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THE MINIMUM WAGE, LOST JOBS, AND POVERTY IN CANADA

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Executive Summary

Raising minimum wages is usually done in an attempt to help low-income households. However, extensive research shows higher minimum wages rarely provide a boost to the intended households, and often hurt the very people they intend to help. There is near unanimity among researchers that higher minimum wages cause employment losses in Canada, especially among youths who account for most of the people earning a minimum wage. The extent of these job losses varies. In particular, we have little experience with the type of large increases in the legislated minimum recently enacted in Alberta and Ontario, but these losses are likely to exceed the estimates based on past incremental increases. The reduction in labour inputs usually happens over an extended period of time; it is naïve to look at employment in the few months following a minimum wage hike to evaluate their impact. As well, large increases in the minimum wage put upward pressure on consumer prices.

Minimum wage hikes do a poor job of targeting low-income households. Most people earning a minimum wage belong to households earning higher incomes, so most of the benefit does not go to low-income people. In 2019, only 4.6% of full-time employees earned the minimum wage, which contradicts the argument that it will lift many people out of low income. Most people are in low income because they are unemployed or cannot get more than part-time employment. Raising the minimum wage may only aggravate the difficulty of getting a job.

The evolution of minimum-wage policy over time shows it has never been a particularly good or even necessary policy to help those with low incomes. A surprising number of well-off nations in Europe never had a minimum-wage policy. Setting a minimum wage in the United States was originally designed to be discriminatory or exclusionary of groups such as visible minorities and women.

More recently, governments have increasingly resorted to higher minimum wages in an attempt to fight poverty. In an era where governments are already running large budget deficits and are looking for ways to rein in spending, minimum wages are seen as a way to shift the cost of achieving social goals from government to business firms. However, this ignores that firms often respond in a way that frustrates the intent of the government's minimum-wage policy. For example, firms can offset the increase in wages paid to some employees by trimming non-wage benefits, such as pensions or leave benefits, to lower the cost. Firms also respond by reducing employment in low-wage jobs, which is especially harmful to youths.

Reviewing the history of minimum wages in Canada's various provinces shows that governments typically get the timing wrong when they raise the minimum wage. The negative impact of higher minimum wages would be minimized by raising them when labour market conditions are strong. Instead, governments often boost the minimum wage when labour market conditions are soft. This was especially true for many Canadian provinces during the slow recovery from the 2008/09 recession.

The goal of governments should not be increasing the share of employees earning the minimum wage. The goal should be creating labour-market conditions so robust that most employees are earning more than the minimum. This was the case for Alberta, where only 1.7% of employees were earning the minimum when the economy was booming in 2014. It is a sign of failure to have a large share of employees earning the minimum wage, such as Ontario where 10.9% earned the minimum in 2014.

1 Introduction

Economists have long been intrigued by the contradiction between the stated goal of raising the minimum wage, that is, to improve the welfare of working people, and its largely negative impact of reducing employment. Questioning what is the true impact of policies intended to improve social well-being is the very reason economics is called "the dismal science".[1] This study follows this tradition of examining the actual outcomes and not just the stated intentions of government policy by updating a previous Fraser Institute study of minimum wages, *Raising the Minimum Wage: Misguided Policy, Unintended Consequences*.[2]

One of the basic principles of microeconomics is that demand falls as prices rise, meaning "[d]emand curves have a negative slope".[3] This was Nobel Laureate George Stigler's conclusion in his pioneering 1946 article, The Economics of Minimum Wage Legislation.[4] whose partial-equilibrium model predicted employment would decline as a result of setting a minimum wage. The vast majority of economic research in Canada has confirmed and refined this basic finding. No one would argue that, if the minimum wage was set at $100 an hour, nearly all low-skill jobs would disappear along with a good many other jobs.

Part of the problem with minimum-wage policy is that its original motivation was not to improve the welfare of all workers. Minimum wages were explicitly designed in the first half of the twentieth century to institutionalize discrimination against groups such as women and African-Americans in the United States and non-whites in South Africa.[5] Progressive economists at the time "believed that the job loss induced by minimum wages was a social benefit, as it performed the eugenic service ridding the labour force of the 'unemployable' ".[6] The idea was that, by raising the wage above what was perceived as

1. George J. Stigler (1988), *Memoirs of an Unregulated Economist* (University of Chicago Press): 5. Stigler was one of the first winners of the Nobel prize in 1982, reflecting his role in microeconomics, which was as pivotal as Milton Friedman's in macroeconomics. Both Stigler and Friedman were founding members of the Mont Pelerin Society chaired by Friedrich Hayek.

2. Robert P. Murphy, Charles Lammam, and Hugh MacIntyre (2016), *Raising the Minimum Wage: Misguided Policy, Unintended Consequences* (Fraser Institute).

3. Stigler (1988), *Memoirs ...* : 200.

4. George J. Stigler (1946), The Economics of Minimum Wage Legislation *(American Economic Review* 36, 3: 358–356.

5. ACIL Economics and Policy PTY Ltd. (1994), *What Future for New Zealand's Minimum Wage Law?* (New Zealand Business Roundtable): 24.

6. Thomas C. Leonard (2005), Eugenics and Economics in the Progressive Era (*Journal of Economic Perspectives* 19, 4): 212–213.

the productivity of these targeted groups, employers would be discouraged from hiring anyone but white males. Some members of Congress openly advocated for a minimum wage "on grounds it would stop black construction workers from taking jobs from white construction workers by working for less than the union wages of white workers".[7] Similar arguments were made in Canada "to price Japanese immigrants out of the labor market."[8] It should not be surprising that a policy based on excluding and discriminating against disadvantaged workers is hard to remake into one that achieves social justice goals.

There is also a political dimension to the advocacy of higher minimum wage rates, based on the premise that a class struggle exists between workers and employers. Employers, without much supporting evidence, are portrayed as being dominant in relations with their employees, who therefore need protection from paternalistic governments. Richard Epstein pointed out the flaw in this thinking: "If such an inequality did govern the employment relationship, we should expect to see conditions that exist in no labour market. Wages would be driven to zero, for no matter what their previous level, the employer could use his (inexhaustible) bargaining power to reduce them further, until the zero level was reached".[9]

Instead, history shows that living standards have improved substantially without government regulation of a minimum wage. Several progressive countries in Europe kept unemployment low and lowered inequality without setting any minimum-wage rate, including Finland,[10] Sweden, Denmark, Italy, Norway, and Switzerland.[11] Several modern industrial societies did not have minimum wage laws, with no obvious lack of social progress.[12] Germany, Britain, Ireland, and Hong Kong all did not have minimum wage rates before at least 1997 (when Hong Kong reverted to control from China), which helped produce low unemployment rates in all these nations.[13] Britain adopted a minimum wage in 1999[14], while Germany eventually enacted one in January 2015.[15] The question is not whether $11 an hour is fair or $15 an hour is a living wage, but whether it is good policy and whether it attains the intended goals of raising low incomes over time.

7. Thomas Sowell (2013), *Intellectuals and Race* (Basic Books): 96.
8. Sowell (2013), *Intellectuals* … : 96.
9. Richard A. Epstein, quoted in ACIL (1994), *What Future for* … : 26.
10. Ellen Ruppel Shell (2018), *The Job: Work and Its Future in a Time of Radical Change* (Currency): 216.
11. Anthony B. Atkinson (2015), *Inequality: What Can Be Done?* (Harvard University Press): 148.
12. ACIL (1994), *What Future for* … : 34.
13. Thomas Sowell (2011), *The Thomas Sowell Reader* (Basic Books): 109.
14. Thomas Piketty (2014), *Capital in the Twenty-First Century* (Belknap/Harvard University Press): 310. The United States was one of the pioneers in introducing a minimum wage in 1933; many European countries such as France did not follow until after World War II.
15. *The Economist* (2015), Destination unknown (July 25).

One attraction that a minimum wage has for governments is that it costs them nothing directly, since it is employers and their customers who bear the cost. It is dubious both in principle and in practice whether governments should dictate the price of labour to employers in order to achieve social goals, shifting all the costs to them so that government can avoid the expense of targeting assistance to households with low incomes through programs such as wage subsidies. As the famed economist, Thomas Sowell, observed, the minimum wage is "an unfunded mandate imposed on private organizations" by governments.[16] The reaction of firms to minimum wages also produce unintended consequences that undermine the social goals of governments: for example, firms can cut back on non-wage benefits such as pensions or health care to offset higher minimum wages, leaving workers no better off (defined pension benefits in the private sector have fallen sharply since the 1990s, a trend also encouraged by their higher cost as interest rates fell).

16. Sowell (2011), *The Thomas Sowell Reader*: 139.

2 The Recent Trend of the Minimum Wage, by Province

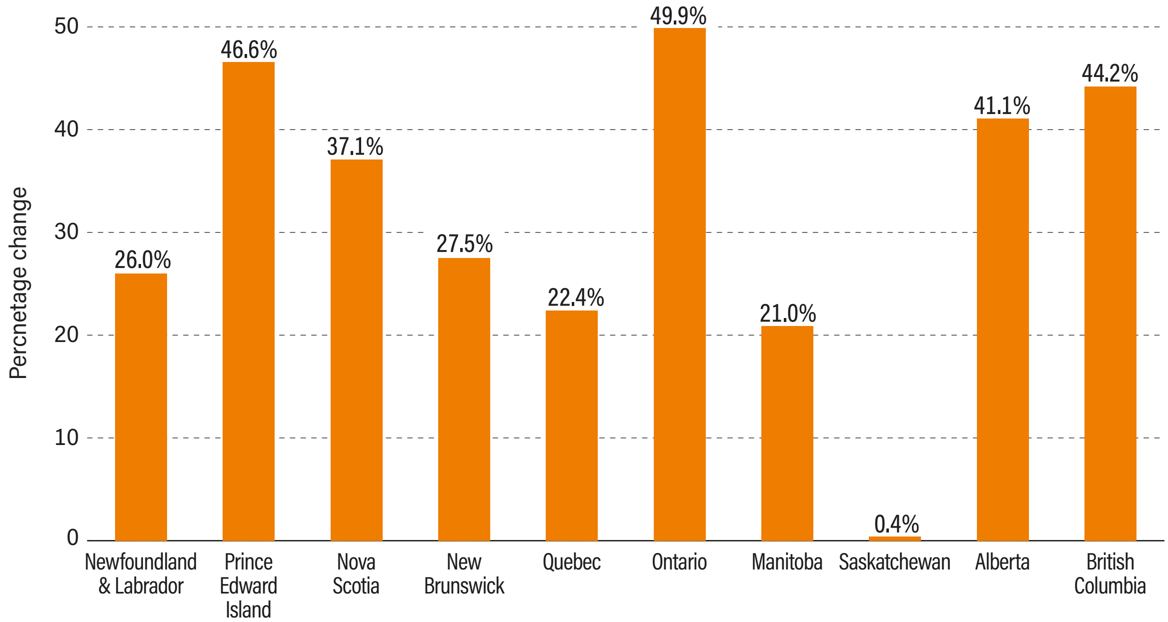
The trend of the minimum wage in recent decades has been broadly similar in all ten of Canada's provinces. Inflation-adjusted (real) minimum wages have gone through four distinct phases since 1981. They were little changed or even declined in some provinces in the 1980s as inflation eroded the purchasing power of fixed nominal minimum rates. Real minimum wages then rose sharply in the first half of the 1990s, especially in Ontario when the NDP took power for one term. The prolonged recession and slow recovery of the early 1990s preceded an economic boom during the late 1990s that sent the unemployment rate to historic lows. For most of the latter half of the 1990s through to just before the recession associated with the Great Financial Crisis in 2008, governments allowed tight labour-market conditions to lift incomes rather than trying to legislate prosperity through minimum wage hikes. Alberta was the best example, as competition among employers to hire employees meant most workers were paid above the minimum wage. As a result, the constant-dollar minimum wage fell slowly as fixed nominal rates were gradually eroded by inflation.[17]

Fuelled by the so-called super-cycle in commodities, the unemployment rate fell to new lows in 2007 and 2008 just before the Global Financial Crisis sent the global economy into a deep recession. Since then, the economy has posted persistently slow growth, although the unemployment rate remained low as Canada's ageing population lowered the labour force participation rate. Provincial governments began raising their minimum wages just before the onset of recession in 2008, and stepped up these increases even as the economy struggled to recover.

There are some important regional variations in the trend of minimum wages. From 1981 to 2019 there was almost no change in Saskatchewan's real minimum wage at just over $11 an hour (**figure 1**, measured in constant 2014 dollars). Manitoba and Quebec posted modest increases of about 20%, to a level around $12 an hour. The Atlantic provinces posted slightly higher gains, but because they started from a lower level in 1981 their minimum wage remains between $11 and $12 an hour. By far the largest increases in minimum wages since 1981 have been in Alberta, Ontario, and British Columbia, with increases ranging from 41% to 50%, and these provinces now have the highest level of minimum wage at between $13 and $15 an hour.

17. Source for data on pp. 4 and 5 is Statistics Canada (2020), table 13-10-0005-01, *Canada Labour Program*.

Figure 1: Change (%) in constant-dollar minimum wage, by province, 1981–2019



Source: Statistics Canada (2020), table 13-10-0005-01, *Canada Labour Program*.

Ontario saw the largest increase in its minimum wage, which rose 49.9% between 1981 and 2019 to $14 an hour, second only to Alberta's $15 an hour. After allowing inflation to erode the minimum wage in the 1980s, Ontario's newly elected NDP government in the early 1990s raised the minimum wage by $2 an hour (or 22%) by 1994. The government that replaced the NDP allowed inflation to erase about $1 of this increase by 2003. Since then, the minimum wage in Ontario rose rapidly, by $1 an hour before the recession began in 2008, by another $1 after the recession, and then by $2 in 2018.

Quebec had the third-highest minimum wage in 1981, but over the next four decades its rate rose by only 22.4%, the third least in Canada. Following the high unemployment brought on by the severe recession of 1981–1982, Quebec allowed inflation to erode its real minimum wage by about $1 an hour in the 1980s. It recouped this decline in the 1990s and then left the minimum unchanged until the Global Financial Crisis, after which it rose by $2 an hour.

The trends in Western Canada were more disparate. Generally speaking, minimum wages in Alberta, Manitoba, and Saskatchewan were little changed for an extended period after the late 1980s. One reason Alberta placed little emphasis on the minimum wage is all but a handful of workers earned more, with only 1.7% of its workers earning the minimum rate in 2014, compared with over 10% in Ontario.[18] However, the election of

18. Galarneau, Diane (2015), *Minimum Wage in Canada since 1975* (Statistics Canada, Cat. No. 11-630-X2015006 (June): 3. <https://www150.statcan.gc.ca/n1/en/catalogue/11-630-X2015006>, as of February 18, 2021.

an NDP government in Alberta in 2015 was followed by four straight years where the minimum wage rose by about $1 a year on average, lifting it to $15 an hour, the highest in Canada. British Columbia followed its own path, raising the minimum wage sharply in the 1990s, then letting it lag from 2002 to 2011, after which it followed the national trend to sharply higher minimum wages.

The constant-dollar wage in the Atlantic provinces was little changed for decades, fluctuating between $7 and $8 an hour (in 2014 dollars) between 1981 and 2006. However, the minimum wage was raised just before the recession began in 2008 and the Atlantic provinces stepped up these increases even as the economy struggled to recover.

Poor timing

The sharp increases in minimum wages over the past decade even as the economy slowed is another example of government policy not being synchronized with the business cycle. Poor timing is typical of fiscal policy. For example, infrastructure projects are often touted as a tool to combat a recession but, in practice, the long lags in selecting projects, tendering them, conducting the mandatory environmental reviews and public consultations, and then undertaking the actual construction means that most of the money is not spent until long after the recession is over. One example was President Obama's infrastructure program, which in practice was hobbled by a lack of "shovel-ready" projects in 2009 and "[a]s a result, Obama produced few if any lasting results in the area of infrastructure".[19] The clumsy roll-out of public investment stimulus meant that "[t]he Obama administration would have no Grand Coulee Dam to point to in seeking support for its approach. Nine billion dollars for high-speed rail was a limp substitute. That the stimulus had no physical legacy allowed the skeptics to denigrate the effects and advocate quick abandonment".[20] Another example is the Trudeau government's promise to spend on infrastructure to alleviate Canada's 2015 slowdown when oil prices crashed. Canada's Parliamentary Budget Officer documented how, even after four years, most of the promised spending has yet to take place.[21]

The same pattern of poor timing often holds for minimum wages. Governments often initiate increases at the height of a boom that do not take effect until the economy has fallen into recession when they do the most harm. For example, many provincial

19. Jeffrey Sachs (2017), *Building the New American Economy* (Columbia University Press): 29.
20. Barry Eichengreen (2015), *Hall of Mirrors: The Great Depression, the Great Recession, and the Uses—and the Misuses—of History* (Oxford University Press: 299.
21. In both the United States in 2009 and Canada after 2015, the inevitable lags in implementing spending were compounded by state and provincial governments using increased federal spending as an excuse to cut their own infrastructure spending to help repair their balance sheets. See Office of the Parliamentary Budget Officer (2019), *Infrastructure Update: Investments in Provinces and Municipalities* (March 13): 2.

governments began raising minimum wages in 2006, just before the economy plunged into recession in 2008. However, poor timing has not been the only problem in recent years. Despite the downturn in the economy and a sluggish recovery, governments deliberately legislated further increases in the minimum wage in a misguided and futile effort to legislate prosperity. This was most evident in Ontario and Alberta.

Deflating the minimum wage

It is noteworthy that Statistics Canada routinely calculates the constant dollar data for minimum wages using its Consumer Price Index (CPI) as the measure of inflation, including the data used in Galarneau and Fecteau's *The Ups and Downs of Minimum Wage*.[22] There is a widespread consensus among experts that the CPI overstates inflation and therefore underestimates the increase in the real minimum wage, especially over long periods. The degree of the upward bias in the CPI is a matter of debate; the authoritative Boskin Commission estimated a bias of near 1% in the United States, while the Bank of Canada estimates the bias is about 0.5% in Canada.[23] Even a bias of half a percent a year accumulates to substantial amounts over long periods; over a half century, the effect would be to overstate prices by nearly 25%, and therefore understate the increase in the real minimum wage by the same amount.

There are several reasons for mismeasurement in the CPI. These include changing purchases by consumers, new store outlets (such as Walmart) selling to consumers, a lag in introducing new products into the CPI,[24] and the changing quality of consumer products. One way to correct for the upward bias in the CPI in Canada is to use the implicit price index (IPI) for personal expenditure in GDP, which incorporates more up-to-date spending patterns (which the Bank of Canada estimated accounted for nearly half the upward bias of the CPI between 2005 and 2011)[25] and has more comprehensive coverage, especially for travel spending. For example, from 1981 to 2019, the CPI rose 174.7% while the IPI for household consumption expenditures increased 148.2%.[26] This divergence of 26.5% over 38 years represents an average difference of 0.7% a year. More researchers, including those at Statistics Canada, should use the IPI data from household spending when analyzing long-term trends in incomes and prices.

22. Diane Galarneau and Eric Fecteau (2014), *The Ups and Downs of Minimum Wage* (Statistics Canada, Cat. No. 75-006-X [July]): 2.

23. Patrick Sabourin (2012), Measurement Bias in the Canadian Consumer Price Index: An Update (*Bank of Canada Review*, Summer): 1.

24. For example, in the United States automobiles did not enter the CPI until 1935, air conditioners until 1964, and cell phones until 1998, well after their introduction into the marketplace. Thomas Philippon (2019), *The Great Reversal: How America Gave Up on Free Markets* (Belknap Press): 42.

25. Sabourin (2012), Measurement Bias ... : 10.

26. The CPI data are from Statistics Canada, table 18-10-0005-01, Consumer Price Index, annual averages. The data for GDP prices are from Statistics Canada, table 36-10-0223-01, Implicit price indexes, GDP, annual.

One reason some users avoid the GDP deflator is that the data are revised. Statcan's policy of never revising the CPI, even when errors are discovered in its calculation, makes it preferable for contracts or government indexation of the tax and transfer system because revisions to the inflation rate would disrupt many monetary transactions already accounted for. However, this complication from revisions is irrelevant for researchers, where revisions actually may be preferable by correcting mistakes and leading to better data.[27] Nevertheless, most researchers have followed Statistics Canada in using the CPI to deflate wages despite the bias this introduces to the estimates. In fact, the resulting under-estimation of real income growth may even be an asset to some since it helps dramatize their research results and enhance their public profile.

27. Philip Cross (2017), *Revisions to Economic Statistics and Their Impact on Policymaking* (C.D. Howe Institute Working Paper, October): 9.

3 Minimum Wages and Job Loss

There is widespread agreement among economists that minimum wages dampen employment. A survey conducted by the Canadian Economics Association found that 85% of Canadian economists agreed a minimum wage lowers employment and has little impact on poverty.[28] A similar survey by the American Economics Association showed that 87% of American economists agreed that minimum wage laws increase unemployment among low-skilled workers.[29] It is rare to find such unanimity among economists on an issue germane to a policy topic that is controversial to the general public.

The minimum wage rate only applies to those workers who are able to find a job at the government-mandated rate. While few low-income people directly benefit from a higher minimum wage, an unknown number of people lose the opportunity to be employed because the minimum wage was too high. As Taylor concluded, "the costs to the few who can't find jobs because of a higher minimum wage may be in some sense more severe than the smaller benefits to individuals who are paid more".[30]

Research in Canada found mostly negative impacts on employment. In fact, the greater variety of minimum-wage-rate regimes in Canada's ten provinces makes for stronger research evidence since "Canadian data provides substantially more variation than US data".[31] Ontario's 2014 Minimum Wage Advisory Panel concluded that Canadian "researchers have generally found an adverse employment effect of raising minimum wages especially for young workers".[32] The negative impact of minimum wages on employment appears to have increased over time. The consensus in the 1980s was that a 40% increase in the minimum wage resulted in employment losses of between 1% and 3%. Ontario's Advisory Panel concluded that this negative impact worsened after the 1980s, with a consensus that "teen employment would drop by 3%–6% if the minimum

28. Cited in Michael Walker (1988), Spring Rituals (*Fraser Forum*, April). The spring ritual Walker refers to was the annual review of minimum wages typically conducted every spring by provincial governments. (Summarized in ACIL (1994), *What Future for …* : 34.)

29. Bruno S. Frei, Werner Pommerehne, Friedrich Schneider, and Guy Gilbert (1984), Consensus and Dissension among Economists: An Empirical Inquiry (*American Economic Review* 74, 5, December): 991.

30. Timothy Taylor (2012), *The Instant Economist: Everything You Need to Know about How the Economy Works* (A Plume Book): 37.

31. Anindya Sen, Kathleen Rybczynski, and Corey Van De Waal (2011), Teen Employment, Poverty, and the Minimum Wage: Evidence from Canada (*Labour Economics* 18): 37.

32. Minimum Wage Advisory Panel (2014), *Report and Recommendations for the Minister of Labour* (January): 34.

wage is raised by 10%".[33] Pierre Fortin also found that the negative impact of minimum wages on employment, especially among youths, more than doubled between the period from 1981 to 1994 and that from 1995 to 2008.[34]

Examples of specific studies for Canada include Swidinsky, who estimated a 10% increase in the minimum wage lowered employment of teenagers by between 1% and 3%. Block found that the provinces with the highest minimum wages also had the highest unemployment rate among youths.[35] Baker and his colleagues found that for teenagers "a 10% increase in the minimum wage is associated with roughly a 2.5% decrease in employment".[36] Gunderson concluded that "a 10% increase in the minimum wage reduces the employment of teens by 3% to 6% and slightly less for young adults. The adverse effect occurs in the form of slower employment growth relative to what would have happened in the absence of the minimum wage increase: it does not necessarily indicate a decline in the actual employment of the groups."[37] Gunderson also found the negative impact on employment was slightly larger in Canada than in the United States. Using data from 1997 to 2010, Lemieux finds "for teenagers, increases in the minimum wages 'pushes up' a large fraction of workers to the new minimum wage, but also yields some modest employment losses. There are no discernable impacts of the minimum wage for young adults".[38]

Many studies outside of Canada confirm the negative impact minimum wages have on staffing. Several outline the process that leads employers to reduce employment. The International Monetary Fund in 2016 identified that minimum wage hikes in France have negative job effects: "by squeezing profit margins, minimum wage increases discourage investment and depress output. As unskilled labour becomes relatively expensive, more unskilled workers lose their jobs. This worsens the income distribution at the bottom despite the increase in unskilled relative wages".[39] The Congressional Budget Office

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33. Minimum Wage Advisory Panel (2014), *Report and Recommendations* ... : 34.

34. Pierre Fortin (2010), Salaire minimum, pauvreté et emploi : à la recherche du "compromis idéal (*Regards sur le travail* 7, 1, Automne): 10.

35. All these studies for Canada are neatly summarized in ACIL (1994), *What Future for* ... : 47, 48.

36. Baker, Michael, Dwayne Benjamin, and Shuchita Stanger (1999), The Highs and Lows of the Minimum Wage Effect: A Time-Series Cross-Section Study of the Canadian Law (*Journal of Labour Economics* 17, 2, April): 318–350.

37. Morely Gunderson (2008), *Minimum Wages: Operating with a Blunt Instrument* (AIMS Labour Market Series, Commentary no. 1, December, Atlantic Institute for Market Studies): 6.

38. Thomas Lemieux (2011), Minimum Wages and the Joint Distribution of Employment and Wages (Research paper [October], Vancouver School of Economics, University of British Columbia): Abstract.

39. Quoted in William Watson (2016), Now even the IMF shows how minimum wages hurt hard-up workers (*Financial Post*, April 27). <https://financialpost.com/opinion/william-watson-now-even-the-imf-shows-how-higher-minimum-wages-hurt-hard-up-workers>, as of March 1, 2021..

(CBO) in the United States predicted that raising the federal minimum wage to $15 an hour would result in the likely loss of 1.3 million jobs, with an upper-bound estimate of 3.7 million possible losses.[40] The CBO cites two forces that lower employment when the minimum wage rises.[41] The first is that higher wages increase the cost to employers of producing goods and services. When these higher costs are passed on to consumers as higher prices, demand falls and so does output. The second channel is that, as the price of low-wage workers increases, the relative cost of employing higher-wage workers or investing in machines and technology declines. Employers respond by reducing low-wage staff and instead substitute capital or higher-skilled workers who are better able to use this capital or new technology. High minimum wages in Europe priced much low-skilled labour in services out of the job market. For example, the American stores of the Toys“R”Us firm employed one third more people per square meter of shop floor in its US stores than in French ones.[42]

Professor David Neumark summarized the research on the job impact of minimum wages in the United States, writing: “the vast majority of these studies point to job losses for the least-skilled”.[43] Neumark’s own research on the subject for the Federal Reserve Board concluded that a 10% hike in the minimum wage reduced jobs for teenagers and the low skilled by 1% to 2%. An growing body of research contradicts the 1995 study by Card and Kreuger and similar follow-up studies that found a benign impact of minimum wages on employment in the United States.[44]

Not all studies agree that higher minimum wages lead to job loss. This reflects a number of factors. One is that the negative impact on jobs is not always immediate. It can be some time before employers invest in machinery to replace minimum-wage jobs, which are often the most susceptible to automation.[45] Those economists who expect employment

40. Congressional Budget Office [CBO] (2019), *The Effects on Employment and Family Income of Increasing the Federal Minimum Wage* (July): 3. The CBO’s analysis openly contradicted President Obama’s assertion that “there is no solid evidence that a higher minimum wage costs jobs”.

41. CBO (2019), *The Effects on Employment* ... : 9.

42. Timothy B. Smith (2004), *France in Crisis: Welfare, Inequality, and Globalization since 1980* (Cambridge University Press): 184.

43. David Neumark (2015), The Evidence Is Piling Up that Higher Minimum Wages Kill Jobs (*Wall Street Journal*, December 15). <https://www.wsj.com/articles/the-evidence-is-piling-up-that-higher-minimum-wages-kill-jobs-1450220824>, as of 1 March, 2021.

44. David Card and Alan Kreuger (1995), *Myth and Measurement: The New Economics of the Minimum Wage* (Princeton University Press).

45. Some employers contemplated more automation to offset Ontario’s hike to minimum wages. See, for example, Ross Marowits (2017), Metro Grocery Chain Looking at Automation to Offset Higher Ontario Minimum Wage (*The Star*, August 15). <https://www.thestar.com/business/2017/08/15/metro-grocery-chain-looking-at-automation-to-offset-higher-ontario-minimum-wage.html>, as of March 1, 2021.

to react immediately to increases in the minimum wage are conducting simplistic and misleading analysis.[46]

Why estimates of job loss vary

As shown in the previous section, while there is near unanimity about the directional effect of higher minimum wages on employment, there is a considerable range of expert estimates of the magnitude of the effect. The range of estimates for job losses from minimum wages reflects the difficulty of measuring their impact on employment. The first statistical complication is what is called the endogeneity problem. For example, if governments usually raise the minimum wage when the economy is growing well, the negative impact of these increases on employment will be minimized. This simultaneity bias makes the effect of very small minimum wage changes hard to measure.

A second difficulty is that the loss of jobs is unlikely to be immediate. Raising the minimum wage on January 1 does not lead to a flood of layoffs in the same month or even in the same year. Instead, the depressing effect on employment plays out over time, as some employers may decide to let attrition cut their labour force or in the very long run reorganize their production process to reduce labour inputs. These adjustments can include everything from the wholesale off-shoring of production to low-wage countries to replacing cashiers (with self-service checkout stations or on-line ordering), or more subtle adjustments like self-service gas stations.[47] The long time needed to evaluate the full effect of increases in the minimum wage on employment led Sen and colleagues to conclude that "the complete impacts of an amendment to the minimum wage take longer than a year".[48] However, the longer it takes for employers to respond to higher minimum wages, the harder it becomes to disentangle the effect of raising the minimum wage from all the other forces that are continually shaping employment levels, from cyclical changes in demand to technological change. Firms often do not make major cuts to their labour force until a recession forces them to review their staffing levels, which can mean layoffs rather than letting attrition reduce their employment (this appears to be one factor in the unusually steep job losses in the United States during the 2008/09 recession).

Adding to the complexity of estimating job loss resulting from minimum wages is the turnover among firms. If labour-intensive small independent restaurants, for example, go

46. A Statistics Canada analyst was quoted as saying about minimum wages and jobs: "There's no clear reaction in the labour market". See Rachelle Younglai and Kelly Cryderman (2016), Small-business owners in Alberta brace for minimum-wage hike (*Globe and Mail*, October 1). <https://www.theglobeandmail.com/report-on-business/small-business/sb-managing/small-business-owners-in-alberta-brace-for-minimum-wage-hike/article32174789/>, as of March 1, 2021.

47. Gunderson (2008), *Minimum Wages* ... : 4.

48. Sen, Rybczynski, and Van De Waal (2011), Teen Employment, Poverty ... : 43.

out of business because of higher costs as a result of minimum wage hikes, they are likely to be replaced by chain restaurants that use more machinery. However, this dynamic is missed when only the employment of independent restaurants that stay in business is examined.[49] The substitution of machinery for labour is more likely to occur if the minimum wage is indexed to inflation, making its increase permanent by not allowing inflation to gradually erode the real minimum wage over time. Indexation has become increasingly frequent in Canada, with Newfoundland & Labrador, New Brunswick, Nova Scotia, Saskatchewan, and British Columbia all adopting indexation in 2018 as a partial substitute for the huge increases introduced in Ontario and Alberta. Indexation removes a government's ability to allow inflation to gradually lower the cost to employers and to forgo increases during recessions when finding a job is already a challenge.

Another complication is that the response of employment may be non-linear, depending on the magnitude of the increase and the level from which it was raised. Most estimates of the impact of rising minimum wages on employment are based on examining the response to relatively small increases. Economists have very little experience with the very large hikes to minimum wages recently imposed in Ontario and Alberta. In examining Ontario's proposed 32% hike in the minimum wage in 2018 and 2019, the Financial Accountability Office (FAO) of Ontario estimated that employment would fall by 50,000, but acknowledged that "there is evidence to suggest that the job losses could be larger than the FAO's estimate. Ontario's minimum wage increase is both larger and more rapid than past experience, providing businesses with a greater incentive to reduce costs more aggressively".[50] Further complicating analysis is that the response of employers partly depends on the level and not just the increase of the minimum wage; a large increase from an initial low level will have less impact than a similar increase from a high level because labour costs will not rise as much.[51]

Some studies use surveys of employers before and after a rise in the minimum wage as their evidence. This methodology is vulnerable to what is called "survivor bias".[52] Financially robust firms employing low-skill labour are more likely to survive higher minimum wages, so their employment levels remain high while weaker firms may go

49. *The Economist* (2015), Destination unknown: Large increases in the minimum wage could have severe long-term effects (August 11). <https://blog.supplysideliberal.com/post/126482484343/the-economist-destination-unknown-large>, as of March 1, 2021.

50. Financial Accountability Office of Ontario [FAO] (2017), *Assessing the Economic Impact of Ontario's Proposed Minimum Wage Increase* (September 12): 1.

51. Dany Brouillette, Calista Cheung, Daniel Gao, and Olivier Gervais (2017), *The Impacts of Minimum Wage Increases on the Canadian Economy* (Bank of Canada Staff Analytical Note 2017-26).

52. For a discussion, see Thomas Sowell (2016), *Wealth, Poverty and Politics* (revised edition, Basic Books): 278.

bust and disappear from the survey. This is analogous to surveying people who survive playing Russian roulette, which appears to refute the idea it is a dangerous game to play, an incorrect conclusion.[53]

Most studies agree the major impact of raising the minimum wage falls upon youths: almost all of the job losses found in the extensive research on this subject were concentrated among youths, especially teenagers. This is hardly a new phenomenon. Unemployment among blacks in the United States was essentially the same as for white youths in the 1940s despite more overt racism and less education precisely because "[f]or all practical purposes, there was no minimum wage law."[54]

The sharp hikes in the minimum wages for Alberta and Ontario in 2018 appear to have had the largest negative impact on youths. While it is far too early to be definitive or to expect all the effects to have played out, it is instructive that the employment rate among youths between 15 and 24 years fell by a full percentage point in Ontario between late 2017 and early 2020 (before the pandemic began), while in Alberta it dropped by half a point over the same period. By comparison, the employment rate for youths in all of Canada rose by nearly two percentage points over the same period, implying an even larger increase in the eight other provinces.[55]

Compounding the disappearance of jobs for youths is that these are often entry-level jobs.[56] The effects of such losses are likely to reverberate for years in lower earnings for these youths. Despite their poor reputation, entry-level jobs allow workers to demonstrate that they have "learned how to show up for work on time, give it [their] best, get along with others, take directions, and create value with [their] time and effort".[57] Thomas Sowell more bluntly stated: "There are no dead-end jobs. There are only dead-end people".[58] Many teens would gladly work unpaid for brief periods, content to acquire valuable work experience as demonstrated by the growing popularity of internships in recent years.

Denying youths entry-level jobs can lower their lifetime earnings. Researchers at the University of British Columbia found that the more hours teenagers worked whether during summer vacation or part-time after school,

53. Thomas Sowell (2010), *Dismantling America: And Other Controversial Essays* (Basic Books): 186.
54. Sowell (2010), *Dismantling America* ... : 186.
55. Statistics Canada, table 14-10-0287-01.
56. Taylor (2012), *The Instant Economist* ... : 38.
57. Arthur C. Brooks (2015), *The Conservative Heart* (Broadside Books): 153.
58. Sowell (2011), *The Thomas Sowell Reader*: 40.

> the better their later job outcomes. They had a higher chance of being employed later in life and of having a higher income. They also had a better fit in their jobs, and better career networking skills later on. They learned all the basic work survival skills that most people learn after they work for a while, and they tended to learn it earlier by working earlier.[59]

These results were confirmed by David Neumark and Cortnie Shupe, who also found that the adverse effects of higher minimum wages on longer-run earning discouraged investment in human capital (education, training, certification, and so on) by young people, further dampening their lifetime incomes.[60] In particular, "most studies tend to suggest a negative impact whereby higher minimum wages encourage students to drop out of school and try to obtain the higher-wage minimum wage jobs".[61]

Minimum wages have little impact on poverty

Boosting minimum wages has proved to be a poor policy tool to reduce the incidence of low incomes. For example, the CBO estimates that doubling the US federal minimum wage to $15 an hour would lower poverty by only 3.8%.[62] This low impact on poverty rates reflects that most people who receive the minimum wage live in households already earning higher incomes. Worse, those minimum wage earners who are part of low income households are likely to be teenagers, who are at higher risk of losing their job as the minimum rate rises. This can actually leave low income households worse off.

The case of a single parent with one or more children is often cited to justify higher minimum wages. However, the data show that single parents represent only 2.2% of all families with at least one minimum wage earner in 2019. It is telling that this share did not increase between 2014 and 2019, despite sharply higher minimum wages in Ontario and Alberta and increases in most other provinces. The conclusion is that the recent round of minimum wage hikes did not raise the share of single parents with children earning the new higher minimum wage.

The vast majority (over 95%) of full-time workers earn more than the minimum wage, even after a decade of rapid increases in the minimum rate. In 2019, only 4.6% of full-time

59. Marc-David Seidel (2015), How McJobs pay off later in career success (*Financial Post*, May 14). <https://financialpost.com/opinion/mcjobs-pay-off-later-in-career-success>, as of March 1, 2021.

60. David Neumark and Cortnie Shupe (2018), *Declining Teen Employment: Minimum Wages, Other Explanations, and Implications for Human Capital Investment* (Mercatus Working Paper 2).

61. Michele Campolietei and Morley Gunderson (2010), The Poverty of Minimum Wages as an Anti-Poverty Policy. In L. Harrison (ed.), *Social Policy: Challenges, Developments and Implications* (Nova Science): 53.

62. CBO (2019), *The Effects on Employment …* : 4.

workers earned the provincial minimum, a reflection of how most full-time workers quickly move up the wage ladder within their firm (we know that most minimum wage earners work for private-sector firms since very few government employee pay scales dip that low. Instead, cash-strapped governments increasingly contract out health care and education services to private sector firms that pay less, in an effort to control the cost of government services).

The share of all employees (excluding self-employed) earning the minimum wage was 5.0% in 1997 and 7.2% in 2014[63] and 8.8% in 2019. Since 2014, the proportion of those earning minimum wage who are living with someone earning more than a minimum wage has remained above 80%. In 2014, the vast majority of people receiving the minimum wage were youths living with their parents (53.5%) or adults living with their spouse (26.3%). By 2019 the proportion of employees receiving the minimum wage and living with their parents fell from 56.9% to 53.5%, while those living with their spouse increased from 26.3% to 27.5%. So the share of minimum wage earners living with someone earning a higher wage was little changed from 83.2% in 2014.[64]

The Canadian evidence on minimum wages reviewed earlier suggest that large hikes in the minimum wage almost certainly had a depressing effect on the employment of youths still living with their parents, slowing their transition out of the parental nest and into the labour market. These youths hold minimum-wage jobs for only a short period of time, using them as a stepping stone to higher-paying jobs. Very few minimum wage earners (slightly more than 1%) work for more than five years at the minimum wage.[65]

The clear implication is that raising minimum wages is not an effective anti-poverty tool because very few low-income households are dependent on jobs paying the minimum wage. In the words of Professor Ron Kneebone from the University of Calgary, raising the minimum wage is not an effective anti-poverty tool partly "because an important reason why many people are in poverty is that they cannot find employment or can only find part-time employment. Even doubling the minimum wage does nothing to help those people".[66]

63. Galarneau,Diane (2015), *Minimum Wage in Canada since 1975* (Statistics Canada, Canadian Megatrends, Cat. No. 11-630-X2015006 June: 2. <https://www150.statcan.gc.ca/n1/en/catalogue/11-630-X2015006>, as of February 18, 2021.

64. Statistics Canada, custom tabulation provided on a request from the Fraser Institute.

65. Gunderson (2008), *Minimum Wages* ... : 2.

66. Ron Kneebone (2015), The poverty of the minimum wage (*Financial Post*, May 14). <https://financialpost.com/opinion/the-poverty-of-the-minimum-wage>, as of March 1, 2021.

Another reason the minimum wage fails to address poverty is that the wages are paid to individuals, while poverty reflects family income. The vast majority of minimum-wage earners belong to a family unit that earns enough income to be above the poverty line. For example, Ontario's FAO estimated that: "Households with incomes above the median would receive almost 40 per cent of the income gain" from Ontario's proposed increase in minimum wages in 2018 and 2019, while only 27% of higher incomes would benefit low-income families.[67] This is another example of poor targeting and why the FAO concluded that "raising the minimum wage would be an inefficient policy tool for reducing overall poverty".[68] Worse, a minimum wage could aggravate the difficulties of those earning a low income if it causes job losses, which most studies in Canada confirm is the result of higher minimum wages.

Sen, Rybczynski, and van de Waal found that the negative impact on the employment of teenagers from higher minimum-wage rates can actually aggravate rather than alleviate poverty. While most teens belong to households that are well above Statistics Canada's Low Income Cut Off (LICO), and therefore losing a job or receiving a higher wage has little impact on household well-being, some teenagers earning a minimum wage make a substantial contribution to the earnings of low-income households. As a result, the loss of jobs for these teens in low-income households represents an important loss of income for these families. Sen and his colleagues conclude that, while higher minimum-wage rates are designed to alleviate poverty, in reality "[a] higher minimum wage may paradoxically result in more poverty as teen unemployment results in a drop in household income among low-income families".[69]

The focus on minimum wages also ignores that wages and salaries are a rapidly diminishing part of total labour compensation. Non-wage benefits have grown from 4.9% in 1961 to 13.8% of all labour compensation in 2019, as an aging population prefers health care or pension benefits to wage income.[70] Forcing employers to increase the wage portion of employee compensation gives them the incentive to lower these sizeable non-wage benefits to employees to offset some, if not all, of higher wage costs, leaving employees little better off than before an increase in the minimum wage. In a widely publicized case, employees at a fast-food chain were notified that non-wage benefits were being scaled back after Ontario's $14-an-hour minimum wage took effect.[71]

67. FAO (2017), *Assessing the Economic Impact ...* : 6.

68. FAO (2017), *Assessing the Economic Impact ...* : 1.

69. Anindya Sen, Kathleen Rybczynski, and Corey van de Waal (2011), Teen Employment, Poverty, and the Minimum Wage: Evidence from Canada (*Labour Economics* 18): 46.

70. Statistics Canada, table 36-10-0114-01, Compensation of employees, Canada.

71. Chris Woodward (2018), Rough-road ramifications of minimum wage hike (*OneNewsNow.com*, January 5).

Higher minimum wages do not boost other wages

What other arguments are advanced for raising the minimum wage if lowering poverty is not a plausible result? One is that a higher minimum wage will help lift the wages for workers earning slightly more than the new minimum rate.[72] The rationale is that employers pay workers on a sliding scale that maintains a certain premium between different jobs and skills. For example, if cooks in a neighbourhood restaurant earn $2 an hour more than dishwashers, the hope is that a hike in the minimum wage paid to dishwashers would lead the employer to raise the wage for the cook to maintain the same wage differential.

The problem with this argument is that there is little in economic theory or practice to support it. Economic theory says that employees are paid according to their own productivity not their productivity relative to others. Legislating a higher minimum wage does not change the productivity of workers, so there is no reason to expect employers to systematically pay all their employees higher wages. Paying employees more than they produce for the firm is a recipe for bankruptcy, not economic growth. The only impact is to substitute higher-skilled workers as the relative price of lower-skilled workers rises. The Bank of Canada estimates that, in practice, higher minimum wages may have a small effect on some other low-wage employees, who represent about 7% of workers.[73] The large increases in minimum wages across Canada over the past decade were not accompanied by a rising share of labour income in overall GDP, faster gains in overall hourly earnings, or higher wages paid to workers earning slightly more than the minimum wage.

A minimum wage is a blunt instrument that lacks the flexibility to adapt to individual or local circumstances. The argument that $15 an hour is needed to support the income of a working mother raising children is irrelevant to a 16-year old trying to get a toehold in the labour market. People living in downtown Vancouver or Toronto may feel a high minimum wage is needed to afford housing, but a much lower wage provides for adequate lodging in Thunder Bay or Saint John.

Minimum wage hikes bring higher prices

Raising minimum wages pushes up the cost of doing business, which can be passed on to consumers as higher prices. Costs rise faster than just the increase in the minimum wage because, on top of paying the higher minimum wage, employers are responsible for increased contributions to Employment Insurance, the Canada Pension Plan, and Workers' Compensation, all of which are linked to the underlying wage.

72. One articulation that minimum wages affect wages "slightly higher up the wage scale" is found in Joseph Stiglitz (2015), *Rewriting the Rules of the American Economy: An Agenda for Growth and Shared Prosperity* (Norton): 80.
73. Brouillette, Cheung, Gao, and Gervais (2017), *The Impacts of Minimum Wage Increases ...* : 1.

The potential impact on prices from minimum wages can be significant. In the United States, Renkin, Montialoux, and Siegenthaler estimate that the one-third decline in the real minimum wage between 1979 and 1995 lowered the CPI by 1%.[74] This suggests that the increases in the minimum wage in Ontario and Alberta of a similar magnitude could affect prices by the same amount, but in a much shorter period of time. The Financial Accountability Office of Ontario estimated that a 27% hike in the minimum wage to $15 an hour would raise overall consumer prices in Ontario by 0.5%, which in turn would dampen the rise in consumer spending.[75]

For all of Canada, the Bank of Canada estimated the increase in minimum wages across the country could raise prices by up to "a small but significant" 0.4% between 2017 and 2019.[76] The increase in inflation was enough in the Bank of Canada's model to put upward pressure on interest rates, which is one reason consumer spending fell in its projections of how the economy would respond to higher minimum wages.[77] Even then, the Bank's methodology was based on the behavioural response of prices to past changes in minimum wages, which exclude the possibility of a larger non-linear response to the unusually large increase in the minimum wage in 2017 and 2018 discussed earlier.

74. Cited in Philippon (2019), *The Great Reversal* ... : 34.
75. FAO (2017), *Assessing the Economic Impact* ... : 5.
76. Brouillette, Cheung, Gao, and Gervais (2017), *The Impacts of Minimum Wage Increases* ... : 3.
77. Brouillette, Cheung, Gao, and Gervais (2017), *The Impacts of Minimum Wage Increases* ... : 7.

Conclusion—Government, not Business, Should Pay to Augment Low Incomes

Raising the minimum wage is tantamount to a government's trying to dictate to business that employers must foot the bill for a social goal of the government. However, governments cannot prevent firms from recovering higher labour costs by raising prices or reducing non-wage benefits or employment. For example, grocery executives attributed some of the increase in food prices early in 2019 to the lagged effect of higher minimum wages in several provinces.[78]

If governments deem raising low incomes is desirable, it has several tools to do so. It could invest more in skills-training programs. Governments could subsidize firms that hire low-skilled workers, or subsidize the wages of low-skilled workers through programs such as the Working Income Tax Benefit. The latter has paid a benefit to low-income earners since 2007, modeled partly on Quebec's Work Premium program (Quebec's benefit program is one reason its low-income earners are better off despite having a lower minimum wage than most other provinces).[79]

Unlike a minimum wage, which does a very poor job of raising the income of those earning a low income, government subsidies directly target low-income people. In all these instances, governments would bear the fiscal burden, allowing the electorate to decide if it agrees to such expenditure of its tax dollars. A wage subsidy has the advantage of properly localizing both the costs and the benefits. The costs are borne by governments and ultimately taxpayers, and the benefits are targeted to the working poor. This contrasts with a minimum wage, which passes the costs on to employers and distributes the benefits to a wide range of households who do not have a low income. However, a minimum wage does not directly cost the government anything, which may explain its popularity, especially after the global financial crisis left government balance sheets in such a poor state. Instead, government mandates a high price of labour for employers, leaving firms to cope with the problem of higher costs in ways that often contradict the results governments intended.

78. Marina Strauss (2019), Produce prices on the rise as grocery retailers grapple with higher wage, transportation costs (*Globe and Mail*, March 28).
79. Luc Godbout from Université de Sherbrooke said "c'est chez nous que les bas salariés vivent le mieux en considérant toutes les prestations fiscales et en tenant compte du coût de la vie". Quoted in Stéphanie Grammond (2016), Avant qu'on parle du salaire minimum à 15 $… (*La Presse+* (9 décembre). <https://www.lapresse.ca/debats/chroniques/stephanie-grammond/201612/09/01-5049710-avant-quon-parle-du-salaire-minimum-a-15-.php>, as March 1, 2021.

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