

Ontario Enters Uncharted Waters with a \$15 Minimum Wage

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SUMMARY

■ Premier Wynne's government in Ontario has announced a plan to increase the province's minimum wage to \$15 per hour by 2019. This would represent a 32 percent increase in less than 18 months.

■ Such a rapid increase in the minimum wage could have harmful unintended consequences. Specifically, it will reduce employment opportunities for young and less skilled workers. Defenders of the policy often cite evidence from the United States suggesting that the adverse effects on employment will be negligible.

■ The impact of a minimum wage increase on employment in a given jurisdiction depends on a many variables, one of the most important of which is the existing prevailing wage levels in the economy.

■ Research shows that as the minimum wage climbs closer to the market-determined median and mean wage levels in an economy, the likelihood of substantial, economically harmful

effects on employment opportunities for young people increases.

■ This bulletin examines how the new minimum wage in the province will compare to the prevailing median and mean wage levels. It shows that once the minimum wage increase has been implemented, the ratio of Ontario's minimum-to-median wage will be out of touch with Canadian, North American, and international norms. Ontario will have, by far, the highest minimum-to-median wage ratio in Canada and will be much higher than nearby competing US states.

■ The move to a much higher minimum-to-median wage ratio heightens the probabilities of substantial adverse employment effects. This is especially true in economically weaker regions of the province where prevailing market wage levels are much lower than they are in Toronto. Specifically, in many regions of Ontario the mean wage is now more than 15 percent lower than in Toronto. The likelihood of severe effects on employment in these regions from a dramatic increase to the minimum wage is especially high.

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Introduction

In late May 2017, Premier Kathleen Wynne's government proposed a plan to raise the provincial minimum wage to \$15 per hour, an increase of 32 percent from its current level of \$11.40 (a small interim increase to \$11.60 is scheduled for October 2017). The minimum wage hike is the centrepiece of the government's *Fair Workplaces, Better Jobs Act*, which includes several other new labour regulations. The increase is scheduled to be implemented in two significant stages, with an increase to \$14 in January of 2018, followed by a further increase to \$15 in January 2019. All told, the 32 percent hike will occur in the short span of approximately 18 months.

The decision makes Ontario the second Canadian province to commit to a \$15 minimum wage. In the fall of 2016, Alberta announced it would implement a \$15 minimum wage by October 2018.

Since Premier Wynne's announcement there has been a swirl of analysis and commentary about the likely economic effects in the province of the minimum wage increase. Many economists and other analysts have warned that such a substantial minimum wage increase over such a short time is likely to have serious unintended consequences—specifically, severe consequences for youth employment (Lammam et al., 2017). This view is consistent with Canadian research, which consistently shows that minimum wage increases produce adverse effects on employment for young and less skilled workers (Murphy et al., 2016).¹

¹ For brevity's sake, throughout this bulletin we frequently refer to "adverse effects" on employment and the "job loss" effects of minimum wage increases without referring to the specific demographic groups in which those effects are strongly felt. How-

ever, there are some economists and higher minimum wages advocates who have put forward the contrary view, which argues that the proposed minimum wage increases will have no significant adverse effects on employment, and that any such effects would be more than offset by the benefits of wage gains for low-wage workers (Mojtehedzadeh, 2017). Proponents of much higher minimum wages often base their arguments about non-existent or minimal employment effects on research from the United States, including a famous study by Card and Krueger (1994).² However, this research bears little relevance to the debate in Canada, partly because this and other similar American studies measured the effect of small increases conducted in jurisdictions with dramatically lower minimum wages than those prevailing in Canada today.

ever, Canadian research suggests that the adverse effects on employment from minimum wage increases are significantly more heavily concentrated among young and inexperienced workers than other groups since this group of workers is disproportionately represented among minimum wage earners in Canada (Murphy et al., 2016)..

² Neumark and Wascher (2000) have heavily criticized the Card and Krueger methodology. In fact, there is a lively debate among economists about proper control techniques and how best to measure the effects of the minimum wage on employment and whether the adverse effects on employment are generally substantial. Critically, this debate centres on US-based data, which is less consistent than Canadian data and academic research. (The Canadian data consistently point to negative employment effects.) While we recognize that this debate is ongoing and robust, we ultimately agree with Neumark and Wascher's (2007) conclusion that the bulk of the US literature comes down on the side of a classical understanding of the labour market for lower skilled earners, which implies there will generally be adverse effects on employment from minimum wage increases.

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Given the comparatively high baseline minimum wage from which Ontario is starting, and the much larger increases that the province is considering, it is not clear that the American literature can offer much useful information for the debate here. Studies measuring the effects of much smaller minimum wage hikes in very different labour markets with much lower starting minimum wages (such as New Jersey in the 1990s, referred to in the Card and Krueger study) may have little bearing on the likely impact of a significant minimum wage increase in Ontario today.

This bulletin aims to provide context that can help readers understand the likely impact of raising the minimum wage in Ontario. Specifically, we focus on the relationship between the new proposed minimum wage and the provincial median wage, a factor that economists have identified as an indicator of the likely severity of the adverse effects from minimum wage increases. This analysis shows that Ontario is entering into uncharted waters, and will soon have (by far) the highest minimum-wage-to-median-wage ratio of any jurisdiction in Canada—and in most other OECD countries. This high ratio is an indicator that the province's proposed minimum wage could severely diminish the employment opportunities for the least skilled workers in the province.

The relationship between the minimum and median wage

Local economic conditions are important in determining how a given minimum wage increase will affect employment. A jurisdiction that has relatively low overall wages will experience larger adverse effects from a minimum wage hike because more workers are affected by the policy. A similar minimum wage hike in a jurisdiction with relatively high overall wages will

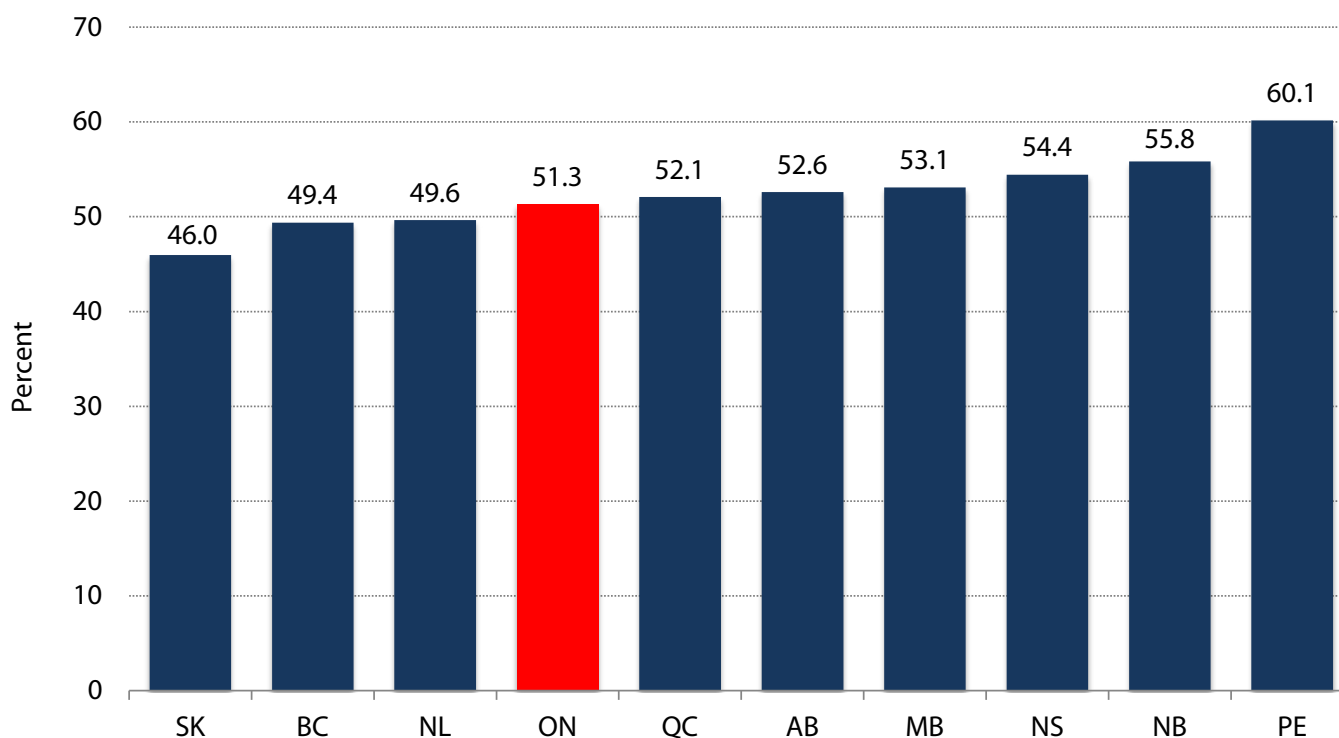
experience less significant adverse effects because wages are generally above the new minimum level and therefore fewer workers are affected. The relationship between overall wage levels and the minimum wage in a given jurisdiction can be measured by the ratio between the minimum wage and the median wage (the mid-point in the hourly wage distribution: half of workers earn above this point; half below). Indeed, research by the World Bank identifies this ratio in a given jurisdiction as being a factor that helps determine the size of resulting negative employment effects. As the minimum wage rises higher relative to the median wage, the more likely it is that there will be substantial adverse employment effects (Rutkowski, 2003).

The relationship between the minimum wage and the median wage is expressed as a ratio that economists sometimes refer to as the “Kaitz index” (Dube, 2014; Cass, 2016).³ The index, typically expressed as a number between 0 and 1, consists of the ratio of the minimum wage to the median wage. As the Kaitz Index climbs higher, the likelihood of more severe adverse employment effects from minimum wage increases goes up (Rutkowski, 2003). In this sce-

³ Different economists use the term “Kaitz index” to refer to very similar but subtly different metrics. Many define the term as being the ratio of the minimum wage to the median wage (e.g. Cass, Dube.), some economists define the term slightly differently. In most other cases, the Kaitz Index is used to refer to the ratio between the minimum wage and the average wage. In this paper, we use the same definition as Cass and Dube, and refer to the Kaitz index as the ratio of the minimum wage to the median wage in a jurisdiction. For clarity, the Kaitz Index refers to the actually observed wage distribution in the economy which includes existing minimum wage laws. It does not use a model to create a hypothetical wage distribution in an environment with no minimum wage.

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Figure 1: Minimum Wage Relative to Median Wage, 2017



Sources: Statistics Canada, 2017b; 2017c.

nario, economists suggest that increasing the minimum wage will cause more severe impacts on employment (Rutkowski, 2003).

A widely-cited target for the Kaitz index is 0.5—meaning the minimum wage would stand at half of the median wage (Dube, 2014; Cass, 2016). In fact, data from the Organisation for Economic Co-operation and Development (OECD) shows that a minimum wage equivalent to approximately half the median wage is generally the norm in developed countries. For example, in 2015 the Kaitz index stood at 0.49 in the UK, 0.48 in Germany, and 0.53 in Australia. The average for all OECD countries was 0.52 (OECD, 2017).⁴

⁴ Some sub-national jurisdictions within some countries (particularly the United States) have minimum wages that are above the national level and so

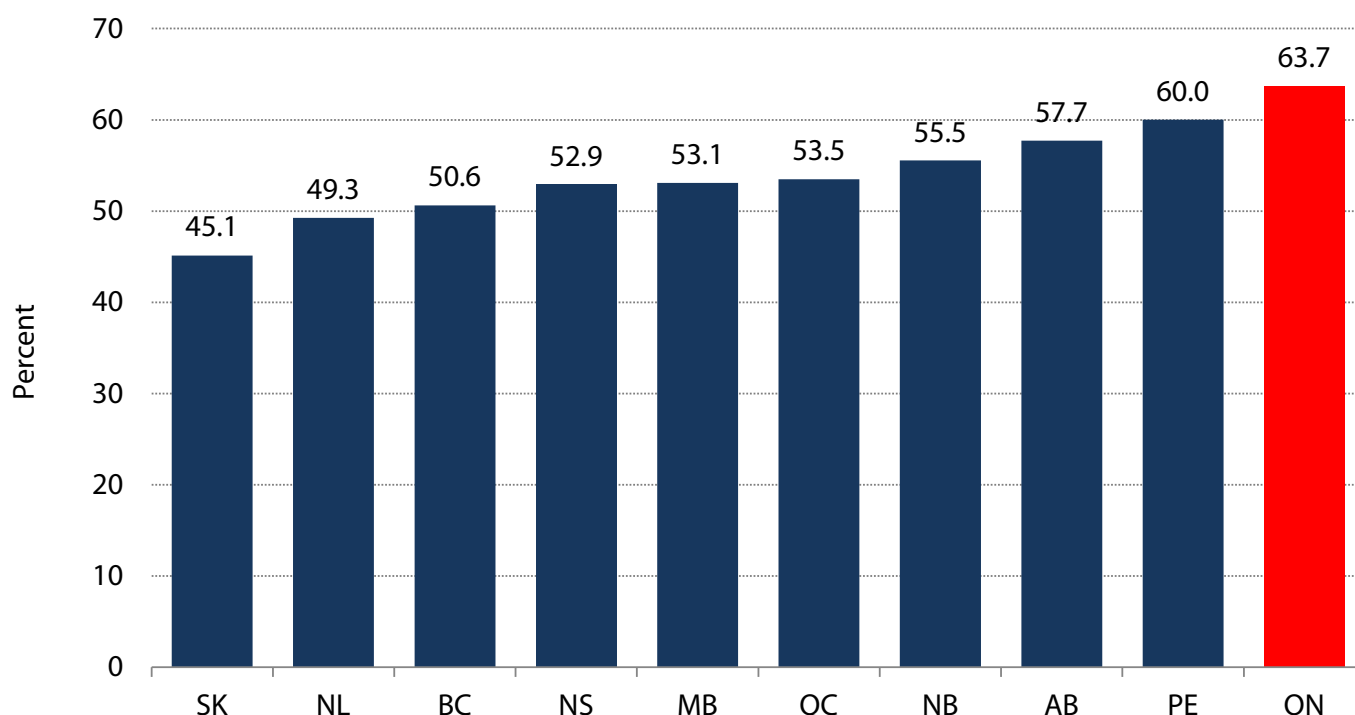
Most Canadian jurisdictions have also held close to the 0.5 Kaitz index benchmark in recent years. As of May 2017, the Kaitz index in Canadian provinces ranged from a low of 0.46 in Saskatchewan to a high of 0.60 in Prince Edward Island. The country's larger provinces are even more tightly clustered around the 0.5 standard. Alberta's Kaitz index stands at 0.53 and British Columbia's is 0.49.⁵ Ontario's Kaitz index is currently 0.51 and Quebec's is 0.52.

they may have higher Kaitz index. This study refers to national minimum wage levels.

⁵ Data were assembled for this study prior to the announcement that British Columbia's previously scheduled minimum wage increase, up from \$10.85 to \$11.25, will in fact be a slightly larger, rising to \$11.35. This small additional increase will cause BC's Kaitz index for 2017 to rise slightly.

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Figure 2: Minimum Wage Relative to Median Wage, 2019



Sources: Statistics Canada, 2017b; 2017c; calculations by authors.

This reality will change dramatically over the next 18 months in Ontario as increases to the province's minimum wage will rise far faster than the projected median wage, thereby raising the province's Kaitz index. Once the minimum wage increase is fully implemented, Ontario's Kaitz index will be by far the highest in Canada, and out of step with OECD norms.

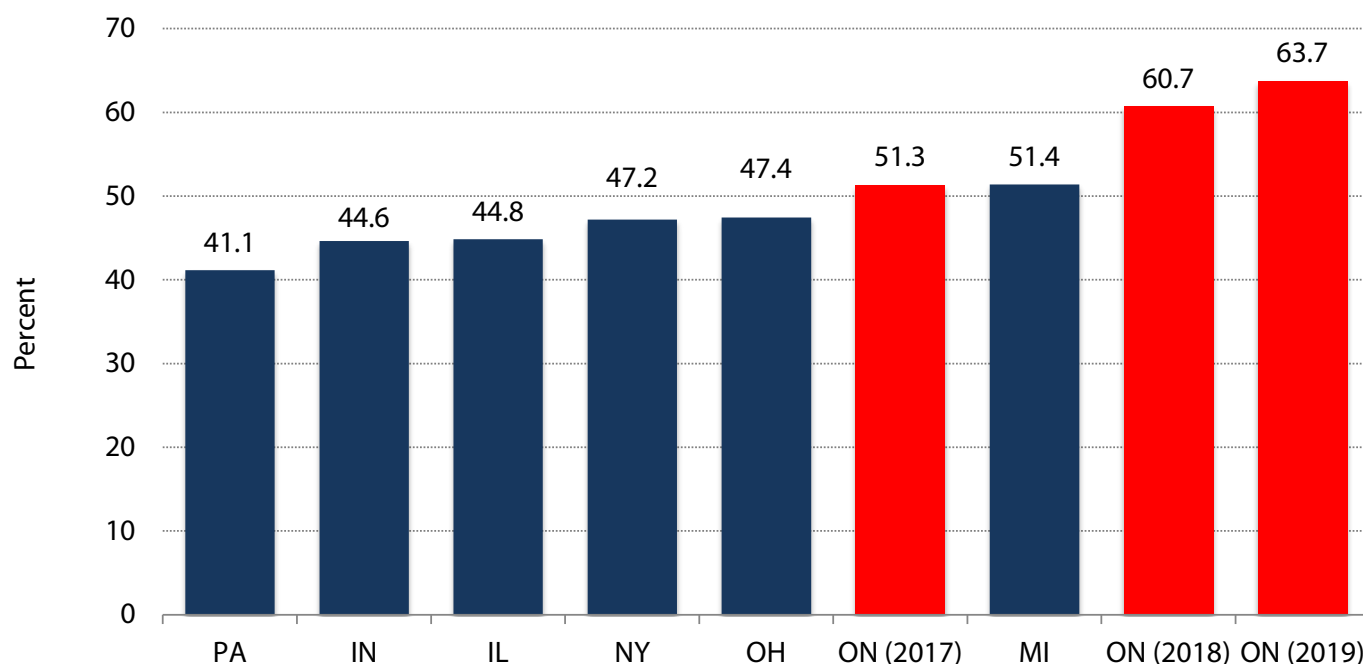
Figure 2 compares the projected Kaitz index in each province in 2019, by which point Ontario will have fully implemented its planned increase to \$15 per hour. Figure 2 shows that by then, Ontario's Kaitz index will have climbed to 0.64. In other words, the minimum wage in the province will be 64 percent as high as the median wage, greatly out of step with prevailing national norms. The Kaitz index for all the other provinces is expected to be at 0.6 or below.

It is not just in comparison to other Canadian provinces that Ontario will become an outlier with the introduction of a \$15 minimum wage over the next 18 months. Ontario will also become badly out of step with nearby US states with which the province competes for manufacturing investment.⁶ Figure 3 shows Ontario's projected Kaitz index for 2019 compared with the current Kaitz index (using state-wide minimum wages) in six nearby "rustbelt" manufacturing states. In 2017, Ontario (0.51) is already tied with Michigan as having the highest Kai-

⁶ City-level ordinances in certain states require higher minimum wages in those jurisdictions. However, since Ontario's minimum wage will be imposed province-wide, it is most appropriate to compare Ontario's Kaitz index to those determined by the state-level minimum wage in nearby jurisdictions.

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Figure 3: Minimum Wage Relative to Median Wage in Ontario and Selected US States



Notes: May 2017 median wage and 2017 minimum wage for US states; 2017, 2018, and 2019 values for Ontario.

Sources: National Conference of State Legislatures, 2017; Bureau of Labor Statistics, 2017; Statscan 2017 b, 2017c; calculation by authors.

tz index among these jurisdictions (the range is from 0.41 in Pennsylvania to 0.51). However, with a \$15 minimum wage, Ontario's Kaitz index will greatly surpass that of any of the rustbelt states, as figure 3 demonstrates.⁷

These data show that with its substantial planned increase to the minimum wage, Ontario is entering waters that are mostly unchart-

⁷ Figure three simply compares Ontario's 2019 Kaitz index to the 2017 level in Ontario and rustbelt jurisdictions. It does not reflect comparatively small annual changes planned in New York, Ohio, and Michigan. Increases in the Kaitz Index in all three states resulting from these minimum wage changes will be trivial in comparison to Ontario's, and barring future legislative changes, none will have a Kaitz Index score close to Ontario's in 2019.

ed. Whereas all large Canadian provinces and nearby US states have Kaitz indices that currently range from approximately 0.41 to 0.52, over the next two years, Ontario will move to a dramatically higher Kaitz index of 0.64. The precise effects on employment of this move are difficult to predict, in large part because there are few examples of similar jurisdictions that have introduced comparably large increases to their minimum-to-median wage ratio in recent years. However, given that higher Kaitz indices are generally associated with greater adverse employment effects from minimum wage increases, it is reasonable to conclude that the planned minimum wage increase in Ontario creates substantial risks of reducing employment, particularly for young, inexperienced, and less skilled Ontario labour force partici-

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pants—the groups that previous research has identified as being the most severely affected by minimum wage hikes.

Because there is no precedent in recent Canadian history for the planned size and rapidity of implementation of Ontario's minimum wage increases, it is difficult to estimate the size of the likely effects on employment. However, research from Quebec sheds some light on the issue.

For example, as we have argued earlier, research by economist Pierre Fortin (2010) shows that the extent of disemployment effects from minimum wage increases becomes more severe as the minimum wage becomes higher relative to median and average wages. As a result, Fortin has argued that a minimum-to-mean wage ratio of 0.45 should be viewed (in the Quebec context) as an “upward limit” for the minimum wage. This target aligns closely with the Kaitz index using median wages (0.5) that we have relied upon in this paper, and is very close to Ontario's current level with respect to the mean hourly wage (0.44).⁸

It is beyond the scope of this paper to estimate the potential employment losses in Ontario as a result of the higher minimum wage. However, for context, we note that Fortin estimates that a one percentage point increase in the minimum wage as a share of the average wage reduces total employment by 0.2 percent. Further frequently cited and well regarded research has found that a 10 percent increase in the minimum wage can decrease employment for teenagers and young adults by 3 to 6 per-

⁸ Because mean (average) wages are slightly higher than median wages, the minimum-to-average wage ratio is typically a few percentage points lower than the minimum-to-median wage ratio in any specific jurisdiction. However, the two measures are very closely related.

cent (Gunderson, 2014). Because the size and implementation speed of the minimum wage increase in Ontario is unprecedented, it is difficult to know exactly what the employment effects will be. However, the research cited here implies that those effects could be substantial.

Applying a regional lens

One feature of Ontario's minimum wage increase that distinguishes it from most other high minimum wage experiments that are currently being implemented in the United States (most notably, in Seattle) is that it is being implemented province-wide, not just in a single, high-wage city.

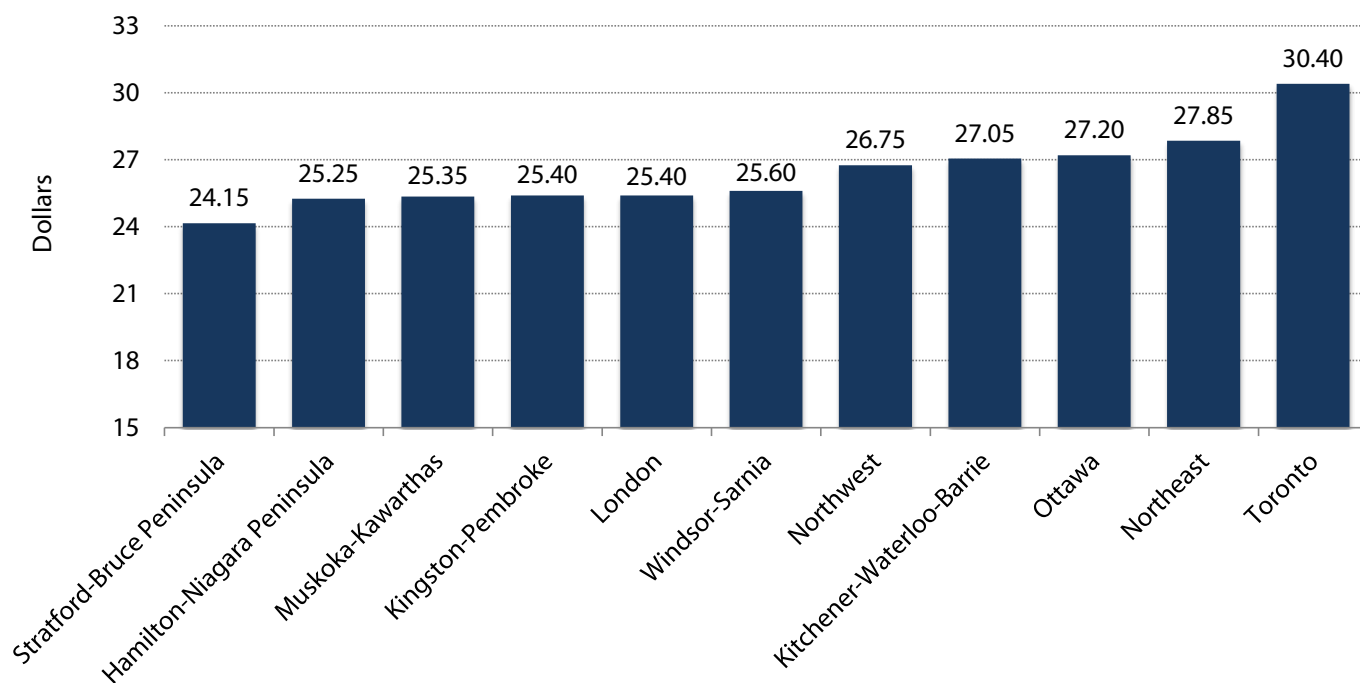
This is potentially problematic. Ontario is a large economy with various regional labour markets, the health and performance of which vary substantially from one to another (Eisen and Emes, 2016). Although the Canadian evidence suggests that such a large increase in the minimum wage is likely to significantly and adversely affect youth employment throughout the province, it is important to note that these effects are likely to be even worse in regions of the province where prevailing market wage levels are lower.

Unfortunately, median wage levels are not available at the regional level in Ontario so it is not possible to build a regional Kaitz index (using median wage levels) within the province. However, a recent Statistics Canada survey provides the average (ie., mean) full-time wage in each region of Ontario, which helps provide some context and demonstrates the extent of regional variation in the province's prevailing wage levels.

As figure 4 shows, average wages vary considerably across Ontario. Predictably, they are highest in Toronto, where the average hourly

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Figure 4: Average Hourly Wage by Region, 2016



Sources: Statistics Canada, 2017a; Bureau of Labor Statistics, 2017.

full-time wage was \$30.40 in 2016. In several other regions, the average wage was much lower. In each of Kingston-Pembroke, Muskoka-Kawarthas, Hamilton-Niagara, London, Windsor-Sarnia, and Stratford Bruce-Peninsula, the average full time hourly wage was at least 15 percent lower than in Toronto (Statistics Canada, 2017a).

We have seen that Ontario's Kaitz index is set to become an outlier relative to the rest of the country and nearby American jurisdictions, but it is important to recognize that Ontario's overall mean and median wage are driven considerably higher by the much higher wages that prevail in Toronto relative to those in the rest of the province. In regions outside of Toronto, the Kaitz index will be substantially higher still. Job creation and economic growth have been severely challenged over the past decade in

southwestern, northern, and eastern Ontario. A dramatic and speedy escalation in the minimum wage may risk especially severe employment effects in these parts of the province as they are already struggling with weak labour market performance.

Conclusion

There are valid reasons to be concerned about significant negative employment effects in Ontario resulting from a 32 percent increase in the minimum wage. The economic literature suggests that as the minimum wage rises and becomes a greater proportion of the median wage (ie., a higher Kaitz index), this is associated with greater adverse employment effects for young and unskilled workers who, without commensurate improvements in their productivity, will

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be increasingly priced out of employment opportunities. And Ontario's Kaitz index is set to soar well beyond the prevailing level in any other province or nearby US state. The planned minimum wage increases will likely make it even more difficult for members of this cohort, especially teenagers, to find work.

While there are reasons to be concerned about province-wide effects, there is particular cause for concern about the effects of these wage changes in economically weaker regions of the province where prevailing market wages are lower than the provincial average and a higher minimum wage will therefore especially distort the labour market. Most of the province's economic regions have average wage levels that are 15 percent (or more) lower than Toronto's. For many residents of these regions, which have generally endured weak labour market performance in the years during and since the 2008/09 recession, a much higher minimum wage will make it even harder to find work for younger and less experienced workers.

With the introduction of a \$15 minimum wage, Ontario will enter into largely uncharted waters. Policymakers across North America who are themselves considering higher minimum wages will doubtless be watching the experiment closely. However, there are good reasons to be concerned that this learning will come at a substantial cost to many Ontario residents, particularly to youth ages 15 to 24, who are likely to see significant adverse employment effects resulting from a minimum wage increase that will push the province far outside of Canadian, North American, and even international norms.

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