Divided Landscapes of Economic Opportunity

The Canadian Geography of Intergenerational Mobility

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‘Inclusive growth’ is economic and social development of relatively more advantage to the relatively disadvantaged.

Equality of economic opportunities is an aspect of inclusive growth.

1. For instrumental reasons
   - equal opportunity means greater efficiency and productivity

2. For intrinsic reasons
   - equal opportunity might be seen as being ‘fair,’ leading to less concern about resulting inequality of outcomes
‘Inclusive growth’ is economic and social development of relatively more advantage to the relatively disadvantaged

Equality of economic opportunities is an aspect of inclusive growth

Bottom line for public policy

don’t let inequality increase in the bottom half of the income distribution, indeed strive to reduce it in a way that encourages labour market and social engagement
Three motivating pictures: Inequality is higher

Top income shares rising

14% of total market income accrues to the top one per cent

1975: 8.1%

1996: 10.3%

2013: 11.7%
Three motivating pictures: Mobility varies within the US

B. Relative Mobility: Rank-Rank Slopes \( (\bar{r}_{100} - \bar{r}_0)/100 \) by CZ

Corr. with baseline \( \bar{r}_{25} = -0.68 \) (unweighted), -0.61 (pop-weighted)
Equality of economic opportunities is an aspect of inclusive growth, but it is challenging to measure

Children should have the capacity to become all that they can be, without regard to family income background

1. equality of opportunity is a challenge to measure
2. intergenerational income mobility is one dimension, but it in turn has many dimensions about which we might care
   - incomes
   - positions (or rank mobility)
   - directions (particularly upward mobility)
Three measures of intergenerational mobility we care about

1. incomes

average incomes of children from different communities vary for at least three statistical reasons related to differences in:

- average community income
- absolute income mobility: the overall change in average adult income of all children compared to the average of their parents
- relative income mobility: how much the gap between parent incomes is closed in the next generation
Table 1: Average child and parent ‘family’ incomes by province

<table>
<thead>
<tr>
<th>Province/Territory</th>
<th>Number of Children</th>
<th>Child Income</th>
<th>Parent Income</th>
</tr>
</thead>
<tbody>
<tr>
<td>Newfoundland and Labrador</td>
<td>84,050</td>
<td>45,900</td>
<td>29,400</td>
</tr>
<tr>
<td>Prince Edward Island</td>
<td>16,750</td>
<td>45,600</td>
<td>30,750</td>
</tr>
<tr>
<td>Nova Scotia</td>
<td>112,900</td>
<td>45,350</td>
<td>35,150</td>
</tr>
<tr>
<td>New Brunswick</td>
<td>91,500</td>
<td>44,200</td>
<td>32,850</td>
</tr>
<tr>
<td>Quebec</td>
<td>796,650</td>
<td>50,800</td>
<td>39,700</td>
</tr>
<tr>
<td>Ontario</td>
<td>1,057,550</td>
<td>57,950</td>
<td>44,250</td>
</tr>
<tr>
<td>Manitoba</td>
<td>122,150</td>
<td>48,550</td>
<td>36,500</td>
</tr>
<tr>
<td>Saskatchewan</td>
<td>122,500</td>
<td>56,550</td>
<td>39,750</td>
</tr>
<tr>
<td>Alberta</td>
<td>284,550</td>
<td>65,200</td>
<td>48,550</td>
</tr>
<tr>
<td>British Columbia</td>
<td>304,250</td>
<td>53,200</td>
<td>47,200</td>
</tr>
<tr>
<td>Yukon</td>
<td>2,950</td>
<td>50,700</td>
<td>42,450</td>
</tr>
<tr>
<td>Northwest Territories, Nunavut</td>
<td>7,150</td>
<td>46,100</td>
<td>29,050</td>
</tr>
<tr>
<td>Canada</td>
<td>3,002,950</td>
<td>54,500</td>
<td>42,050</td>
</tr>
</tbody>
</table>

Note: Numbers are weighted totals, incomes expressed in 2014 dollars, and everything rounded to the nearest 50.
Table 2: Intergenerational income mobility: absolute income mobility, relative income mobility, and average parental community income

<table>
<thead>
<tr>
<th>Province/Territory</th>
<th>Absolute</th>
<th>Relative</th>
<th>Parent Income</th>
</tr>
</thead>
<tbody>
<tr>
<td>Newfoundland and Labrador</td>
<td>8.69</td>
<td>0.180</td>
<td>29,400</td>
</tr>
<tr>
<td>Prince Edward Island</td>
<td>8.91</td>
<td>0.159</td>
<td>30,750</td>
</tr>
<tr>
<td>Nova Scotia</td>
<td>8.49</td>
<td>0.192</td>
<td>35,150</td>
</tr>
<tr>
<td>New Brunswick</td>
<td>8.54</td>
<td>0.189</td>
<td>32,850</td>
</tr>
<tr>
<td>Quebec</td>
<td>8.67</td>
<td>0.186</td>
<td>39,700</td>
</tr>
<tr>
<td>Ontario</td>
<td>8.67</td>
<td>0.191</td>
<td>44,250</td>
</tr>
<tr>
<td>Manitoba</td>
<td>6.98</td>
<td>0.341</td>
<td>36,500</td>
</tr>
<tr>
<td>Saskatchewan</td>
<td>8.19</td>
<td>0.238</td>
<td>39,750</td>
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<tr>
<td>Alberta</td>
<td>8.71</td>
<td>0.194</td>
<td>48,550</td>
</tr>
<tr>
<td>British Columbia</td>
<td>8.73</td>
<td>0.176</td>
<td>47,200</td>
</tr>
<tr>
<td>Yukon</td>
<td>8.62</td>
<td>0.187</td>
<td>42,450</td>
</tr>
<tr>
<td>Northwest Territories, Nunavut</td>
<td>8.67</td>
<td>0.175</td>
<td>29,050</td>
</tr>
<tr>
<td>Canada</td>
<td>8.52</td>
<td>0.201</td>
<td>42,050</td>
</tr>
</tbody>
</table>
Average adult income of children is higher than average parent income in almost every municipality.
Three measures of intergenerational mobility we care about

1. incomes

2. position

the average rank in the national income distribution of children from different communities depends upon:

- **absolute rank mobility**: how much a child born to bottom ranking parents rises
- **relative rank mobility**: how much the rank of a child increases for higher ranking parents
The children of middle ranked Manitobans barely surpass children of the lowest ranked Albertans.

In Alberta absolute rank mobility is 44, and relative is 0.21. While in Manitoba absolute is 31, and relative is 0.33.
Three measures of intergenerational mobility we care about

1. incomes

2. position

3. upward mobility, avoiding poverty

- **rags to riches**: moving to the top, given bottom income parents
- **the cycle of poverty**: staying in the bottom, given bottom income parents
- **the cycle of privilege**: staying in the top, given top income parents
Table 3: Intergenerational directional mobility based on selected quintile transition probabilities

<table>
<thead>
<tr>
<th>Province/Territory</th>
<th>Rags to riches</th>
<th>Cycle of poverty</th>
<th>Cycle of privilege</th>
</tr>
</thead>
<tbody>
<tr>
<td>Newfoundland and Labrador</td>
<td>0.087</td>
<td>0.321</td>
<td>0.295</td>
</tr>
<tr>
<td>Prince Edward Island</td>
<td>0.077</td>
<td>0.278</td>
<td>0.279</td>
</tr>
<tr>
<td>Nova Scotia</td>
<td>0.071</td>
<td>0.350</td>
<td>0.256</td>
</tr>
<tr>
<td>New Brunswick</td>
<td>0.061</td>
<td>0.352</td>
<td>0.264</td>
</tr>
<tr>
<td>Quebec</td>
<td>0.091</td>
<td>0.290</td>
<td>0.298</td>
</tr>
<tr>
<td>Ontario</td>
<td>0.141</td>
<td>0.284</td>
<td>0.352</td>
</tr>
<tr>
<td>Manitoba</td>
<td>0.076</td>
<td>0.414</td>
<td>0.296</td>
</tr>
<tr>
<td>Saskatchewan</td>
<td>0.141</td>
<td>0.277</td>
<td>0.333</td>
</tr>
<tr>
<td>Alberta</td>
<td>0.185</td>
<td>0.259</td>
<td>0.375</td>
</tr>
<tr>
<td>British Columbia</td>
<td>0.120</td>
<td>0.298</td>
<td>0.256</td>
</tr>
<tr>
<td>Yukon</td>
<td>0.117</td>
<td>0.371</td>
<td>0.295</td>
</tr>
<tr>
<td>Northwest Territories, Nunavut</td>
<td>0.100</td>
<td>0.397</td>
<td>0.391</td>
</tr>
<tr>
<td>Canada</td>
<td>0.114</td>
<td>0.301</td>
<td>0.323</td>
</tr>
</tbody>
</table>
Cycles of privilege don’t hamper rags to riches movement, but cycles of poverty do.
Cycles of poverty are more likely for boys

Chances of an intergenerational cycle of low income are higher for men

Chances of an intergenerational cycle of low income are higher for women
The intergenerational cycle of bottom income

The following table shows the probability of staying in the bottom quintile for men and women having bottom quintile parents:

- 0.40 or higher
- 0.35 to 0.40
- 0.30 to 0.35
- 0.25 to 0.30
- 0.20 to 0.25
- less than 0.20

The map illustrates the probability of staying in the bottom quintile across Canada, with different colors representing different probability ranges.
Rags to riches mobility

Probability of moving to the top quintile for men and women having bottom quintile parents

- 0.20 or more
- 0.15 to 0.20
- 0.10 to 0.15
- 0.05 to 0.10
- 0.025 to 0.05
- less than 0.025
Clustering communities with unsupervised machine learning

Eight parameters of three alternative measures

- absolute income mobility, relative income mobility, average parent incomes
- absolute rank mobility, relative rank mobility
- rags to riches, cycles of poverty, cycles of privilege
The landscape of “us and them”
Four divides in the landscape of economic opportunity

Census Division Clusters
(determined by Hierarchical Agglomerative Clustering)

1
2
3
4
unclassified

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(determined by Hierarchical Agglomerative Clustering)

1
2
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4
unclassified

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2
3
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unclassified
**Correlates of economic opportunity**

- **Poverty rate in the parent's generation**
  - (Percent of population in the Census Division below the LICO)

- **Probability of intergenerational low income**

- **Number of Children in bottom quintile families**

![Graph showing the relationship between poverty rate in the parent's generation and the probability of intergenerational low income.](image-url)
Public policy for ‘Inclusive growth’

Demand side policy

1. The nature of growth and income security policy
2. Cities as poles of inclusive growth
   - Toronto, no more?
   - diversity of employment opportunities
   - public goods and non monetary aspects of well-being

Supply side policy

1. some First Nations communities
2. boys in lower income families
3. education
4. geographic mobility as human capital
5. immigration
   - age at arrival
   - access to jobs, implicit bias, TFW