

Assessing the Economic Impact of Ontario's Proposed Minimum Wage Increase

Key Points

- The government's proposal to raise Ontario's general minimum wage to \$15 per hour will dramatically increase the number of minimum wage workers from just over 500,000 currently to 1.6 million in 2019. As well, under a \$15 minimum wage, adults and those with full-time jobs would represent the majority of minimum wage workers.
 - By comparison, under the current minimum wage of \$11.40 per hour, teens and young adults and those with part-time jobs account for the majority of minimum wage workers.
- The FAO estimates that the higher minimum wage will raise total labour income (after adjusting for price inflation) by 1.3 per cent by 2019. However, the FAO estimates that just one-quarter of the higher labour income would directly benefit low-income families. Since the income gains would not be concentrated on low-income families, raising the minimum wage would be an inefficient policy tool for reducing overall poverty.
- The higher minimum wage will increase payroll costs for Ontario businesses, leading to some job losses for lower income workers. At the same time, higher labour income and household spending will boost economic activity leading to some offsetting job gains. On net, the FAO estimates that Ontario's proposed minimum wage increase will result in a loss of approximately 50,000 jobs (0.7 per cent of total employment), with job losses concentrated among teens and young adults.
 - However, there is evidence to suggest that the job losses could be larger than the FAO's estimate.
 Ontario's proposed minimum wage increase is both larger and more rapid than past experience, providing businesses with a greater incentive to reduce costs more aggressively.

Background

As part of Bill 148, the *Fair Workplaces, Better Jobs Act*, 2017, the government proposes to raise Ontario's general minimum wage from its current rate of \$11.40 per hour to \$14 per hour on January 1, 2018 and \$15 per hour the following year.

Ontario's Proposed Minimum Wage Increases

| | September 2017 | January 2019 |
|--|---|--------------|
| General Minimum Wage (\$) | 11.40 | 15.00 |
| Students under 18 (\$) | 10.70 | 14.10 |
| Liquor Servers (\$) | 9.90 | 13.05 |
| Number of Minimum Wage Workers | 520,000 | 1,610,000 |
| As % of Total Employment | 7% | 22% |
| % of Minimum Wage Workers that | 39% / 61% | 55% / 45% |
| are Full-time / Part-time | | |
| ource: FAO and Ministry of Labour, Proposed Changes to Ontario | o's Employment and Labour Laws, May 30, 2017. | |

¹ The FAO's analysis did not consider other potential non-economic benefits of a minimum wage increase, including improving workers' well-being and health outcomes. For a discussion on the impact of minimum wages on health outcomes, see *J. Paul Leigh, Could Raising the Minimum Wage Improve the Public's Health?, 2016.* For a discussion on the impact on well-being, see *P. Flavin and G. Shufeldt, Minimum Wage Increases and Workers' Well-Being, 2016.*



Ontario's Minimum Wage Workers

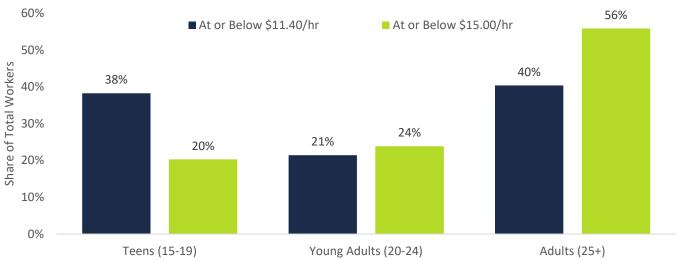
The FAO estimates that approximately seven per cent of all Ontario workers (or about 520,000 people) are earning the current minimum wage in 2017. Approximately 60 per cent of Ontario's current minimum wage workers are teens and young adults while the remaining 40 per cent are adults (25 years of age and older).² In addition, the majority of minimum wage earners (about 60 per cent) are part-time employees.

The government proposes to raise Ontario's general minimum wage to \$15 an hour in 2019, an increase of 32 per cent over 18 months. This higher minimum wage would be expected to benefit nearly 1.6 million workers or 22 per cent of Ontario's workforce by 2019.

With the expanded coverage of the minimum wage, the composition of minimum wage workers would shift significantly. Under a \$15 minimum wage:

- Adults would account for well over half (56 per cent) of all minimum wage workers while teen workers would account for just one-fifth; and
- Full-time employees would also account for a majority (55 per cent) of minimum wage workers.

Minimum Wage Workers by Age Group



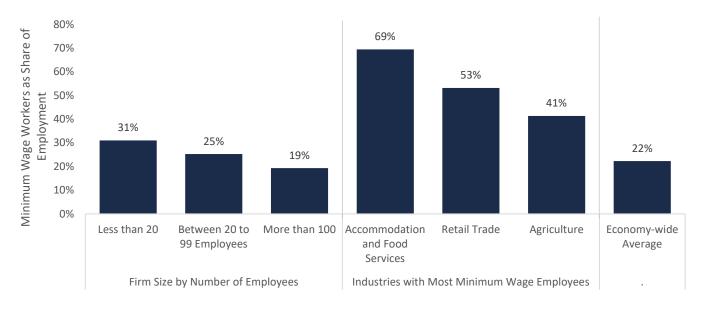
Source: FAO calculations using data from Statistics Canada's Labour Force Survey (January-July 2017) Note: Figures exclude self-employed workers.

The proposed minimum wage increase would also disproportionately impact workers in certain industries and businesses. In particular, small businesses (those with fewer than 20 employees) employ a larger proportion of workers paid \$15 per hour or less compared to larger employers. Similarly, the accommodation and food services, retail trade and agriculture industries all employ relatively large proportions of lower wage workers compared with other sectors.

² In this Commentary, 'teens' refers to workers between the ages of 15 to 19, while young adults are between the ages of 20 and 24 and adults are 25 years of age and older.



Minimum Wage Workers (\$15 per hour) as Share of Total Employment by Firm Size and Industry



Source: Statistics Canada's Labour Force Survey (January to July 2017)

Economic Responses to Higher Minimum Wage

The increase in the minimum wage would redistribute income from business owners to workers, raising household incomes but also boosting payroll costs.

In response to higher payroll costs,³ some businesses will attempt to reduce expenses by substituting minimum wage employees for higher paid, more productive workers or by increasing automation.⁴ This would lead to some job losses for minimum-wage workers.⁵

In addition to the direct job losses of lower wage workers, the increase in the minimum wage would impact employment through the broader economy. Businesses would be expected to respond to higher payroll costs by attempting to raise prices. This would be expected to result in a decline in sales, forcing some businesses to scale back production and lay-off some of their workforce.

However, a higher minimum wage would also raise labour income and increase consumer spending. Higher spending would then stimulate economic activity and lead to job creation. The jobs created from higher household spending would be expected to offset some of the loss in employment that would result from the higher minimum wage.

Higher Payroll Costs Could Result in Significant Challenges for Some Businesses

The challenges of adjusting to the higher minimum wage would be more pronounced for firms which rely heavily on minimum wage workers and face highly competitive business environments. For example, businesses in the agriculture and retail trade sectors could face difficulty increasing prices due to competition from international imports and online retailers. In addition, smaller employers may have less flexibility than larger businesses to reduce costs.

³ In addition to higher salaries, an increase in the minimum wage would also increase employers' contributions for Employment Insurance, the Canada Pension Plan, and other benefits such as insurance and pensions.

⁴ The increase in payroll costs could also be mitigated by improvements in labour productivity and reductions in employee benefits and training.

⁵ The impact to employment can occur either as job losses, a slowdown in employment growth or a reduction in hours worked.



Minimum Wage Increase Expected to Result in Moderate Job Losses

To estimate the impact of Ontario's higher minimum wage on minimum wage workers, the FAO has applied results based on previously published minimum wage research.

Researchers have generally found a stronger relationship between minimum wages and employment in Canada than in the United States. ⁶ Canadian research suggests that a 10 per cent increase in minimum wages has historically resulted in a 3 to 6 per cent reduction in teen employment. ⁷ The impact on young adult employment is generally estimated to be about one-third of the impact on teen employment. Existing research also suggests that there is no significant impact of minimum wage changes on adult employment. ⁸

The government proposes to raise the general minimum wage to \$15 an hour in 2019, an increase of 27 per cent compared to what the minimum wage would have been under existing law. Based on existing research, the FAO estimates that the proposed increase in the minimum wage would reduce employment of directly affected workers by about 65,000 jobs. Studies have indicated that businesses which face higher payroll costs typically respond by laying off inexperienced workers. Given this, the job losses would be expected to be concentrated among teens, young adults, and recent immigrants. 11

However, there is evidence to suggest that the direct job losses of affected workers in Ontario could be larger than the FAO's estimate. Ontario's proposed minimum wage increase is both relatively larger and more rapid compared with most other jurisdictions or historical experience. This could provide businesses with a greater incentive to reduce costs more aggressively than suggested by existing research – which are generally based on more moderate increases.

Job Losses Moderated by Higher Household Spending

As discussed above, a minimum wage increase would also be expected to impact the broader economy by increasing prices and raising household spending.

⁶ Gunderson noted that "Canadian data are generally regarded as better than US data... [Canadian minimum wages] are largely under provincial jurisdiction and there is considerable cross-sectional and time series variation in minimum wages...in contrast to the U.S. data where minimum wages are under the federal jurisdiction, with changes seldom occurring." (Morley Gunderson, Minimum Wages in Canada: Theory, Evidence and Practice, 2005). Also see Minimum Wage Advisory Panel, Ministry of Labour, 2014.

⁷ For a review of research on the impact of an increase minimum wage on the employment of teens, young adults and adults, see Gunderson, Morley; Minimum Wages: Issues and Options for Ontario, Prepared for the Ontario Ministry of Finance; 2007, and Gunderson, Morley; Minimum Wages in Canada: Theory, Evidence and Policy, 2005. For a more recent study, see Anindya Sen, Kathleen Rybczynski, Corey Van De Waal, Teen employment, poverty, and the minimum wage: Evidence from Canada, 2011. See the FAO's methodological note for a review of the research which is available upon request.

⁸ Studies suggests that adult employment is not impacted by an increase in minimum wages because businesses tend to lay off inexperienced workers first (that is, teenagers and young adults). See *David Neumark, Employment effects of minimum wages, 2014 and Gunderson, Morley; Minimum Wages: Issues and Options for Ontario, Prepared for the Ontario Ministry of Finance; 2007.*

⁹ Under the section 23 of the *Employment Standards Act*, the minimum wage is increased annually by the rate of consumer price index (CPI) inflation. As a result, in the absence of the proposed policy change, the general minimum wage would be expected to increase from the current rate of \$11.40 per hour to \$11.85 on January 1, 2019 based on the FAO's inflation forecast from the 2017 Spring Economic and Fiscal Outlook.

¹⁰ The FAO estimates are based on the mid-point in the range of estimated elasticities. For teenagers, the FAO assumes that a 10 per cent increase in minimum wage would reduce teenage employment by 4.5 per cent. For young adults, this sensitivity is assumed to be 1.5 per cent, while the impact on adult employment is assumed to be negligible. Based on these assumed elasticities, the FAO estimates that Ontario's minimum wage increase would result in a loss of 65,000 minimum wage jobs. However, based on the estimated range for the elasticities, the employment loss could range from 40,000 to 80,000 jobs.

¹¹ Rybczynski and Sen found that the disemployment effects for prime-age immigrants is equally large as the effects for teens. (*Employment Effects of the Minimum Wage: Panel Data Evidence from Canadian Provinces, Kate Rybczynski and Anindya Sen, Forthcoming*).

¹² Under the government's proposal, Ontario's minimum wage would increase by 32 per cent over 18 months. This is a more significant hike compared with increases of 20 per cent over two years in 1990 or 28 per cent over three years in 2008.

¹³Some studies have indicated that sharper increases in minimum wages result in substantially larger employment effects. For example, the University of California Berkley estimates that there are small disemployment effects for increases in minimum wages up to 25 per cent and \$10 an hour (USD). However, higher levels of minimum wages are associated with growing negative employment effects. (*University of California, Berkeley, The Effects of a \$15 Minimum Wage in New York State, 2016*). Also see *Minimum Wage Advisory Panel, Ministry of Labour, 2014*.



Researchers have found that a 10 per cent increase in minimum wages would be expected to increase consumer prices by around 0.2 per cent. ¹⁴ Based on this research, the FAO estimates that a 27 per cent increase in minimum wages would boost Ontario's consumer prices by about 0.5 per cent. Higher prices would dampen the growth in consumer spending.

At the same time, workers who receive a higher wage would increase their household spending, stimulating economic activity and creating new jobs. However, the higher income and spending of low-wage workers would be moderated by the lower income and spending of business owners who face higher payroll costs.

The FAO estimates that net gain in economic activity generated from the boost to household spending, partially offset by higher prices and lower business income, would lead to the creation of approximately 15,000 jobs, depending on how businesses and workers adjust to the new minimum wage.

As a result, the FAO estimates that Ontario's proposed minimum wage increase will lead to a net employment loss of 50,000 jobs, after accounting for the direct employment loss of minimum wage workers partially offset by the positive impact of higher household spending.

Gains in Labour Income Partially Offset by Employment Losses and Higher Prices

Ontario's proposed increase in the minimum wage would raise the incomes of approximately 1.6 million workers and would also lead to 'spillover' effects that would result in higher wages for workers earning just above the new minimum wage. Excluding any impacts on employment or prices, the FAO estimates that the proposed increase in the minimum wage, combined with spillover effects, would raise total labour income by 2.0 per cent ¹⁶.

However, as previously discussed, businesses would be expected to raise prices and lower employment, offsetting some of the overall gain in real or inflation-adjusted labour income. Including these impacts, the FAO estimates that the higher minimum wage would boost total real labour income by 1.3 per cent by 2019.¹⁷

Income Gain Broadly Distributed Across Households

The government has identified Ontario's minimum wage as a key policy tool in it's poverty reduction strategy. ¹⁸ However, based on the FAO's analysis, higher minimum wages are not an effective way to alleviate poverty.

Specifically, the FAO estimates that:

- Just 27 per cent of the total gain in labour income (resulting from the higher minimum wage) would be expected to benefit low-income families;
- Another one-third of the real income gain would benefit families with incomes between the low-income threshold and the median household income; and
- Households with incomes above the median would receive almost 40 per cent of the income gain.

¹⁴ According to Lemo's (2004) review of existing US studies, a 10 per cent increase in minimum wage typically increases overall prices between 0.2 to 0.4 per cent. (*Sara Lemos, The Effect of Minimum Wage on Prices, 2004*). Since Canadian industries are typically more trade exposed than U.S. industries, the price increase in Canada would be expected to be more moderate than in the US. Given this, the FAO assumes a price elasticity in the low-end of the range.

¹⁵ The higher minimum wage would also be expected to result in 'spillover effects' on workers earning just above the new minimum wage. These workers could be expected to demand pay increases consistent with the higher minimum wage rate. The FAO assumed (based on published research) that those currently earning between \$15 and \$17 per hour would experience wage increases of 7.5 per cent and those earning between \$17 to \$19 per hour would see their earnings increase by 3 per cent. See: *David Neumark, Mark Schweitzer, William Wascher, The Effects of Minimum Wages Throughout the Wage Distribution', 2000.*

¹⁶ In this commentary, 'labour income' refers to wages and salaries which does not include employers' social contributions.

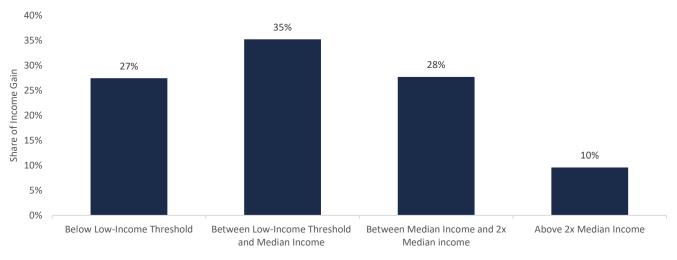
¹⁷ The FAO estimated the impact to labour income using microdata from Statistics Canada's *Labour Force Survey* (January to July 2017). In its estimation, the FAO adjusts for different categories of minimum wage (general rate, the rates for students and the servers'), the spillover effect, the impact of disemployment and price inflation.

¹⁸ Ontario Poverty Reduction Strategy, Government of Ontario, 2014.



As a result, the income gains from Ontario's proposed minimum wage increase would be relatively broadly distributed across all households and not concentrated on low-income families. Since minimum wages target low-wage workers, but not necessarily low-income families, raising the minimum wage would be an inefficient policy tool for reducing overall poverty.¹⁹

Distribution of Income Gains from Minimum Wage Increase



Source: FAO based on the Survey of Labour and Income Dynamics (2011)²⁰

Note: Low-income is defined as families earning below the market-basket measure (MBM).²¹ The FAO projects the low-income threshold (based on MBM) will be \$45,713 in 2019 with the median household income at \$91,752.

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* Greg Hunter and Edward Crummey provided research and editorial assistance.

External reviewers were provided with earlier drafts of this report for their comments. However, the input of external reviewers implies no responsibility for this final report, which rests solely with the FAO. Details of the FAO's methodology is available upon request.

¹⁹ The FAO's estimates are consistent with other Canadian research which has generally concluded that there is only a weak link between minimum wages and poverty. A summary is provided in the report of the Minimum Wage Advisory Panel (*Ministry of Labour, 2014*). Also see *Anindya Sen, Kathleen Rybczynski, Corey Van De Waal, Teen employment, poverty, and the minimum wage: Evidence from Canada, 2011*.

²⁰ The distributional analysis is based on data from Statistics Canada's Survey of Labour and Income Dynamics (SLID), because its successor, the Canadian Income Survey, does not publish data on hourly wages. Since the SLID was discontinued after 2011, the wage data was projected to 2019 levels using the forecast of inflation from the FAO's 2017 Spring Economic and Fiscal Outlook. The distribution of income gains includes estimates of income losses from disemployment effect of directly affected workers.

²¹ The MBM is a measure of low income based on the cost of a specific basket of goods and services that represents a modest, basic standard of living. MBMs are produced by Statistics Canada for various urban and rural areas in Canada. Since a province-wide MBM is not available, Toronto is used by the FAO because it would capture the upper limit of low-income in Ontario. The FAO applies the historical growth rate of MBM to project the threshold to 2019.