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**Thinking about Minimum Wage
Increases in Alberta:
Theoretically, Empirically,
and Regionally**

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Revised June 2017

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Thinking about Minimum Wage Increases in Alberta: Theoretically, Empirically, and Regionally

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Abstract

In 2015, Alberta became the first province in Canada to commit to a \$15.00 minimum wage, from an initial rate of \$10.20 to \$15.00 by 2018, through four annual increases. This commentary offers ways to more broadly think about the effects of these minimum wage increases, with an emphasis on potential employment loss. Following a description of the policy parameters, theoretical framework, and previous empirical evidence, back-of-the-envelope calculations are provided for Alberta, which result in a potential loss of roughly 25,000 jobs. Given the boom and bust nature of the regional economy, Alberta should have timed its minimum wage increases with upward movements in energy prices, and/or followed through with its initial job creation tax credit or some other economic flexibility. Instead, by ignoring economic conditions, the province wrongfully prioritized wages during a time when employment was a problem.

Keywords: Alberta, Canada; energy boom; labour demand; minimum wage.

JEL Codes: J23; J38; Q33; R23.

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1 Policy parameters of Alberta's minimum wage increases

On April 19th, 2015, Alberta's New Democratic Party (NDP) released their 2015 provincial election platform, which put forward their "agenda for the next five years" (Alberta NDP, 2015). This platform contained a commitment to raise the minimum wage in Alberta, from \$10.20 to \$15.00 an hour by 2018, as well as eliminate the liquor server differential, in order to "ensure the benefits of better economic policies are more widely shared." A job creation tax credit to "effectively help Alberta businesses who invest to create new jobs" was also included as a part of this platform. On May 5th, 2015, the NDP won the provincial election with a majority government. At that time, no \$15.00 minimum wage proposal had yet been approved at the Canadian province or U.S. state level.

Following this platform, the first increase of the minimum wage, from \$10.20 to \$11.20, was announced on June 29th, 2015, which would take place on October 1st of that year. The next set of successive increases to Alberta's minimum wage were announced on June 30th, 2016, from \$11.20 to \$12.20 in 2016, from \$12.20 to \$13.60 in 2017, and from \$13.60 to \$15.00 in 2018, all taking place on October 1st of their respective years. These proposed changes officially became law on September 13th, 2016. The current commentary considers the basic parameters of this policy: an initial \$10.20 minimum wage, a target of a \$15.00 minimum wage, a four-year time horizon to the fourth quarter of 2018, and its initial pairing with a job creation tax credit.

The magnitude of these proposed increases to Alberta's minimum wage is quite large in both nominal and percentage terms. The proposed overall increase from the rate set in 2014 to \$15.00 in 2018 would be a nominal increase of \$4.80, a 47.0 percent increase over four years, and a 10.1 percent annual increase.¹ In contrast, during the previous four years from 2010 to 2014, the provincial minimum wage was \$8.80 and rose to \$10.20, which is a nominal increase of \$1.40, a 15.9 percent increase, and a 3.8 percent annual increase. That said, the recent commitment of Ontario in June 2017 to a \$15 minimum wage by 2019 contains a much larger one-year increase of \$2.60, from \$11.40 in 2017 to \$14.00 in 2018, which is a 22.8 percent increase for that particular year.

¹ The increase in the minimum wage for liquor servers is even larger, given that it was historically set lower and has now been made equal by the fourth quarter of 2016.

The overall policy would take Alberta from having a minimum wage similar to other provinces, to having one substantially above the others, with the exception of Ontario which recently adopted the similar target of \$15. With no federal minimum wage policy in Canada since 1996, three provinces had the lowest minimum wage of \$10.20 in 2014 (Alberta, Prince Edward Island, and Saskatchewan), and Ontario had the highest minimum wage of \$11.00: a nominal difference of \$0.80 CAD.² In contrast, during that same year, many states were at the U.S. federal minimum wage floor of \$7.25, while the highest minimum wage of \$9.50 was found in the District of Columbia: a nominal difference of \$2.25 USD.³ The dispersion in minimum wages across Canadian provinces was therefore much smaller than the dispersion across U.S. states.

The time horizon for these proposed increases to Alberta's minimum wage is also quite short relative to other \$15.00 minimum wage policies that were recently adopted in the U.S. Alberta's \$15.00 minimum wage goal, following from city-level movements in the U.S. such as in New York City and Seattle, began to be implemented at the state-level for California and New York as of April 2016 (Wallace-Wells, 2016). These state-level policies of California and New York have similar initial minimum wages to Alberta, at \$10.00 and \$9.00 respectively, meaning that the overall percentage changes are roughly the same. However, California and New York will be gradually rising up to \$15.00 by 2022, four years after Alberta would have achieved its \$15.00 goal in 2018. Ontario, on the other hand, will achieve its \$15 minimum wage goal only two months after Alberta does.

There are other notable differences between the minimum wage policies of Alberta, California, and New York. The trait that makes California's policy unique is that it allows for a one-year postponement of its end date due to a state-wide recession. New York's policy is unique in that it will happen geographically, beginning in New York City by 2019, then in Nassau, Suffolk, and Westchester counties by 2021, and moving outward to the rest of the state from there. What would have made Alberta's policy unique is that it was initially paired with an additional tax credit to help create jobs. However, this job creation tax credit was never fully implemented and was discontinued in April 2016 (Cotter, 2016), several months before the second incremental increase to the minimum wage took place.

In summary, Alberta's minimum wage is moving from \$10.20 in 2014 to \$15 by 2018,

² Among the territories, the Northwest Territories went from having the lowest minimum wage of \$10.00 in 2014 to the highest at \$12.50 in 2015. In 2016, Nunavut became the highest at \$13.00.

³ Washington state was not too far behind the District of Columbia, with a minimum wage \$9.32.

through four annual increases. The parameters of Alberta's policy have both similarities and differences from several of the other \$15 minimum wage policies that are also currently underway in Canada and the U.S. The magnitude of these changes to a \$15.00 minimum wage is especially large, and Alberta's time horizon is particularly short, in that it is basically half of the time horizon of California and New York. While Alberta does not have the recession postponement clause or the geographic roll-out of the California and New York plans, there had been an additional tax credit to help create jobs which was not carried out.

2 Minimum wage theory and previous empirical evidence

In the theoretical neo-classical model of the competitive labour market, wages are represented on the y-axis and employment is represented on the x-axis, as seen in Figure 1. Within this framework, workers who supply their labour to the market provide less labour at lower wages and more labour at higher wages, which is represented by an upward sloping labour supply curve. Employers, who demand labour as one particular input to production, will demand less labour at higher wages and more labour at lower wages, which is represented by a downward sloping labour demand curve.⁴ The intersection of these two curves determines the equilibrium wage rate and employment level for this labour market.

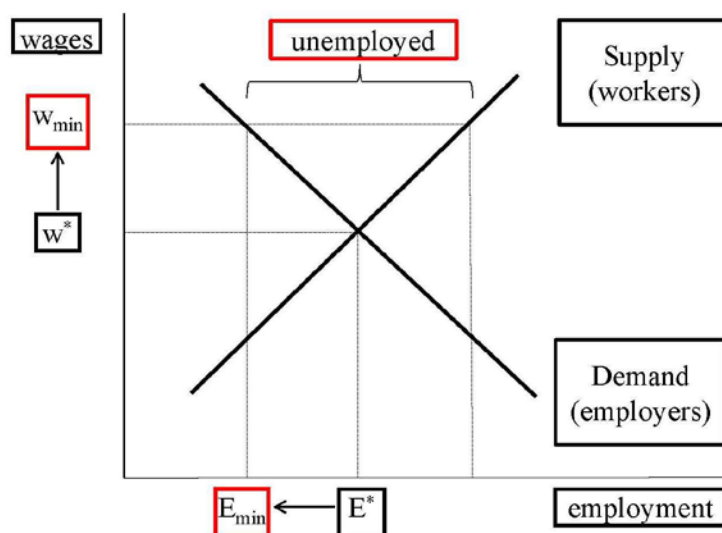
Under the competitive neo-classical model, where there are many employers, there is an expectation of an employment loss due to a minimum wage. When a binding minimum wage is set, it acts as a price floor in this market, preventing the wage from returning to its equilibrium level, which can also be seen in Figure 1. At this higher than equilibrium wage, more workers are willing to work, but fewer employers are willing to hire, thereby resulting in a loss of employment. The size of this loss depends on the relative responsiveness of employers and workers, as shown by the relative slopes of the labour demand and supply curves, as well as the size of the minimum wage increase itself.⁵

In the presence of monopsony power, however, where there is instead only one or a handful of employers, raising the minimum wage would not lead to a reduction in employment and might even increase it. When there is monopsony power in a labour market, the monopsony wage and employment level are set below the competitive equilibrium, which results in a wage rate below the value of marginal product for each worker. In this case, a minimum wage could help to raise both wages and employment, as long as the minimum wage being set is higher than the monopsony wage, but below or equal to the competitive equilibrium wage.

⁴ Unlike the market for goods and services, the demand for labour comes from firms, while the supply comes from individuals, rather than the other way around.

⁵ This policy additionally redistributes economic surplus from firms to workers, but also creates inefficiency, as some surplus is gone from the market entirely, which is known as dead-weight loss. Although employers unambiguously lose surplus under this policy, workers do not unambiguously gain, as some workers will get the higher wage being paid, while others will no longer be employed.

Figure 1: Minimum Wage in a Labour Market



Just as the two theoretical models offer competing predictions as to the employment effects of minimum wages, the empirical evidence seems to currently be viewed through either a classical or revisionist lens, with the classical view supporting the negative prediction and the revisionist view supporting the zero to positive prediction. In order to give weight to both sides, the classical literature reviews of Brown et al. (1982), Brown (1999), and Neumark and Wascher (2007), as well as the revisionist reviews of Card and Krueger (1995), Doucouliagos and Stanley (2009), and Krueger (2015a), should be read.⁶

This empirical literature of minimum wages on employment can be summarized through three stylized facts. First, since the earliest estimate of this kind was calculated by Stigler (1946), many empirical estimates of the employment effects of minimum wages now exist and should not be ignored, although it can be argued that changes in empirical techniques over time now favor certain types of estimates over others. The often-quoted U.S. elasticity estimates imply that a 10 percent increase in the minimum wage reduces the affected employment, typically of teenagers and young adults in this literature, by 1 to 3 percent (Brown et al., 1982). In an update to that review, Brown (1999) put the number closer to the lower bound of one percent.

⁶ For a self-proclaimed agnostic, Figure 2 of Doucouliagos and Stanley (2009), which plots the magnitude, sign, and significance of over 1,400 employment elasticities of minimum wages, may act as a Rorschach test.

Second, the amount of negative estimates in the literature vastly outnumber the amount of positive estimates, although this may reflect some degree of publication bias (Doucouliagos and Stanley, 2009). And third, the magnitude and statistical significance of the negative estimates are greater than that of the positive estimates overall, but most of the statistically significant estimates are at or just below zero. These three stylized facts, along with their stated caveats listed above, may be interpreted as leaning towards “a relatively consistent (although not always statistically significant) indication of negative employment effects of minimum wages” (Neumark and Wascher, 2007).

With regard to the Canada-specific evidence, the elasticity estimates of the minimum wage on the affected employment rate are larger and have bounds that are wider than that of the consensus U.S. estimates. These estimates imply that a 10 percent increase in the minimum wage would lead to a 1.7 to 7.5 percent reduction in the affected employment in Canada.⁷ Although it remains unclear as to why the elasticities are larger and range is wider for Canada than for the U.S., this could be related to differences in the real value of the minimum wage over time due to price differences across the two countries, as well as the dispersion of minimum wages being different among provinces than among states.

The distributional effects of minimum wages also need to be addressed, as minimum wages are typically offered as a means to further equalize the income distribution and reduce poverty. Theoretically speaking, a minimum wage compresses the wage distribution by cutting off a portion of its lower-end, which should then reduce inequality. In a recent assessment of the empirical evidence for the U.S., Autor et al. (2016) found that “the minimum wage reduces inequality in the lower tail of the wage distribution, though by substantially less than previous estimates,” with impacts up through the 10th percentile for men and the 25th percentile for women. For Canada, Campolieti (2015) finds that the distributional reach of the minimum wage is lower, however, only reaching the 5th percentile for men and the 10th percentile for women. This lower distributional reach for Canada, as compared with the U.S., could reflect differences in their overall wage distributions and therefore different situations regarding the impacts of minimum wages on inequality.

⁷ This elasticity range of -0.17 to -0.75 takes the second highest and second lowest values from the combination of the -0.17 from Swidinsky (1980), with the -0.25 from Baker et al. (1999), -0.75 to -0.84 from Yuen (2003), -0.14 to -0.44 from Campolieti et al. (2006), -0.30 to -0.50 from Sen et al. (2011), and -0.17 to -0.25 from Brochu and Green (2013).

With regard to poverty, the effect of a minimum wage is theoretically ambiguous, as lower-wage workers could only gain in earnings with a higher wage rate if they remained employed and working similar hours as before. This may then be enough to lift them above the poverty line if they were previously below it. MaCurdy (2015) provided evidence that the minimum wage did not reduce poverty for the U.S. using a general equilibrium framework, while assuming no employment effects, full price pass-through, and no change in quantities purchased. For Canada, Mascella et al. (2009) showed a similar lack of a poverty reduction from the minimum wage when assuming no employment effects, while Sen et al. (2011) found that the minimum wage was associated with an increase in poverty due to the loss in employment.

In summary, the effects of a minimum wage should be thought of in both theoretical and empirical terms. Theoretically, a neo-classical model of a competitive labour market predicts an employment loss induced by the implementation of a minimum wage. However, if monopsonistic power is present, then an employment gain is instead possible. While the interpretation of the empirical evidence is divided into classical and revisionist, it favors a slightly negative employment effect or no effect at all, over a strongly negative effect or a positive one. That said, the existing Canadian evidence points to a larger employment loss from a minimum wage than the U.S. Lastly, while a minimum wage should help to reduce inequality, it is not likely to reduce poverty and may even increase it.

3 Applying the theory and evidence to Alberta's policy

The true impacts of these minimum wage increases in Alberta can only be identified with proper measurement well after the changes take place, so that outcomes can be compared before, during, and after the policy. The real challenge at that time will be to disentangle and isolate how much of the changes in outcomes are attributable to the minimum wage policy and how much are attributable to the workings of the provincial economy or other policies being simultaneously implemented, like the new carbon tax as of January 1st, 2017. Even once this evidence does become available, it will also take additional time to closely examine these estimates and their methods, in order to identify which are most reliable to represent the effects of this policy.

At present, any prediction regarding the potential impacts of this policy must rely upon the established theoretical framework and previous empirical evidence. Based on the existing theory, the prediction is that employment could be reduced, unaffected, or increased under a minimum wage policy. The relevant question to begin with for Alberta is whether the affected workers are under a competitive labour market or are instead under the presence of monopsony power. Unless it is shown that monopsony power is indeed a reality in Alberta, specifically within the industries that employ the majority of minimum wage workers, both at the onset of this policy change and at its end, then perfect competition remains the most applicable case. This would then suggest that there will be some loss of employment associated with this new minimum wage policy.⁸

How large will the potential employment loss be from Alberta's new minimum wage? To answer this, several back-of-the-envelope calculations of the employment impacts can be performed using the previous elasticities from the empirical literature. Multiplying the Canadian elasticity bounds (-0.17 to -0.75) by the 47 percent increase associated with Alberta's \$15.00 minimum wage results in an 8.0 to 35.3 percent reduction in the affected employment (0.47×0.17 to 0.47×0.75). Even if the responsiveness were at the lowest end of this scale, this would still be a substantial employment loss of 8 percent among the affected

⁸ This prediction has been supported by one of the key contributors to the revisionist literature. Regarding the effects of having a \$15.00 minimum wage in place across the U.S., Alan Krueger (2015b) stated that: "A \$12 per hour minimum wage in the United States phased in over several years would be in the same ballpark as Britain's minimum wage today. But \$15.00 an hour is beyond international experience, and could well be counterproductive. Although some high wage cities and states could probably absorb a \$15.00 an hour minimum wage with little or no job loss, it is far from clear that the same could be said for every state, city and town in the United States."

workers, given the large magnitude of Alberta's increases.

In order to translate this percentage into counts of individual workers, this lower bound number can then be further multiplied by different types of workers who are most likely to be affected by this policy. The number of workers who were employed at or below the goal of \$15.00 just prior to the on-set of this policy was 321,300 (Alberta Government, 2016), which would mean a loss of 25,704 of these workers ($0.08 \times 321,300$). Alternatively, the amount of teenagers and young adults, aged 15 to 24, that were employed in Alberta was 326,300 in April 2015 (Statistics Canada, 2017), making that a possible loss of 26,104 jobs among that group ($0.08 \times 326,300$). Therefore, these implied losses are very similar in size.

Moving forward to what these numbers look like at present, now that two of the minimum wage increases have already taken place, is illuminating. From April 2015 to April 2017, the number of employed individuals aged 15-24 in Alberta has dropped from 326,300 to 298,600, meaning that 27,700 of these individuals have already lost their jobs. This exceeds their implied employment loss from the \$15 minimum wage by more than 1,500 workers ($27,700 - 26,104 = 1,596$), with the two largest minimum wage increases yet to come. This may be an indication that the job losses for this group, by the time the policy is fully implemented, will be larger than those implied by the lowest bound estimate.

The magnitude of this potential job loss is, of course, open to interpretation. In a province that employed 2,289,100 workers in April 2017, a loss of roughly 25,000 workers would perhaps not seem like much. If, however, Alberta were instead considering a policy that potentially resulted in over 25,000 jobs being created, this would more likely be touted as a large number. In addition, the potential employment loss of roughly 25,000 workers came from applying the smallest related employment elasticity to the policy change. If instead the largest elasticity was applied, this would result in a possible employment loss of 115,184 workers for employed teenagers and young adults ($0.353 \times 326,300$).⁹

In summary, the effects of Alberta's \$15.00 minimum wage can only be determined through proper measurement conducted after the policy is fully implemented. In the meantime, any prediction needs to rely on the existing theory and previous evidence. With regards to the theory, Alberta's labour markets would seem to be best described by the competitive case, implying that some loss of employment is likely due to this policy. Using

⁹ It might also be the case that the previous employment elasticities no longer apply, given the large size of Alberta's minimum wage increases, meaning that this policy could yield either smaller or larger impacts for employment, as well as for inequality and poverty.

the elasticity estimates from the Canadian evidence, together with the magnitude of Alberta's minimum wage increases, yields an expected employment loss of roughly 25,000 workers.

4 The boom and bust cycle of the regional economy

When a change in labour market policy is being considered, the current and future state of the economy should be taken into account. In the case of increases to the minimum wage, the potential employment loss among affected workers could prove to be larger during an economic downturn than it would otherwise be than during a period of moderate growth or economic expansion. Sabia (2015) provides evidence (from Addison et al., 2013, and Sabia, 2014) that the employment loss for low-skilled teenagers and young adults was indeed larger during recessions in the U.S., especially for those without high school diplomas. The size of this employment loss was also shown to be larger even when comparing times of moderate growth to times of expansion.

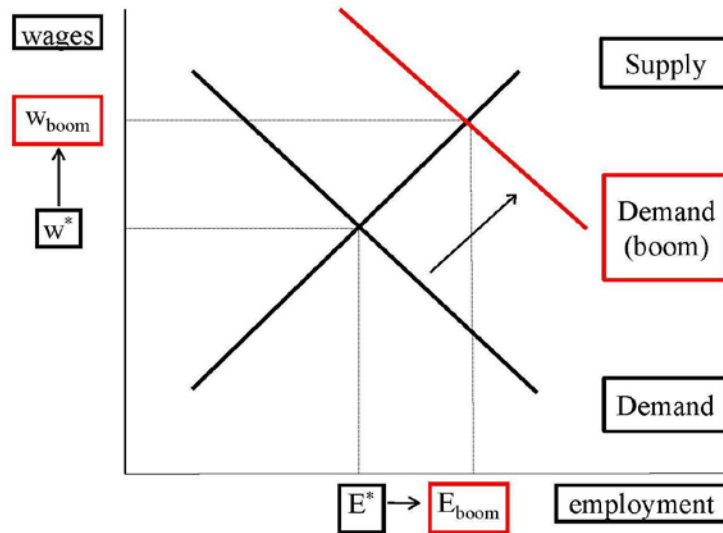
Given the natural resource endowments of Western Canada, the condition of the regional economy is highly correlated with the prices of crude oil and natural gas, which is especially true for Alberta and its labour market. For firms within the energy extraction industry, these prices of their output directly enter into their demand for labour.¹⁰ For firms in other local industries, these energy price movements would heavily influence their output prices as well, especially in the presence of large industry spillovers. Therefore, if energy prices drastically rise or decline in a boom and bust cycle, this would respectively shift aggregate labour demand outward or inward, in both energy extraction and other local industries, which is shown in Figure 2 for an energy boom. Wages and employment would then rise in a boom and fall in a bust accordingly with those price fluctuations.

The empirical evidence supports this theoretical argument, most notably for the western Canadian provinces of Alberta, British Columbia, Manitoba, and Saskatchewan. Within the extraction industry of Western Canada over the previous two energy booms of the 1970s and early 2000s, Marchand (2012) found a generalized boom impact of a 56.6 percent increase in total employment, an 83.7 percent increase in total earnings, and a 27.0 percent increase in earnings per worker. However, no significant losses were found to wages or employment during the energy bust of the 1980s, instead indicating a stagnation period.¹¹

¹⁰ The labour demand equation is the output price times that industry's marginal product of labour.

¹¹ Similar evidence was previously found for the mining industry in the mid-western U.S. states of Kentucky, Ohio, Pennsylvania, and West Virginia by Black et al. (2005). During the 1970s coal boom, they found that total employment rose by 54.4 percent, total earnings rose by 98.4 percent, and earnings per worker grew by 44.0 percent. That said, losses to total employment and total earnings during the 1980s coal bust were of similar magnitude to the gains in the boom.

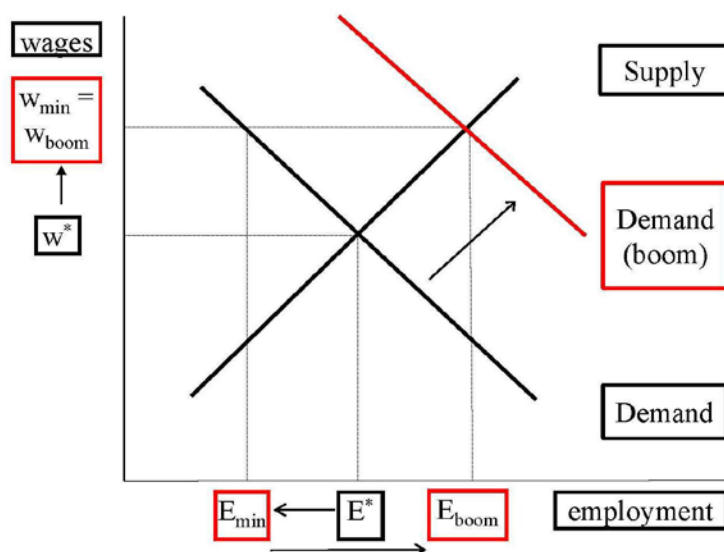
Figure 2: Energy Boom in a Labour Market



Significant spillovers from the directly-impacted resource extraction industry into other local industries, such as construction, retail trade, and services, were also found. For Western Canada, these spillover estimates imply that for every 10 energy extraction jobs created during the boom, 1 to 7 other local additional jobs were created, with services represented as the upper bound estimate (Marchand, 2012). These large spillovers are important within this framework, because the affected workers from a minimum wage policy are more likely to be found in services or in retail trade than in the energy extraction sector. While this means that the magnitudes of the energy boom impacts would be less than that documented for the energy extraction sector, in terms of earnings and employment, they would still be fairly large based on these spillover estimates.

In order to fully consider what minimum wage increases might entail for Alberta under stimulated labour demand, neo-classical minimum wage theory can be combined with that of a regional energy boom. For the simple case demonstrated in Figure 3, the new minimum wage is set exactly equal to the new equilibrium boom wage for affected workers. In this case, the positive shock to labour demand from an energy boom will have created more than enough jobs to cover the potential employment loss from the minimum wage, resulting in a net job gain equal to that potential loss. In the case of an energy boom of only half the magnitude of Figure 3, there would instead be no employment change from the minimum wage at all, resulting in the same employment level as the initial competitive equilibrium. Similarly, an energy boom of only a quarter of the magnitude shown in the figure would

Figure 3: Minimum Wage with an Energy Boom



result in the potential job loss of the minimum wage increase being cut by half.¹²

With regards to inequality and poverty, Marchand (2015) showed that the most recent energy boom in Western Canada led to U-shaped growth across deciles of the earnings and income distributions, meaning that everyone shared in the gains, but the top and the bottom grew by more than the middle. In most cases, this led to increased local aggregates of inequality from an energy boom, with the exception of decreased inequality at the lower end of the distribution and in the service industry.¹³ An energy boom also lifts a substantial amount of individuals out of absolute poverty, as high as 45 percent of the poor for the case of Western Canada according to Marchand (2015).¹⁴ However, it also slightly increased the number of individuals in relative poverty.

¹² The relative minimum wage differences between Alberta and its neighboring provinces may also matter, both at present and in the near future, if the differences were large enough to entice workers from neighboring provinces to come into Alberta. That said, geographic differences in the eligibility and generosity of employment insurance are likely to be more important for this type of mobility.

¹³ Using provincial differences across Canada, Fortin and Lemieux (2015) showed that much of the decrease in inequality in the lower half of the distribution since the late 1990s is attributable to both increases in provincial minimum wages and a booming extraction sector, relative to Ontario.

¹⁴ For the case of the coal boom and bust in the mid-western U.S., this poverty reduction was around 25 percent according to Black et al. (2005).

In summary, the current and future conditions of the regional economy matter when considering the effects of minimum wage increases on employment. In resource-abundant Alberta, energy prices directly and indirectly influence labour demand, resulting in boom and busts cycles for wages and employment. While these effects are largest in the energy extraction industry, they have also been found to spillover into other local industries, with the largest spillovers happening in industries that employ the most minimum wage workers. If minimum wage increases were to occur when labour demand was shifting outward, due to upward movements in energy prices, this would mitigate the impact of potential job loss by adding more employment into the region. Lastly, energy booms have their own distributional impacts of significantly lowering absolute poverty, but likely increasing inequality and relative poverty.

5 Prioritizing wages when employment is a problem

Given the tradeoff between raising the minimum wage and potentially lowering employment, it would be best that increases to the minimum wage occur at a time when labour demand is expanding rather than contracting. Although this would not completely eliminate any adverse employment effects associated with the policy, it would certainly make the potential consequences more palatable, especially among the affected workers that the policy is intending to help. Without such a stimulation of labour demand, the potential employment loss is likely to be larger than it otherwise would be. This is as true for Alberta as it would be for any other province or state adopting such large increases to their minimum wage.

In Alberta's case, it already has a built-in mechanism to stimulate labour demand through a positive spike in oil and gas prices. Therefore, it would make the most sense for the province to increase its minimum wage when these energy prices are moving upward, rather than downward. Unfortunately, Alberta committed to its \$15 minimum wage goal in the midst of an energy price bust, meaning that labour demand was either contracting or stagnant at the time, and a sudden rise in energy prices does not seem to be on the horizon. Given the associated loss of employment, Alberta should have temporarily postponed its minimum wage increases to a later date and over a longer time horizon. Instead, calls for this postponement went unanswered (Marchand, 2016). That said, perhaps a tying of future minimum wage increases to energy price movements might be something for Alberta to consider in the future, beyond 2018.

Going back to the inception of the policy, Alberta could have additionally gone through with the pairing of a job creation tax credit with its \$15 minimum wage, as was originally intended in the NDP platform (Alberta NDP, 2015). The job creation tax credit for employers was actually the first economic policy put forward in this platform, with the \$15.00 minimum wage only appearing as the third economic policy. This government-funded job creation could have worked as a means to stimulate labour demand in Alberta over the short-term, while the minimum wage increases were being carried out. Unfortunately again, these stimulation efforts have not gone forward, as the tax credit was discontinued and no replacement was offered.

Alternatively, the provincial government could have adopted other policy traits, like the built-in recession postponement of California's policy or the geographic roll-out of New York's,

both of which add increased flexibility towards economic conditions in their own ways. A recession would be associated with a contraction in labour demand, so there would be no need to call on the government to postpone their minimum wage increases after the fact if California's policy trait was built in. With minimum wage increases coming to the metropolitan area of New York City first and then moving out to lower priced areas from there, the potential employment loss is minimized by first coming to areas that can more easily absorb those effects. The Alberta equivalent would have been Calgary and Edmonton receiving the \$15 minimum wage before Red Deer or Lethbridge, or any of the other less populated areas throughout the province.

Most puzzling though is that, without an upward swing in energy prices, the job creation tax credit, or any other economic flexibility, Alberta wrongfully prioritized wages at a time when employment was a problem. From April 2015, one month before the Alberta NDP took office, to November 2016, one month after the second minimum wage increase, annual employment growth dropped by 4.0 percentage points, the employment rate fell by 3.0 percentage points, and the unemployment rate rose by 3.4 percentage points in the province (Statistics Canada, 2017). The Alberta NDP also clearly had employment in mind in their initial policy platform, with the term "job" or "jobs" appearing fifteen times, and "employment" appearing five times, while the term "wage" was mentioned only once (Alberta NDP, 2015). Once it became clear that employment was an issue, the Alberta government should have reprioritized its economic policy toward increasing employment rather than increasing wages, as it originally intended to do.

With Alberta as the first with a \$15.00 minimum wage at the provincial or state level, followed by Ontario and then California and New York, future governments will be able to examine at least this handful of examples from what takes place from such a policy. Thus far, the only evidence of the effects of a \$15 minimum wage is from two recent studies for the city of Seattle, with one showing negative employment effects (Jardim et al., 2017) and the other showing no employment effects (Reich et al., 2017). Only through proper measurement of these employment effects, as well as those for inequality and poverty, can good judgment be made, and the economic condition of the state or province should also be accounted for when making such a judgment.

In summary, with the minimum wage potentially leading to the loss of employment, the pairing of labour demand stimulus with a large minimum wage increase seems to be the

most balanced way forward. While rapid increases in energy prices have been the proven way to effectively stimulate labour demand for Alberta in the past, this does not seem likely to happen in the near future. And, the tax credit intended for this purpose was instead scrapped with no replacement. There are, however, other policy traits that could have been adopted along with the minimum wage increases, in order to help keep the policy as flexible as possible to economic conditions. The prioritization of wages over employment by the Alberta government was especially strange when the province was already experiencing a loss of employment, with no immediate end in sight. Other provinces and states should closely examine the \$15 minimum wage cases of Alberta, California, New York, Ontario, and other localities, before adopting such large increases in their minimum wage, while at the same time considering their current and future economic situations.

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