Impact Analysis of Mandatory Paid Sick Leave

To the Ontario Construction Industry

Presentation by
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Objectives of analysis

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Objective:

- CANCEA will perform an analysis of the potential impact on construction industry costs of a mandatory paid sick leave policy in Ontario. The analysis would take the form of a scenario analysis, which will consider a range of the different potential behavioural responses by employers and workers to a paid sick leave policy.

Statement of independence and other caveats:

- CANCEA does not accept any client engagements that require a pre-determined result or policy stance or otherwise inhibits its independence.
- In keeping with CANCEA's guidelines for funded research, the design and method of research, as well as the content of this study, were determined solely by CANCEA.
- This information is not intended as specific investment, accounting, legal or tax advice.
- This report was commissioned by a consortium of construction industry associations and includes:

RESCON
The General Contractors' Association of Toronto (GCAT)
Ontario General Contractors Association (OGCA)

Construction Labour Relations Association of Ontario (CLRAO)
Greater Toronto Sewer and Watermain Contractors Association (GTSWCA)

Results at a glance

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- The analysis has shown that a paid sick leave program of 5 days per annum for workers is a good policy when it is used as intended.
- Controls do not exist to ensure paid sick leave compliance and workers are expected, to some extent, to take advantage of a paid sick leave program. Analysis demonstrates that as compliance drops, the costs to the industry can be significant, $1.65 billion in the worst case, and approximately $1 billion in the expected case.
- While paid sick leave is desirable, it would require a sophisticated system of tracking and tracing of employees and their health in the construction industry, an environment of control and compliance enforcement that does not currently exist.
- It is recommended that the government install a system of tracking and tracing of construction employees and their health prior to contemplating a universal paid sick leave program in Ontario. The risk of not doing so could result in a $1 billion cost to construction industry employers and a 10% reduction of the value of their businesses.

About CANCEA and the authors of the study

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Since 2002, CANCEA is a socio-analytics and data organization that is known for its modern geospatial approach to socioeconomic and market analysis:

- Canada's largest, most integrated socio-economic simulation platform
- Only organization in North America that performs socio-economic and market agent-based modelling, a modern approach that requires the detailed statistical longitudinal tracking of individual people, households, businesses and jobs
- CANCEA has performed over 320 projects related to urban informatics, demographics, economics, labour market, infrastructure, social value, health, land use and policy analysis, yielding a comprehensive database of over:

56,000
regions across Canada

215,000
regions across the United States

100,000
Regions across the UK

Pricipals

Dr. Paul Smetanin

DBA, M.Econ, B.Econ, LLB, ACA, founder

Doctoral research in behavioural economics and decision making.
Link to doctorial work: Decision Making: A Geometric and Covariant Framework

Career highlights:

- CANCEA since 2002
- CRO of Australia's second-largest bank
- Executive VP, Algorithmics
- KPMG Director, Treasury and Financial Risk Management Solutions

Dr. David Stiff

Ph.D, B.Eng, since 2008

Doctoral research in computational methods in quantum mechanics

Career highlights:

- Architect of CANCEA's agent-based simulation platform
- Postdoctoral Fellow, Max Planck Institute for Nuclear Physics, Heidelberg, Germany

Relevant features of the construction industry

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- **52,000 construction-sector businesses** in Ontario
- **575,000 construction employees** spanning 500+ trades and skills. **180,000 unionized**, **395,000 non-union**, **323,000 employees with multiple employers**
- The majority of construction employees do not have access to paid sick leave. The general experience on the ground is that:
  - Workers with chronic diseases do take sick days off work
  - Workers who are sick by way of an infectious disease will typically still go to work, be less productive (ie. presenteeism) and increase the risk of spreading the disease among the workforce. (Tartari et al, 2020)
- While many employers view paid sick leave as a good policy, the industry does not have the means to track and control compliance with a new paid sick leave policy. Determined by interviews with an assortment of construction employers, their aggregate industry expectation is that employees will continue their current practices when sick and that a new paid sick leave program will be partially "gamed" along the lines of:
  - 60% to 80% of workers will use their paid sick leave days as flex-days and
  - 40% to 60% of workers that have multiple employers will claim more than their 5 paid sick leave days per annum.

What is taken into account in the analysis

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Taken into account	Comments
Construction occupations, by union and non-union	148 individual construction-specific trade occupations (NOC 7), as well as associated non-trade occupations in construction Occupations are assumed not have paid sick days.
Productivity dependency of occupations	Each project has a cluster of occupations that work together daily on a project at different project stages. When specific occupations don't show up on a day, it affects the productivity of the cluster, which is taken into account.
Individual workers, by occupation who have multiple employers	Used to calculate the potential for multiple sick day claims by one worker across several employers. Statistics Canada data on multiple employers
Construction occupation's total remuneration on an hourly basis	Includes: wages, allowances, employer contributions for pension, WSIB, CPP and EI
Construction sectors (NAICS 23)	Residential, , industrial, commercial and engineering
Firmology: Number of firms, by firm size, by direct and indirect factors of production	Dependency of firm production and productivity on their workers of different occupations and upon other firms that supply goods and services in the intermediate market
Location and project variations	There are regional variations in the construction labour market in terms of pay scales and the ability of other workers to fill the gaps of a missing workers. As such, the additional costs may not be felt uniformly across the province.
Incidence and prevalence of chronic disease and/or mental health	Enters the calculation of the probability of being sick on a given day
Spread of infectious disease at a worksite	Enters the calculation of the probability of being sick on a given day and the probability of making other workers sick if they show up to the worksite with an infectious disease (either influenza or coronavirus). (R0 parameter for infectious disease, typical seasonal prevalence)
Presenteeism	Enters the calculation of the productivity of a worker when they show up to a worksite when they are sick
Costs of tracking and enforcing proper use of paid sick leave	Not taken into account

What is taken into account in the scenario analysis

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Taken into account	Comment
Scenario analysis	
Use of paid sick days as "flex days" (ranging of 0% to 100%)	0% means that days taken would only be when employee is actually sick. In this case, reduced likelihood on spreading infection on job-site 100% means that days taken would be when employee is not sick. When employee is sick, the employee would work and risk spreading infection
The amount of 'multiple-claims' from employees working for multiple employers without the ability to track sick days across employers	0% means there is no ability to track any workers across multiple employers allowing

Worker response to a new paid-sick level program

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Worker behaviour in response to a new paid-sick level program could include:

- **Using the program as intended:**
  - Taking paid sick days only when they are sick. Has the benefits of not spreading infectious diseases at the work site and improving the productivity of the sick worker through the reduction of presenteeism and return to work sooner.
  - Not claiming more than 5 paid sick days per annum regardless of if the worker has multiple employers
    - Assumes that either (1) employers have the ability to track sick day claims by workers with multiple employers, or (2) that workers will not game the program by claiming more than 5 sick days per annum from multiple employers
- **Not using the program as intended:**
  - This occurs when workers game the program for their benefit. Most likely to occur when there are no controls and/or the means of tracking if a worker is actually sick and is claiming paid sick days from multiple employers to exceed the 5 day entitlement per annum.
    - Taking paid sick days when they are not sick. Using the program as flex days. Nothing changes in regard to the spread of infectious diseases at the work site and lost productivity of a sick worker through presenteeism (showing up to work with compromised productivity).
    - Claiming more than 5 paid sick days per annum if the opportunity arises given multiple employers. Employers don't have the ability to track sick day claims by workers with multiple employers, and workers will game the program by claiming 5 sick days per annum from each employer

Scenario analysis: Worker response to new paid-sick level program

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- **Workers' behavioural response to a new paid sick leave program is not known.**
- By running the range of scenarios, it provides insight in the possible outcomes resulting from people's behaviour, while still allowing one to identify the most expected outcomes. In addition, it would highlight the conditions under which benefits to the construction industry are maximized and the costs minimized.
- Each scenario is a combination of assumptions from which the simulation is run for a year to see the impacts to construction industry employers. There are 36 different scenario combinations modelled. Two scenarios represent the extreme combinations of behavioural assumptions which are:
  - **Best case:** Workers use the paid sick leave program as intended. They take 0 flex days and workers cannot over-claim (0% probability) from multiple employers (ie. no more than 5 paid sick days per annum across all employers)
  - **Worst case:** Workers do not use the paid sick leave program as intended. They take 5 flex days and there is a 100% probability of workers over-claiming from multiple employers (ie. more than 5 paid sick days)
- The 34 other scenarios fill in the different assumption combinations between the two extreme scenarios.

Results: Best case and worst case

The following table summarizes the impact on costs to Ontario construction employers under the different behavioural assumptions of how workers might use a new paid sick leave programme.

- **Best case:** If the paid sick leave program is used by workers exactly the way it would be intended, then there is not cost to construction employers (green box, top left corner of table, -ve means lower costs).
- **Worst case:** If workers take all of their new paid sick leave as flex-days and will claim from each of their employers, then the consequences to construction employers
  - $1.65 billion in additional costs and lost productivity (red box, bottom left corner of table).
  - 3.6% increase in the total compensation costs to employers.
  - A reduction of the market value of the employer's business in the year of the program taking effect of 17.6%.
  - An erosion of the employer's ability to continue to re-invest in growth

Additional Costs to Construction Employers in Ontario ($millions)

Number of **Non-sick days taken** as sick days

	0.0	0.2	0.4	0.6	0.8	1.0
0	-$5M	-$5M	-$5M	-$5M	-$5M	-$5M
1	$326M	$304M	$282M	$260M	$238M	$216M
2	$657M	$613M	$569M	$525M	$481M	$437M
3	$988M	$922M	$856M	$790M	$724M	$658M
4	$1,319M	$1,231M	$1,143M	$1,055M	$967M	$879M
5	$1,650M	$1,540M	$1,430M	$1,320M	$1,210M	$1,100M

Ability to track & ensure **no double dipping**
Probability of a worker **not double dipping**

Results: Expected case

The following table summarizes the impact on costs to Ontario construction employers under the different behavioural assumptions of how workers might use a new paid sick leave program.

- Expected case: The aggregate industry expected case is that workers will take 60% to 80% of their paid sick leave days as flex-days and 40% to 60% of workers that have multiple employers will claim more than their 5 paid sick leave days per annum. The results of the expected case are:
  - Between $790 million and $1.14 billion in additional costs and lost productivity (white boxed corner in middle of table).
  - 1.72% to 2.48% increase in the total compensation costs to employers. Could add an additional 3.8% to infrastructure costs
  - A reduction of the market value of the employer's business in the year of the program taking effect of between 8.4% to 12.2%.

Additional Costs to Construction Employers in Ontario ($millions)

Number of **Non-sick days taken** as sick days	0.0	0.2	0.4	0.6	0.8	1.0
0	-$5M	-$5M	-$5M	-$5M	-$5M	-$5M
1	$326M	$304M	$282M	$260M	$238M	$216M
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Ability to track & ensure **no double dipping**
Probability of a worker **not double dipping**

Conclusions

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- The analysis has shown that a paid sick leave program of 5 days per annum for workers is a good policy when it is used as intended. The costs of paid sick leave is balanced by the decrease of presenteeism and sickness on construction sites and increases in productivity.
- The challenges with adopting a mandatory paid sick leave policy in the construction industry are threefold:
  1. There is no ability for the industry or government to track and ensure proper compliance with a paid sick leave program
  2. The industry has a high proportion of its workforce working for multiple employers
  3. Some employers pay a higher hourly wage rate to cover other additional benefits such as sick leave, while others do not.
- Controls do not exist to ensure paid sick leave compliance and workers are expected, to some extent, to take advantage of a paid sick leave program. Analysis demonstrates that as compliance drops, the costs to the industry can be significant, $1.65 billion in the worst case, and approximately $1 billion in the expected case.
- While paid sick leave is desirable, it would require a sophisticated system of tracking and tracing of employees and their health in the construction industry, an environment of control and compliance enforcement that does not currently exist.
- It is recommended that the government install a system of tracking and tracing of construction employees and their health prior to contemplating a universal paid sick leave program in Ontario. The risk of not doing so could result in a $1billion cost to construction industry employers and a 10% reduction of the value of their businesses.