

Minimum wage: How much is too much?

Summary

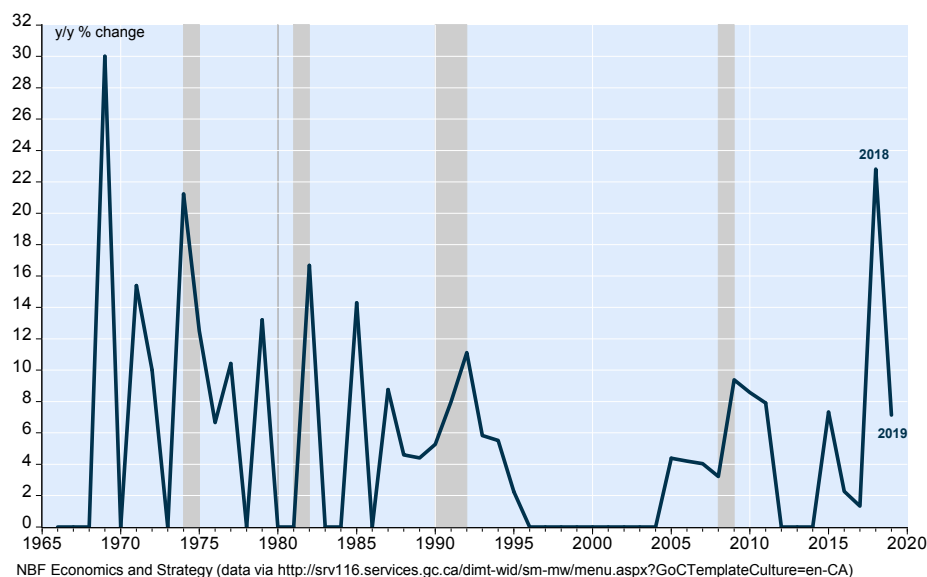
- In June the Ontario government announced its intention to raise the province's minimum wage by the most in 50 years: 23% this January 1 and another 7% a year later.
- This move would raise the ratio of minimum wage to average hourly earnings in Ontario from the current 44% to 53% on January 1 and 55% a year later.
- There is only one precedent among the four largest provinces in Canada for an increase of the minimum wage to such ratios, the experience of Quebec in 1975. Two years after its introduction, this increase was found to be counterproductive.
- The segments of the labour force most likely to be affected by a surge in the minimum wage are youth (people aged 15-24) and recent immigrants (those landed less than five years ago).

Ontario goes for it

Politicians across many jurisdictions have embraced the idea of raising the minimum wage to \$15 an hour. Seattle has done it. Alberta is scheduled to get there in 2018. As British Columbia and Quebec continue to think about it, Ontario has announced that it wants get there soon. In Bill 148, the "Fair Workplaces, Better Jobs Act, 2017," the government of Canada's most populous province proposes to raise the general minimum wage from the current \$11.40 an hour to \$14 this January 1 and \$15 a year later. As the chart below shows, the planned 23% increase in Ontario's minimum wage this January 1 is the largest in 50 years.

Ontario: The biggest increase in about 50 years

Minimum wage increase in Ontario (as of January of every year)



Raising the minimum wage to \$15 would sharply increase the number of minimum-wage earners, from about 11% of Ontario's workforce to a whopping 24% (table 1). This unusually large minimum-wage increase could have the second-round effect of encouraging workers currently earning between \$15 and \$20 an hour to ask for raises. In 2016 there were more than a million workers in that pay bracket, 17% of all employees. Boosting the minimum wage to \$15 per hour could thus affect as much as 41% of Ontario's workforce.

Table 1
Wage distribution of Ontario employees in 2016

	<u>Thousands</u>	<u>Distribution</u>
Total employed	5956	100%
Making less than \$12/hour	673	11%
Making \$12-\$14.99/hour	764	13%
Making \$15-19.99/hour	1025	17%
Making \$20-29.99/hour	1579	27%
Making \$30/hour and over	1914	32%

NBF Economics & Strategy (data via Statistics Canada)

Looking at segments of the workforce that stand to be affected more directly by the minimum-wage increase, we note that the proportion of Ontario employees currently making less than \$15 an hour is 69% among those aged 15 to 24 (the highest percentage of the four most populous provinces) and 40% among immigrants who obtained permanent residency less than five years ago (table 2).

Table 2
Proportion of employees earning less than 15\$ per hour, 2016

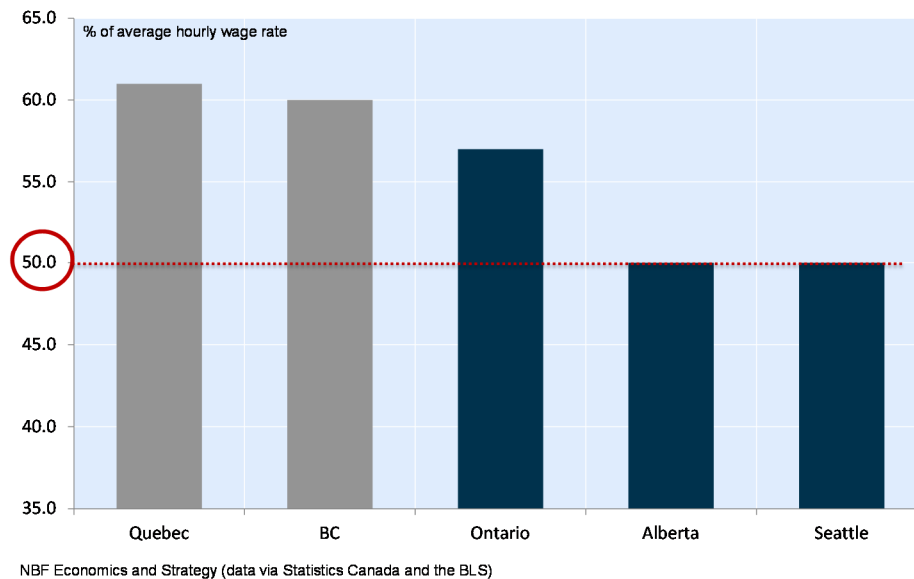
	<u>CANADA</u>		<u>QUE</u>		<u>ONT</u>		<u>ALB</u>		<u>BC</u>	
	Proportion - less than 15\$	Distribution	Proportion - less than 15\$	Distribution	Proportion - less than 15\$	Distribution	Proportion - less than 15\$	Distribution	Proportion - less than 15\$	Distribution
Total	23%	100%	23%	100%	24%	100%	16%	100%	22%	100%
Full-time	16%	57%	16%	57%	17%	57%	10%	52%	14%	54%
Part-time	54%	43%	54%	43%	58%	43%	43%	48%	49%	46%
Age group										
15-24	64%	43%	66%	43%	69%	43%	48%	47%	60%	46%
25-54	15%	42%	14%	41%	16%	42%	10%	42%	13%	40%
55 and over	19%	15%	22%	17%	20%	15%	11%	11%	17%	14%
Immigrant status										
Landed Immigrants	25%	26%	28%	17%	25%	31%	21%	30%	25%	33%
Recent immigrants (less than 5 year)	40%	6%	39%	4%	40%	5%	35%	12%	39%	5%
Non-Landed immigrants	34%	3%	39%	2%	32%	2%	31%	7%	33%	4%
Born in Canada	22%	71%	22%	81%	24%	66%	13%	63%	20%	63%

NBF Economics & Strategy (data via Statistics Canada)

It's not the same everywhere

The introduction of a \$15 minimum wage does not affect the economies of North American regions equally, since average income varies markedly among provinces and states. For example, Seattle's average hourly wage of US\$30.43 is 28% above the U.S. average and Alberta's average hourly wage of \$30.12 is 16% above the Canadian average. Thus a raise to \$15 brings the minimum wage to about 50% of average hourly earnings (AHE) in Seattle and Alberta, but to 57% of AHE in Ontario. If British Columbia and Quebec opted to proceed to 15\$ per hour today, their ratio would be 60% (chart).

Canada: Impact of \$15/h minimum wage not the same everywhere
\$15/hour as a share of average hourly wage rate (as of August 2017)



The Canadian precedent: Quebec in the mid-1970s

In other words, Ontario's move to a \$15 minimum wage is much more aggressive than Seattle's or that planned by Alberta. After implementation, we estimate that Ontario's ratio of minimum wage to AHE would be double that in the U.S. and second highest only to France among the mature OECD economies.

We estimate that Ontario's ratio of minimum wage to AHE could be as high as 55% in 2019.¹ There is only one precedent among the four largest provinces in Canada for raising the minimum wage to such a ratio: the experience of Quebec in 1975. The provincial government of the day, probably intending in part to narrow the wage gap with Ontario, raised Quebec's minimum wage from 8% below Ontario's to 23% above it.² That took Quebec's minimum wage to 54.2% of AHE, vs. 40.9% for Ontario.³

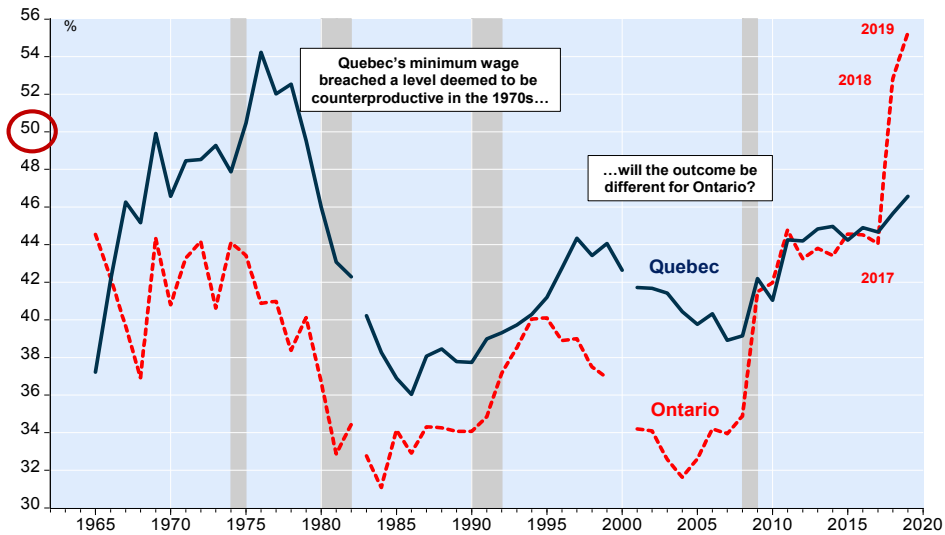
¹ The large increase in Ontario's minimum wage in 1968 mentioned earlier had propelled the ratio to only 44%.

² Though Quebec's minimum-wage-to-AHE ratio is generally higher than Ontario's, its minimum wage has generally been lower. The mid-1970s were the only years in modern history when Quebec's minimum wage was higher than Ontario's for an extended period.

³ Average hourly earnings in the manufacturing sector is available with a long historical perspective allowing us to do comparison across time.

Canada: Perspective on minimum wage in Ontario and Quebec

Ratio of minimum wage to average hourly earnings (AHE) in manufacturing*

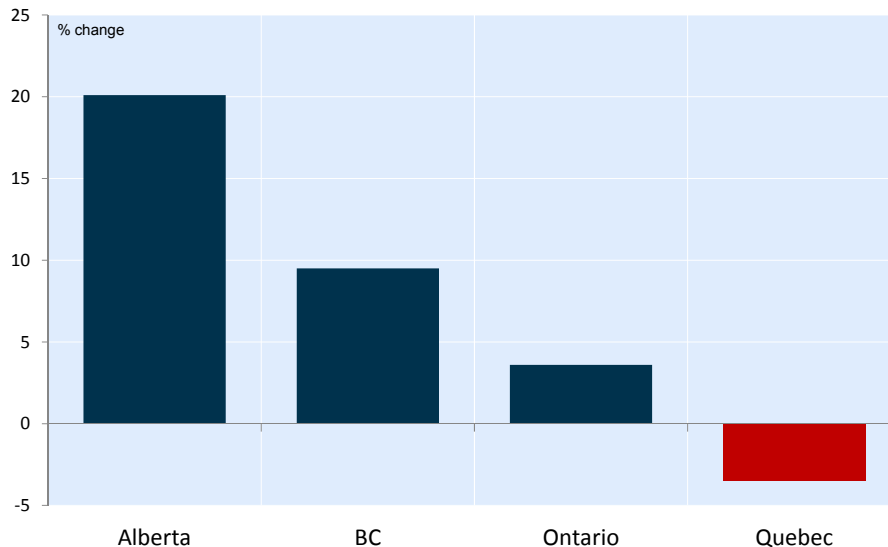


* We use manufacturing as the benchmark wage because it is the only one going back to 1965
NBF Economics and Strategy (<http://srv116.services.gc.ca/dimt-wid/sm-mw/rpt4.aspx?GoCTemplateCulture=en-CA>, Statistics Canada)

This proved counterproductive. Youth employment soon deteriorated: by 1977, Quebec’s jobless rate for people aged 15-24 had surged 6 percentage points to 19.5% while Ontario’s remained relatively flat at about 13%. As the next chart shows, Quebec was the only province where youth employment declined between January 1976 and December 1977, a period when employment for all other age groups in Quebec grew 2.2% (Ontario: 3.6%).

Canada: What happened in Quebec in the mid 1970s

Change in youth employment between January 1976 and December 1977



NBF Economics and Strategy (data via Statistics Canada)

Surprised by this outcome, the Quebec government commissioned a report in 1978 from Pierre Fortin,⁴ who found that the increase in the minimum wage had been too large and was detrimental to youth employment. It was later established that for Quebec, a minimum-wage-to-AHE ratio below 50% coupled with government transfers was the best way to maintain optimal employment and improve wealth redistribution. Will Ontario's outcome be different from Quebec's of the 1970s? Time will tell.

Employment elasticities

Canada currently has one of the highest employment rates in the developed world for people aged 15-24: 57%, vs. an OECD average of 41%. We also have one of highest employment rates for immigrants, 71%, vs. an OECD average of 65%. What do empirical studies say about the effect on employment of an increase of the minimum wage? Fortin (2010), drawing on data for all provinces from 1981 to 2008, found an inverse relationship between the minimum-wage-to-AHE ratio and the employment rate.⁵ His results show a smaller negative effect for the period 1981-94 than for the period 1995-2008, and a decrease in the negative effect with age. He found that a 10% rise in the minimum-wage-to-AHE ratio (e.g. from 40% to 44%) reduced employment of those aged 15-19 by 5.3%, of those aged 20-24 by 2.2% and of those aged 25-54 by 0.6%. These elasticities, applied to Ontario's proposed legislation, suggest a loss of 124,000 jobs, more than half of them (65,000) among 15- to 24-year-olds. We note that this projection carries a high degree of uncertainty, since the simulated increase exceeds the order of magnitude of the sample data. Also, it does not take into the account the effects of possible offsetting measures such as business tax cuts.

Stéfane Marion and Matthieu Arseneau

⁴ Currently Emeritus Professor of Economics at the University of Quebec at Montreal, Fellow of the Royal Society of Canada and member of the National Statistics Council of Canada.

⁵ Pierre Fortin, "Salaire minimum, pauvreté et emploi : à la recherche du compromis idéal," *Regard sur le Travail*, Fall 2010.

Special Report

Economics and Strategy

Montreal Office

514-879-2529

Stéfane Marion

Chief Economist and Strategist
stefane.marion@nbc.ca

Paul-André Pinsonnault

Senior Fixed Income Economist
paulandre.pinsonnault@nbc.ca

Krishen Rangasamy

Senior Economist
krishen.rangasamy@nbc.ca

Marc Pinsonneault

Senior Economist
marc.pinsonneault@nbc.ca

Matthieu Arseneau

Senior Economist
matthieu.arseneau@nbc.ca

Angelo Katsoras

Geopolitical Analyst
angelo.katsoras@nbc.ca

Kyle Dahms

Economist
kyle.dahms@nbc.ca

Jocelyn Paquet

Economist
jocelyn.paquet@nbc.ca

Toronto Office

416-869-8598

Warren Lovely

MD, Public Sector Research and Strategy
warren.lovely@nbc.ca

General – National Bank Financial (NBF) is an indirect wholly owned subsidiary of National Bank of Canada. National Bank of Canada is a public company listed on Canadian stock exchanges.

The particulars contained herein were obtained from sources which we believe to be reliable but are not guaranteed by us and may be incomplete. The opinions expressed are based upon our analysis and interpretation of these particulars and are not to be construed as a solicitation or offer to buy or sell the securities mentioned herein.

Research Analysts – The Research Analyst(s) who prepare these reports certify that their respective report accurately reflects his or her personal opinion and that no part of his/her compensation was, is, or will be directly or indirectly related to the specific recommendations or views as to the securities or companies.

NBF compensates its Research Analysts from a variety of sources. The Research Department is a cost centre and is funded by the business activities of NBF including, Institutional Equity Sales and Trading, Retail Sales, the correspondent clearing business, and Corporate and Investment Banking. Since the revenues from these businesses vary, the funds for research compensation vary. No one business line has a greater influence than any other for Research Analyst compensation.

Canadian Residents – In respect of the distribution of this report in Canada, NBF accepts responsibility for its contents. To make further inquiry related to this report, Canadian residents should contact their NBF professional representative. To effect any transaction, Canadian residents should contact their NBF Investment advisor.

U.S. Residents – With respect to the distribution of this report in the United States, National Bank of Canada Financial Inc. (NBCFI) is regulated by the Financial Industry Regulatory Authority (FINRA) and a member of the Securities Investor Protection Corporation (SIPC). This report has been prepared in whole or in part by, research analysts employed by non-US affiliates of NBCFI that are not registered as broker/dealers in the US. These non-US research analysts are not registered as associated persons of NBCFI and are not licensed or qualified as research analysts with FINRA or any other US regulatory authority and, accordingly, may not be subject (among other things) to FINRA restrictions regarding communications by a research analyst with the subject company, public appearances by research analysts and trading securities held a research analyst account.

All of the views expressed in this research report accurately reflect the research analysts' personal views regarding any and all of the subject securities or issuers. No part of the analysts' compensation was, is, or will be, directly or indirectly, related to the specific recommendations or views expressed in this research report. The analyst responsible for the production of this report certifies that the views expressed herein reflect his or her accurate personal and technical judgment at the moment of publication. Because the views of analysts may differ, members of the National Bank Financial Group may have or may in the future issue reports that are inconsistent with this report, or that reach conclusions different from those in this report. To make further inquiry related to this report, United States residents should contact their NBCFI registered representative.

UK Residents – In respect of the distribution of this report to UK residents, National Bank Financial Inc. has approved the contents (including, where necessary, for the purposes of Section 21(1) of the Financial Services and Markets Act 2000). National Bank Financial Inc. and/or its parent and/or any companies within or affiliates of the National Bank of Canada group and/or any of their directors, officers and employees may have or may have had interests or long or short positions in, and may at any time make purchases and/or sales as principal or agent, or may act or may have acted as market maker in the relevant investments or related investments discussed in this report, or may act or have acted as investment and/or commercial banker with respect thereto. The value of investments can go down as well as up. Past performance will not necessarily be repeated in the future. The investments contained in this report are not available to retail customers. This report does not constitute or form part of any offer for sale or subscription of or solicitation of any offer to buy or subscribe for the securities described herein nor shall it or any part of it form the basis of or be relied on in connection with any contract or commitment whatsoever.

This information is only for distribution to Eligible Counterparties and Professional Clients in the United Kingdom within the meaning of the rules of the Financial Conduct Authority. National Bank Financial Inc. is authorised and regulated by the Financial Conduct Authority and has its registered office at 71 Fenchurch Street, London, EC3M 4HD.

National Bank Financial Inc. is not authorised by the Prudential Regulation Authority and the Financial Conduct Authority to accept deposits in the United Kingdom.

HK Residents – With respect to the distribution of this report in Hong Kong by NBC Financial Markets Asia Limited ("NBCFMA") which is licensed by the Securities and Futures Commission ("SFC") to conduct Type 1 (dealing in securities) regulated activity, the contents of this report are solely for informational purposes. It has not been approved by, reviewed by, verified by or filed with any regulator in Hong Kong. Nothing herein is a recommendation, advice, offer or solicitation to buy or sell a product or service, nor an official confirmation of any transaction. None of the products issuers, NBCFMA or its affiliates or other persons or entities named herein are obliged to notify you of changes to any information and none of the foregoing assume any loss suffered by you in reliance of such information.

The content of this report may contain information about investment products which are not authorized by SFC for offering to the public in Hong Kong and such information will only be available to, those persons who are Professional Investors (as defined in the Securities and Futures Ordinance of Hong Kong ("SFO")). If you are in any doubt as to your status you should consult a financial adviser or contact us. This material is not meant to be marketing materials and is not intended for public distribution. Please note that neither this material nor the product referred to is authorized for sale by SFC. Please refer to product prospectus for full details.

There may be conflicts of interest relating to NBCFMA or its affiliates' businesses. These activities and interests include potential multiple advisory, transactional and financial and other interests in securities and instruments that may be purchased or sold by NBCFMA or its affiliates, or in other investment vehicles which are managed by NBCFMA or its affiliates that may purchase or sell such securities and instruments.

No other entity within the National Bank of Canada group, including NBF, is licensed or registered with the SFC. Accordingly, such entities and their employees are not permitted and do not intend to: (i) carry on a business in any regulated activity in Hong Kong; (ii) hold themselves out as carrying on a business in any regulated activity in Hong Kong; or (iii) actively market their services to the Hong Kong public.

Copyright – This report may not be reproduced in whole or in part, or further distributed or published or referred to in any manner whatsoever, nor may the information, opinions or conclusions contained in it be referred to without in each case the prior express written consent of National Bank Financial.