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

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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

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

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

II. Economic Perspective on Subsidies

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 - federal corporate income tax ~ \$1.71
 - GST/HST ~ \$1.11

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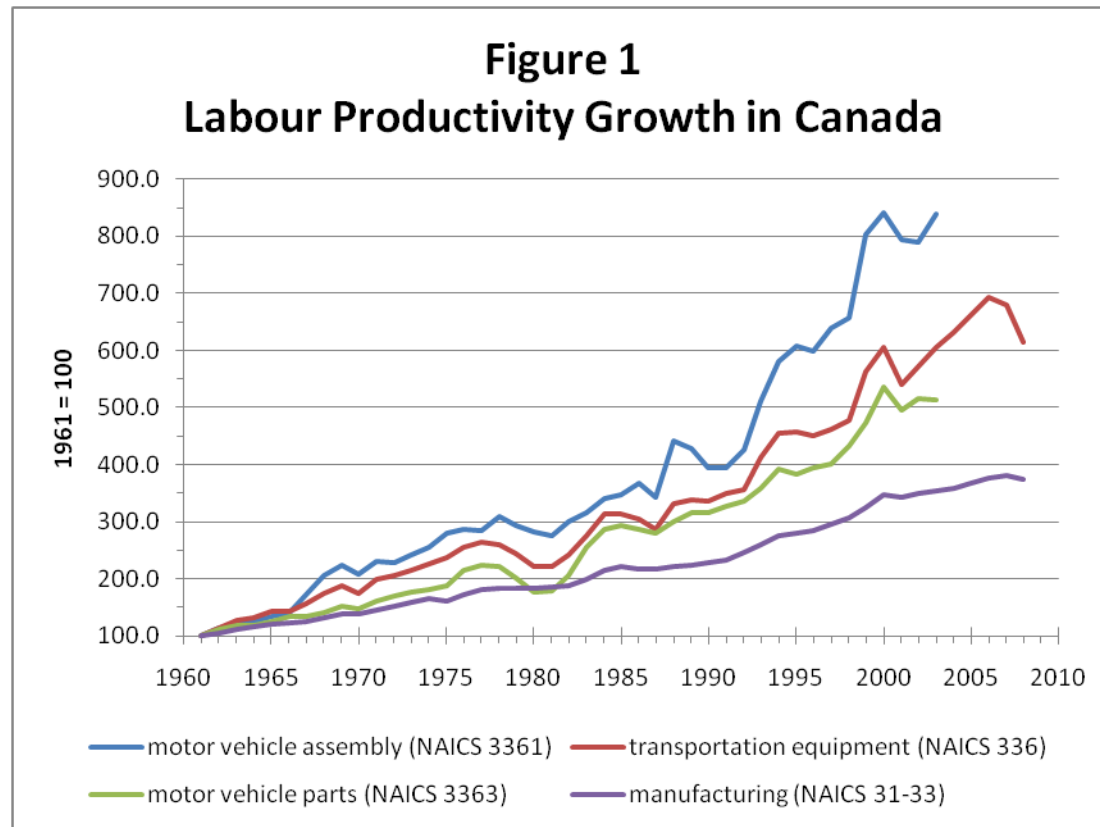
- How much benefit can be extracted from high productivity industries?

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?



Source: Statistics Canada, Industry KLEMS Productivity Database.

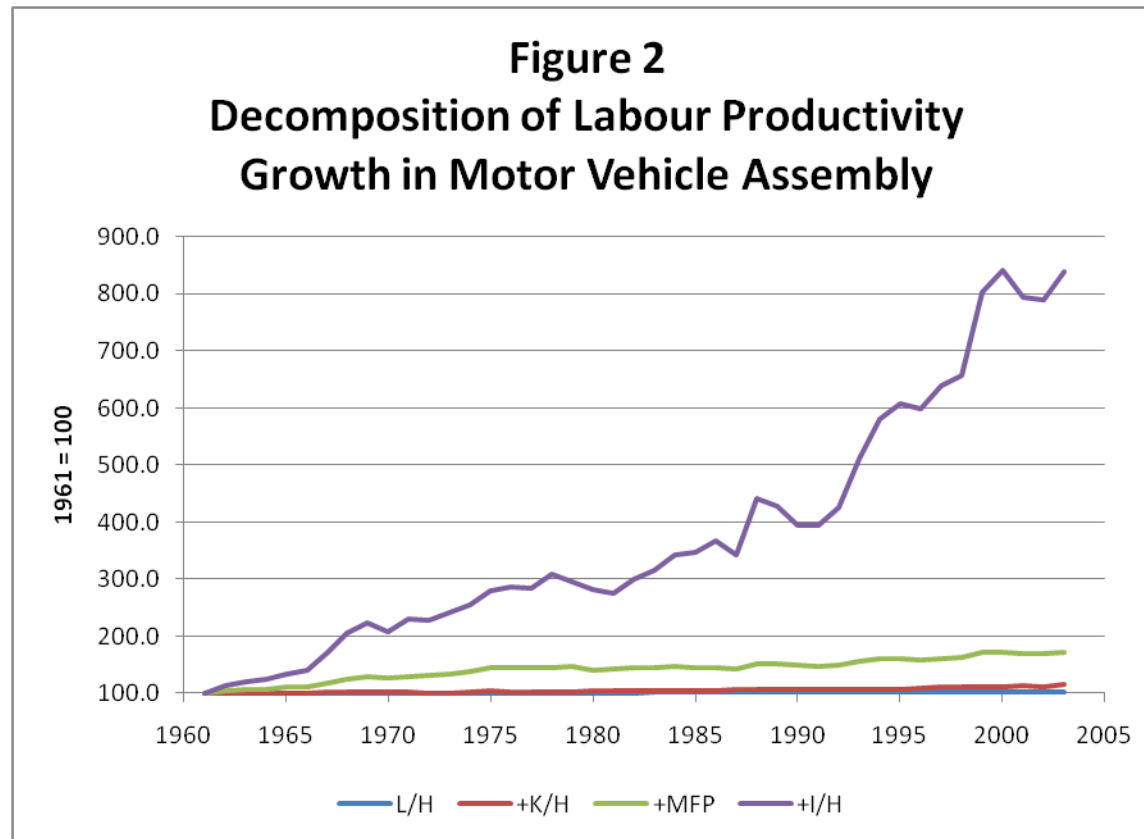
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**Average Hourly Earnings (2007)
Excluding Overtime, Employees Paid by the Hour**

Canadian Motor Vehicle Assembly	\$31.83
Canadian Motor Vehicle Parts Manufacturing	\$24.13
Ontario Manufacturing	\$21.90

Source: Statistics Canada, CANSIM v1809188, v1809189, v1809131, v1809789.

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Hypothesis – average manufacturing wage
- 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

IV. Cost-Benefit Analysis of the Bailout of GM and Chrysler 2009

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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Efficiency analysis:

- Average mfg wage is the “opportunity cost” of auto workers
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→ \$10 wage premium → there is room for concessions
- 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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- Therefore, it would be more efficient for workers to provide the investment incentive through concessions
- How much could automotive workers provide?

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Example: Ford Centennial Project (2004)

- 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

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What about the bailouts of GM and Chrysler?

- Concession of the \$10 premium earned by automotive assembly workers \times 18,400 workers \rightarrow capitalized value of \$6 billion.
- Compare with \$9.5 billion net cost of the bailout / \$14.4 gross cost

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Equity analysis:

- Average annual gross income of auto assemblers (2007, estimated):
\$66,000
- Average annual market income of Canadians aged 25-64 (2007):
\$44,271
- Redistribution of income upward rather than downward →
not compelling

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Sustainability of the automotive wage premium:

- Competition from lower wage jurisdictions (US South, Mexico, China)
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- Can the wage premium of Canadian automotive workers last?
- What is the best strategy for labour? Total resistance?
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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Policy recommendations:

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- External benefits of investment projects should be identified, quantified and debated before a subsidy is granted.

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Policy recommendations:

- External benefits of investment projects should be identified, quantified and debated before a subsidy is granted.
- Governments should require competitive labour compensation as a precondition for subsidies.

Thank You!