Putting numbers on inequality

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The Occupy movement occupied a lot of political attention this fall in Vancouver. While it often seemed muddled in its goals, the one message that did come through was a concern with growing inequality.

The media has talked a lot about U.S. inequality trends, but we may be more concerned about what is happening in Canada. Digging into Canadian trends can point us to how, as a society, we ought to respond.

The top line in the chart at right shows the trend in family earnings inequality for Canada since 1976. The earnings number we use here includes all income other than government transfers - so we have income from employment, investments, etc. We then compare the earnings of everyone in Canada against a benchmark where everyone has the same income. The difference between reality and this benchmark is distilled down to one number, called the Gini coefficient. The bigger the Gini, the greater the inequality.

The Gini is useful because it's a standard measure used all over the world. But it's worth noting that the Gini does a poor job of capturing movements in the earnings for the top one per cent that has been the focus of the Occupy movement. We will focus on issues related to very high earners in Thursday's piece.

Staring at the top line in the chart reveals a few key patterns. First, there is no doubt that earnings inequality has risen in Canada in the last three decades. The Gini rose from 0.44 to 0.51 between 1980 and 2007, which were both years at the peak of economic booms. This is a substantial rise for a Gini coefficient and implies a 16-per-cent increase in inequality. To put this trend in more intuitive terms: in 1980 the top 20 per cent of earners took home 44 per cent of total earnings while by 2007 they took home 51 per cent.

Second, inequality rises sharply during recessions because it's low earners who bear the brunt of bad economic times. This happened in both the busts of 1981-83 and the early '90s. You might expect inequality to then decline as we come out of recessions, but this didn't happen in either the '80s or '90s. Instead, the level of inequality ratcheted upward over time. In the strong labour market of the early/mid 2000s, inequality did decline somewhat, but it has been rising again in the current slowdown. If history is any guide, we could be witnessing another ratcheting up in inequality.

The lower line in the chart shows the Gini for family income after we add in government transfers and take out taxes to get what economists call "disposable income." The first point to notice is how much lower this line is: taxes and transfers really do decrease inequality - a lot. In 2009, inequality in disposable income was 24-per-cent lower than earnings inequality.

The disposable income line tells a very different story from the market income line.
Up to about 1990, the disposable income line was flat. Market income was growing less equal, but federal and provincial governments increased taxes and transfers enough to offset growing earnings inequality.

This all changed in the mid-1990s. With large government deficits and record numbers on provincial welfare rolls, the will to keep increasing taxes to fund more transfers faltered. Governments cut taxes and transfers, and inequality in disposable income started tracking inequality in earnings. This led to a strongly different pattern in after-tax income. In the 2000s, while earnings inequality fell, disposable income inequality rose slightly. For disposable income, the share of the top 20 per cent of families rose from 40 per cent in 1980 to 44 per cent in 2009.

One possible conclusion from these patterns is that while taxes and transfers reduce inequality, they can only be part of the response since the political will to address long-term increases in inequality through these tools may be weak: The ultimate solution must also involve addressing earnings inequality directly. We will talk more about policy responses in the fourth instalment of this series.

One last thought - what may matter more than the income distribution in a given year is what happens through time. Do people move up the income ladder, or stick where they started? Charles Beach at Queen's University has shown that 18 per cent of those in the bottom 10 per cent in one year are still stuck at the bottom eight years later.

This is good - a strong majority are able to escape the bottom. However, for those in the top 10 per cent, 72 per cent of them are still there eight years later, and the probability of moving from the middle to the bottom has been growing. Breaking into the top income club is hard and getting harder.

These numbers tell us that the ratcheting-up of inequality in Canada is real. Whatever else it achieved, the Occupy movement is shining a light on our growing inequality.

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