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Bailouts and Subsidies: the Economics of Assisting the Automotive Sector in Canada

Leslie Shiell
Department of Economics
University of Ottawa

Robin Somerville
Director,
The Centre for Spatial Economics

IRPP Study No. 28
March 2012
I. Assisting the automotive sector: 2004 – present

“Bailout” of GM and Chrysler 2009

- Total $14.4 billion
- GM $10.6 billion ($US 9.5 billion)
- Chrysler $3.8 billion
- Federal share 2/3, Ontario share 1/3
- Net cost: $9.5 billion → $4.9 billion liability to Ontario’s Pension Benefit Guarantee Fund

Shiell and Somerville 2012
I. Assisting the automotive sector: 2004 – present

Project-based subsidies 2004 – present

- Total $1.4 billion
- Federal share 45%, Ontario share 55%
- Recipients: Ford, GM, Chrysler, Toyota, Honda, Navistar, Linamar, Valiant, Nemak, Toyota Boshoku, Toyotetsu, AGS Automotive/Tiercon, Denso
- Loans vs. grants
- Production facilities vs. R&D

Shiell and Somerville 2012
II. Economic Perspective on Subsidies

Justifications for investment subsidies:

- External benefits of investment
  (e.g. clusters, technology spillovers, etc.)

- Avoiding social costs of adjustment
  (unemployment, reduced tax revenues)

- Attracting high productivity industries

Shiell and Somerville 2012
II. Economic Perspective on Subsidies

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  - e.g. Dahlby and Ferede (2011) estimate “marginal cost of public funds”
  - federal corporate income tax $\sim 1.71$
  - GST/HST $\sim 1.11$

Shiell and Somerville 2012
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  - e.g. Dahlby and Ferede (2011) estimate “marginal cost of public funds”
  - federal corporate income tax $\sim$ $1.71$
  - GST/HST $\sim$ $1.11$

- How much benefit can be extracted from high productivity industries?
III. High Productivity Industries: How Much Can Be Extracted?

Consider the Canadian automotive industry:

- High labour productivity growth
- Superior pay
III. High Productivity Industries: How Much Can Be Extracted?

Figure 1
Labour Productivity Growth in Canada

Source: Statistics Canada, Industry KLEMS Productivity Database.

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III. High Productivity Industries: How Much Can Be Extracted?

**Average Hourly Earnings (2007)**
*Excluding Overtime, Employees Paid by the Hour*

<table>
<thead>
<tr>
<th>Industry</th>
<th>Earnings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canadian Motor Vehicle Assembly</td>
<td>$31.83</td>
</tr>
<tr>
<td>Canadian Motor Vehicle Parts Manufacturing</td>
<td>$24.13</td>
</tr>
<tr>
<td>Ontario Manufacturing</td>
<td>$21.90</td>
</tr>
</tbody>
</table>

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Figure 2
Decomposition of Labour Productivity Growth in Motor Vehicle Assembly

Source: Statistics Canada, Industry KLEMS Productivity Database

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- What is the “opportunity cost” of the workers?
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- International competition
  → pay level not sustainable unless supported by subsidies
IV. Cost-Benefit Analysis of the Bailout of GM and Chrysler 2009

Macroeconomic performance evaluated with the Provincial Economic Modeling System of The Centre for Spatial Economics (C₄SE)

Assumptions:

- Analysis based on information available to policy makers in spring 2009
- US was going ahead with bailouts anyway
- No Canadian bailout →
  - Canadian operations close, move to another jurisdiction
  - No increase in sales for Ford, Toyota, Honda, etc.
  - Claim of approx. $4.9 billion on Ontario’s Pension Benefit Guarantee Fund
Three scenarios:

- Successful bailout
  - continued viability of GM and Chrysler but with gradual reduction in market share and employment
  - with and without pay back

- No bailout

- Bailout resulting in closure – temporary reprieve, companies close in 2015
IV. Cost-Benefit Analysis of the Bailout of GM and Chrysler 2009

All bailout scenarios were preferable to no bailout

Ex. Successful bailout – nothing paid back

- net cost of the bailout - $9.5 billion
- GDP losses avoided in 2009: $23.1 billion
- Job losses avoided in 2009: ~ 100,000
- Government finances yield a positive return by 2015
V. Cost-Benefit Analysis – Project-Based Subsidies, 2004-2011

$1.4 billion total: $782 million from Ontario, $645 million federal

Conclusion: Like the bailouts, project-based subsidies also were preferable to losing the investment.
VI. Good Policy … Better Policy … Best Policy
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Could these investments have been secured by contributions by workers – i.e. concessions in pay – rather than by government?
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Efficiency analysis:

- Average mfg wage is the “opportunity cost” of auto workers
  - $10 wage premium  ➔ there is room for concessions

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- Subsidies relieve workers of the need to make concessions → we can view subsidies as a transfer to workers

- Subsidies must be financed by distortionary taxation → there is additional cost over and above the transfer to workers

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VI. Good Policy … Better Policy … Best Policy

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- Therefore, it would be more efficient for workers to provide the investment incentive through concessions

- How much could automotive workers provide?
VI. Good Policy … Better Policy … Best Policy


- Convert Oakville assembly plant into a flex facility
- Ontario’s grant of $100 million
- 3,900 direct jobs secured
- Equivalent pay concession of 79 cents per hour

Shiell and Somerville 2012
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VI. Good Policy … Better Policy … Best Policy

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Shiell and Somerville 2012
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- Compare with $9.5 billion net cost of the bailout / $14.4 gross cost

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- Redistribution of income upward rather than downward ➔ not compelling

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VI. Good Policy … Better Policy … Best Policy

Sustainability of the automotive wage premium:
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  Cooperative strategy reflecting the competitive level of pay?
VII. Conclusion

Investment inducements based on workers’ concessions are superior to subsidies in terms of efficiency, equity, and sustainability.

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- Governments should require competitive labour compensation as a precondition for subsidies.
Thank You!