Income Inequality Trends in York Region, 1997 to 2012

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Community and Health Services
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Introduction

This information sheet highlights income inequality trends in York Region between 1997 and 2012 using Statistics Canada's Small Area and Administrative Data, also known as income tax data.

Income tax data is a highly accurate data set that covers 100 per cent of tax filers and 96 per cent of all Canadians. It is available annually at a number of geographic levels.[1]

Income tax data is collected by matching personal income tax with other records, such as the Canada Child Tax Benefit, Social Insurance Number (SIN), addresses and birth files. The data is then aggregated into population profiles that can be grouped for individuals or for families and people not in families. Statistics Canada follows strict confidentiality procedures to develop the data and no personal information or identifiers are provided.

This information sheet is part of a series on York Region's changing income distribution

This analysis is part of several information sheets developed by York Region's Community and Health Services Department looking at trends in how income is distributed among York Region residents. They are intended to raise awareness and stimulate discussion of income issues among organizations that plan and deliver human services to York Region residents by providing data specific to what is happening in York Region.

Each information sheet covers distinct topics. One highlights low income trends in York Region – how many residents are living on low income and how has this changed? Another looks at the middle part of the income distribution – is the middle income group declining or not in York Region?

This information sheet focuses more broadly on income inequality – in other words, the extent that income is unevenly distributed among residents and how this has changed. This analysis helps identify who is benefiting most and least from York Region's prosperity.

While focusing on different aspects of income distribution in York Region, all three information sheets provide insights into the pressures facing Regional human services and broader goals of sustaining inclusive communities. In particular, understanding how many York Region residents are facing income challenges helps inform the level and type of services needed. Knowing if income growth is being enjoyed by many or only by a small group of residents helps assess if York Region is on track in providing opportunities for all to thrive.

Approach

What is inequality?

Income inequality is the extent that income is distributed unevenly among a population. Regions or countries where the income distribution is "skewed" to higher income groups, and the gap between higher and lower income residents is increasing, are considered more

[1] Income taxes are filed in the spring after the tax year. Income tax data is then developed and released the following year. For example, 2012 income tax data is developed from the 2012 tax returns filed in the spring of 2013, with data released to data users during the summer of 2014.

unequal than places where incomes are more evenly distributed across all residents.

Income inequality has received growing attention in Canada as studies have pointed to a general increase in inequality since the mid-to-late 1990s. Although its causes and impact are complex, growing income inequality is often seen as a challenge to social stability, productivity and sense of fairness if the gains of economic growth are perceived as bypassing lower and middle income residents. It can also create health disparities between the wealthy and others given that income is one of the social determinants of health. It can also lead to intergenerational concerns if younger residents are increasingly unable to move up the income ladder compared to previous generations.

At the same time, in a market economy such as Canada's that rewards risk taking, higher skills and entrepreneurialism, a certain level of market income inequality is expected. Market income includes income from employment (wages and self-employment), investments (interest and dividends), rental income, Registered Retirement Savings Plans, Registered Retirement Income Funds and private pensions. Market income inequality generally refers to differences in the wage package and returns on investments across the income distribution. Market income inequality usually trends higher than after-tax income inequality because of the impact of government policy.

In fact, the role of government in addressing income inequality is complex. It generally plays a dual role in creating the conditions for economic growth and providing opportunities for citizens to benefit from this growth through public services, labour market regulations and skills development, income support programs and progressive tax policy. The extent that governments can either increase or reduce income inequality depends on specific policy decisions – e.g. the level of income supports it provides for lower and middle income earners; the level of support to broadly available public services such as public education and health care; or tax policy that either increases or decreases the progressivity of the tax system. In Canada, government policy has tended to offset market income inequality, but to varying degrees since the 1980s. [2]

How is inequality measured?

There are many ways to measure income inequality. The approach in this information sheet is to use three basic indicators of how the higher end of the income distribution is doing relative to the others:

- Changes in average income – have incomes at the higher end increased more than others?
- Changes in the gap between the average income at the higher and lower ends of the distribution – has the gap increased?

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[2] Market income inequality has been generally increasing in Canada since the 1980s driven by a mix of market forces, such as technology changes and globalization that have contributed to the "hollowing out" of middle income jobs in manufacturing, lack of growth in productivity and growing wage and compensation packages at the higher end of the labour market. At the same time, the impact of government policy on mitigating market income inequality has varied. The tax and transfer system tended to reduce market income inequality more during the 1980s and less so from the mid-1990s to early 2000s when cuts to income transfers and weakening of the progressivity of the income tax system occurred. However, increasing income benefit levels and minimum wages, as well as steady employment in the commodity and construction sectors across Canada since then, may be helping to stabilize income inequality. For a review of the causes, impacts and policy issues of inequality, see Fortin N., D. Green, T. Lemieux and K, Milligan (2012). "Canadian Inequality: Recent Developments and Policy Options", *Canadian Public Policy*, Vol. 38, no.2 pp. 121-145; C. Alexander and F. Fong (2014). *The Case for Leaning Against Income Inequality in Canada*. TD Economics (Retrieved from http://www.td.com/document/PDF/economics/special/income_inequality.pdf); and Parliament of Canada (2013). *Income Inequality in Canada: An Overview*. House of Commons Report of the Standing Committee on Finance, 4th Parliament, Second Session (Retrieved from http://www.parl.gc.ca/content/hoc/Committee/412/FINA/Reports/RP6380060/finarp03/finarp03-e.pdf)

- Changes in the share of income – has the higher end received more of total income than others?

If the average income, income gap and share are all increasing at the higher end compared to the middle or lower end of the income distribution, then inequality can be said to be increasing.[3]

The data used in this information sheet is individual after-tax income. After-tax income reflects the income an individual has after all government transfers are received and income tax is paid, both of which usually have the effect of reducing inequality that may arise from unequal market income.

To compare the higher, middle and lower parts of the income distribution, the data is organized into **quintiles**. This means dividing the number of individual income tax filers into five equal groups, with each quintile representing 20 per cent of all York Region income tax filers. The income is sorted from lowest to highest. The lower end of the income distribution is represented at the first quintile and the higher end at the fifth quintile. Calculations are then made within each quintile to assess changes in average income of each quintile, the share of total income for each quintile and the income gap between the highest and lowest quintiles.[4] All income data has been inflation-adjusted to 2012 dollars (referred to as constant dollars). This allows for comparing changes in the real value of income over time (referred to as real income). The data includes all tax filers, including those who have zero or negative income.[5]

Inequality Trends

After increasing from 1997 to 2002, income inequality has largely plateaued since

As Table 1shows, increases in average incomes among all quintiles varied between 1997 and 2012. The largest increases occurred at the fourth and fifth quintiles while the rest basically kept pace with inflation.[6] In addition, the income gap between the highest and lowest income residents increased, with the top quintile earning 26 times the income of the bottom quintile in 2012 – up from 23 times in 1997.

[3] The gold standard in measuring inequality is the Gini coefficient, which calculates the extent that the distribution of incomes within a population deviates from a perfectly equal distribution. Calculating the Gini coefficient usually requires access to micro-data files (i.e. individual records) that are not available in tax filer data.

[4] The data includes all income tax filers in York Region. In 2012 this represented 825,600 York Region residents. Inequality can also be measured using family income. Family income is usually higher than individual incomes given that many families have more than one tax filer and earner. However, the basic inequality trends are usually similar between family and individual income data. Individual income tends to capture the impact of employment and other market income returns while family income captures the impact of income sharing within families. For analysis that uses both individual and family data, see Murphy, M., P. Roberts and M. Wolfson (2007). *A Profile of High-Income Canadians: 1982 to 2004*. Statistics Canada Income Statistics Division, Ottawa, Cat. No. 75F0002MIE.

[5] Those with negative income have been adjusted to zero in the data set.

[6] The first quintile includes people with zero or very low income, which helps explain the low average for this group. These could include students, the self-employed, single adults relying on Ontario Works, recent arrivals to Canada with no Canadian income, newcomer seniors who do not qualify for Old Age Security, etc.

Table 1

Average Annual Individual After Tax Income by Quintiles, 1997 to 2012, York Region (2012 constant dollars)

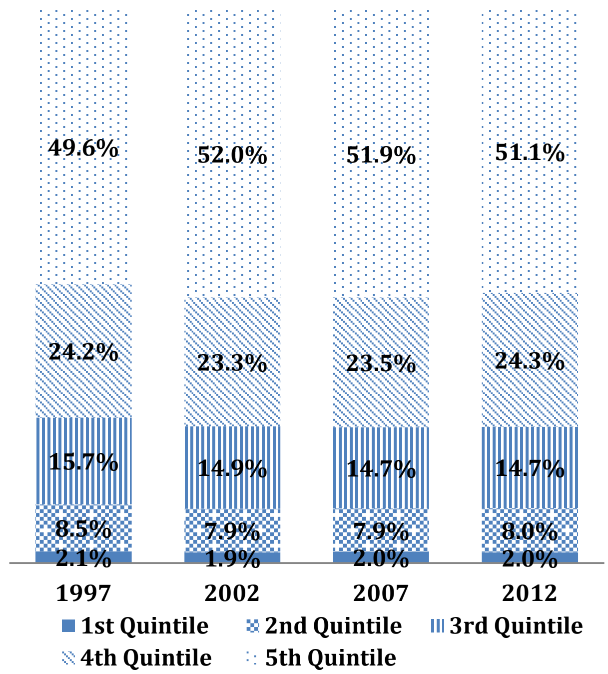
	1997	2002	2007	2012	% change 1997-2012
1st Quintile	3,790	3,814	3,938	3,757	-0.9%
2nd Quintile	15,004	15,499	15,569	15,245	1.6%
3rd Quintile	27,676	29,243	29,118	28,066	1.4%
4th Quintile	42,714	45,777	46,583	46,386	8.6%
5th Quintile	87,639	102,070	102,817	97,683	11.5%
Ratio 5th to 1st Q	23.1	26.8	26.1	26.0	-

Source: Statistics Canada, Income Statistics Division, T1 Family File 1997-2012, Reference 14030

Higher income residents also gained a slightly bigger share of total income in York Region between 1997 and 2012. As Chart 1 shows, the fifth quintile's share of all income increased from 49.6 per cent to 51 per cent between 1997 and 2012, with slight declines at the bottom three quintiles.

Chart 1

Percent Share of Total Individual After Tax Income by Quintiles, 1997 to 2012, York Region



Source: Statistics Canada, Income Statistics Division, T1 Family File 1997-2012, Reference 14030

These changes show that income inequality increased somewhat in York Region between 1997 and 2012. However, as Chart 1 and Tables 1 and 2 (see below) show, almost all the overall income gains at the higher end happened between 1997 and 2002. This is shown in all three measures – where changes in average income, share of income and income gap between the first and fifth quintiles all showed increasing inequality between 1997 and 2002 but largely plateaued after that. The 2008 recession and the following recovery years had a negative impact on all quintiles and decreased inequality slightly, but not enough to reverse the increases between 1997 and 2002. The impact of the recession was greatest at the bottom quintiles as lower and middle income residents likely faced more challenges making ends meet with declining incomes than higher income residents.

Table 2

Change in Average Individual After Tax Income by Quintiles, York Region (2012 constant dollars)

	1997-2002	2002-2007	2007-2012
Total	11.1%	0.8%	-3.5%
1st Quintile	0.6%	3.3%	-4.6%
2nd Quintile	3.3%	0.5%	-2.1%
3rd Quintile	5.7%	-0.4%	-3.6%
4th Quintile	7.2%	1.8%	-0.4%
5th Quintile	16.5%	0.7%	-5.0%

Source: Statistics Canada, Income Statistics Division, T1 Family File 1997-2012, Reference 14030

The highest income residents, or the top five per cent, had a slightly different experience than the rest of the top quintile between 1997 and 2012

York Region's increasing income inequality is reflected in the income gains of residents at the higher end of the income distribution. However, not all high income residents in York Region experienced the same pattern of income growth, particularly the top five per cent of income tax filers. As Table 3 shows, the average income of the top five per cent of York Region income tax filers increased more than others within the top quintile between 1997 and 2002 but decreased after that, particularly between 2007 and 2012 - from $191,846 to $170,062, or an 11 per cent decrease, compared to small increases for the top five to 10 per cent and top 10 to 20 per cent of income tax filers in York Region between 2007 and 2012. This decrease was likely a result of the impact of the 2008 recession on equity returns and losses at the highest income levels.

Table 3

Average Annual Individual After Tax Income, Highest Income Earners, 1997 to 2012, York Region (2012 constant dollars)

	1997	2002	2007	2012
Top 5%	156,033	193,610	191,846	170,062
Top 5-10%	75,329	84,161	85,801	85,836
Top 10-20%	59,592	65,246	66,811	67,419

Source: Statistics Canada, Income Statistics Division, T1 Family File 1997-2012, Reference 14030

Conclusion

Income inequality is increasing in many European and North American economies. York Region has been no exception. [7, 8] If this persists, York Region may face challenges in sustaining a sense of inclusion among all income groups and achieving its long-term goal of being a place where everyone can thrive and reach optimal health.

Income inequality reflects many factors – differences in wages between higher and lower skilled residents, changes in the type of jobs

[7] OECD (2011). *Divided We Stand: Why Inequality Keeps Rising*. OECD Publishing. (Retrieved from http://dx.doi.org/10.1787/9789264119536-en)

[8] Calculations using the Gini coefficient for Census long form data by University of Toronto researchers also show some increasing inequality within York Region communities and York Region as a whole from 1990 to 2005. Due to the lack of micro data at the York Region level, the researchers applied the Gini to household income groupings rather than families or individual data. See Alan Walks (2013). *Income Inequality and Polarization in Canada's Cities: An Examination and New Form of Measurement.* Research Paper 227 Cities Centre, University of Toronto (Retrieved from http://neighbourhoodchange.ca/documents/2014/04/walks-2013-income-inequality-rp227.pdf) and Neighborhood Change Research Partnership, University of Toronto.

available, the impact of globalization and technology and changing federal and provincial policy, etc. These are largely beyond control of Regional government to change or influence alone. York Region remains a relatively affluent community with a robust economy and strong business enterprises. While federal and provincial policy needs to play a leading role in impacting income levels, Regional government also plans and delivers important human services that help low and middle income residents meet basic needs and improve labour market outcomes. Examples of where services are making a difference include:

- employment supports, such as child care fee assistance, skills training and transit fare subsides
- affordable and social housing options and homelessness prevention programs
- dental benefits for low income children and health and dental benefits for Ontario Works clients
- promoting social inclusion and collective action in the community, such as the Immigration Settlement Strategy and Making Ends Meet initiative.

In addition, regional government can partner or lead in advocating for federal and provincial income benefits, skills development and tax policies that help address income inequality. Regional and local municipal governments, along with other partners across the Greater Toronto and Hamilton Area, can also work together to create the right conditions for business investment and jobs that provide better incomes for residents at the lower and middle parts of the income distribution. This includes economic development strategies, public transit and other key infrastructure investments and responsible property tax and fiscal policy that foster growth in good jobs.

For More Information

Research and analysis for this information sheet are prepared by the Strategies and Partnerships Branch, Community and Health Services Department, The Regional Municipality of York. This information is not exhaustive of all research relevant to York Region. It is provided for reference purposes only. York Region accepts no liability for the consequences of any actions taken on the basis of the information provided.

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