Asset poverty in Canada: Implications for child and family research

David W. Rothwell

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Asset poverty in Canada: Implications for child and family research

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Agenda

1. Why measure poverty - general (DR)
2. Basics of poverty measurement - assets vs. income (DR)
3. Population estimates (DR)
4. Why social work should measure poverty? (AB)
5. Asset poverty in Canadian families w/ children (AB)
Why measure poverty?

1. Different measures imply different size and composition of the target population (Haveman, 2009).
2. Policies are more effectively targeted to reduce poverty.
3. Monitoring and evaluating interventions against poverty are easier with a poverty measure.
4. It keeps the poor on the agenda; policymakers and citizens respond (Ravallion, 1998; Haveman, 2009).
Why measure poverty?

1. Different measures imply different size and composition of target population (Haveman, 2009).
Why measure poverty?

1. Different measures imply different size and composition of target population (Haveman, 2009)

2. More effectively target policy interventions
Why measure poverty?

1. different measures imply different size and composition of target population (Haveman, 2009)
2. more effectively target policy interventions
3. monitoring and evaluating interventions
Why measure poverty?

1. different measures imply different size and composition of target population (Haveman, 2009)
2. more effectively target policy interventions
3. monitoring and evaluating interventions
4. keeps the poor on the agenda; policymakers and citizens respond (Ravallion, 1998; Haveman, 2009)
Poverty Measurement in Rich Countries

Stats Can approach

Former Statistics Canada chief statistician Ivan Fellegi, "poverty is intrinsically a question of social consensus and the determination of poverty criterion ultimately involves value judgments and, as such, it is not the role of Statistics Canada to define and measure poverty." Murphy et al 2012
Low income measurement in Canada

- Low income cutoffs (LICO)
- Low income measure (LIM)
- Market Basket Measures (MBM)
- See *Stats Can report Low Income Lines*
The Low Income Cutoff - LICO

Definition

The low income cut-offs (LICOs) are income thresholds below which a family will likely devote a larger share (20%) of its income on the necessities of food, shelter and clothing than the average family.

- First in 1959; re-based in 1992
- regional variability 5
LICO calculation

Calculation of an after-tax LICO

% of income spent on food, shelter and clothing

LICO over time
Low income measure - LIM

Definition: the LIM is a fixed percentage (50%) of median adjusted household income, where "adjusted" indicates that household needs are taken into account. (Statistics Canada, 2011, p. 10)

- introduced early 1990s
- Survey = Survey of Labor Income and Dynamics
- regional variability none
LIM over time
The market basket measure - MBM

Definition

Definition: The MBM is a measure of low income based on the cost of a specific basket of goods and services representing a modest, basic standard of living. (Statistics Canada, 2013, p. 9). Includes the costs of food, clothing, footwear, transportation, shelter and other expenses.

- First release in 2000, rebased 2011
- Survey = Survey of Labor Income and Dynamics
- Regional variability 49
MBM over time

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Low income lines over time

**Graph:**
- **Line:**
  - Red: Low income cut-offs after tax, 1992 base
  - Green: Low income measure after tax
  - Blue: Market basket measure, 2011 base

**Data:**
- Poverty Rates: 9%, 10%, 11%, 12%, 13%, 14%, 15%

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Before and after tax low income
Underlying assumptions of income poverty measurement

Lampman and Haveman assumptions income poverty

1. Income is a proxy for long-term well-being; capacity to consume
2. Markets function
3. Needs standard
4. Adjust for family size - equivalence scale
Alternative measures of poverty

Economic measures

1. Actual consumption measures
Alternative measures of poverty

Economic measures

1. Actual consumption measures
2. What about assets?
Neoclassical assumption: assets are stored income, representing potential for consumption but nothing more
Income v. assets?

- Neoclassical assumption: assets are stored income, representing potential for consumption but nothing more

Sherraden (1991) *Assets and the Poor*

- assumed that assets are more than potential future consumption
- when people accumulate assets, people think and behave differently; and the world responds to them differently
What are the effects of asset holding?

- Sherraden
  - future orientation
  - human capital
  - focus and specialization
  - social influence
  - intergenerational
What are the effects of asset holding?

- Sherraden
  - future orientation
  - human capital
  - focus and specialization
  - social influence
  - intergenerational
- Economic mobility (Morillas, 2007)
- Guard against shocks
- Stress and family functioning
Asset effects?

- Assets also a proxy for long-term wellbeing

- Shapiro (2004) ”Most survive on incomes, while assets feed dreams of a better life, offer hope for the future, and are the key resources to launching upward mobility”
Asset effects?

- Assets also a proxy for long-term wellbeing

- Shapiro (2004) “Most survive on incomes, while assets feed dreams of a better life, offer hope for the future, and are the key resources to launching upward mobility”

- Alternative explanations
  1. income, not assets
Assets also a proxy for long-term wellbeing

Shapiro (2004) ”Most survive on incomes, while assets feed dreams of a better life, offer hope for the future, and are the key resources to launching upward mobility”

Alternative explanations

1 income, not assets

2 endogeneity
by all accounts assets are more unequally distributed than income
Asset and wealth patterns in Canada

1. by all accounts assets are more unequally distributed than income

2. Top income quintile held 69.2% all wealth (Stats Can, 2006)
Asset and wealth patterns in Canada

1. by all accounts assets are more unequally distributed than income

2. Top income quintile held 69.2% all wealth (Stats Can, 2006)

3. Gap top/bottom deciles wealth to income 9:1
   - gap in mean wealth $1.3 million compared to gap in mean income $145,000 (Chawla, 2004)
Asset and wealth patterns in Canada

1. By all accounts, assets are more unequally distributed than income.

2. Top income quintile held 69.2% of all wealth (Stats Can, 2006).

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4. Correlation between income and net worth increased from .35 to .43 between 1999 and 2005 (Brzozowski, 2010).
Asset and wealth patterns in Canada

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4. Correlation between income and net worth increased .35 to .43 between 1999 and 2005 (Brzozowski, 2010).

5. Rise in percent of low income Canadians without financial assets 35% in 1984; 40% in 1999 (Morissette, 2002).
Method

Assuming assets can also be a proxy for well-being then what about measuring asset poverty?
Method

Assuming assets can also be a proxy for well-being then what about measuring asset poverty?

Research Questions

- What is the nature of asset holding in Canada 1999-2005?
- What is the prevalence of asset poverty in Canada?
- How does the prevalence of asset poverty compare to the prevalence of income poverty?
- What are the key socio-demographic determinants of asset poverty?
"The purpose of the survey is to collect information from a sample of Canadian households on their assets, debts, employment, income and education. This helps in understanding how household finances change because of economic pressures. The SFS provides a comprehensive picture of the net worth of Canadians. Information is collected on the value of all major financial and non-financial assets and on the money owing on mortgages, vehicles, credit cards, student loans and other debts.” (Statistics Canada, 2005)
Survey of Financial Security 1999

- Sample size $\text{N}=31,575$ linked to economic families (15,933).
- Stratified, multi-stage sample selected from the Labour Force Survey (LFS) sampling frame.
- Weight: population counts for different Stats Can province - age - sex groups.
Survey of Financial Security 2005

- Sample size N=10,442 linked to economic families (5,103).

- Stratified, multi-stage sample selected from the Labour Force Survey (LFS) sampling frame.

- Weight: population counts for different Stats Can province - age - sex groups. T4 files and SLID adjustments
Method

Operational Definition

Haveman and Wolff (2005): a household or person is asset poor, "if their access to wealth-type resources is insufficient to enable them to meet their basic needs for some limited period of time" (p. 149).
Operational Definition

Wealth type resources

1. financial assets: all checking and savings accounts, term deposits, mutual funds, stocks, registered savings plans, vehicles and other durable assets.

2. net worth: (reported value of financial assets plus principal residence, other real estate) - value of total debts.
 Operational Definition

Basic Needs

- assumption that a household has sufficient wealth type resources to maintain at the low income LICO threshold
Period of time

- A period of three months
### 2005 Low income thresholds for large urban area family

- **LICO** = $32,576
- **LIM** = $32,326
- **MBM: Montreal** : $25,940
2005 Low income thresholds for large urban area family

- LICO = $32,576
- LIM = $32,326
- MBM: Montreal : $25,940
- Asset poverty threshold = $32,576 * .25 = $8,144
Distribution of assets and net worth

<table>
<thead>
<tr>
<th>Variable</th>
<th>Unc mean</th>
<th>Unc median</th>
<th>% pos</th>
<th>mean</th>
<th>SE</th>
<th>25%</th>
<th>median</th>
<th>75%</th>
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</thead>
<tbody>
<tr>
<td>1999 Financial assets non pension</td>
<td>39890</td>
<td>3496</td>
<td>91</td>
<td>44441</td>
<td>1938</td>
<td>1135</td>
<td>5282</td>
<td>22982</td>
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<tr>
<td>2005 Financial assets non pension</td>
<td>43797</td>
<td>4447</td>
<td>82</td>
<td>49152</td>
<td>2870</td>
<td>1199</td>
<td>6193</td>
<td>27861</td>
</tr>
<tr>
<td>1999 Net worth1</td>
<td>118384</td>
<td>41163</td>
<td>89</td>
<td>158408</td>
<td>3150</td>
<td>21041</td>
<td>81412</td>
<td>187066</td>
</tr>
<tr>
<td>2005 Net worth1</td>
<td>158270</td>
<td>54916</td>
<td>81</td>
<td>208779</td>
<td>9083</td>
<td>25613</td>
<td>103359</td>
<td>233247</td>
</tr>
</tbody>
</table>
### Asset poverty rates 1999 to 2005

#### Background

- **LICO**: Low Income Cut-off
- **APOVFA2**: Asset Poverty Vulnerability Factor 2
- **APOVNW1**: Asset Poverty Vulnerability Factor 1

<table>
<thead>
<tr>
<th>Year</th>
<th>Measure</th>
<th>1999</th>
<th>2005</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>LICO</td>
<td>0%</td>
<td>20%</td>
</tr>
<tr>
<td></td>
<td>APOVFA2</td>
<td>40%</td>
<td>40%</td>
</tr>
<tr>
<td></td>
<td>APOVNW1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Method

- **Headcount Rate**

#### Results

- Asset poverty rates increased from 0% to 20% between 1999 and 2005.

#### Discussion

- Further analysis is needed to understand the implications for child and family research.
Asset Poverty in OECD Context (Brandolini et al, 2010)

- **Background**
- **Method**
- **Results**
- **Discussion**

**Measure**

- **Headcount Rate**
- **IncomePov**
- **FAPov**

<table>
<thead>
<tr>
<th>Country</th>
<th>Year</th>
<th>Measure 1</th>
<th>Measure 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canada</td>
<td>1999</td>
<td>0%</td>
<td>50%</td>
</tr>
<tr>
<td>US</td>
<td>2001</td>
<td>10%</td>
<td>40%</td>
</tr>
<tr>
<td>Germany</td>
<td>2002</td>
<td>20%</td>
<td>30%</td>
</tr>
<tr>
<td>Finland</td>
<td>1999</td>
<td>30%</td>
<td>20%</td>
</tr>
<tr>
<td>UK</td>
<td>2000</td>
<td>40%</td>
<td>10%</td>
</tr>
<tr>
<td>Sweden</td>
<td>2002</td>
<td>50%</td>
<td>50%</td>
</tr>
<tr>
<td>Norway</td>
<td>2002</td>
<td>40%</td>
<td>40%</td>
</tr>
<tr>
<td>Italy</td>
<td>2002</td>
<td>30%</td>
<td>30%</td>
</tr>
</tbody>
</table>
Regression results - preliminary
2005 Regression Predicting Asset Poverty

Variables:
- Famsize
- Childno
- Age<25
- Age25–34
- Age35–49
- Age50–65
- Female
- Married
- Single
- Singmom
- Cancit
- Lgfre
- Lgoth
- Ednohs
- Edsoco
- Edcol
- Home

Odds Ratios

Model:
- APOVFA2
- APOVNW1
- LICO
Regression results - preliminary

2005 Regression Predicting Asset Poverty

Variables
- Famsize
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- Married
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APOVFA2
APOVNW1
LICO
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- Singmom
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- Lgfre
- Lgoth
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- Edsoco
- Edcol
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- IncomeLog

Odds Ratios

Model:
- APOVFA2_1
- APOVFA2_2
Regression results - preliminary

2005 Regression Predicting Asset Poverty

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- Famsiz
- Child
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- Age25-34
- Age35-49
- Age50-65
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- Married
- Single
- Singmom
- Cancit
- Lgfre
- Lgoth
- Ednhs
- Edsoco
- Edcol
- Home
- IncomeLog

Odds Ratios

Model:
- APOVNW_1
- APOVNW_2
Joint income and asset poverty

1. low income only
2. joint asset poor low income
3. asset poor only
Joint income and asset poverty

Figure 2. Poverty in the labor income and net worth space: Asset- and income-poverty measures.

Source: Authors' elaboration. See text for further explanation.
### Quintiles: income by financial assets 2005

<table>
<thead>
<tr>
<th></th>
<th>FA 1</th>
<th>FA 2</th>
<th>FA 3</th>
<th>FA 4</th>
<th>FA 5</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Income 1</td>
<td>43.9</td>
<td>22.3</td>
<td>14.5</td>
<td>13.4</td>
<td>6.0</td>
<td>100.0</td>
</tr>
<tr>
<td>Income 2</td>
<td>25.8</td>
<td>22.6</td>
<td>19.3</td>
<td>18.9</td>
<td>13.5</td>
<td>100.0</td>
</tr>
<tr>
<td>Income 3</td>
<td>15.1</td>
<td>24.1</td>
<td>27.7</td>
<td>20.6</td>
<td>12.6</td>
<td>100.0</td>
</tr>
<tr>
<td>Income 4</td>
<td>10.9</td>
<td>20.7</td>
<td>29.9</td>
<td>23.4</td>
<td>15.2</td>
<td>100.0</td>
</tr>
<tr>
<td>Income 5</td>
<td>4.9</td>
<td>13.2</td>
<td>21.5</td>
<td>29.9</td>
<td>30.4</td>
<td>100.0</td>
</tr>
</tbody>
</table>
## Joint income and asset poverty

<table>
<thead>
<tr>
<th></th>
<th>LICO 0</th>
<th>LICO 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>APOVFA 0</td>
<td>...</td>
<td>2.79</td>
</tr>
<tr>
<td>APOVFA 1</td>
<td>40.384</td>
<td>9.71</td>
</tr>
</tbody>
</table>
## Joint income and asset poverty

<table>
<thead>
<tr>
<th>APOVNW 0</th>
<th>LICO 0</th>
<th>LICO 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>...</td>
<td>4.47</td>
<td></td>
</tr>
<tr>
<td>APOVNW 1</td>
<td>18.7308</td>
<td>8.03</td>
</tr>
</tbody>
</table>
To understand representation (+/-) we create a disproportionate index by
\[
\left( \frac{x}{\text{asset poor total}} \right) / \left( \frac{y}{\text{population}} \right)
\]
where \( x = \) asset poor demographic; \( y = \) population demographic
### Overrepresented

<table>
<thead>
<tr>
<th>Var1</th>
<th>POP</th>
<th>APOVFA2</th>
<th>iFA2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female lone parent</td>
<td>3.02</td>
<td>4.88</td>
<td>1.62</td>
</tr>
<tr>
<td>Renter</td>
<td>27.51</td>
<td>40.74</td>
<td>1.48</td>
</tr>
<tr>
<td>Single hh</td>
<td>17.48</td>
<td>22.33</td>
<td>1.28</td>
</tr>
<tr>
<td>Age 25-34</td>
<td>16.71</td>
<td>21.05</td>
<td>1.26</td>
</tr>
<tr>
<td>3 Children</td>
<td>4.23</td>
<td>5.29</td>
<td>1.25</td>
</tr>
</tbody>
</table>
### Underrepresented

<table>
<thead>
<tr>
<th>Var1</th>
<th>POP</th>
<th>APOVFA2</th>
<th>iFA2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Over 65 yrs</td>
<td>14.25</td>
<td>8.00</td>
<td>0.56</td>
</tr>
<tr>
<td>University degree</td>
<td>21.12</td>
<td>16.52</td>
<td>0.78</td>
</tr>
<tr>
<td>Home owner</td>
<td>71.28</td>
<td>57.71</td>
<td>0.81</td>
</tr>
<tr>
<td>Married</td>
<td>50.35</td>
<td>42.03</td>
<td>0.83</td>
</tr>
<tr>
<td>Fam size 2</td>
<td>30.01</td>
<td>25.54</td>
<td>0.85</td>
</tr>
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</table>
Discussion

1. Asset poverty is between 2.16 (net worth) and 4 x (financial assets) greater than LICO rates.

Discussion

1. Asset poverty is between 2.16 (net worth) and 4 x (financial assets) greater than LICO rates


3. Asset poverty is a simple indicator of economic vulnerability

4. Overall rates mask certain advantages / disadvantages
Plausible explanations

- demographic changes over time
- low growth in real wages - increase in "working poor"
- changing nature of credit access, particularly for low-income (Buckland)
- mismatch between financial practices and financial services
### Limitations

- """Poverty" is an inherently vague concept, and developing a poverty measure requires a number of relatively arbitrary assumptions." Rebecca Blank, 2008
  - LICO for basic needs threshold
  - Cross-sectional surveys not designed for comparison over time
- Smaller sample in 2005
Social Welfare Policy Implications

- It's not just about "poor" people
Discussion

Social Welfare Policy Implications

- It’s not just about “poor” people
- Role of the state
Discussion

Social Welfare Policy Implications

- It’s not just about “poor” people
- Role of the state
- Provincial poverty plans mostly lack mentioning of asset/wealth
  ⇒ asset limits for social assistance
Discussion

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- Provincial poverty plans mostly lack mentioning of asset/wealth
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- Asset building policies, matched savings, Canada Learning Bond
Social Welfare Policy Implications

- It's not just about "poor" people
- Role of the state
- Provincial poverty plans mostly lack mentioning of asset/wealth
  \[\Rightarrow\] asset limits for social assistance
- Asset building policies, matched savings, Canada Learning Bond
- Financial literacy and consumer protection
Discussion

Future directions

- Provincial differences - decomposition and multilevel methods
- Geo-spatial dimensions to asset poverty v. income poverty
- 2012 SFS in preparation at RDC
- Need to account for age and Employment Insurance protection
Thanks

Paper under review; working paper is available on SSRN

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- @davidwrothwell
- mcgill.ca/socialdevelopment
References


References


