO.

The stronger growth of average market income, compared with the median, implies that Ontarians in the upper half of the income distribution are benefiting from much stronger income growth than those in the lower half (as explored in Chapter 2). However, the even stronger gains in economy-wide income imply that the income being generated through economic growth is not being broadly shared with all Ontarians.

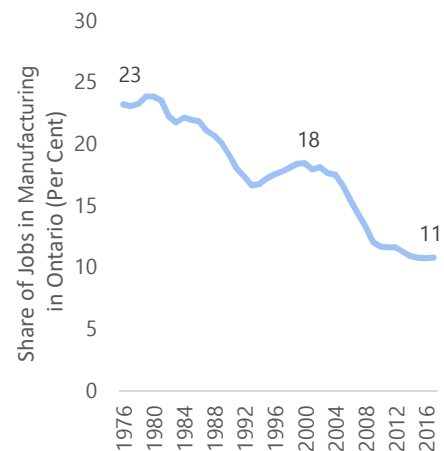
Chapter 4 goes on to examine two broad, inter-related areas of structural change that have contributed to these trends in Ontario incomes.

The first is a significant shift in Ontario's industrial composition. The experience of Ontario's manufacturing sector has been particularly dramatic, where employment has declined from a high of 1.1 million in 2004 to about 770,000 jobs in 2017. Manufacturing currently accounts for just over one in 10 Ontario jobs, down from almost one in four jobs in the late 1970s.

According to the OECD, the increased integration of the global economy has contributed to a similar shift in the industrial composition of many developed economies.

Export industries in high-wage, developed countries are increasingly competing with firms in developing, low-wage economies, leading to the "offshoring" of labour-intensive tasks, particularly in manufacturing. In addition, the sharp appreciation of the Canadian dollar during the 2000s presented additional competitiveness challenges for Ontario's exporting industries.

Dramatic decline in manufacturing jobs



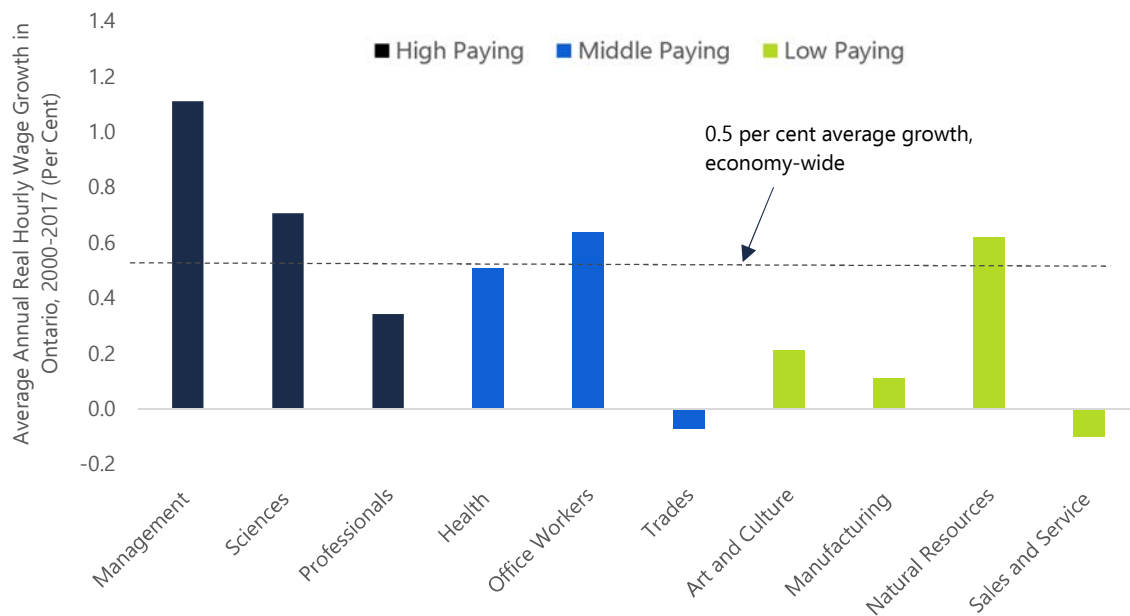
Source: Statistics Canada Labour Force Survey.

The second broad development in Ontario’s economy involves structural changes that have occurred in Ontario’s labour market. Non-standard work, including part-time and temporary jobs, has become increasingly common, while the share of unionized jobs has declined.

The OECD notes that these labour market changes have contributed to slower income growth, rising income inequality and declining income mobility in many developed economies. Importantly, the pay gap between standard employment and non-standard work is much wider in Canada than the average across OECD countries.

These two factors – Ontario’s shifting industrial composition, coupled with an evolving labour market – have resulted in significant changes to the nature of work in Ontario. In addition, dramatic scientific advances, particularly in information technologies, have contributed to increased automation in many industries and occupations. Taken together, these trends have led to uneven wage growth among occupations in Ontario.

Ontario’s growing wage premium in higher-skilled jobs (2000-2017)



Source: Statistics Canada Labour Force Survey and FAO.

Since 2000, average wages for the highest-paying occupations outpaced more modest wage gains in middle-paying jobs. In contrast, average wages for the lowest-paying occupations have stagnated, except for natural resource-based occupations.

Recent research by the International Monetary Fund (IMF) and the OECD¹⁰ has shown that slower income growth, higher income inequality and declining income mobility can be mutually reinforcing trends.

When children in lower-income families have fewer opportunities and face greater challenges in acquiring skills and education, their future potential may go unrealized. This can lower their potential productivity and reduce future economic growth, which in turn lowers income gains and ultimately reinforces income inequality.

OECD research has also shown that these trends can negatively impact overall well-being, and in particular the well-being of lower-income citizens. It can also negatively impact social cohesion and civic engagement. This, in turn, can undermine confidence in public institutions and discourage democratic participation.

In Ontario, slow income growth for lower-income families, an unequal distribution of market incomes and reduced income mobility raise important questions about the appropriate role of government in ensuring that all individuals have access to similar opportunities to improve their economic circumstances.

¹⁰ See the OECD's "[A Broken Social Elevator - How to Promote Social Mobility](#)".

1. Income growth

Summary

- Between 2000 and 2016, the market income (before taxes and government transfers) of the median¹¹ Ontario family declined after adjusting for inflation. When income taxes and government transfers are included, median family income in Ontario increased only modestly during the same period.
- During this period, the incomes of the poorest 40 per cent of Ontario families increased much more slowly than the incomes of the richest 40 per cent of Ontario families. Families with a higher incidence of low income, particularly working-age people living alone and single-parent families, experienced absolute declines in their real after-tax income.
- Median after-tax income in Ontario was higher than the average for all other provinces in 2016. However, Ontario recorded the slowest growth in median family income among all provinces between 2000 and 2016, for both market and after-tax incomes.

Family income in Ontario

In 2016, there were 13.8 million people living in 5.7 million families¹² in Ontario. In total, these families earned \$447 billion in market income, and received an additional \$63 billion in government transfers.

Definitions of income

In this report, **market income** refers to earnings from employment, investment returns, private pension income and other sources, but excludes taxes and government transfers. **After-tax income** is defined as market income plus government transfers less taxes paid.

All dollar figures presented in this report are in constant (inflation adjusted) 2016 dollars, unless otherwise noted.

Based on Statistics Canada's Canadian Income Survey¹³, the market income of the median¹⁴ Ontario family (the family at the mid-point of the income distribution) was \$55,600 in 2016, an increase of roughly \$2,000 (or almost 4 per cent) since 2011, as incomes continued to recover from the 2008-2009 recession.

¹¹ The family at the mid-point of the income distribution, including families with no market income.

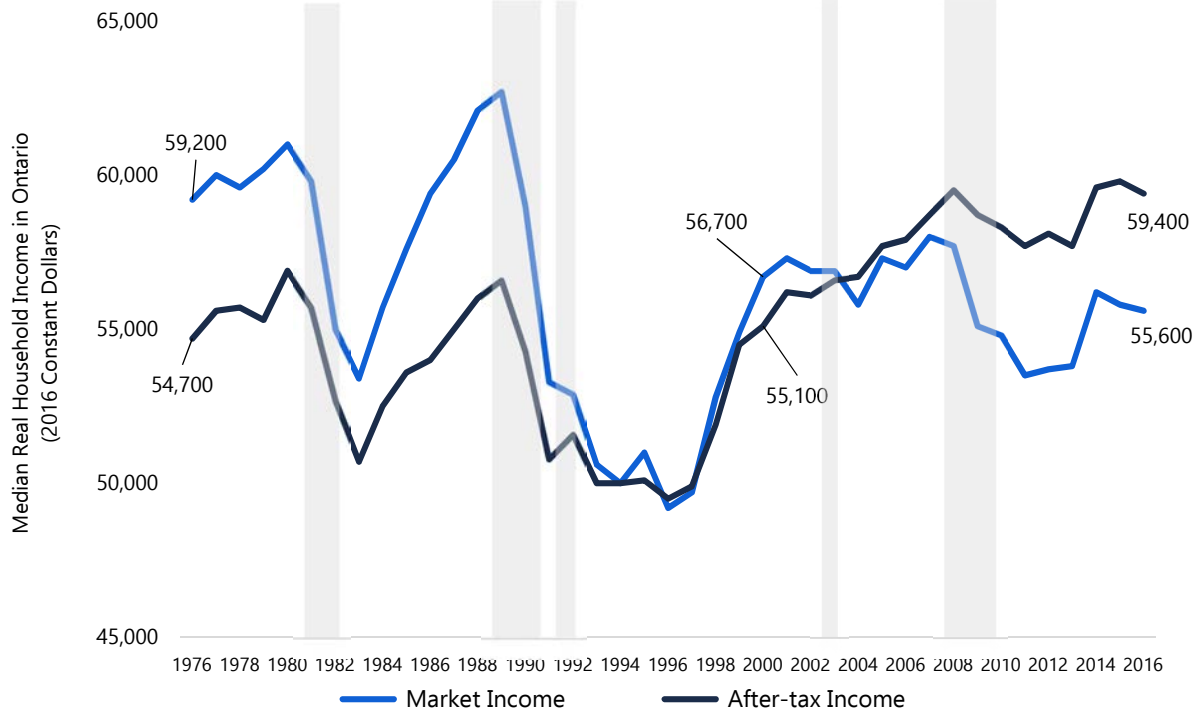
¹² The term "families" in this chapter refers to "Economic families and persons not in an economic family". Statistics Canada defines economic families as: "...a group of two or more persons who live in the same dwelling and are related to each other by blood, marriage, common-law, adoption or a foster relationship." See: [The Statistics Canada Dictionary](#).

¹³ [Canadian Income Survey](#), Statistics Canada. Prior to 2012, detailed income data were available from the Survey of Labour and Income Dynamics. Most persons responding to the Canadian Income Survey allow Statistics Canada to access their income tax data, so the quality and accuracy of the income statistics are high.

¹⁴ "Median income" refers to the income of the family in the middle of the income distribution (the 50th percentile). This chapter focuses on median income rather than mean or average income, as very high income families tend to bias (or skew upwards) the calculation of average income.

However, in 2016, median market income for Ontario families remained more than \$1,000 below its level in 2000 (Figure 1.1).

1.1 Family market income lower than in 2000



Note: Shaded areas indicate recession.

Source: Statistics Canada Canadian Income Survey and FAO.

In the 25 years before 2000, median family income in Ontario experienced dramatic swings. During the recessions of the early 1980s and 1990s, it declined significantly, then recovered partially during the boom of the late 1990s. Notably, the market income of the median Ontario family in 2016 remained below its level in 1976, after adjusting for inflation.

Including government transfers and taxes, median family income in 2016 was \$59,400, about \$3,800 higher than median market income. After-tax median family income declined during and following the 2009 recession, but has since recovered to reach new highs. Since 2000, the median after-tax income of Ontario families has increased at an average annual pace of 0.5 per cent.

Since 2000, changes in median income in Ontario have been influenced by many overlapping factors.

- Ontario's aging population is resulting in a shift in the composition of income; the importance of employment income is declining, while the importance of retirement and investment income is increasing.
- The average family size has gradually declined, and more individuals are living alone.
- Working-age Ontarians have experienced relatively slower growth in employment income.

- Governments have made a number of changes to the tax and transfer system, largely focused on supporting the incomes of Canadians and Ontarians in the middle of the income distribution.

These factors are explored in turn.

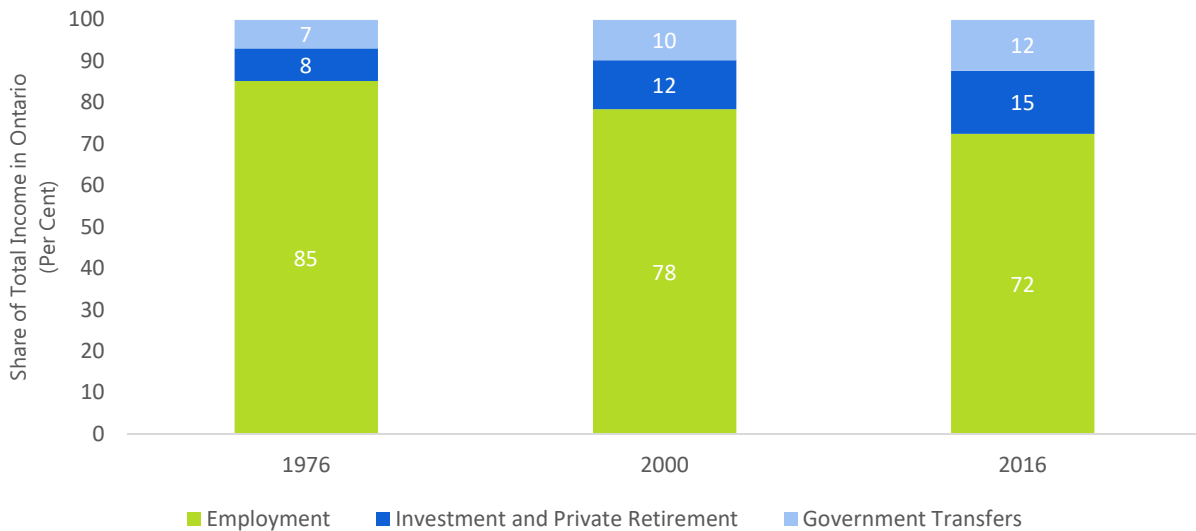
Ontario’s aging population is changing the composition of income

Ontarians receive income from a variety of sources, including employment, investments, private retirement savings and government transfers.

In 2016:

- Ontarians earned 72 per cent of their total income through employment or self-employment, largely in the form of wages and salaries;
- returns from private retirement savings, investments and other private income accounted for 15 per cent of total income; and
- transfers from the federal and provincial governments – including Old Age Security, Guaranteed Income Supplement, Canada Pension Plan, child benefits, Employment Insurance and social assistance – accounted for 12 per cent of total income.

1.2 Employment earnings comprise smaller share of income



Note: Numbers may not add up due to rounding.

Source: Statistics Canada Canadian Income Survey and FAO.

The composition of income has evolved over the past four decades. The rising proportion of Ontario seniors has increased the share of income earned from investments, retirement income and government transfers. At the same time, the share of employment income has decreased from 85 per cent of total income in 1976 to 72 per cent in 2016 (Figure 1.2).

The average family size has declined

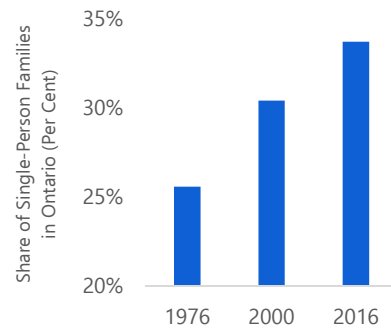
Trends in family incomes over the past four decades reflect not only an aging population and significant changes in the labour market, but also ongoing shifts in the structure and make-up of Ontario families.

Since 1976, Ontario experienced a gradual decline in the average family size, while more individuals are living alone. The share of single-person families increased from 26 per cent in 1976 to 30 per cent in 2000, and continued increasing to 34 per cent in 2016.

The evolving make-up of Ontario families has also included:

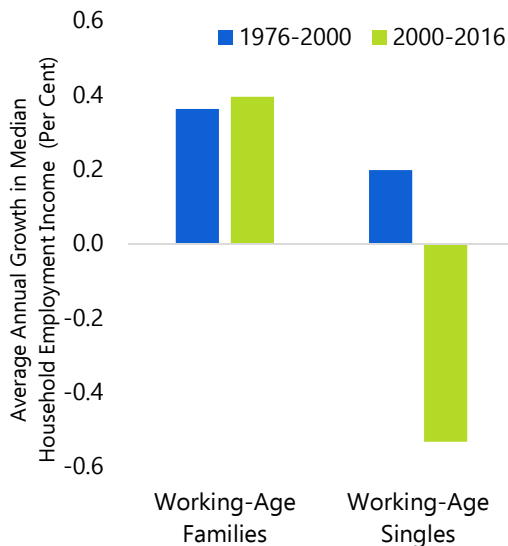
- an increase in dual-income families, as women have entered the workforce in increasing numbers, a trend that has also coincided with a narrowing in the gender pay gap¹⁵;
- an increase in the number of multi-generational and non-traditional families¹⁶; and
- a trend towards adolescents and adult children living with parents for longer periods of time.

1.3 Rising Share of Single-Person Families



Source: Statistics Canada Canadian Income Survey and FAO.

1.4 Growth in employment income of working-age Ontarians



Source: Statistics Canada Canadian Income Survey and FAO.

These demographic shifts have contributed to changes in family incomes over the past several decades. As a result, caution should be used when comparing historical family incomes with more recent values.

Growth in employment income has slowed for working-age Ontario families

Ontario families (both multi-person families and individuals) can be divided into those headed by a senior aged 65 and older and working-age families in which the family head is aged 64 or younger. Focusing on working-age families can largely control for the effect of Ontario's aging population and better isolate the impact of changes in the labour market on overall income growth.

The median employment income of working-age families has grown slowly since 2000. Specifically,

¹⁵ See the FAO's [2017 Labour Market Commentary](#).

¹⁶ See Statistics Canada's "[Families, households and marital status: Key results from the 2016 Census](#)".

employment income of working-age families increased at an annual average rate of 0.4 per cent before and after 2000.

However, for working-age singles living alone, modest employment income gains in the period prior to 2000 have reversed, with median employment income declining by 0.5 per cent since 2000 (Figure 1.4).

The slowdown in employment income growth in the post-2000 period reflects three factors: the significant restructuring of Ontario's economy; associated changes in the labour market; and a generally slower pace of economic growth that occurred during this period. The underlying economic factors that contributed to this weak growth since 2000 are analyzed further in Chapter 4.

Changes to the tax and transfer system have supported median after-tax incomes

As noted at the outset of this chapter, the median market income of Ontario families declined between 2000 and 2016, while median after-tax income increased modestly. The modest growth in after-tax incomes partly reflects changes to the tax and transfer system that benefited middle-income Ontarians.

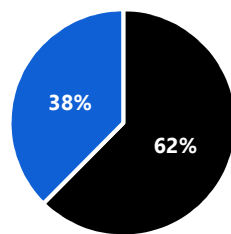
The tax and transfer system includes both federal and provincial income taxes as well as social benefit programs administered by all levels of government. The Ontario government collects about 40 per cent of personal income taxes paid by Ontario residents.

However, most major transfers are administered by the federal government. They include the Canada Pension Plan, Old Age Security, Guaranteed Income Supplement, Employment Insurance and child benefits.

The Ontario government administers two primary social assistance programs: the Ontario Disability Support Program and the Ontario Works Program, as well as other smaller transfers. Combined, Ontario's social assistance payments accounted for 17 per cent of total government transfers to Ontario families in 2016.

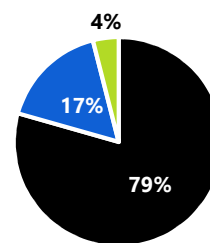
1.5 Ontario Government plays a smaller, but key role in the tax and transfer system

Share of Personal Income Tax Collected in Ontario (2016)



■ Federal Government
■ Ontario Government

Share of Transfers Paid to Households in Ontario (2016)



■ Federal Government
■ Ontario Government
■ Local Government

Source: Statistics Canada and FAO.

The increasing role of government programs in supporting median family income is partly a reflection of Ontario's aging population (and rising CPP payments in particular). However, it also reflects

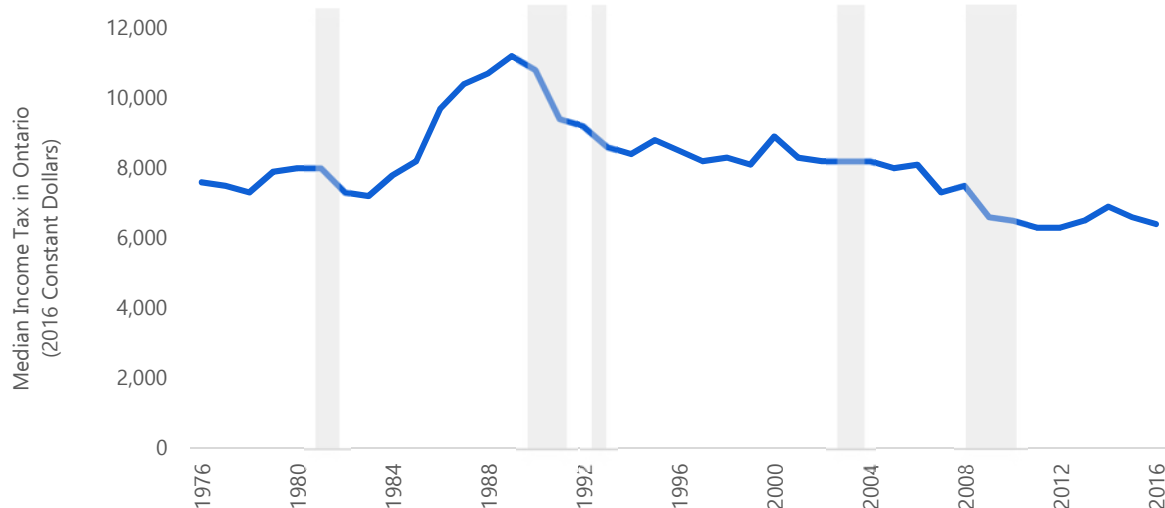
enhancements to government income support programs, as well as a number of tax changes that benefited middle-income Ontarians.

These tax changes have included:

- a number of reductions to Ontario personal income taxes, particularly in the late 1990s,¹⁷ and more recently in 2010,¹⁸ as well as
- reductions to federal personal income taxes, particularly in the early 2000s and again in the early 2010s.¹⁹

The combined effect of these and other tax changes has lowered the median tax burden for middle-income Ontario families.

1.6 Median income tax has declined



Note: This represents the 50th percentile amount of income tax paid by Ontario families. Shaded areas indicate recession.
Source: Statistics Canada Canadian Income Survey and FAO.

In addition, both the provincial and federal governments have made changes to social transfer programs. These include:

- The federal government's introduction of the Universal Child Care Benefit (UCCB) in 2006, which provided all families with a monthly payment for each child under the age of six.²⁰ In 2016, the federal government replaced the UCCB with the Canada Child Benefit, which provides monthly, tax-free payments to families with children under 18, targeted to low- and middle-income families.²¹
- The federal government's extension of Employment Insurance benefits in 2010.²²

¹⁷ See the [1998 Ontario Budget](#), page 67 and the [1999 Ontario Budget](#), page 69.

¹⁸ See [Ontario's 2010 Tax Plan for Jobs and Growth](#).

¹⁹ See the [2000 Federal Budget](#), page 12, the [2009 Federal Budget](#), page 109, and the [2010 Federal Budget](#), page 47.

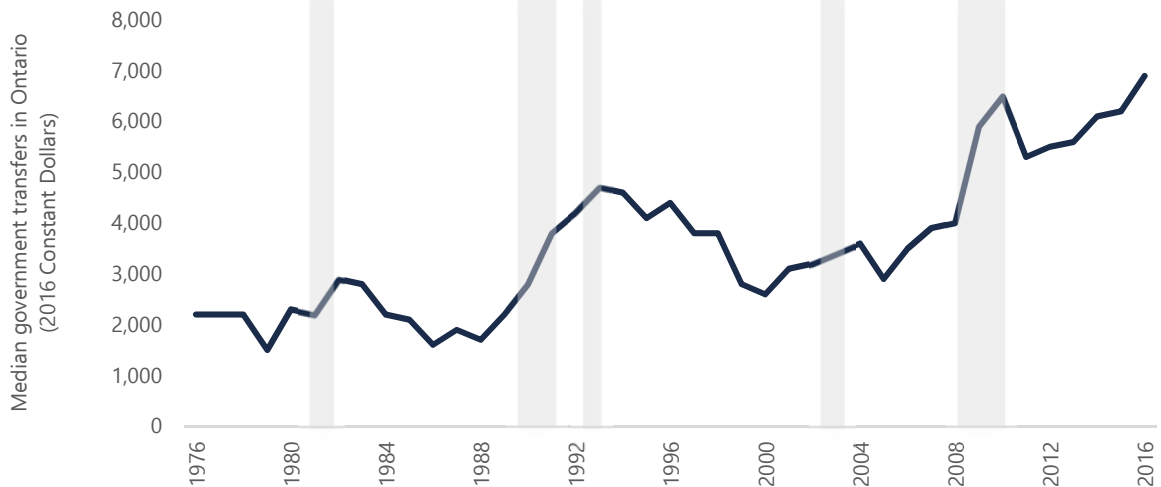
²⁰ See the [2006 Federal Budget](#), page 15.

²¹ See the [2016 Federal Budget](#), page 57.

²² See the [2009 Federal Budget](#), page 94.

Taken together, changes to government transfers have raised the amount of government-funded income support for middle-income Ontario families.

1.7 Median government transfers have increased



Note: This represents the 50th percentile amount of government transfers received by Ontario families. Shaded areas indicate recession.

Source: Statistics Canada's Canadian Income Survey and FAO.

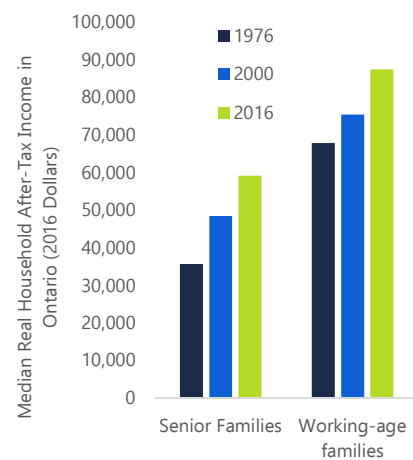
After-tax income gains have not been uniform across families

Between 2000 and 2016, the median after-tax incomes of Ontario families (both senior and working-age) recorded reasonably strong growth. For senior families, median after-tax income increased by a robust 1.3 per cent a year on average, reaching \$59,100 by 2016.

Similarly, for working-age families, growth has also been relatively solid; median after-tax income increased at an annual average rate of 0.9 per cent, reaching \$87,400 by 2016.

However, gains in after-tax income have not been uniform across all Ontario families.

1.8 Solid growth in after-tax income for families



Source: Statistics Canada Canadian Income Survey and FAO.

For single-parent families, median after-tax income increased strongly from 1976 to 2000. But in the post-2000 period, the median income of single-parent families declined by over \$1,000, falling to \$39,300 in 2016.

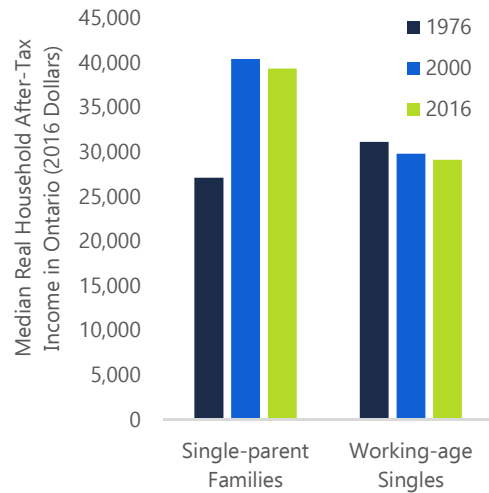
Working-age Ontarians living alone also experienced declines in after-tax incomes. In 2016, the median after-tax income for this group was \$29,100, about \$700 lower than in 2000 and about \$2,000 lower than in 1976.

In 2016, single-parent families and working-age singles combined represented about 2.1 million Ontarians, or about 15 per cent of the population.²³

Not only did these two groups experience outright declines in after-tax median incomes since 2000, they were also much more likely to be living in low income than other Ontario families.

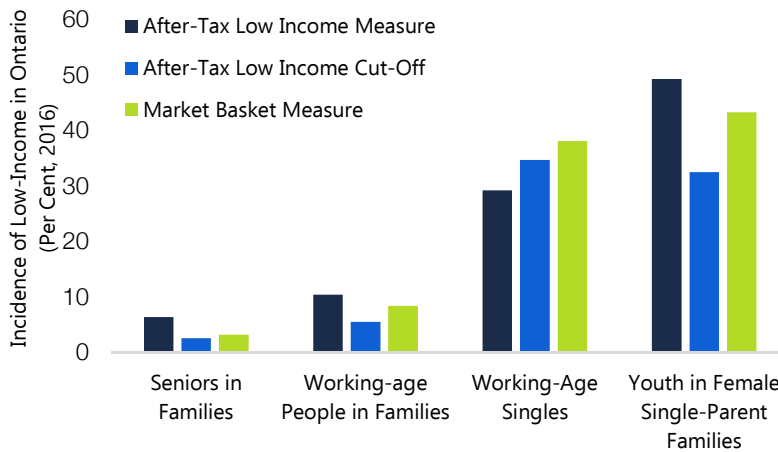
In 2016, fewer than 10 per cent of Ontario families on average (both senior families and working-age families) were considered living in low income, regardless of the low-income measure used.²⁴ However, more than 30 per cent of working-age singles were considered living in low income (Figure 1.10).

1.9 Working-age singles and single-parent families saw declines in after-tax income post-2000



Source: Statistics Canada Canadian Income Survey and FAO.

1.10 Working-age singles and youth in single-parent families are more likely to be poor



Source: Statistics Canada Canadian Income Survey and FAO.

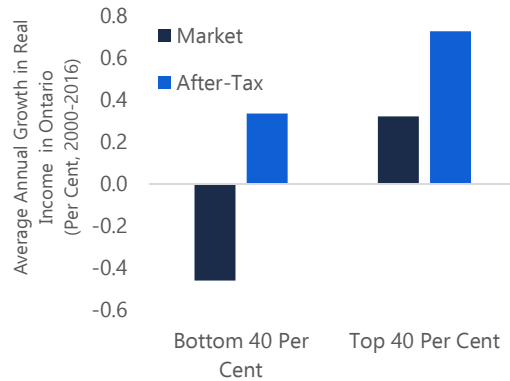
²³ In 2000, there were 1.7 million people in lone-parent families and working-age single people, comprising 15 per cent of the population. In 1976, there were 0.9 million, comprising 11 per cent.

²⁴ Statistics Canada uses three complementary low-income measures. The low-income cut-off measures the income level at which a family may be in straitened circumstances because it has to spend a greater proportion of its income on necessities than the average family of similar size. The low-income measure calculates the incidence of families whose income is below 50 per cent of the adjusted after-tax median income of private households. The market basket measure costs out a basket of necessary goods and services, and defines thresholds that represent levels of income needed to cover the cost of the basket. See Statistics Canada's "[low income definitions](#)" for more information.

In general, incomes of the poorest Ontario families have recorded relatively weak growth since 2000. Between 2000 and 2016, the average after-tax income of the poorest 40 per cent of Ontario families increased at an annual average rate of 0.3 per cent, much slower than the 0.7 per cent average annual increase for the top 40 per cent of Ontario families.²⁵

Notably, during the same time frame, the average market income of the poorest 40 per cent of Ontario families declined by an average of 0.5 per cent a year. This underlines the important role of government programs in supporting the incomes of Ontario’s most vulnerable families.

1.11 Income growth has been much slower for lower-income Ontario families



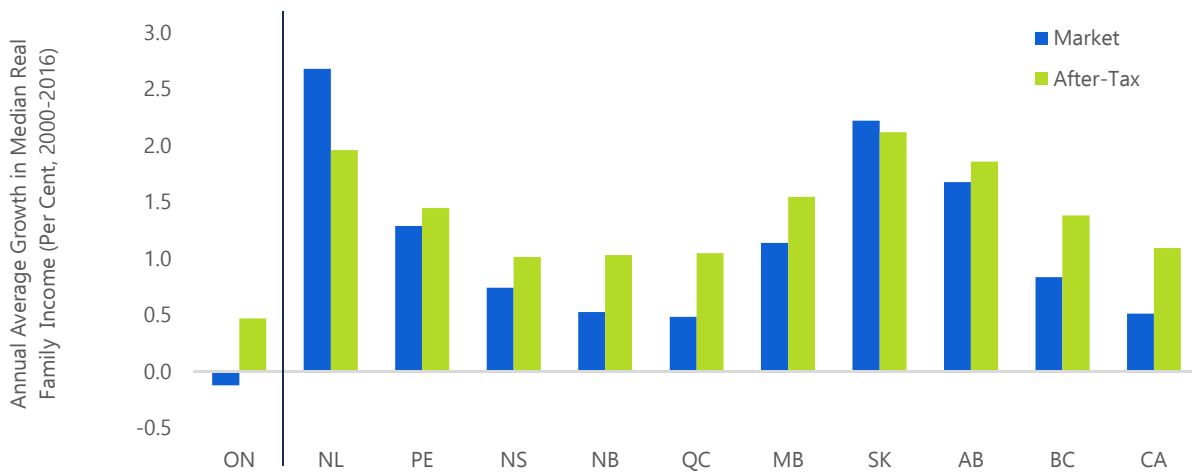
Source: Statistics Canada Canadian Income Survey and FAO.

Income growth underperforming the rest of Canada

Between 2000 and 2016, Ontario’s median after-tax family income increased at an annual average rate of 0.5 per cent. Significantly, this was the slowest pace of growth among all provinces (Figure 1.12).

This relatively weak performance can largely be attributed to the outright decline in median market incomes in Ontario, compared to relatively solid gains in median market incomes in all other provinces. On average, median market earnings in the rest of Canada grew by a relatively robust 1.5 per cent a year between 2000 and 2016.²⁶

1.12 Ontario’s median income growth slowest among provinces between 2000 and 2016



Source: Statistics Canada Canadian Income Survey and FAO.

²⁵ Data in Figure 1.11 do not control for family size. See Chapter 2 for a discussion of data on income and its distribution that are adjusted for family size.

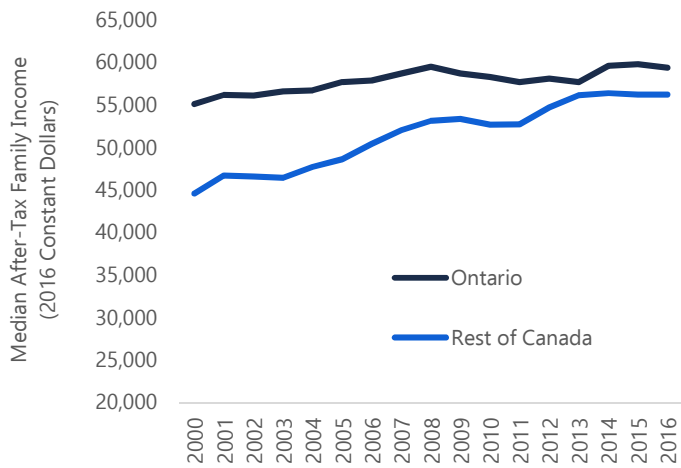
²⁶ Data on average income growth for the rest of Canada are weighted by provincial population.

In 2000, Ontario's median family after-tax income was more than \$10,000 (almost 20 per cent) higher than the average median after-tax income in other provinces.

However, the commodity price boom of the early 2000s led to strong income gains in the resource rich provinces of Newfoundland and Labrador, Alberta, Saskatchewan and British Columbia.

By 2016, the gap between Ontario and the rest of Canada had narrowed. The average median after-tax income in other provinces reached \$56,200, just \$3,000 below that of Ontario.

1.13 Median after-tax incomes in rest of Canada approaching Ontario's



Note: Income data for the rest of Canada are weighted by population.
Source: Statistics Canada Canadian Income Survey and FAO.

2. Income distribution

Summary

- Between 2000 and 2016, the inequality of market income increased in Ontario. In 2000, average market earnings of the richest 20 per cent of Ontarians (the top quintile) were 16 times larger than the average earnings of the bottom quintile. By 2016, they were 19 times larger. However, on an after-tax basis, income inequality has not increased since 2000 in Ontario.
- Ontarians with higher incomes continued to capture the majority of the growth in total after-tax income. Those in the lowest income quintile received, on average, \$2,300 more in after-tax income in 2016 than they did in 2000, while those in the highest quintile received \$11,300 more, on average, in after-tax income.
- Ontario's inequality in after-tax income is similar to other provinces and to the OECD average, but lower than in the United States.
- In 2016, taxes and transfers reduced income inequality by almost 30 per cent; Ontario's income taxes and social assistance programs contributed more than one-third of this reduction. However, the tax and transfer system in Ontario redistributed less income per capita relative to most other OECD countries.
- Research by the OECD and IMF has concluded that higher income inequality inhibits a jurisdiction's economic growth. It does so by lowering human capital investment, discouraging initiative and innovation, and lowering potential productivity.

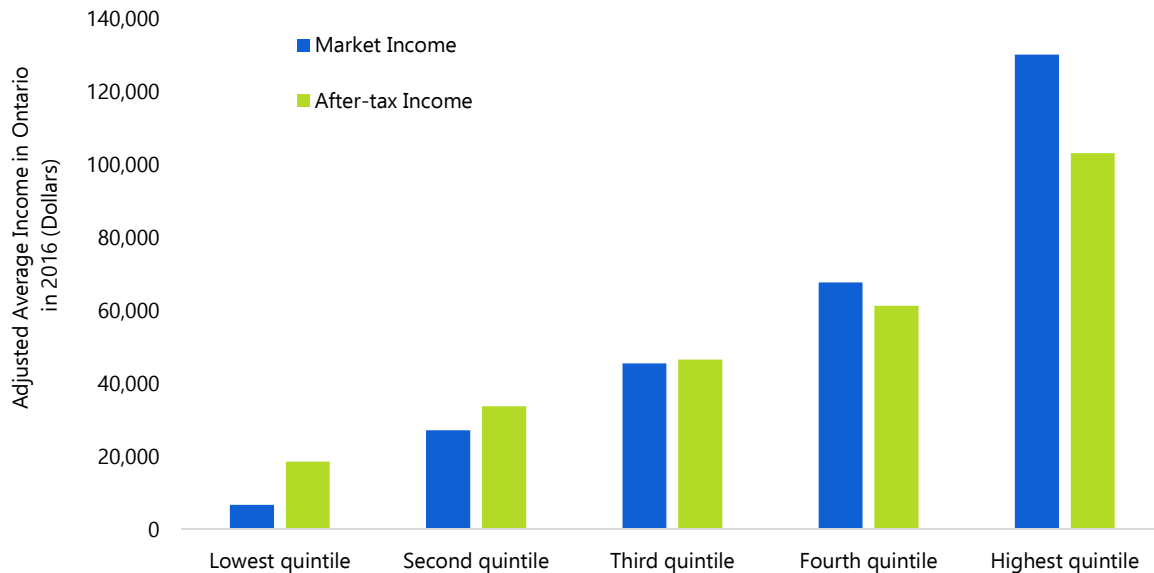
Income in Ontario is unevenly distributed

If all Ontarians were lined up according to their annual income from lowest to highest and divided into five equal groups, this would form five "income quintiles", each representing 20 per cent or one-fifth of the population.

In 2016, the average market income for Ontarians in the lowest income quintile (the poorest 20 per cent) was \$6,750.²⁷ In contrast, the average market income of the highest quintile (the richest 20 per cent) was \$130,250, roughly 19 times the level of the lowest quintile.

²⁷ In this chapter, income data are adjusted to control for household size, since household members tend to share their income, and larger households benefit from economies of scale. In this way, a household with many earners is not necessarily ranked higher than a single-person household simply because there are more income earners. Income is adjusted by taking the total income of the household and dividing it by the square root of the household size. Each household member (including children) is then allocated this "adjusted income amount" prior to ranking individuals into quintiles. This allows income to be expressed on a per-person basis, while reflecting a household's total resources.

2.1 Income is unevenly distributed in Ontario (2016)



Source: Statistics Canada Canadian Income Survey and FAO.

Ontario's income distribution is less uneven on an after-tax basis, since the tax and transfer system redistributes income from higher-income to lower-income Ontarians. In 2016, on an after-tax basis, Ontarians in the lowest income quintile reported an average income of \$18,600, while those in the top quintile reported average incomes of \$103,200, roughly five times higher (Figure 2.1).

In 2016, Ontarians in the highest quintile (the 20 per cent of Ontarians with the highest incomes) received 47 per cent of total market income, compared to 39 per cent of income on an after-tax basis. At the same time, the 20 per cent of Ontarians in the lowest income quintile received just 2.4 per cent of total market income; government taxes and transfers increased that share to 7 per cent on an after-tax basis.

After-tax income inequality plateaued after 2000

A common way of assessing income inequality is to calculate the ratio of incomes accruing to the top quintile with the incomes of those in the bottom quintile.

In 2000, the average market earnings of the top quintile were 16 times higher than those of the bottom quintile. By 2016, earnings in the top quintile were more than 19 times higher.²⁸

²⁸ This does not imply that the same people are in high and low income in each year. Income mobility is discussed in Chapter 3.

However, on an after-tax basis, the top quintile’s average income was 5.5 times higher than that of the bottom quintile in 2000. This ratio has remained relatively constant from 2000 to 2016.

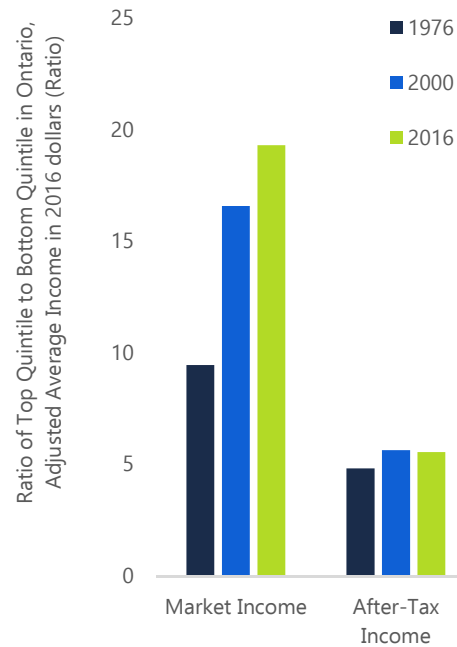
The relatively stable ratio for after-tax incomes reflects the fact that the tax and transfer system (comprising both federal and provincial components) has played an important role in reducing income inequality by transferring income from higher- to lower-income Ontarians.

Another common measure of aggregate income inequality is the ‘Gini coefficient’, a measure which summarizes the degree of inequality across the entire income distribution in a single number that ranges from zero to one. The higher the value of the Gini coefficient, the more unequal is the distribution of incomes.²⁹

From 1976 to the mid-1990s, market income inequality increased in Ontario, reflected in an upward trend in the Gini coefficient. This rising income inequality was in part a result of the recessions of the early 1980s and 1990s, which affected lower-income Ontarians more severely than richer Ontarians.

Importantly, the Gini coefficient based on after-tax incomes was largely unchanged over the 1976 to 1995 period, as the tax and transfer system effectively offset much of the rising inequality of market incomes (Figure 2.3).

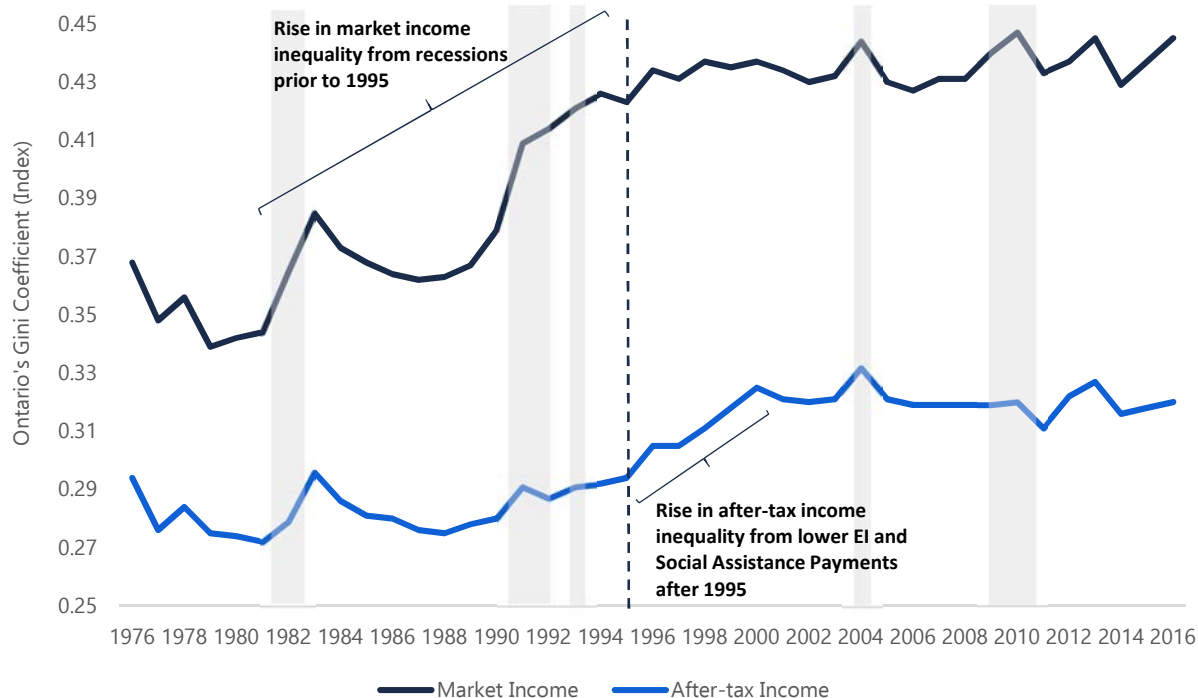
2.2 After 2000, market income inequality grew while after-tax inequality remained constant



Source: Statistics Canada Canadian Income Survey and FAO.

²⁹ The Gini coefficient is an index between one and zero that measures aggregate income inequality within a jurisdiction. A value of zero indicates that each individual or household within the jurisdiction earned the same income. Conversely, a value of one indicates that the entire aggregate income of the jurisdiction accrued to a single person. The closer the Gini coefficient is to one, the more unequal is the income distribution. While the absolute value of the Gini coefficient can be difficult to interpret, trends in the Gini coefficient over time are a useful indicator of the direction of income inequality. See the World Bank’s [“Handbook on Poverty and Inequality”](#) for more information on the methodology behind the calculation of Gini coefficients.

2.3 Lower transfers in the 1990s raised after-tax income inequality



Note: Shaded areas indicate recessions.

Source: Statistics Canada Canadian Income Survey and FAO.

Changes in the tax and transfer system can have significant impacts on the distribution of income. During the 1990s, the federal government reduced the generosity of Employment Insurance, while the Ontario government lowered social assistance payments. These policy changes contributed to a steady rise in after-tax income inequality in the 1990s, even as market income inequality was stabilizing.

Since 2000, after-tax income inequality – as measured by the Gini coefficient – has largely plateaued close to its current level.³⁰

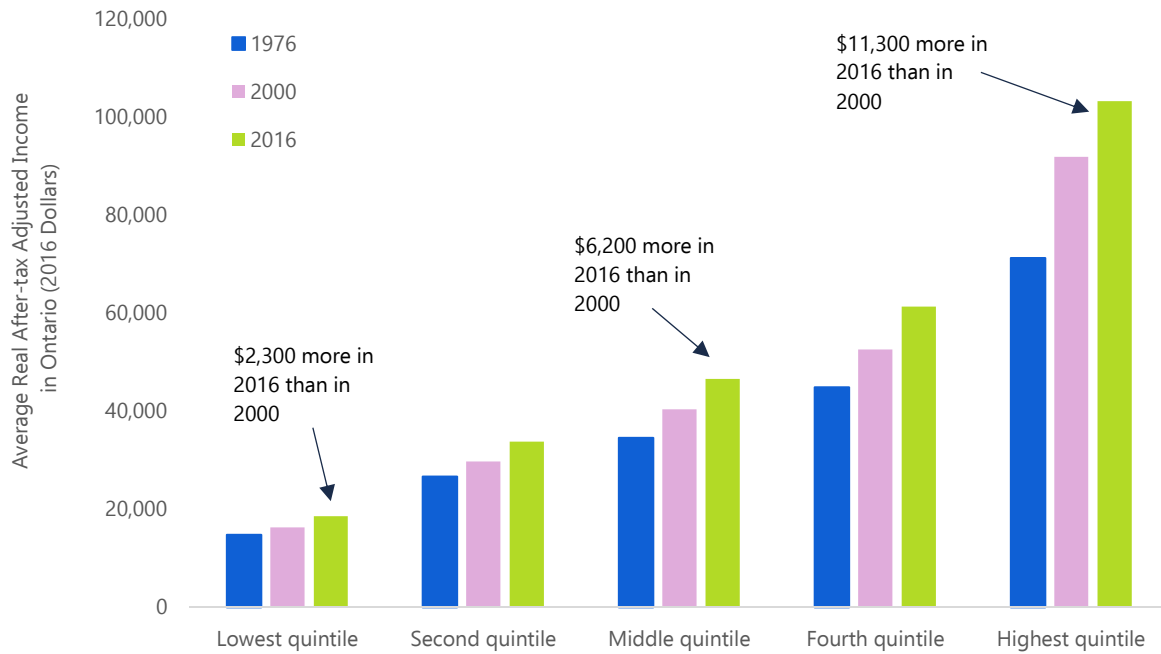
Higher-Income Ontarians Continue to Capture Most of the After-Tax Income Gains

Despite a fairly constant level of after-tax income inequality in Ontario since 2000, the incomes of higher-earning Ontarians increased much more substantially than for lower-income Ontarians, on an after-tax basis.

Those in the lowest quintile received, on average, \$2,300 more in after-tax income in 2016 than in 2000, while Ontarians in the highest income quintile received \$11,300 more in after-tax income (Figure 2.4).

³⁰ The FAO also examined trends in the Gini coefficient of working-age Ontarians (those aged 25 to 54) to control for the impact of Ontario's aging population. The trends in working-age Gini coefficients were not materially different from those displayed above.

2.4 Income gains have been strongest for higher-income Ontarians

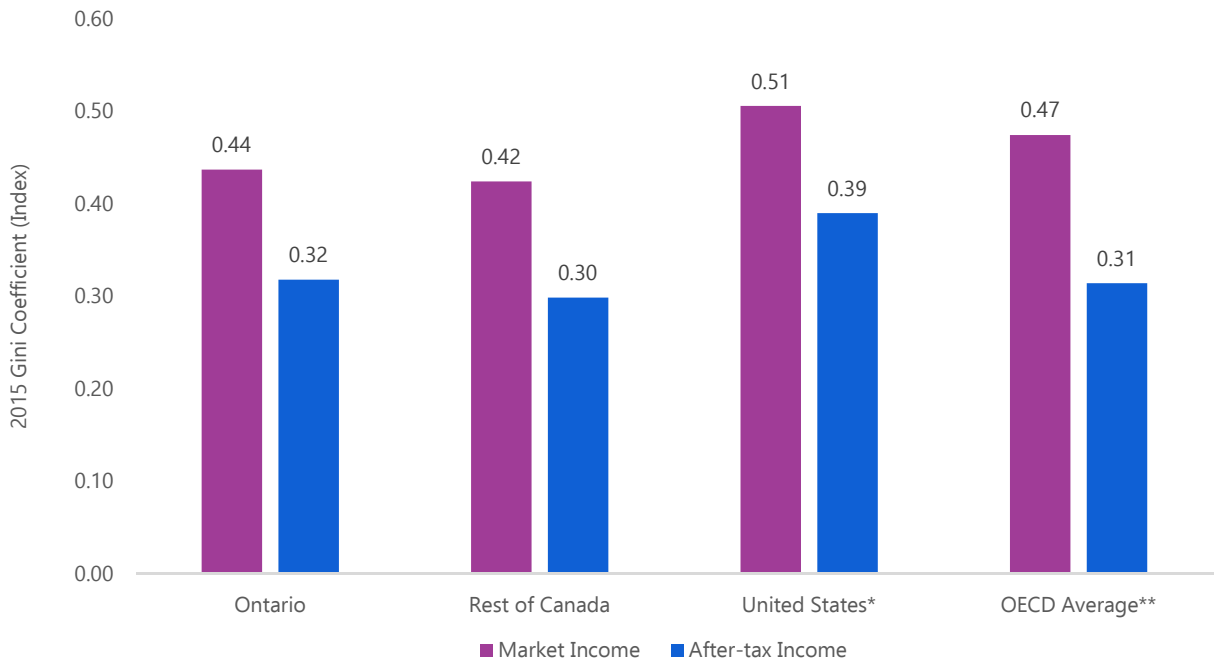


Source: Statistics Canada Canadian Income Survey and FAO.

Ontario's after-tax income distribution is similar to other jurisdictions

Ontario's market income inequality is modestly higher than the average in the rest of Canada. Since the tax and transfer system reduces inequality by similar degrees in all provinces, Ontario's after-tax income inequality is also marginally higher than in other provinces. However Ontario's market income inequality is lower than both the US and OECD average (Figure 2.5).

2.5 Ontario's after-tax income distribution similar to other jurisdictions



* US and OECD average after-tax income Gini Coefficients are based on disposable income as defined by the OECD.

** OECD average includes all OECD members besides Australia, Hungary, Iceland, Japan, Mexico and New Zealand.

Note: Averages for the rest of Canada and OECD are calculated as simple averages.

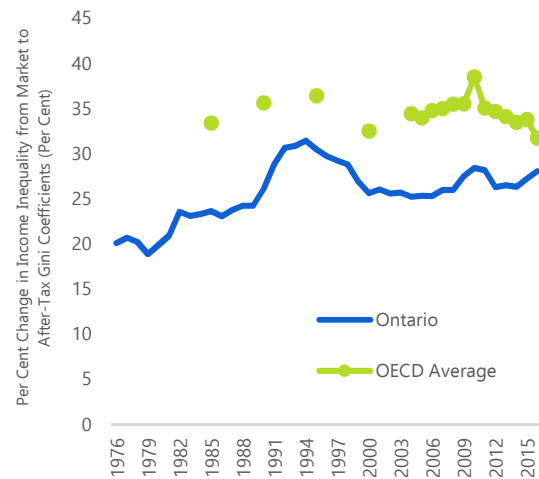
Source: Statistics Canada Canadian Income Survey, OECD and FAO.

Overall, the tax and transfer system in Ontario contributes to a roughly 30 per cent reduction in income inequality (as measured by the Gini coefficient). By comparison, the tax and transfer systems of OECD countries reduce income inequality by roughly 35 per cent on average (Figure 2.6).³¹

According to OECD estimates, Canada's tax and transfer system ranks 25th out of 31 countries in terms of its effectiveness at reducing income inequality.

The tax and transfer system in Ontario includes both federal and provincial income taxes, as well as social benefit programs administered by all levels of government. These include: the Canada Pension Plan, Guaranteed Income Supplement, Employment Insurance, child benefits and social assistance programs.

2.6 Tax and transfer system in Ontario redistributes less income per capita than the OECD average

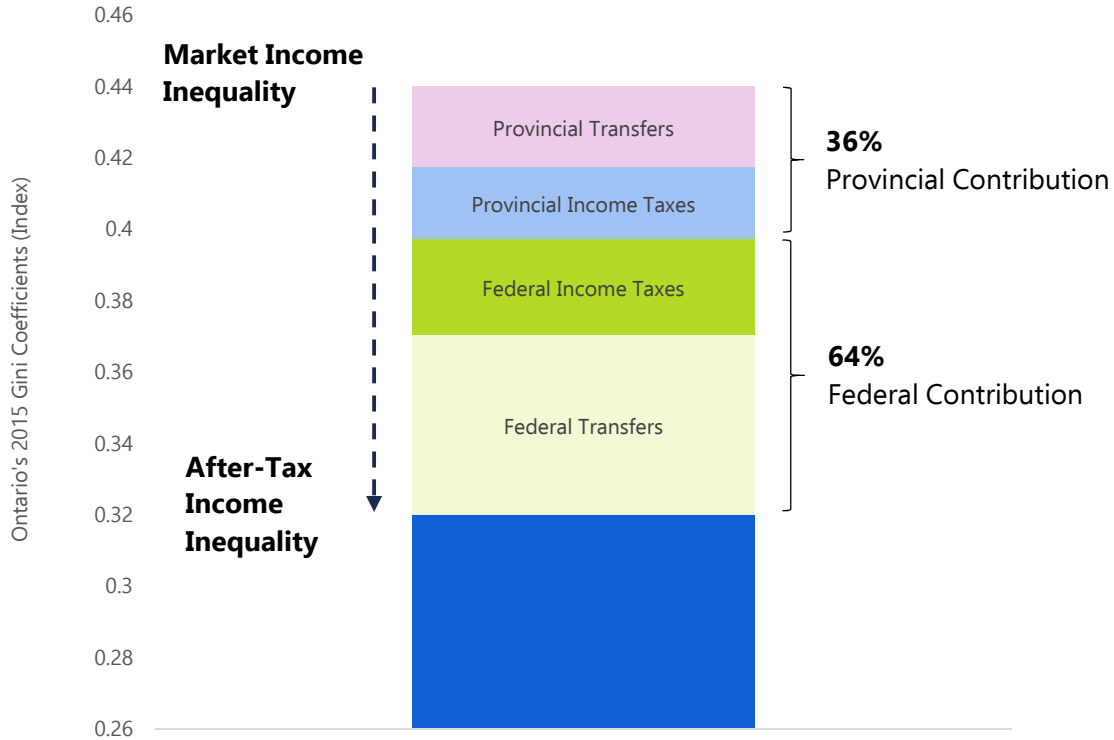


Source: Statistics Canada Canadian Income Survey, OECD and FAO.

³¹ See OECD ["In It Together: Why Less Inequality Benefits All...in Canada"](#).

In 2015, the Ontario government’s taxes and transfers contributed 36 per cent to the overall reduction in income inequality; federal government taxes and transfers accounted for the rest (Figure 2.7).³²

2.7 Ontario taxes and transfers contributed over a third of the reduction in income inequality in 2015



Source: Statistics Canada Canadian Income Survey, Social Policy Simulation Database and Model and FAO.

Higher income inequality associated with slower income growth

Research by both the OECD and IMF has concluded that higher income inequality can slow the rate of long-term economic growth.³³

The OECD estimates that the rise of income inequality between 1990 and 2010 lowered the cumulative growth of real gross domestic product (GDP) in OECD countries by 4.7 percentage points. These estimates have also been echoed by similar research from the US Federal Reserve.³⁴

³² The impacts of provincial and federal income taxes and transfers on the Gini coefficient were estimated with Statistics Canada’s Social Policy Simulation Database and Model (SPSDM) using FAO assumptions and calculations.

³³ See the IMF’s [“Causes and Consequences of Income Inequality: A Global Perspective”](#) or the OECD’s [“Divided We Stand: Why Inequality Keeps Rising”](#).

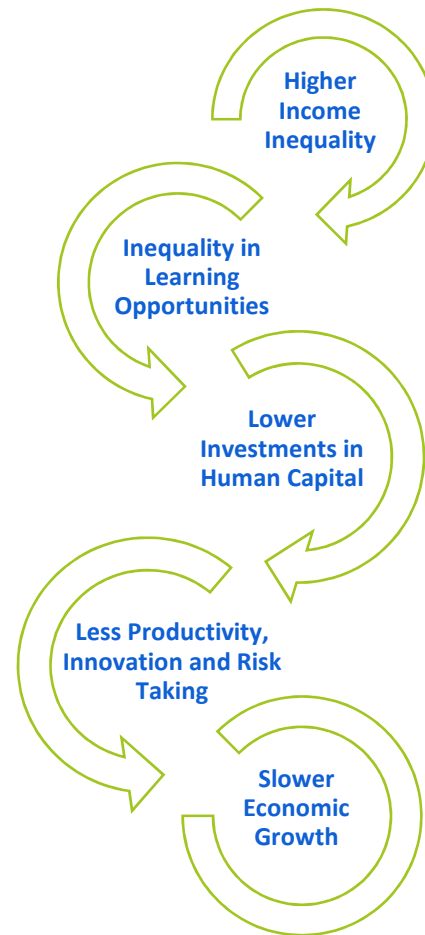
³⁴ See the US Federal Reserve Bank of St. Louis’s [“Economic Mobility, Research & Ideas on Strengthening Families, Communities & the Economy”](#).

Investments in education and knowledge can improve the quality of the workforce, and contribute to more innovation and initiative, spurring economic growth. Investments in human capital are defined by the OECD as the “knowledge, skills, competencies, and attributes that facilitate the creation of personal, social and economic wellbeing”.³⁵

Research by the OECD has noted that “inequality in learning opportunities begins at birth, and often widens as individuals grow older. Children from more affluent families tend to develop better skills in reading and problem-solving, are less likely to drop out of school without a diploma and are more likely to complete tertiary education.”³⁶

Higher income inequality can lead to less investment in the educational attainment of lower income families, eventually lowering their potential productivity.³⁷ This decreases aggregate productivity and output in the economy, slowing the pace of overall economic growth in the long term.

2.8 Income inequality slows the rate of long-term economic growth



Note: Arrows represent correlation between these trends and not necessarily causation.

³⁵ See [“OECD Insights: Human Capital”](#).

³⁶ See: [“OECD Issues Note: Social Mobility and Equal Opportunities”](#), Page 4.

³⁷ See the OECD’s [“In it Together: Why Less Inequality Benefits All”](#).

3. Income mobility

Summary

- It has become more difficult for Ontarians to “get ahead” – that is, move up the income distribution. In this report, upward income mobility is defined as the share of working-age Ontarians who move up at least one income quintile over a five-year period. This share declined from 41 per cent in the early 1980s to 32 per cent more recently. The decline was most pronounced for lower-income Ontarians.
- The prevalence of downward income mobility (the share of working-age Ontarians moving down one quintile over five years) has risen for low- and middle-income Ontarians since the 1980s. In contrast, higher income Ontarians are less likely to experience downward income mobility.
- “Income immobility” (the share of working-age Ontarians who remain in the same income quintile over a five-year period) has also increased steadily since the 1980s. This increase in income immobility has been most pronounced for lower-income Ontarians, indicating that the income distribution in Ontario has become more “sticky” over the last 35 years.
- Income mobility can also be assessed across generations, by measuring the extent to which a parent’s income influences the adult earnings of their children. In Ontario, the children of higher-income parents are more likely to be high-income earners themselves, while children raised in lower-income families are more likely to become lower-income earners.
- Ontario has higher intergenerational income mobility than most OECD countries, including the United States. This implies that parental income matters less to a child’s future earnings potential in Ontario than it does in other jurisdictions. OECD research indicates that high quality and universally accessible education and health care, as is the case in Ontario, coupled with a strong tax and transfer system, are key contributors to intergenerational income mobility.

Relative income mobility

Relative income mobility³⁸ measures the extent to which an individual’s position in the income distribution changes over time. In this report, relative income mobility compares the income quintile of an individual in a starting year to their income quintile five years later.³⁹ This determines if they have moved up or down, or stayed in the same position relative to others.

³⁸ There are two types of mobility: absolute and relative. “Absolute income mobility” is the extent to which a specific individual’s income changes over time, essentially income growth. This chapter focuses on relative income mobility.

³⁹ Other time periods could also be examined. These data come from Statistics Canada’s Longitudinal Administrative Databank. See [“The evolution of income mobility in Canada: Evidence from the Longitudinal Administrative Databank, 1982 to 2012”](#).

Income mobility reflects both sustained changes in an individual's economic circumstance (such as a promotion or career change) as well as other income shocks (such as job loss, a severe illness, divorce or child birth). Higher income mobility implies that more Ontarians are transitioning in and out of low income or moving in and out of higher income brackets. A more dynamic income distribution, with more individuals shifting from one quintile to another over time, can mitigate some of the negative implications of income inequality.⁴⁰

Based on the after-tax income of working-age Ontario tax filers⁴¹, about 50 per cent of working-age Ontarians moved from one quintile in the income distribution to another between 2011 and 2016.

Income mobility includes both upward mobility (those who moved up at least one quintile in a five-year period) and downward mobility (those who moved down at least one quintile in a five-year period). Between 2011 and 2016, 32 per cent of Ontarians experienced upward mobility, 18 per cent experienced downward mobility, and 50 per cent were "immobile"; that is, they remained in the same income quintile.

Of those who experienced mobility (either up or down), most moved by only one quintile. Only 9 per cent of working-age Ontarians moved up by two quintiles or more, while just 5 per cent moved down by more than one quintile.

Income "immobility" has increased

Income immobility – the share of working-age Ontarians remaining in the same income quintile over a given five-year period – has been steadily increasing over the past three decades. That is, the share of Ontarians moving up or down the income distribution has declined.

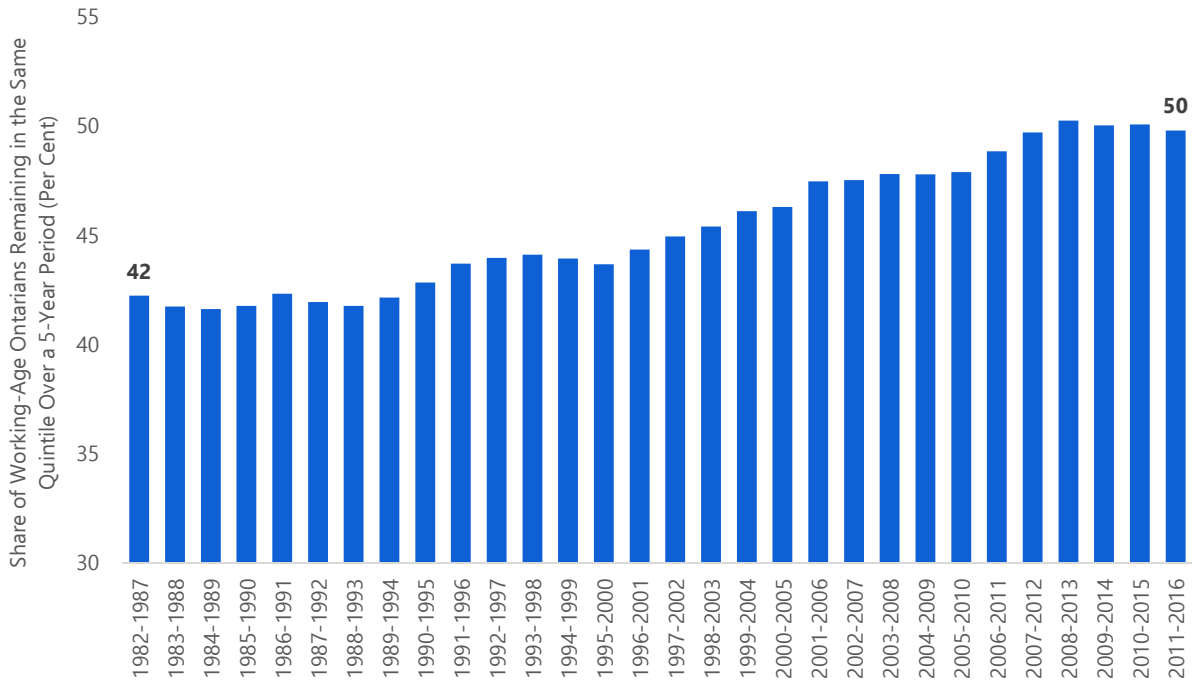
Between 1982 and 1987, roughly 42 per cent of working-age Ontarians remained in the same income quintile. Income immobility remained relatively constant until the early 1990s when it began to increase.

During the five-year period from 2011 to 2016, however, 50 per cent of working-age Ontarians remained in the same income quintile, an increase of 8 percentage points from the 1980s (Figure 3.1).

⁴⁰ For a comprehensive overview of income mobility, see: Federal Reserve Bank of St. Louis and the Board of Governors of the Federal Reserve System (2016) "[Economic Mobility: Research and Ideas on Strengthening Families, Communities and the Economy](#)".

⁴¹ Data for relative mobility in this chapter are for individual tax filers in Ontario aged 18 and over. Only families headed by someone aged 64 and under are included, to focus on income mobility during an individual's working years. Income is adjusted to reflect family size and the earnings of others in the family. "Families" are defined as Census families. Adjusted income is calculated by summing the total income per family and dividing by the square root of the number of individuals in the family.

3.1 Income immobility has increased



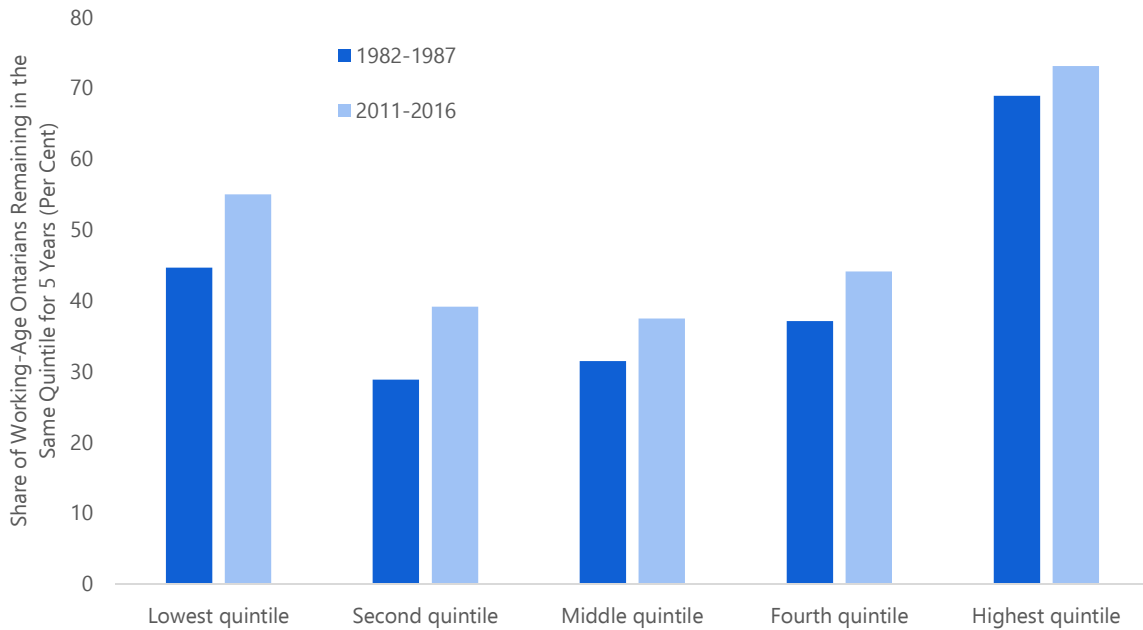
Source: Statistics Canada Longitudinal Administrative Databank custom tabulation and FAO.

More importantly, income immobility is becoming more common for the poorest Ontarians. Over the last 35 years, the share of working-age Ontarians in the bottom two income quintiles who experienced income immobility increased by more than 10 percentage points.

Over the same period, the share of working-age Ontarians in the third and fourth income quintiles who remained in the same position increased by roughly six percentage points. Those in the highest income quintile saw an increase in immobility of four percentage points.

The increased “stickiness” of the income distribution suggests low-income Ontarians are finding it harder to change their relative standing in the income distribution (Figure 3.2).

3.2 Income distribution is becoming “stickier”, especially for low-income working-age Ontarians

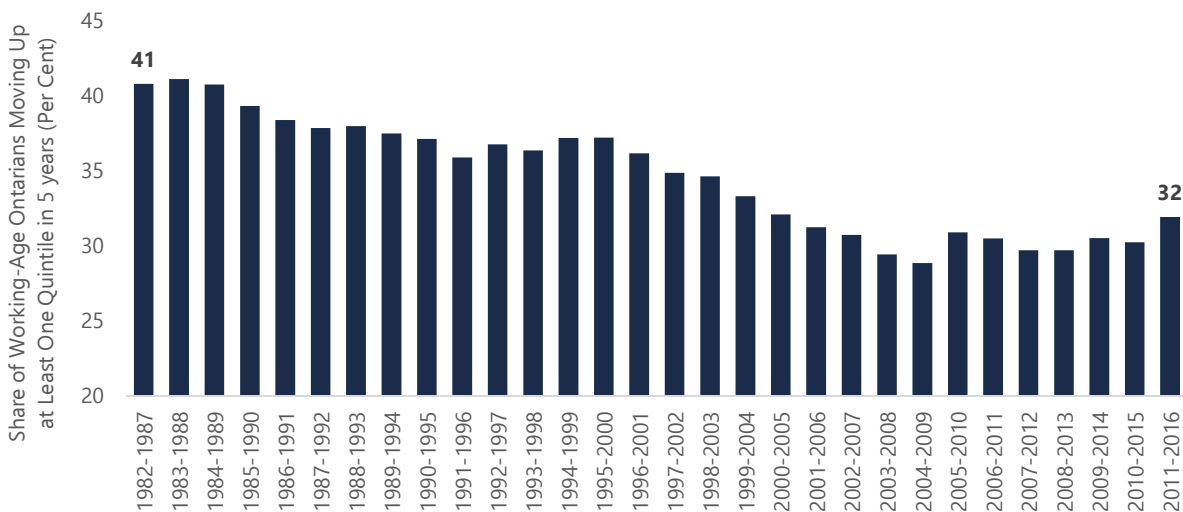


Source: Statistics Canada Longitudinal Administrative Databank custom tabulation and FAO.

Harder to achieve upward mobility in Ontario

The steady rise in income immobility in Ontario is mirrored by a significant decrease in upward mobility, particularly during the 1990s. The proportion of working-age Ontarians moving up the income distribution fell from 41 per cent between 1982 and 1987 to 32 per cent between 2011 and 2016.

3.3 Achieving upward mobility has become more challenging in Ontario

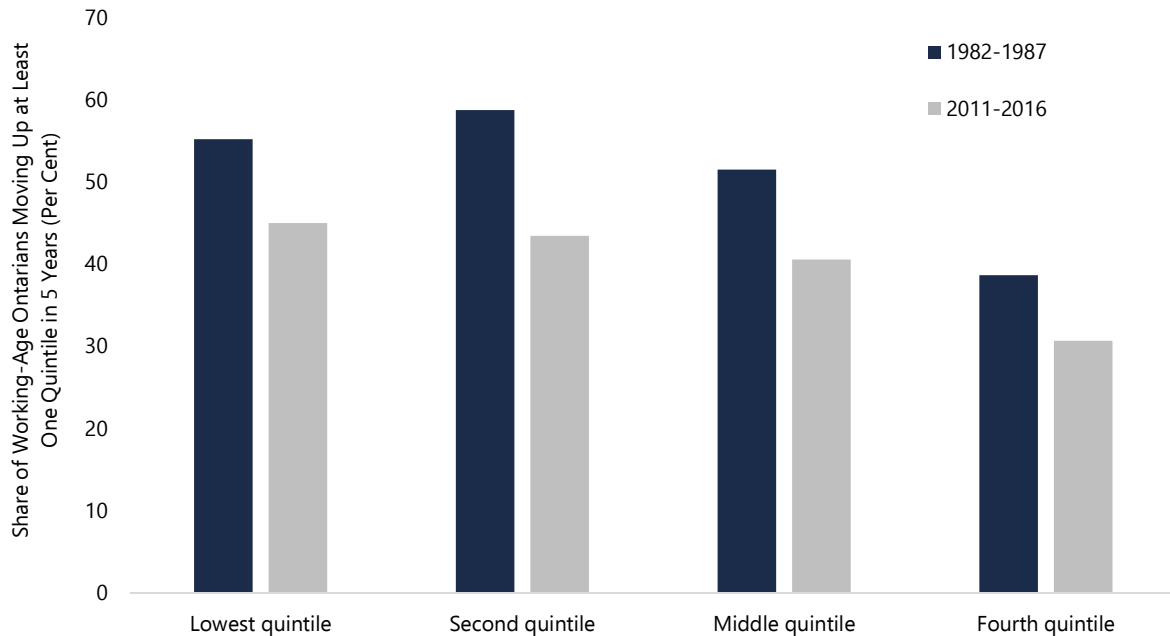


Source: Statistics Canada Longitudinal Administrative Databank custom tabulation and FAO.

The decline in upward mobility occurred for both low- and middle-income Ontarians. During the five-year period in 1982-1987, roughly 57 per cent of working-age Ontarians in the bottom two quintiles succeeded in moving up at least one quintile. However, between 2011 and 2016, this share had dropped 13 percentage points to 44 per cent.

For working-age Ontarians in the 3rd and 4th quintiles, the share who moved up the income distribution declined by roughly nine percentage points between the two five-year periods (Figure 3.4).⁴²

3.4 Lower-income Ontarians have less upward mobility compared to the 1980s



Source: Statistics Canada Longitudinal Administrative Databank custom tabulation and FAO.

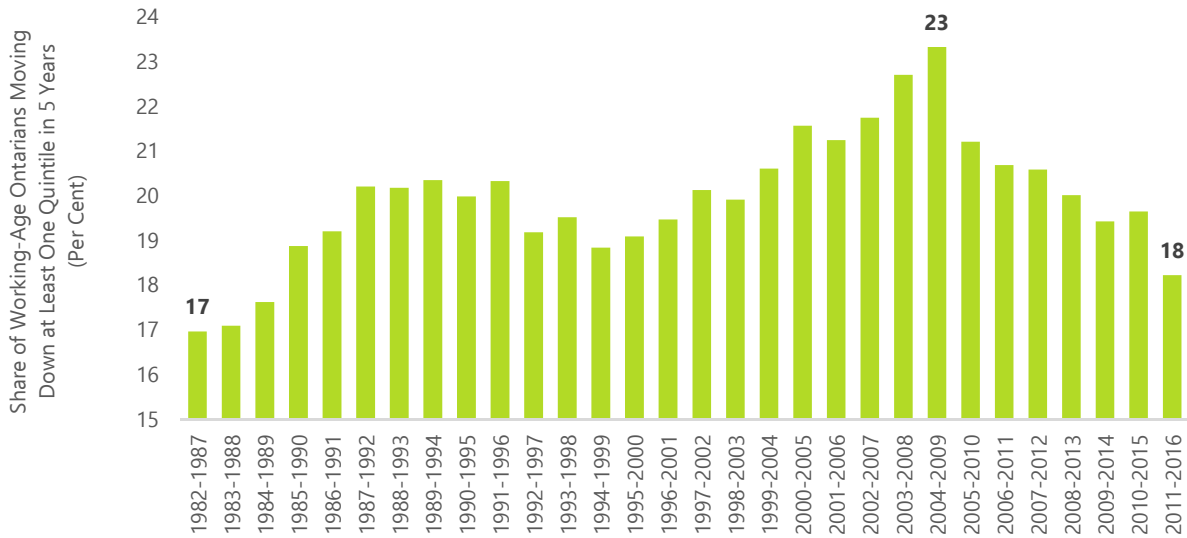
Downward mobility less prevalent since the 2000s

As would be expected, the share of working-age Ontarians experiencing downward mobility typically increases during recessions and decreases during economic expansions.

During the 1982-1987 period, 17 per cent of working Ontarians moved down at least one income quintile. This share increased gradually through the late 1990s into the early 2000s, reaching a peak of 23 per cent between 2004 and 2009. This share has trended lower over the past decade; by the 2011-2016 period, it had declined to 18 per cent (Figure 3.5).

⁴² The fifth quintile is not displayed, since upward mobility is not possible from the highest income quintile.

3.5 Downward mobility less prevalent since the 2000s



Source: Statistics Canada Longitudinal Administrative Databank custom tabulation and FAO.

However, downward mobility has become more prevalent for lower- and middle-income Ontarians. Compared to the early 1980s, the share of working-age Ontarians in the 2nd and 3rd quintiles experiencing downward mobility had increased by roughly five percentage points by 2011-2016. This compares with a one-percentage-point increase for those in the 4th quintile.

Notably, the share of working-age Ontarians in the highest income quintile experienced less downward mobility compared to the early 1980s (Figure 3.6).

3.6 Downward mobility on the rise for middle-income Ontarians



Source: Statistics Canada Longitudinal Administrative Databank custom tabulation, and FAO.

Concerns regarding income inequality might be lessened if the differences in economic standing among Ontarians were more temporary. However, the decline in income mobility in Ontario indicates that these income differences are becoming more permanent, reinforcing existing income inequalities.

Intergenerational income mobility

Over longer periods of time, intergenerational income mobility measures the extent to which a family's economic position in one generation influences the economic position of their children in adulthood.⁴³

In Ontario, as in the rest of Canada, there is a positive relationship between a parent's income and their children's income as adults. Children of higher-income parents are more likely to be high-income earners themselves, while children raised in lower-income families are more likely to become lower-income earners.⁴⁴

The OECD uses the term "opportunity hoarding" to describe how those at the top of the income distribution can ensure that a variety of economic advantages are passed on to their children. These opportunities can include social connections that facilitate access to good schools and employment, as well as other activities that can enhance human and social capital. The highest-income families are also better able to finance investments in training and skills development.

Many of these advantages are unavailable to lower-income families, and work against intergenerational income mobility.⁴⁵ At the same time, OECD research indicates that high quality and universally accessible education and health care are key contributors to intergenerational income mobility.⁴⁶

The level of intergenerational income mobility in a society is typically estimated by 'intergenerational income elasticities', which measure the extent to which parents' incomes impact their children's adult income. The lower the intergenerational elasticity, the lower is the influence of parental incomes on the incomes of their children as adults. This implies that more children (regardless of their parent's income) have a reasonable chance at higher incomes as adults.

Estimates of intergenerational income mobility involve tracking tax information over many decades. As such, it is not currently possible to examine its evolution over time. The following sections compare Ontario's intergenerational income mobility with that of other jurisdictions and examines its relationship with income inequality.

Ontario's intergenerational income mobility is in line with most provinces

Ontario's intergenerational income elasticity is 0.19⁴⁷, near the Canadian average. Most children in Canada enjoy a relatively similar level of intergenerational opportunity (in terms of their future income). However,

⁴³ Income data in this section are taken from the work of Miles Corak, who uses T1 tax returns. The data include total income from all sources (including market and government transfers) over a five-year period. Income is then averaged, based on the number of parents in the household. For example, if there is only one parent, total income over five years is divided by five; if there are two parents, total income over five years is divided by 10. See Miles Corak (2017) "[Divided Landscapes of Economic Opportunity: The Canadian Geography of Intergenerational Income Mobility](#)".

⁴⁴ Corak (2017).

⁴⁵ See the OECD's (2018) "[A Broken Social Elevator? How to Promote Social Mobility](#)". There is also a positive relationship between a parent's income levels and educational attainment. See [Family income and participation in post-secondary education](#) (2003), Corak, Lipps and Zhao.

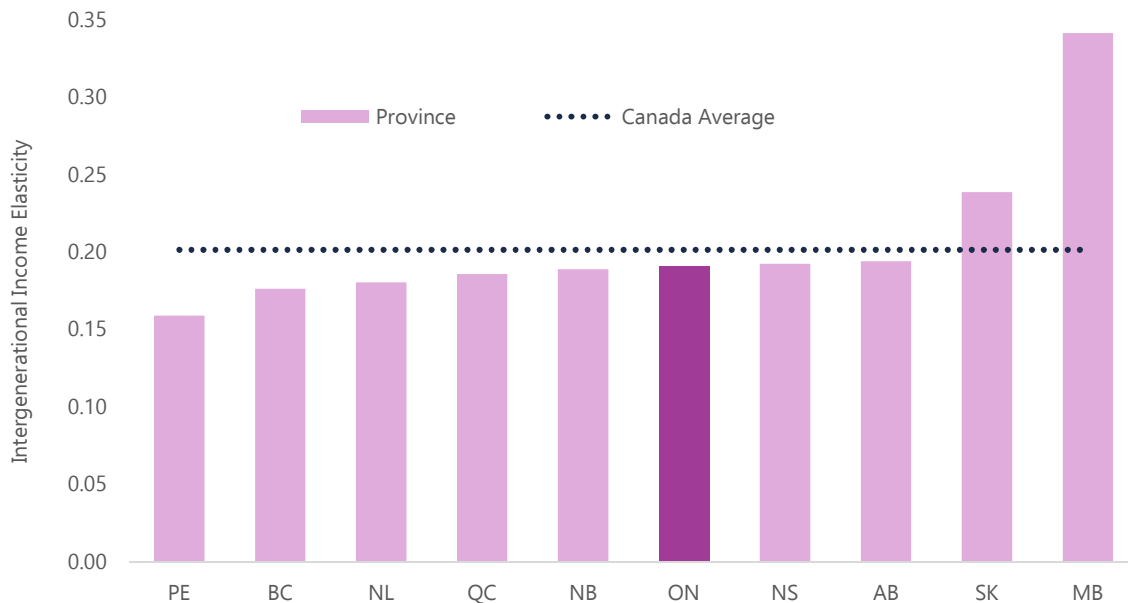
⁴⁶ OECD (2018) "[A Broken Social Elevator? How to Promote Social Mobility](#)".

⁴⁷ The strict interpretation of Ontario's elasticity is that for each percentage point increase in the parent's total income, their children's future total income is expected to increase by 0.19 per cent. The higher the elasticity, the more a parent's income positively influences their children's future income as adults.

intergenerational income elasticities in Saskatchewan and Manitoba are much higher than other provinces (Figure 3.7).⁴⁸

In Canada, communities with higher intergenerational income elasticities (and by extension lower intergenerational income mobility) are typically far from major urban areas and tend to have higher poverty rates, and increased income inequality.⁴⁹

3.7 Ontario's intergenerational income mobility in line with most provinces



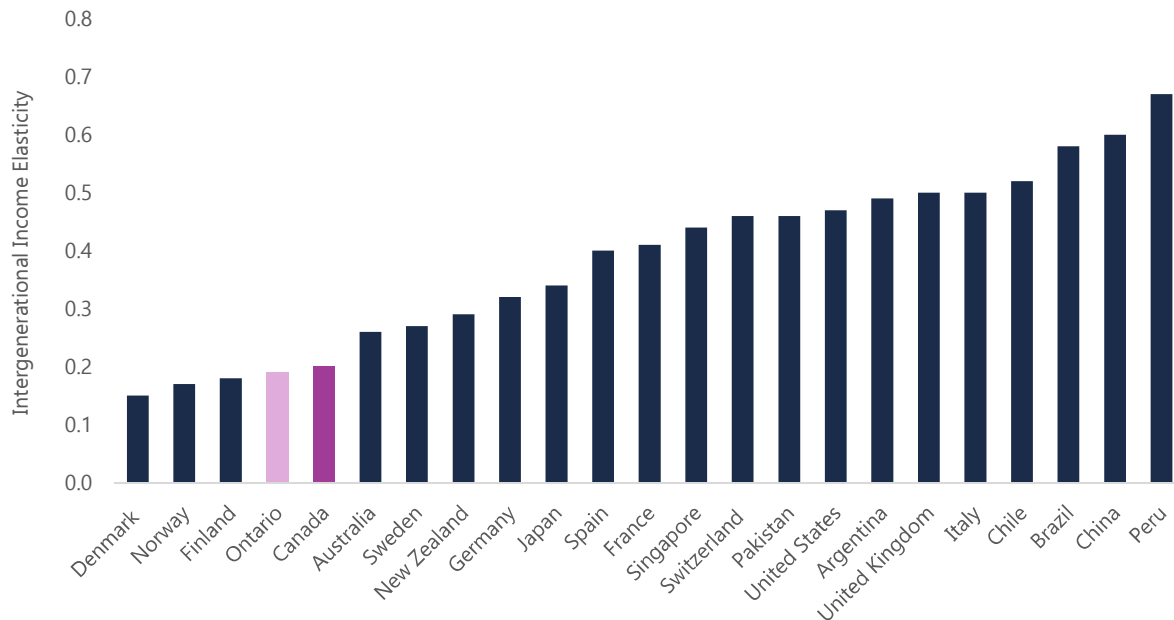
Source: Miles Corak, *Divided Landscapes of Economic Opportunity: The Canadian Geography of Intergenerational Income Mobility*, 2017.

Internationally, there is a much stronger relationship between a parent's income and their children's future income than in Ontario. Ontario's intergenerational income elasticity ranks quite low when compared to other jurisdictions; it is almost 60 per cent below that of the United States and United Kingdom. The only jurisdictions in which a parent's income matters less to their child's future economic status are Denmark, Norway and Finland (Figure 3.8).

⁴⁸ Part of the reason for Manitoba's high elasticity is that the province has many communities with lower average levels of income, which (without suggesting causality) are typically associated with higher elasticities.

⁴⁹ See Miles Corak "[Divided Landscapes of Economic Opportunity: The Canadian Geography of Intergenerational Income Mobility](#)".

3.8 Ontario's intergenerational income mobility better than most nations



Note: Elasticities for Ontario and Canada were published in: Corak (2017) while the other country elasticities were published in Corak (2016).

Source: Miles Corak (2017) [Divided Landscapes of Economic Opportunity: The Canadian Geography of Intergenerational Income Mobility](#) and Miles Corak (2016) [Inequality from Generation to Generation: The United States in Comparison](#).

Lower income mobility can reinforce income inequality

Economic growth, income inequality and income mobility are interconnected factors that can be mutually reinforcing. In a cross-country comparison, countries with higher income inequality also tend to have less income mobility between generations. This is a phenomenon typically known as the Great Gatsby curve.⁵⁰

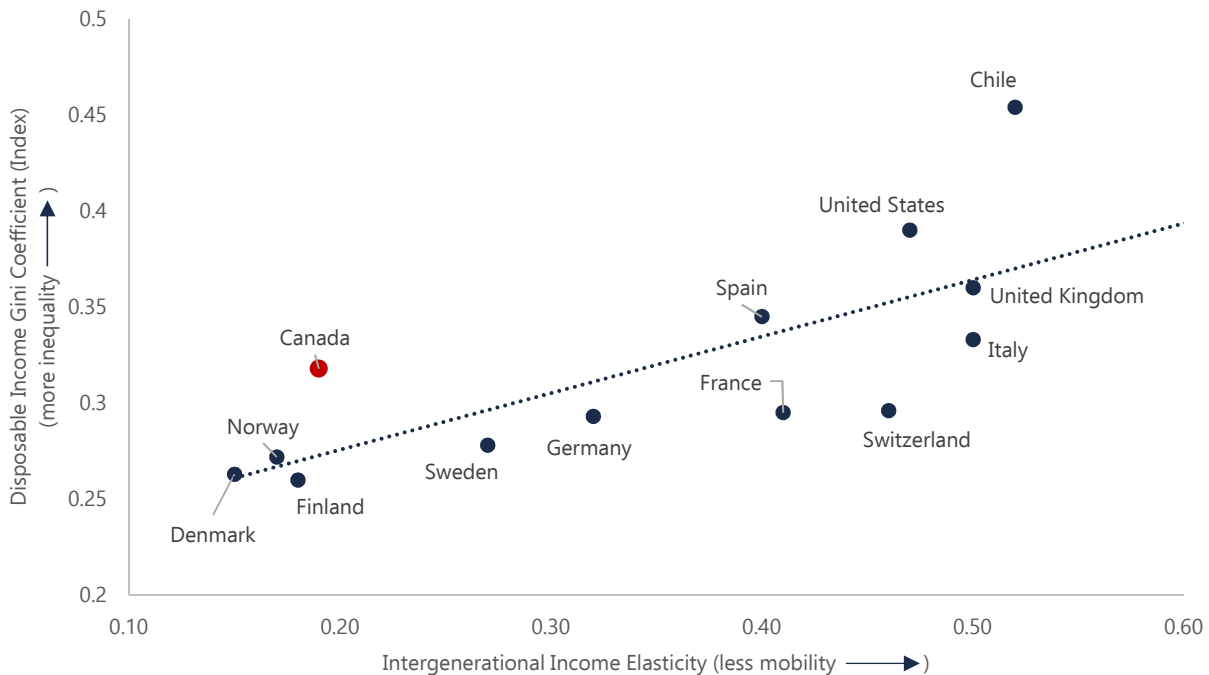
Investments in human capital can improve the quality of the workforce and contribute to aggregate productivity, income growth and income mobility. However, higher income inequality can impede human capital investment and prevent low-income children from reaching their full potential.

Both Ontario and Canada benefit from a number of comparative strengths which have contributed to relatively higher intergenerational income mobility compared to other advanced economies. In particular, the OECD notes that a strong tax and transfer system and high quality and universally accessible education and health care are key contributors to intergenerational income mobility.⁵¹

⁵⁰ The Great Gatsby curve was popularized by Alan Krueger, chairman of the Council of Economic Advisors to the Office of the President of the United States in a [speech](#) given in 2012. The Gatsby curve plots the Gini coefficient against the intergenerational elasticity of income to show a negative relationship between income inequality and income mobility. A higher Gini coefficient indicates higher income inequality, while a higher elasticity of income indicates lower income mobility.

⁵¹ See the OECD's "[A Broken Social Elevator - How to Promote Social Mobility](#)"

3.9 Higher income inequality associated with lower intergenerational income mobility



Note: Elasticities for Ontario and Canada are from Corak (2017), while other country elasticities are from Corak (2016) and collected by Corak from various studies. Gini coefficients are from the OECD database for 2015, the most recent year that includes data for each country.

Source: Miles Corak (2017) [Divided Landscapes of Economic Opportunity: The Canadian Geography of Intergenerational Income Mobility](#) and Miles Corak (2016) [Inequality from Generation to Generation: The United States in Comparison](#) and OECD.

There is also some consensus among researchers that education plays the most important role in increasing intergenerational income mobility. For example, a recent study using the Longitudinal and International Survey of Adults found that the educational attainment of children was the single largest factor explaining the correlation between children's and parents' income in Canada.⁵²

Other factors frequently suggested as determinants of intergenerational income mobility include: family resources and connections; certain cognitive and non-cognitive skills; location of residence; health; immigration status; and the attainment of specific work-related skills (such as communication).⁵³ However, the causal relationship between these factors and intergenerational income mobility remains ambiguous because of the complex relationships among the many factors.⁵⁴

⁵² See Simard-Duplain and St-Denis, "[An exploration of intergenerational income mobility with the Logitudinal International Study of Adults for Canada](#)".

⁵³ See Corak (2017) "[Divided Landscapes of Economic Opportunity: The Canadian Geography of Intergenerational Income Mobility](#)"; Corak (2013) "[Income inequality, equality of opportunity, and intergenerational mobility](#)"; and Bladen et al. (2007) "[Accounting for Intergenerational Income Persistence: Noncognitive Skills, Ability and Education](#)".

⁵⁴ For example, one can expect the parent's socioeconomic status to influence a child's health and region of residence, which in turn would affect cognitive and social development, as well as academic performance.

4. Incomes and the changing economic environment

Summary

- Despite a growing economy, increases in Ontario’s economic output over the past three decades have not translated into comparable gains in the market income of the median working-age Ontarian.
 - Median wages have stagnated since 1997, while a rising share of economy-wide income growth is being earned as corporate profits.
- Two broad, inter-related structural changes in the economy and labour market have contributed to these trends in Ontario incomes.
 - Ontario’s industrial composition has changed dramatically over the past three decades, with job growth concentrated in the service sector, while manufacturing employment has declined.
 - Over the same period, the structure of the Ontario labour market has also changed. Non-standard work – that is, part-time and temporary employment – has become increasingly common, while the share of unionized jobs has declined. These labour market trends have put downward pressure on wages.
- Ontario is not alone in experiencing these changes. OECD research has shown that slowing income growth, rising income inequality and declining income mobility are common across many developed economies.⁵⁵ Globalization and rapid technological advances have been key contributors to these broad structural changes.
 - Due to the globalization of goods markets, export industries in developed economies are increasingly competing with firms in developing, low-wage economies. This has contributed to declines in output and downward pressure on wages in these industries.
 - Scientific advances, particularly in information technologies, are leading to increased automation for many sectors and occupations. In turn, this has contributed to strong wage growth for high-skilled occupations coupled with stagnant wages for lower-skilled workers.
- The sharp appreciation of the Canadian dollar during the 2000s – which hurt the competitiveness of export industries – also played a significant role in the relative decline of Ontario’s manufacturing sector. Over this same period, a commodity price boom led to strong income gains in resource-rich provinces, partly explaining the divergence in income growth between Ontario and the rest of Canada.

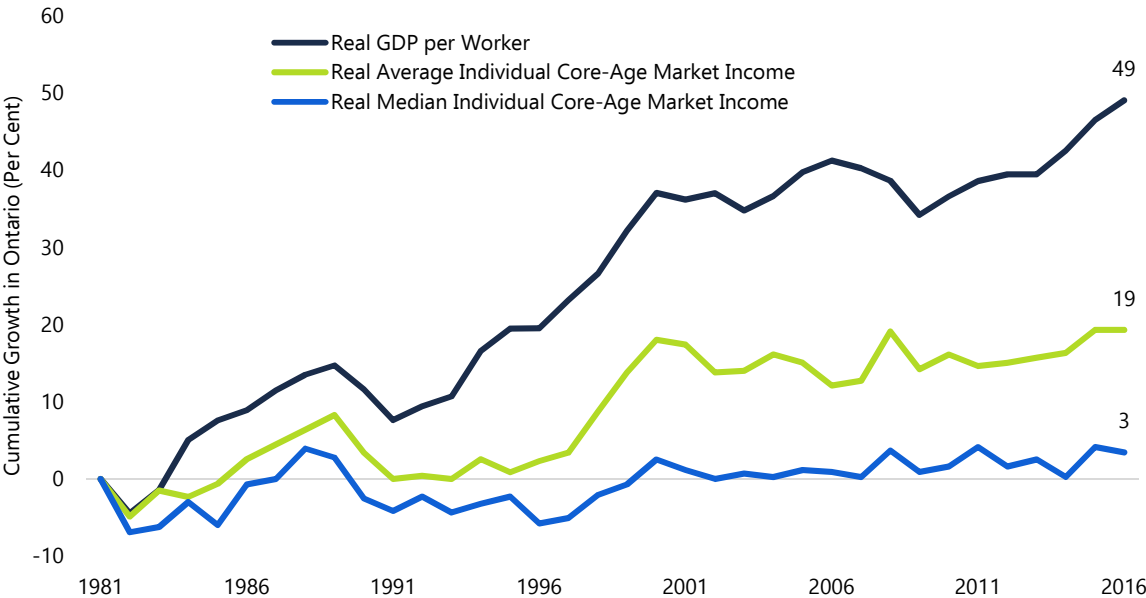
⁵⁵ See the OECD’s [“In it Together, Why Less Inequality Benefits All”](#) and the OECD’s [“A Broken Social Elevator? How to Fix Social Mobility”](#).

Ontario's economic growth not translating into higher median incomes

Between 1981 and 2016, output per worker in Ontario increased by 49 per cent.⁵⁶ Over this same period, the average market earnings of working-age Ontarians rose by 19 per cent.

However, in sharp contrast, the market income of the median working-age Ontarian (the individual at the mid-point of the income distribution) increased by just 3 per cent (Figure 4.1).

4.1 Economic growth did not raise the median income of working-age Ontarians



Note: Real GDP per worker is calculated as real GDP divided by the labour force.
Source: Statistics Canada Labor Force Survey, Income and Expenditure Accounts, Canadian Income Survey and FAO.

The stronger growth of average market income, compared with the median, implies that Ontarians in the upper half of the income distribution are benefiting from much stronger income growth than those in the lower half – a fact that was explored in Chapter 1 of this report.

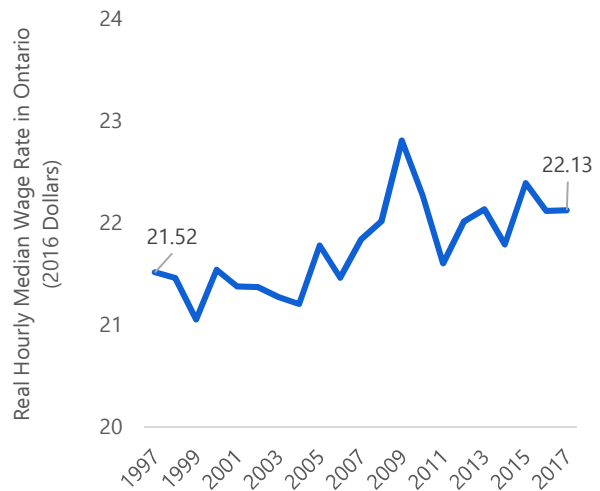
However, the even stronger gains in economy-wide income (as measured by output per worker) implies that the income generated through economic growth is not being broadly shared with all Ontarians.

⁵⁶ Defined as real GDP divided by the labour force.

The underperformance of median income relative to output per worker can partly be explained by the weak growth of wages.

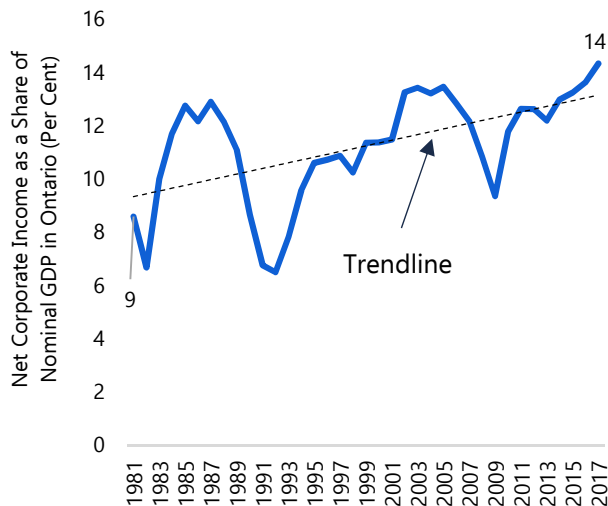
In Ontario, the median wage increased by less than one dollar (or by less than 3 per cent) in total from 1997 to 2017, after adjusting for inflation.

4.2 Median hourly wages have stagnated



Source: Statistics Canada Labour Force Survey and FAO.

4.3 Share of economy-wide income paid as corporate income has increased



Source: Statistics Income and Expenditure Accounts and FAO.

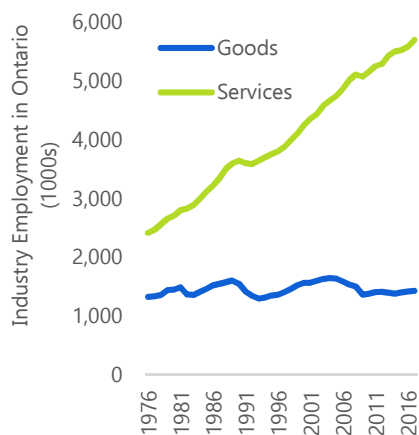
In addition, a rising share of the gains from Ontario's economic growth has been earned as a return to capital (largely corporate profits) since 1981.

Trends in Ontario's incomes over the past several decades have been influenced by a wide range of factors. However, broad interrelated structural changes to both Ontario's industrial composition and labour market have played major roles.

Ontario's industrial composition has changed

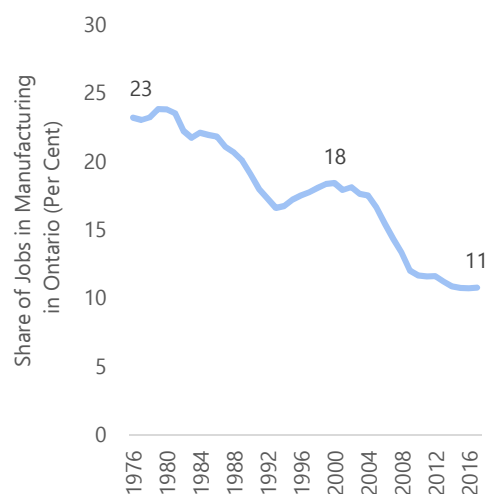
The composition of Ontario's economy has changed dramatically over the last 40 years. Between 1976 and 2016, service sector jobs accounted for almost all the growth in employment, while employment in the goods sector has been stagnant.

4.4 Job growth has been dominated by Ontario's service sector



Source: Statistics Canada Labour Force Survey.

4.5 Decline in manufacturing jobs



Source: Statistics Canada Labour Force Survey.

The experience of Ontario's manufacturing sector has been particularly dramatic. Employment in the sector has declined from a high of 1.1 million in 2004 to 770,000 jobs in 2017. In 2000, manufacturing jobs accounted for 18 per cent of total employment; by 2017, this share had declined to 11 per cent.

According to the OECD, the increased integration of the global economy has contributed to a similar shift in the industrial composition of many developed economies. Export industries in high-wage countries are increasingly competing with firms in developing, low-wage economies, leading to the "offshoring" of labour-intensive tasks, particularly in manufacturing.⁵⁷

Globalization and increased international competition played an important role in the decline of manufacturing jobs in Ontario. However, the sharp appreciation of the Canadian dollar during the 2000s also contributed to an erosion in the competitiveness of Ontario firms exporting to the United States.

At the same time, slower economic growth in the United States also contributed to weaker demand for Ontario exports. These factors were significant drivers in the decline of Ontario's manufacturing sector after 2000.⁵⁸

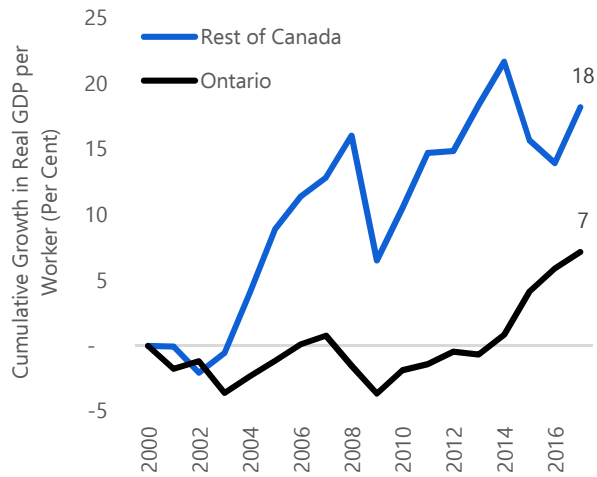
⁵⁷ See OECD's "[Divided We Stand: Why Inequality Keeps Rising](#)".

⁵⁸ See the Centre for the Study of Living Standards "[Ontario's Productivity Performance, 2000-2012: A Detailed Analysis](#)".

Ontario's economy was also more severely impacted by these competitive challenges than other provinces, partly explaining the divergence in income growth between Ontario and the rest of Canada.

The commodity price boom of the early 2000s (which coincided with the appreciation of the Canadian dollar) led to strong income gains in resource-rich provinces, while Ontario's real GDP per worker was flat between 2000 and 2014. More recently, Ontario's GDP per worker has shown solid growth, while lower commodity prices have held back gains in other provinces.

4.6 Growth in Ontario's GDP per worker has lagged that of other provinces since 2000



Note: The average for the rest of Canada is calculated as a weighted average.

Source: Statistics Canada Labour Force Survey, Income and Expenditure Accounts and FAO.

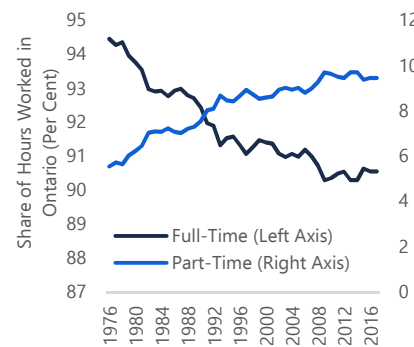
Structural changes in Ontario's labour market

Over the past few decades, globalization and technological advances have contributed to significant structural changes in Ontario's labour market. In particular, Ontario has experienced a rise in non-standard employment and a decline in the share of unionized jobs.

Rise in non-standard employment

From 1976 to 2000, the share of part-time work in Ontario's economy increased, while the share of full-time positions declined. This trend continued after 2000 but at a more moderate pace. Since full-time employment typically pays higher wages than part-time work⁵⁹, the declining share of full-time work has put downward pressure on average hourly wage growth in Ontario.

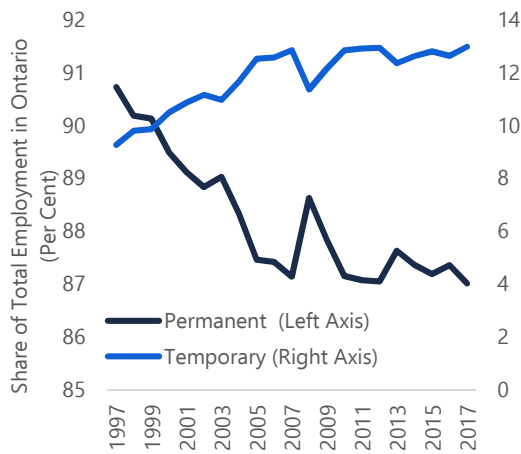
4.7 More part-time work



Source: Statistics Canada Labour Force Survey and FAO.

⁵⁹ In 2017, full-time workers in Ontario earned \$28.30 per hour on average, while part-time workers earned an average of \$18.00 per hour.

4.8 Increase in share of temporary work



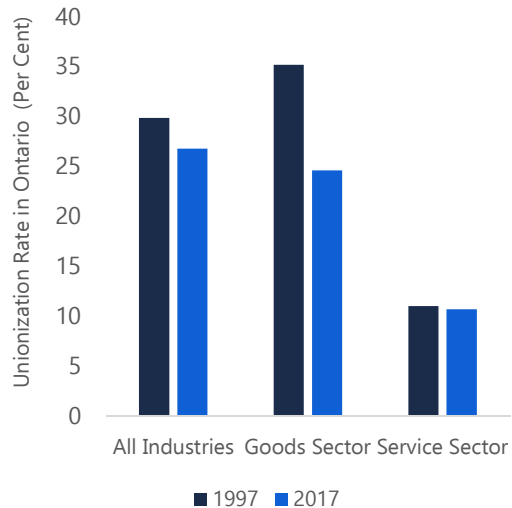
Source: Statistics Canada Labour Force Survey and FAO.

Similarly, the increasing use of temporary workers in many industries has also contributed to slower hourly wage growth in Ontario. From 1997 to 2017, the share of lower-paid temporary workers increased by almost 4 percentage points, while the share of permanent jobs declined by the same amount.⁶⁰ This rise in lower-paid temporary work also contributed to slower overall wage growth in Ontario.

Less unionized work

Unionized workers tend to earn higher wages than non-unionized workers for the same work.⁶¹ However, the unionization rate - the share of workers represented by a union - declined from 30 per cent in 1997 to 27 per cent in 2017. The unionization rate in the goods sector declined more steeply, from 35 per cent in 1997 to 25 per cent in 2017.

4.9 Decline in share of unionized work since 1997



Source: Statistics Canada Labour Force Survey and FAO.

Based on OECD research, these labour market changes have contributed to slower income growth, rising inequality and declining income mobility in many developed economies. But importantly, the pay gap between standard work (full-time, permanent jobs) and non-standard work (temporary, part-time or self-employed work) is much wider in Canada than the average across OECD countries.⁶²

⁶⁰ In 2017, temporary workers earned an average of almost \$7 less per hour than permanent workers (or 25 per cent less per hour).

⁶¹ See Statistics Canada Table 14-10-0134-01.

⁶² See the OECD's: "[In It Together Why Less Inequality Benefits All ...in Canada](#)".

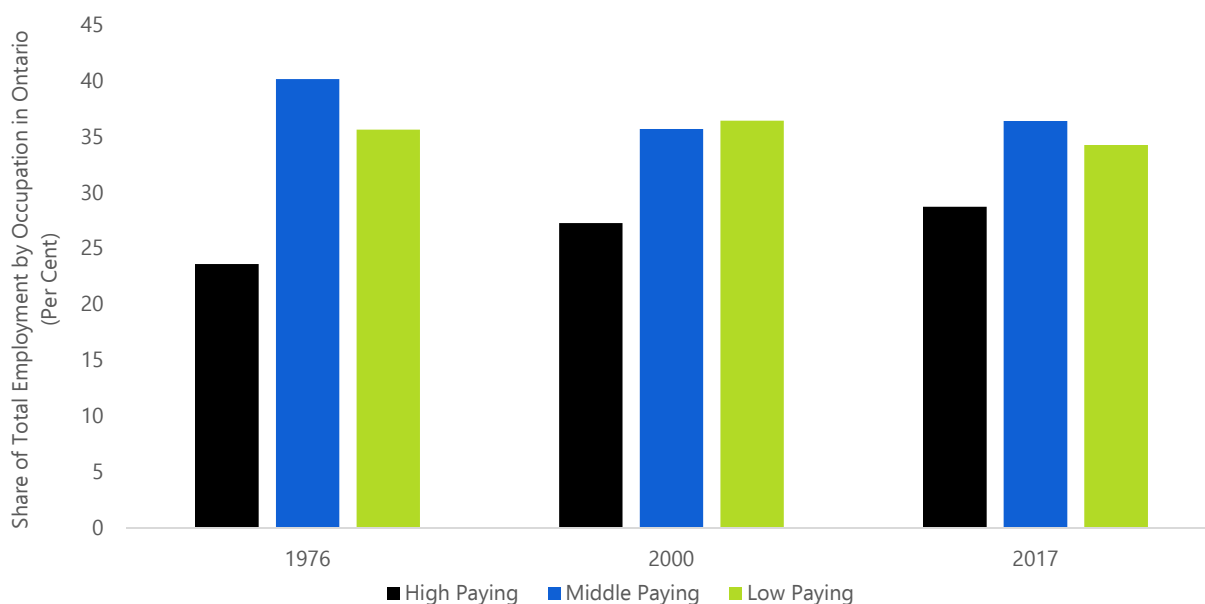
Wage growth uneven among Ontario's occupations

A shifting industrial composition, coupled with an evolving labour market, has resulted in significant changes to the nature of work in Ontario. In addition, dramatic scientific advances, particularly in information technologies, have contributed to increased automation in many industries and occupations.⁶³

Grouping occupations in Ontario into high paying, middle paying and low paying⁶⁴ shows that the share of middle-paying jobs declined from 1976 to 2000, while the shares of high- and low-paying jobs increased.⁶⁵

Since 2000, the share of low-paying jobs declined slightly, while the share of middle- and high-paying jobs increased modestly.

4.10 Modestly more higher paying occupations since 2000



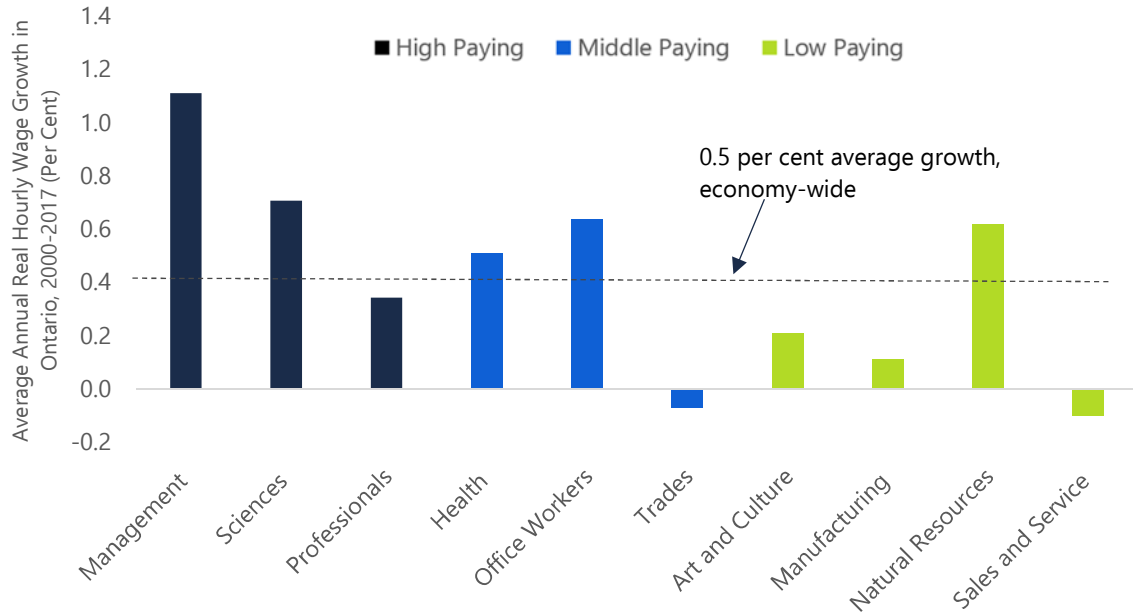
Source: Statistics Canada Labour Force Survey and FAO.

⁶³ There is growing academic interest in the impact of automation on Canadian industries and occupations. See the Brookfield Institute's "[Automation Across the Nation: Understanding the potential impacts of technological trends across Canada](#)" and the C.D. Howe Institute's "[Risk and Readiness: The Impact of Automation on Provincial Labour Markets](#)" for examples of ongoing discussions and relevant academic sources.

⁶⁴ High-paying occupations include: management, "natural and applied sciences", and "education, law and social, community and government services". Middle-paying occupations include: health, "business, finance and administration occupations", and "trades, transport and equipment operators and related occupations". Low-paying occupations include: "art, culture, recreation and sport", "occupations in manufacturing and utilities", "natural resources, agriculture and related production occupations", and "sales and service occupations". See Statistics Canada's [Occupational Classification](#) for more details.

⁶⁵ Ontario's experience aligns with the national trend where the employment share of high- and low-paying jobs increased relative to middle-paying jobs between 1970 and 2006. See Green and Sand (2011) "[Has the Canadian Labour Market Polarized?](#)".

4.11 Ontario's growing wage premium in higher-skilled jobs (2000-2017)



Source: Statistics Canada Labour Force Survey and FAO.

Between 2000 and 2017, economy-wide real hourly wages increased at an annual average rate of 0.5 per cent. However, there has been a wide disparity in wage growth between low-, medium-, and high-paying occupations.

During this period, average wages for the highest-paying occupations outpaced more modest wage gains in middle-paying jobs. By contrast, average wages for the lowest-paying occupations have stagnated, except for natural resource-based occupations.⁶⁶

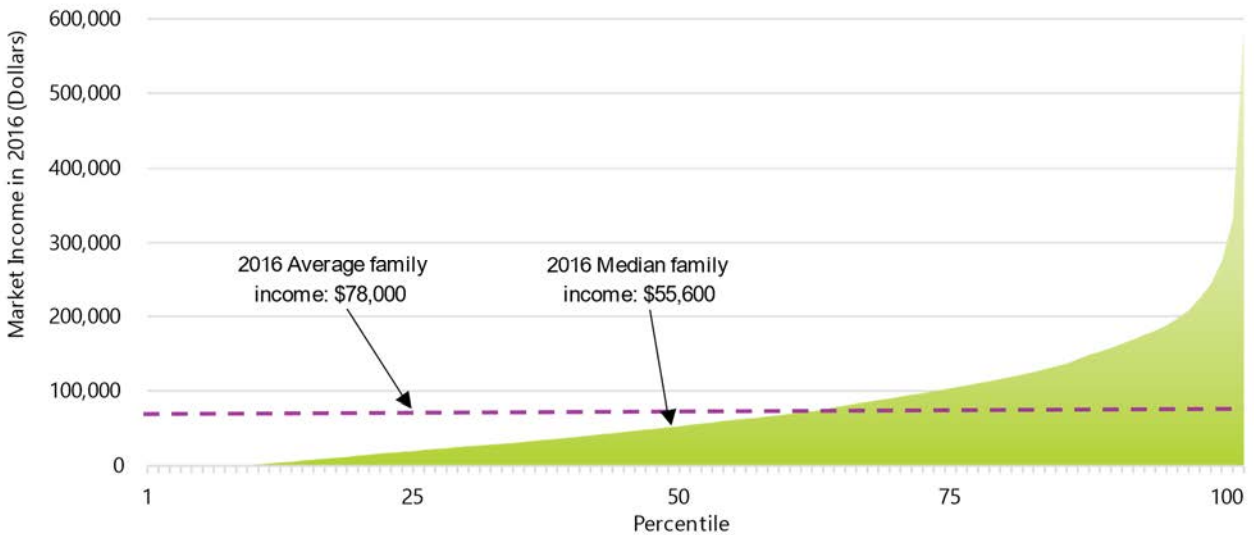
Strong wage growth in high paying occupations coupled with weaker wage growth in the middle- and lower-paying occupations contributed to the increase in market income inequality in Ontario since 2000.

⁶⁶ This trend is consistent with that observed by Green and Sand for Canada from 1980 to 2006. See: "[Has the Canadian Labour Market Polarized?](#)". Hourly wages in natural resources likely benefited from rising commodity prices throughout the 2000s.

5. Appendices

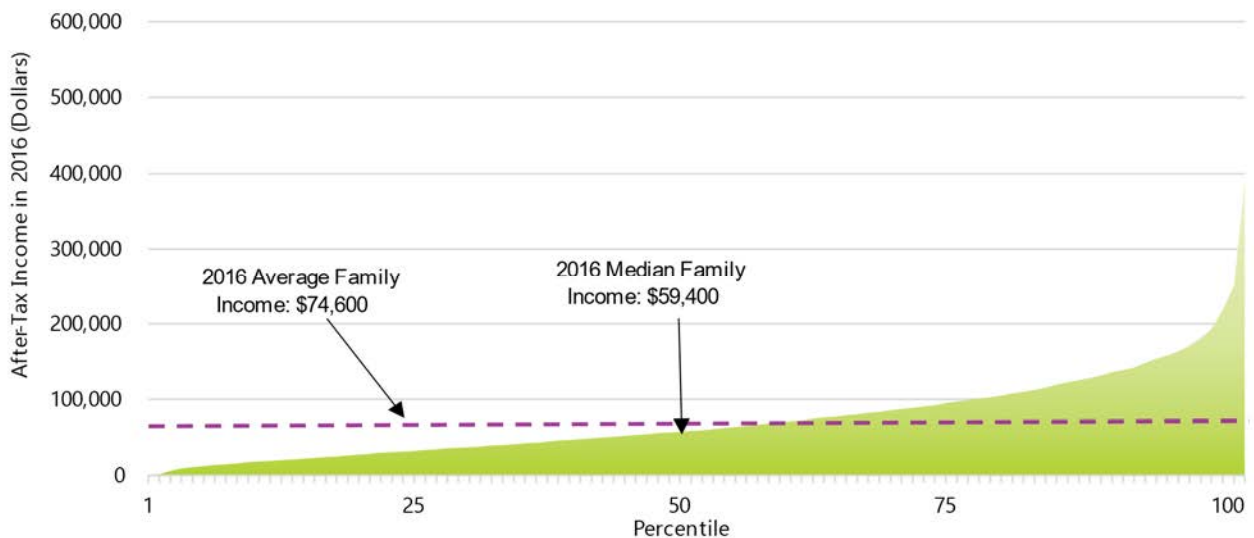
Ontario's family income distribution

A.1 Market income percentiles⁶⁷, 2016



Source: Statistics Canada Canadian Income Survey Custom Tabulation and FAO

A.2 After-tax income percentiles, 2016



Source: Statistics Canada Canadian Income Survey Custom Tabulation and FAO

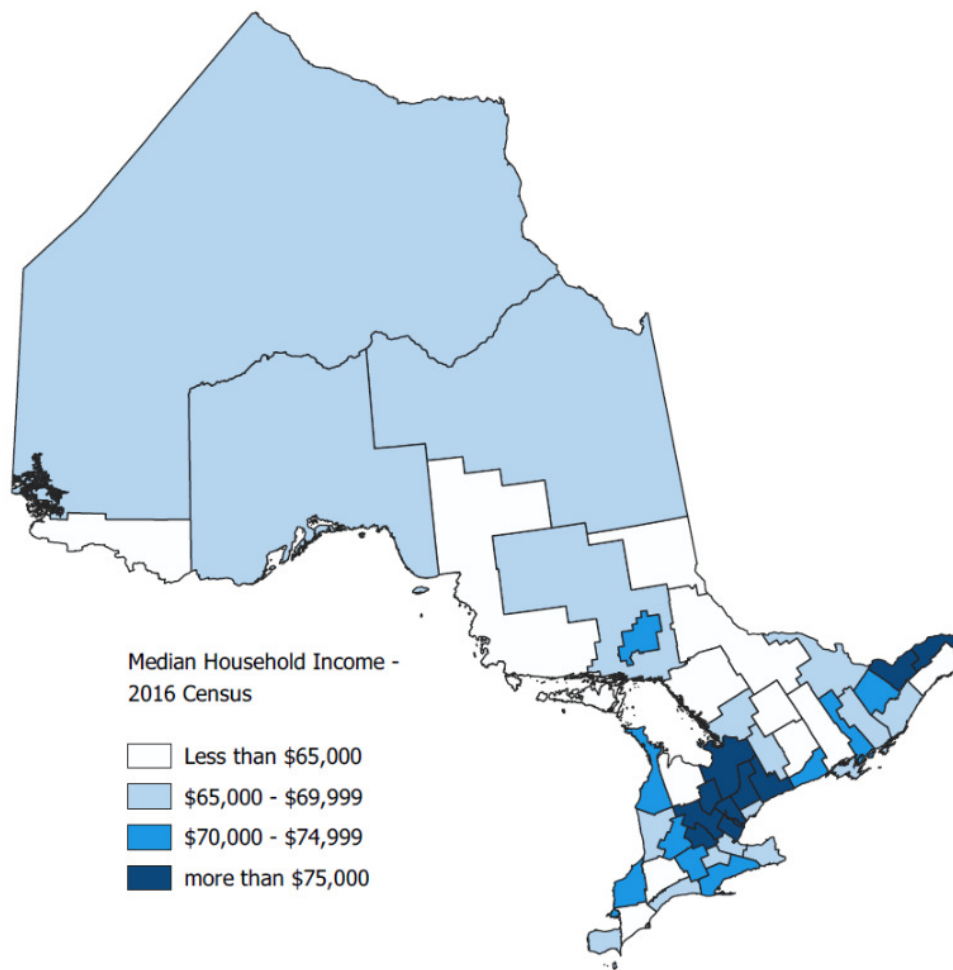
⁶⁷ These charts rank Ontario families into "percentiles", from the poorest 1 per cent to the richest 1 per cent. Each data point displays the income of the family that occupies the mid-point within each percentile group.

Income by region

While this report focused on Ontario-wide incomes, the Census provides household income data⁶⁸ for sub-provincial regions. In Ontario, median household income varies considerably across census divisions.⁶⁹

In 2015, areas with the highest median household incomes were located in census divisions surrounding Toronto as well as in the Ottawa region. Households in rural and northern areas had lower levels of median income.

B.1 Median household income across census divisions in Ontario



Source: Statistics Canada Census and FAO.

⁶⁸ Household income is different than the concept of “family” income presented in Chapter 1, as households can have more than one family living in the dwelling, or many people living together who do not form a family. See Statistics Canada’s [Census Dictionary](#) for more details.

⁶⁹ A census division, as defined by Statistics Canada, is a grouping of neighbouring municipalities sharing common services and regional planning.

Data tables

Table 1: Median Income and Income Growth Rate by Type of Family in Ontario

	Income (2016 Constant Dollars)			Compound Average Growth Rate (Per Cent)		
	1976	2000	2016	1976-2000	2000-2016	1976-2016
Median Market Income						
All Families and Singles*	59,200	56,700	55,600	-0.2	-0.1	-0.2
All Families	72,000	77,600	79,900	0.3	0.2	0.3
Senior Families**	21,100	25,400	35,700	0.8	2.2	1.3
Working-age Families***	76,900	85,500	91,900	0.4	0.5	0.4
Couples	72,000	79,500	90,700	0.4	0.8	0.6
Couples with Children	79,100	94,500	100,200	0.7	0.4	0.6
Single-parent Families	21,100	36,300	22,600	2.3	-2.9	0.2
Couples with Other Relatives	105,700	120,600	124,500	0.6	0.2	0.4
Other Working-age Families	49,500	63,200	67,900	1.0	0.4	0.8
All Singles	24,100	21,300	24,200	-0.5	0.8	0.0
Senior Singles	4,100	8,000	14,000	2.8	3.6	3.1
Working-age Singles	33,500	32,300	29,900	-0.2	-0.5	-0.3
Median After-Tax Income						
All Families and Singles*	54,700	55,100	59,400	0.0	0.5	0.2
All Families	64,900	71,300	80,800	0.4	0.8	0.5
Senior Families**	35,600	48,400	59,100	1.3	1.3	1.3
Working-age Families***	67,800	75,400	87,400	0.4	0.9	0.6
Couples	63,800	68,600	81,400	0.3	1.1	0.6
Couples with Children	70,800	81,200	95,600	0.6	1.0	0.8
Single-parent Families	27,100	40,400	39,300	1.7	-0.2	0.9
Couples with Other Relatives	93,500	106,000	116,900	0.5	0.6	0.6
Other Working-age Families	48,700	66,800	70,600	1.3	0.3	0.9
All Singles	25,900	26,800	29,300	0.1	0.6	0.3
Senior Singles	15,100	23,400	29,600	1.8	1.5	1.7
Working-age Singles	31,100	29,800	29,100	-0.2	-0.1	-0.2

Source: Statistics Canada Canadian Income Survey and FAO.

*Statistics Canada refers to 'Singles' as 'Persons not in an economic family'.

**Statistics Canada refers to 'Seniors' as 'Elderly'.

***Statistics Canada refers to 'Working-age' as 'Non-elderly'. Working-age refers to families or singles below the age of 65.

Table 2: Number of Families and Persons in Ontario

	Number (x1000)			Share of Total (Per Cent)		
	1976	2000	2016	1976	2000	2016
Families						
All Families and Singles*	2,962	4,602	5,733	100.0	100.0	100.0
All Families	2,206	3,202	3,800	74.5	69.6	66.3
Senior Families**	238	454	734	8.0	9.9	12.8
Working-age Families***	1,967	2,748	3,067	66.4	59.7	53.5
Couples	446	661	798	15.1	14.4	13.9
Couples with Children	1,136	1,206	1,162	38.4	26.2	20.3
Single-parent Families	124	242	239	4.2	5.3	4.2
Couples with Other Relatives	192	360	497	6.5	7.8	8.7
Other Working-age Families	69	279	371	2.3	6.1	6.5
All Singles	757	1,399	1,933	25.6	30.4	33.7
Senior Singles	218	384	550	7.4	8.3	9.6
Working-age Singles	539	1,016	1,383	18.2	22.1	24.1
Persons						
All Families and Singles*	8,329	11,587	13,806	100.0	100.0	100.0
All Families	7,573	10,188	11,873	90.9	87.9	86.0
Senior Families**	561	999	1,608	6.7	8.6	11.6
Working-age Families***	7,012	9,188	10,264	84.2	79.3	74.3
Couples	891	1,322	1,597	10.7	11.4	11.6
Couples with Children	4,906	5,004	5,026	58.9	43.2	36.4
Single-parent Families	395	731	703	4.7	6.3	5.1
Couples with Other Relatives	659	1,323	1,898	7.9	11.4	13.7
Other Working-age Families	160	808	1,041	1.9	7.0	7.5
All Singles	757	1,399	1,933	9.1	12.1	14.0
Senior Singles	218	384	550	2.6	3.3	4.0
Working-age Singles	539	1,016	1,383	6.5	8.8	10.0

Source: Statistics Canada Canadian Income Survey and FAO.

*Statistics Canada refers to 'Singles' as 'Persons not in an economic family'.

**Statistics Canada refers to 'Seniors' as 'Elderly'.

***Statistics Canada refers to 'Working-age' as 'Non-elderly'. Working-age refers to families or singles below the age of 65.

Table 3: Average Adjusted Income and Income Growth Rate of Individuals by Quintile in Ontario

	Income (2016 Constant Dollars)			Compound Average Growth Rate (Per Cent)		
	1976	2000	2016	1976-2000	2000-2016	1976-2016
Market Income						
Lowest Quintile	9,450	7,400	6,750	-1.0	-0.6	-0.8
Second Quintile	27,100	27,600	27,150	0.1	-0.1	0.0
Middle Quintile	38,100	43,750	45,550	0.6	0.3	0.4
Fourth Quintile	51,450	61,200	67,700	0.7	0.6	0.7
Highest Quintile	89,200	122,600	130,250	1.3	0.4	1.0
After-Tax Income						
Lowest Quintile	14,800	16,300	18,600	0.4	0.8	0.6
Second Quintile	26,650	29,750	33,800	0.5	0.8	0.6
Middle Quintile	34,550	40,400	46,600	0.7	0.9	0.8
Fourth Quintile	44,900	52,550	61,300	0.7	1.0	0.8
Highest Quintile	71,250	91,850	103,200	1.1	0.7	0.9

Source: Statistics Canada Canadian Income Survey and FAO.

Glossary

Term	Description
After-tax income	Market income plus government transfers less taxes paid (i.e. total income received less taxes paid).
Census division	Grouping of neighbouring municipalities sharing common services and regional planning.
Gini coefficient	A measure which summarizes the degree of inequality across the entire income distribution in a single number that ranges from zero to one. The higher the value of the Gini coefficient, the more unequal is the distribution of income. Trends in the Gini coefficient over time are a useful indicator of the direction of income inequality.
Market income	Earnings from employment, investment returns, private pension income and other private sources (i.e. income before taxes and transfers).
Median income	The income of the family or individual at the mid-point of the income distribution.
Income quintile	Division of all Ontarians into five equal groups after sorting their annual income from lowest to highest. Each income quintile represents 20 per cent or one-fifth of the population.

Term	Description
Intergenerational income elasticity	Measure of the extent to which parents' incomes impact their children's adult income. Represents the expected per cent increase in the children's future total income for every percentage point increase in the parents' total income. The higher the elasticity, the more a parent's income positively influences their children's future income as adults.
Intergenerational income mobility	Measure of the extent to which a family's economic position in one generation influences the economic position of their children in adulthood. Typically estimated by intergenerational income elasticities.
Output per worker	Real GDP per worker, calculated as real GDP divided by number of individuals in the labour force.
Relative income mobility	In this report, defined as the share of working-age Ontarians who move up or down at least one income quintile over five years. Upward income mobility refers to the share of working-age Ontarians who move up at least one income quintile over a five-year period, and downward income mobility refers to the share of working-age Ontarians who move down at least one quintile over a five-year period.
Relative income immobility	Defined as the share of working-age Ontarians who remain in the same income quintile over a five-year period.
Tax and transfer system	Federal and provincial income taxes, as well as social benefit programs administered by all levels of government. Important transfer programs include the Canada Pension Plan, Guaranteed Income Supplement, Employment Insurance, child benefits and social assistance programs.