

Sharing the Wealth from Growth: Comparing the Canadian and US Experiences

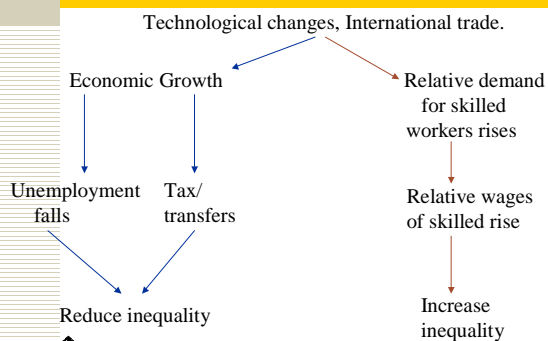
Shay Aba
C.D. Howe Institute
Presentation to the Canadian Economics Association
June 3, 2001, McGill University

Presentation Layout

- ✦ Short overview of theories on the links between economic growth and inequality.
- ✦ Canada and US trends.
- ✦ Explaining the differences.
- ✦ Relationship between growth and inequality, Canada and US.
- ✦ Conclusion.

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Growth's Impact on Inequality



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Inequality's impact on Growth

- ✦ High inequality → political instability → reduces growth.
- ✦ Median voter argument.
- ✦ Credit market imperfections.

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Canada and the United States: Trends in Income and Inequality

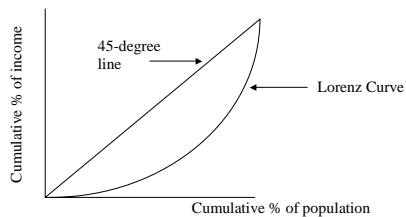
Why We Compare Canada and the US?

- Similarities:
Market orientation, wage setting process, social trends.
- Differences:
Macroeconomic performances.

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Measuring Inequality

- Most popular amongst researchers: The Gini coefficient.



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Measuring Inequality Cont.

- Most popular amongst the public: The Quintiles Ratio.

$$QR = \frac{\text{Average income of the top income quintile}}{\text{Average income of the bottom quintile}}$$

- Higher ratio, higher inequality.

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Measuring Economic Growth

✪ We chose average (mean) household income, the purchasing power of the population.

1. Market income, before government.
2. After-tax income, after government.

Data Sources

Published Data:

- ✪ Canada: Survey of Consumer Finances (SCF). 1971-1997, annual basis.
- ✪ US: March Current Population Survey (MCPS). 1979-1999 for fifteen different definitions of income, annual basis.

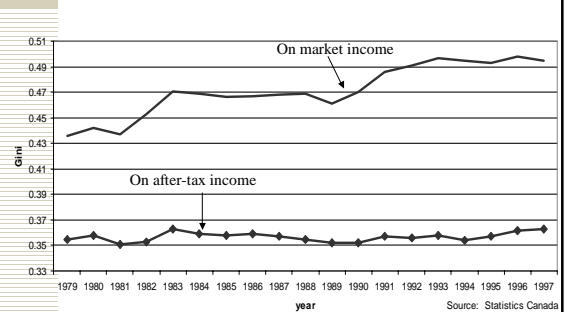
Caveats

✪ Canada: families + unattached individuals, US: households.

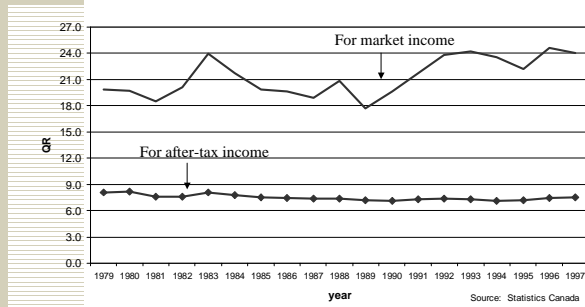
✪ Capital gains, payroll taxes.

✪ After-tax income measures for the US are estimated.

Gini Coefficients, Canada, 1979-1997.



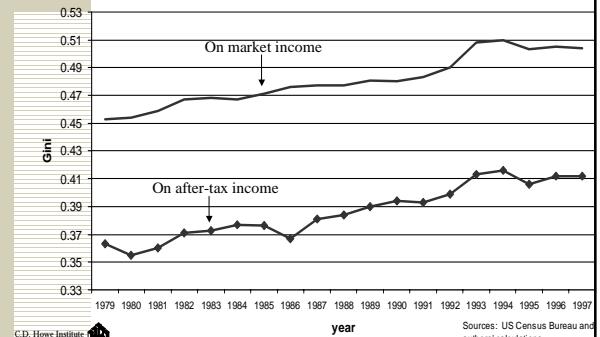
Ratio of Average Income of Top Quintile to Average Income of Bottom Quintile, Canada, 1979-1997.



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Source: Statistics Canada

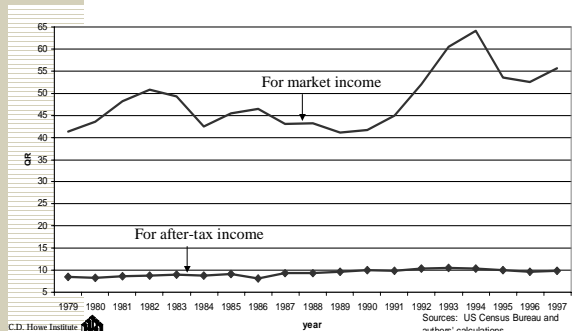
Gini Coefficients, USA, 1979-1997.



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Sources: US Census Bureau and authors' calculations

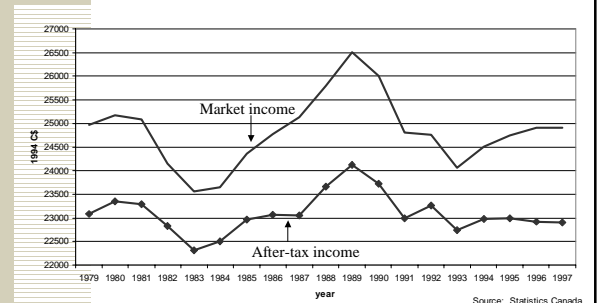
Ratio of Average Income of Top Quintile to Average Income of Bottom Quintile, USA, 1979-1997.



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Sources: US Census Bureau and authors' calculations

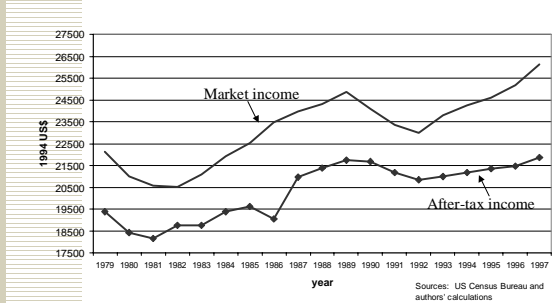
Families and Unattached Individuals, Average Income Adjusted for Family Unit Size, Canada, 1979-1997.



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Source: Statistics Canada

Average Household Income Adjusted for Household Size, United States, 1979-1997.



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Explaining the Differences

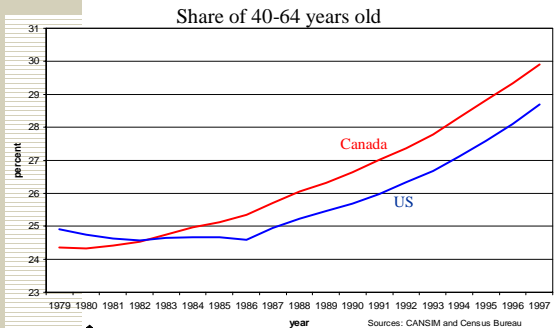
US inequality higher, rises faster. Why?

- Unions: Stronger in Canada. (Dinardo & Lemieux, 1997)
- Graduation rates: Recently higher in Canada. Relative supply of skilled workers ↑ (Bar-or et. al 1995)
- Canada's Tax/Transfers system works harder.

Other Possible Reasons...

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Demographics?



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The Relationship Between Economic Growth and Inequality

Correlation Coefficients

Correlations - Time Period 1979-97, Annual in Levels.

Canada: market income and inequality: -0.71
after-tax income and inequality: -0.63

US: market income and inequality: 0.78*
after-tax income and inequality: 0.85

* Spurious correlation.

Granger Causality Test

Based on the notion that the cause precedes the effect in time. (Granger, 1969)

Does a model with past values of inequality and average income predict better than a model with past values of inequality only? (Standard F-test)

Results

In Canada, **average market income** causes inequality.

P-Values

lags	1	2	3	4
1971-1997	0.5582	0.005	0.017	0.029
1979-1997	0.609	0.0354	0.0236	0.074

In the US, no causality was found.

Results

- Some evidence that **after-tax income** in Canada "Granger causes" inequality.

P-Values

lags	1	2	3	4
1971-1997	0.023	0.067	0.039	0.057
1979-1997	0.107	0.166	0.804	0.942

- No evidence of "Granger causality" in the US

Conclusion

- US higher inequality.
- Inequality rising in both countries, but Canadian Tax/Transfer system keeps inequality under control.
- Economic Growth Does Not Mean Higher Inequality in Canada.**