



Thunder Bay
Ventures

Community Futures Development Corporation

ONTARIO'S MINIMUM WAGE INCREASE – SOME INSIGHTS FROM THUNDER BAY'S PERSPECTIVE

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TABLE OF CONTENTS

Background	3
Executive Summary	7
Potential impact on employment levels	10
Potential impacts by industry	21
Local Business Sentiments	27
References	37



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BACKGROUND

BACKGROUND – ONTARIO'S FAIR WORKPLACE ACT



- ✓ On November 22, 2017, Ontario's [Fair Workplaces, Better Jobs Act, 2017](#), legislation was passed. The Fair Workplaces, Better Jobs Act, 2017 has¹:
 - ✓ Raised Ontario's general minimum wage to \$14 per hour on January 1, 2018, and then to \$15 on January 1, 2019, followed by annual increases at the rate of inflation;
 - ✓ Mandated equal pay for part-time, temporary, casual and seasonal employees doing the same job as full-time employees; and equal pay for temporary help agency employees doing the same job as employees at the agencies' client companies;
 - ✓ Expanded personal emergency leave to 10 days per calendar year for all employees, with at least two paid days per year for employees who have been employed for at least a week;
 - ✓ Banned employers from requiring a doctor's sick note from an employee taking personal emergency leave;
 - ✓ Provided up to 17 weeks off without the fear of losing their job when a worker or their child has experienced or is threatened with domestic or sexual violence, including paid leave for the first five days;
 - ✓ Changed vacation time requirements by ensuring at least three weeks' vacation after five years with the same employer; and
 - ✓ Changed employee scheduling, including requiring employees to be paid for three hours of work if their shift is cancelled within 48 hours of its scheduled start time.



BACKGROUND – ONTARIO'S FAIR WORKPLACE ACT

- ✓ **The increase in the minimum wage from \$11.60 per hour on December 31, 2017 to \$15 by January 1st, 2019 represents a 29% increase in minimum wage, in a relatively short period of time.**
- ✓ **The significant increase in minimum wage has resulted in a large number of stakeholders to question the impact of the Fair Workplaces, Better Jobs Act, 2017.**
- ✓ **Even supporters of the large minimum-wage increase have wondered how high the wage floor can rise before it reduces employment levels and hurts the overall economy.**
- ✓ **In the past, minimum wage increases were relatively small in relation to the increases enacted by the Fair Workplaces, Better Jobs Act, 2017 legislation.**
- ✓ **As a result, the increase to \$15 per hour takes us outside of the range prior impact studies which means that predictions about impact of \$15 minimum wage are less certain.**



BACKGROUND – RESEARCH SCOPE

- ✓ **This study’s purpose is to explore the impacts of the minimum wage increases legislated by the Fair Workplaces, Better Jobs Act, 2017 on the Thunder Bay economy.**

- ✓ **A comprehensive and complete assessment of the economic and social impacts of minimum wage increases on a regional economy is a complex undertaking and beyond the scope of this study. As a result, this study focuses on two main areas of the minimum wage increase:**
 - ✓ The overall employment level in Thunder Bay (i.e., possible job losses); and
 - ✓ Business sentiments in the Thunder Bay area.

- ✓ **This study only focuses on the minimum wage increase that will take place under the the Fair Workplaces, Better Jobs Act, 2017 and not the various other employment reforms which could also have significant economic and social impacts.**



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EXECUTIVE SUMMARY

EXECUTIVE SUMMARY – MACRO LEVEL ANALYSIS



- ✓ The increase in the minimum wage to \$15 has led to various discussions around the resulting economic impacts.
- ✓ Even supporters of large minimum-wage increases have wondered how high the wage floor can rise before it reduces employment and hurts the economy.
- ✓ We estimate the following possible job losses for Thunder Bay based on the minimum wage increase:

Lower Range Estimate	Higher Range Estimate
300 jobs lost	1,150 jobs lost

- ✓ It is extremely difficult to precisely estimate the potential job losses that may arise from the minimum wage increase due to various factors, including:
 - ✓ The minimum wage increase legislated is extremely large ($\approx 30\%$), and well outside of the scope of the prior studies.
 - ✓ There are confounding effects that arise from various factors, such as general changes in economic conditions, increase in consumption from minimum wage earners, etc.
 - ✓ The fact that employers may reduce hours or benefits instead of reducing employment levels.
 - ✓ Businesses may increase prices to offset the increased wage expenses.

EXECUTIVE SUMMARY – BUSINESS LEVEL ANALYSIS



- ✓ Half of local businesses surveyed anticipate mostly negative impacts from the minimum wage increases, with a third of local businesses indifferent. Only 6.5% of local businesses expect mostly positive impacts.
- ✓ Business sentiments regarding the minimum wage increase do not differ according to their expectations of either the overall Thunder Bay economy or their individual business' well-being.
- ✓ The “retail trade and repair” and “restaurant and cafes” industries had the highest percentage of respondents with **negative impact** responses. The “real estate and renting service”, “construction” and “financial services” industries had the highest percentage of respondents with **indifferent impact** responses. The “transport and communication” and “wholesale trade and motor vehicles” industries had the highest percentage of respondent with **positive impact** responses.
- ✓ The concerns about the minimum wage increase do not vary significantly across business size.
- ✓ Businesses with increasing workforces had the highest percentage of respondents in the “mostly positive” and “indifferent” impact categories.



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POTENTIAL IMPACT ON EMPLOYMENT LEVELS

MINIMUM WAGE AND EMPLOYMENT - ECONOMIC THEORY



- ✓ **Based on economic theory, an increase in minimum wage above the market equilibrium wage reduces the demand for low-wage labour.**
- ✓ **The logic behind this is that employers would substitute other factors of production for the higher priced minimum wage workers (e.g., automated capital assets), and/or may reduce supply of their product due to higher labour cost (i.e., produce less due to higher costs).**
- ✓ **An increase in minimum wage has more negative impacts on workers at the lower end of the wage distribution.**
- ✓ **In a growing economy, the impact will be on the new jobs rather than outright layoffs as a result of a minimum wage increase. Workers who remain employed will benefit from the wage increase, while workers who become unemployed will be the losers under the new wage regime.**

MINIMUM WAGE AND EMPLOYMENT - ECONOMIC THEORY



- ✓ Relying on the best available impact analyses of minimum wage increases, we can safely conclude that:
 - ✓ There will be job losses for workers who are currently earning between the previous minimum wage rate (\$11.60 per hour) and the new minimum wage rate (\$15 per hour).
 - ✓ The extent of the job losses tends to be a function of the percentage of workers in this category. The higher this percentage, the greater the extent of job losses.
 - ✓ However, there are other factors that can compensate for the negative impacts of the job losses due to the minimum wage increase.
 - ✓ The total amount of money going to those who have their job will increase.
 - ✓ Since the turnover in this segment of the labour force is high, it is logical to assume that the job losses and wage benefits will be shared among workers.
 - ✓ The higher the wage shock, the more concern of management to implement efficiency and other practice to reduce total labour costs.

MINIMUM WAGE & EMPLOYMENT: MIXED EMPIRICAL RESULTS



- ✓ **The empirical research investigating the impacts of minimum wage increases on employment levels reveals mixed results.**
- ✓ **Early studies (Campolieti et al., 2006) and meta-analyses [e.g., approximately 26 studies were reviewed by Brown, Gilroy and Kohen (1983), 28 studies by Brown (1999), and 29 by Card and Krueger (1995)] in the U.S. and Canada found that minimum wages reduce employment for teenage workers.**
- ✓ **These studies generally argue that a 10% increase in the minimum wage leads to a 1% to 3% reduction in the employment of teenagers.**
- ✓ **Conversely, other studies claim that a higher minimum wage increases the level of consumption in an economy.**
- ✓ **This will enhance the economic activity and as a result can mitigate the negative impacts on employment levels.**



IMPACT OF MINIMUM WAGE ON EMPLOYMENT LEVEL

- ✓ In 2011, researchers predicted major job losses for British Columbia if the province's minimum wage was increased from \$8 per hours to \$10.25 per hour (Veldhuis and Karabegovic, 2011).
 - ✓ This conclusion was reached based on estimates from academic research applied to workers aged 15 to 24.
 - ✓ The prediction amounts to approximately a 16 per cent decline in employment for this age group.
- ✓ Again in 2014, researchers concluded that minimum wage increase “will impose enormous costs” for BC (Lammamand and Macintryer, 2014).
 - ✓ This literature implies that an increase in Ontario's minimum wage to \$15 per hour will also result in large job losses for the economy.



IMPACT OF MINIMUM WAGE ON EMPLOYMENT LEVEL

- ✓ However, there is no empirical record or historical document that suggests that the dire warnings materialized in BC.
- ✓ Exploring the reasons why the BC predictions did not fully materialize can aid in our understanding of what we know and do not know from existing research on minimum wages.
 - ✓ The main reason why the BC job loss estimate did not materialize is that their estimate is based on a study that finds that a 10% increase in the minimum wage will generate a 6 per cent decline in employment for teenagers (Baker et al., 1999).
 - ✓ A similar study by Campolieti et al. (2006) showed that a minimum wage increase of 10% would result in employment losses of approximately 3% to 5%.
 - ✓ Both Baker et al. (1999) and Campolieti et al. (2006) use provincial data from 1990s.



IMPACT OF MINIMUM WAGE ON EMPLOYMENT LEVEL

- ✓ Researchers show that when recent data is used with the Campolieti et al. (2006) model, an increase in minimum wage by 10% only reduces the employment by 2.5% for teenagers (Brochu and Green 2013).
- ✓ According to David Green (2014):

“... any sizeable employment effect estimate in the existing literature applies only to teenagers.”



IMPACT OF MINIMUM WAGE ON EMPLOYMENT LEVEL

- ✓ **Some prior studies obtain large job loss prediction because they apply estimated effects for teenagers to both teenagers and young adults. In fact, the studies of employment losses for teenager are not a credible base for evaluating the impact of increase minimum wage to \$15 on overall employment.**

- ✓ **In contrast, Brochu and Green's estimate the effect of a 10 per cent minimum wage increase:**
 - ✓ **For young adults aged 20 to 24 is only a 0.5 per cent decline in their employment rate.**

 - ✓ **For workers over age 25 imply essentially zero effects on employment.**

 - ✓ **This is such a common finding in the literature that most studies don't bother to present estimates for adults.**



IMPACT OF MINIMUM WAGE ON EMPLOYMENT LEVEL

- ✓ With respect to Thunder Bay's demographic and labour force characteristics, we estimate that the total job losses will be in the range of:

Lower Range Estimate (Brochu and Green (2013) Methodology)	Higher Range Estimate (Campolieti et al. (2006) Methodology)
300 jobs lost	1,150 jobs lost

- ✓ It is extremely difficult to precisely estimate the potential job losses that may arise from the minimum wage increase due to various factors, including:
 - ✓ The minimum wage increase legislated is extremely large ($\approx 30\%$), and well outside of the scope of the prior studies.
 - ✓ There are confounding effects that arise from various factors, such as general changes in economic conditions, increase in consumption from minimum wage earners, etc.
 - ✓ The fact that employers may reduce hours or benefits instead of reducing employment levels.
 - ✓ Businesses may increase prices to offset the increased wage expenses.
 - ✓ The globally disruptive force of automation is moving forward regardless of Ontario's minimum wages.
- ✓ Therefore, we caution users that these estimates are broad estimates with large confidence intervals.



CONFOUNDING EFFECTS AND MINIMUM WAGE HIKES

- ✓ **As previously discussed, there is a direct relationship between minimum wage and the total cost of labour.**
- ✓ **Employers may reduce the hours of work for full-time and part-time staff rather than cutting employment when minimum wage increases.**
- ✓ **There is a possibility of an upward wage effect for workers who are receiving a wage rate above the minimum wage.**
- ✓ **The spillover effect and increase in the wages of those who are at the bottom of wage scale may reduce wage inequality (Card and Krueger, 1995; DiNardo, Fortin and Lemieux, 1997; Lee, 1999; Lemieux, 2006; and Tuelings, 2000) and lead to higher involuntary part-time employment, suggesting that employers may have reduced hours of work for both part-time and full-time workers even when workers preferred to work longer hours.**



MINIMUM WAGE AND HOURS WORKED

- ✓ In summary, economic theory tells us that there is inverse relationship between price and quantity demanded. This is true for labour market as well.
- ✓ Since the demand for labour is a derive demand, other factors can mitigate the negative impact of an increase in minimum wage. Factors such as reduction in labour turnover, improvement in organization efficiency and improvement in general demand offset the impact.
- ✓ Schmitt (2013) points to these factors that may in part explain why some studies found no unemployment effects of a hike in the minimum wage.



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POTENTIAL IMPACTS BY INDUSTRY

ECONOMIC BACKGROUND



- ✓ **The \$15 minimum wage established by the Province of Ontario will result in some inter-Provincial economies having a harder time to adjust. Furthermore, certain industries within an economy will also face more challenges in adjusting.**
- ✓ **In cities / industries where median wages are relatively low, many economists would suggest that the minimum wage increase could result in job losses.**
- ✓ **The tool recommended by economists for assessing the impact of minimum wage increase on the labour force is the ratio of the minimum wage to the wage of workers in the very middle of the income distribution, known as the median wage.**
 - ✓ **The higher the ratio of the minimum to the median wage, the greater the boost to workers.**
 - ✓ **Therefore, the higher that ratio, the greater risk of job losses.**

ECONOMIC BACKGROUND



- ✓ Economists often try to determine the point at which the risk of job loss exceeds the benefit to workers.
- ✓ Economic literature suggest that communities / industries with a ratio of 50% and lower will be better able to manage and absorb minimum wage increases.
- ✓ For example, Michael Reich, a professor of economics at the University of California, Berkeley, an expert in minimum wage policies, recently stated:

“it would be disingenuous to suggest that the potential costs of raising the minimum could never outweigh the economic benefits. We don’t know at what point that kicks in. We know that hasn’t happened at 50 percent or 55 percent.”

- ✓ Other minimum-wage experts, like David Neumark at the University of California Irvine, believes this happens much sooner.



ECONOMIC BACKGROUND

- ✓ **But economists have very few historical examples of increases that go beyond 60 percent. And even some economists who are at ease with moderate increases in the minimum wage worry that a minimum wage in that 60 percent range or higher could produce significant job losses.**
- ✓ **In the past, Canadian minimum wage increases were small and as a result the percentage of minimum wage to median wage was about 40% to 50%.**
- ✓ **Increasing minimum wage to \$15 will result in the minimum wage being approximately 68% of the median wage in Canada.**



IMPACT OF MINIMUM WAGE ON EMPLOYMENT LEVEL

- ✓ We next focus on the Thunder Bay economy.
- ✓ The overall median wage for Thunder Bay is not available from publicly available sources.
 - ✓ Assuming that the median wage in Thunder Bay is the same as Ontario, the overall ratio is approximately 65%.
 - ✓ The ratio varies by age group, and consistent with the prior studies, the ratio is the highest for young adults / teenagers:

15 to 24 years	115%
25 to 54 years	60%
55 years and older	60%

- ✓ Based on the economic literature, a ratio of 60% or lower suggests a minimal impact. As the ratio increases above 60%, the severity of the impact increases.



IMPACT OF MINIMUM WAGE ON EMPLOYMENT LEVEL

- ✓ Based on privately collected data, we estimate the ratio of minimum to median wages by industry for Thunder Bay. The purpose of our analysis is to estimate the industries that will be most likely impacted.
- ✓ The twenty industries with the highest ratios, and therefore, most significant potential impact, are listed as follows:

1	Fast Food Worker
2	Retail Sales Associate
3	Esthetician
4	Server
5	Grocery Produce Stocker
6	Home Care Worker
7	Dishwasher
8	Grocery Produce Clerk
9	Sales Associate
10	Housekeeper

11	Lifeguard
12	Cashier
13	Gas Station Attendant
14	Customer Service Manager
15	Trainer, Employee
16	Prep Cook
17	Landscape Labourer
18	Line Cook
19	Cleaner
20	Customer Service Representative

- ✓ These findings are consistent with our survey analysis by industry (presented later in the report).



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LOCAL BUSINESS SENTIMENTS



RESEARCH OBJECTIVES

- ✓ **The following analysis is based on data extracted from the 2017 Thunder Bay Ventures Business Confidence Index (“2017 TBV BCI”) Study.**

- ✓ **The BCI was administered in August to September, 2017 to businesses of all sizes operating in Thunder Bay and the surrounding area.**
 - ✓ The survey was administered prior to any significant minimum wage increases taking effect, and therefore represent local businesses anticipated impacts from the 2018 and 2019 minimum wage increases.

- ✓ **This next slide presents the overall results from the minimum wage question included in the 2017 TBV BCI survey and was presented in the 2017 TBV BCI Study. This slide is provided for overall context.**
 - ✓ However, the analysis in this study differ from the 2017 TBV BCI Study in that additional sub-group analyses (e.g., cross-tabulations) are presented to draw further, detailed insights regarding the local business sentiments.



THUNDER BAY AREA: PROVINCIAL MINIMUM WAGE PLAN

- ✓ **What impact do you expect on your business as a result of the Provincial Government's proposed \$15 minimum wage?**
 - ✓ Almost half of the respondents expect a negative impact (49.2%, N = 91) from the increases in minimum wage.
 - ✓ A third (33.5%, N = 62) expect a neutral impact (neither positive or negative)

Impact of minimum wage increases...	Responses
Mostly positive	6.5 %
Neither positive nor negative	33.5 %
Mostly negative	49.2 %
Uncertain at this time	10.8 %
Total	100 %





MINIMUM WAGE IMPACTS & ECONOMIC WELL BEING

- ✓ **The relationship between minimum wage increases and expectations about Thunder Bay's economy.**
 - ✓ *Businesses that expect the state of Thunder Bay's economy to stay the same or worsen in the future are mostly negative about the minimum wage increases.*
 - ✓ Businesses that expect the state of Thunder Bay's economy to improve in the future were mostly indifferent about the minimum wage increase (neither positive or negative impact).

- ✓ **The relationship between minimum wage increases and expectations about business' future.**
 - ✓ *Businesses that expect their business' economic well being be somewhat better or worsen are mostly negative about the minimum wage increases.*
 - ✓ Businesses that expect their business' economic well being to be much better were mostly indifferent about the minimum wage increase (neither positive or negative impact).

- ✓ **There were no economic and business level expectations that led businesses to be mostly positive about the minimum wage increases.**

- ✓ Note that each category is determined based respondents' self-reported expectations for future economic and business levels.
- ✓ Note that sub-groups analyses include smaller sample size than the main results, and therefore, have higher sampling risk parameters.



MINIMUM WAGE IMPACTS & INDUSTRIES

✓ The industries that reported minimum wage increase impacts would be **mostly positive**

✓ No industry sector reported that the minimum wage increase would have a mostly positive impact.

✓ The industries that reported minimum wage increase impacts would have **mostly negative**

- ✓ Education, health and social work;
- ✓ Electricity, gas and water;
- ✓ Hotels;
- ✓ Manufacturing;
- ✓ Restaurants and cafes;
- ✓ Retail trade and repair;
- ✓ Transport and communication;

✓ The industries that reported minimum wage increase impacts would be **mostly indifferent**

- ✓ Agriculture, landscaping, fishing, and quarrying;
- ✓ Construction;
- ✓ Financial services;
- ✓ International business activity;
- ✓ Other community, social and personal services;
- ✓ Real estate and renting services;
- ✓ Wholesale trade and motor vehicles;

✓ Note that each category is determined based upon which impact (mostly positive, mostly negative, and indifferent) was the largest in the industry grouping.

✓ Note that sub-groups analyses include smaller sample size than the main results, and therefore, have higher sampling risk parameters.



MINIMUM WAGE IMPACTS & INDUSTRIES

- ✓ The “retail trade and repair” and “restaurant ad cafes” industries had the highest percentage of respondents with **negative impact** responses.
- ✓ The “real estate and renting service”, “construction” and “financial services” industries had the highest percentage of respondents with **indifferent impact** responses.
- ✓ The “transport and communication” and “wholesale trade and motor vehicles” industries had the highest percentage of respondent with **positive impact** responses.

- ✓ Note that each category is determined based upon which impact (mostly positive, mostly negative, and indifferent) was the largest in the industry grouping.
- ✓ Note that sub-groups analyses include smaller sample size than the main results, and therefore, have higher sampling risk parameters.



MINIMUM WAGE IMPACTS & FIRM SIZE

- ✓ **The concerns about the minimum wage increase do not vary significantly across business size.**
 - ✓ That is, bigger business (measured based on total full- and part-time employees) is equally or more concerned about the wage hikes than smaller businesses.

Impact of Minimum Wage Increase	Total Number of Full- and Part-Time Employees				
	Five of Fewer	6 - 10 Employees	11 - 25 Employees	26 to 50 Employees	50+ Employees
Mostly negative	43.9%	50.0%	58.3%	50.0%	66.7%
Mostly positive	6.1%	7.1%	8.3%	0.0%	11.1%
Neither positive nor negative	38.8%	32.1%	25.0%	35.7%	11.1%
Uncertain at this time	11.2%	10.7%	8.3%	14.3%	11.1%

- ✓ Note that each category is determined based upon a businesses self reported total number of full- and part-time employees.
- ✓ Note that sub-groups analyses include smaller sample size than the main results, and therefore, have higher sampling risk parameters.



MINIMUM WAGE IMPACTS & EMPLOYMENT GROWTH

- ✓ **Businesses with increasing workforces had the highest percentage of respondents in the “mostly positive” and “indifferent” impact categories.**
- ✓ This could be the result of businesses that are increasing their workforce are generally growing, and experiencing growth that could offset the impacts of the wage increases.

Impact of Minimum Wage Increase		Reducing Workforce	No Change in Workforce	Increasing Workforce
	Mostly negative		56.5%	53.7%
Mostly positive		4.3%	6.5%	7.4%
Neither positive nor negative		21.7%	30.6%	44.4%
Uncertain at this time		17.4%	9.3%	11.1%

- ✓ Note that each category is determined based upon a businesses self reported change in employment level.
- ✓ Note that sub-groups analyses include smaller sample size than the main results, and therefore, have higher sampling risk parameters.



MINIMUM WAGE IMPACTS & MARKET-BASED WAGE INCREASES

- ✓ We asked businesses to self-report the wage increases they granted to employees in 2017 (prior to the first major increase in mandated minimum wage that takes place on January 1, 2018).
- ✓ We find that there is no association between the wage increases granted in 2017 and businesses' expected impact of the minimum wage increase.
 - ✓ This suggests that businesses do not want to be mandated to increase wages, but, rather would want to provide increases at their discretion.

Impact of Minimum Wage Increase	Wage Increases Granted in 2017			
	less than 5%	5% to 9.9%	10% or more	Don't Know / Not Sure
Mostly negative	52.00%	44.44%	57.69%	43.94%
Mostly positive	9.33%	0.00%	11.54%	3.03%
Neither positive nor negative	28.00%	55.56%	19.23%	39.39%
Uncertain at this time	10.67%	0.00%	11.54%	13.64%

- ✓ Note that each category is determined based upon a businesses self reported wage increases in 2017.
- ✓ Note that sub-groups analyses include smaller sample size than the main results, and therefore, have higher sampling risk parameters.

THANK YOU FOR READING



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