THE RATE OF POVERTY AND ALBERTA’S ECONOMIC FUTURE

Ron Kneebone and Margarita Wilkins
Alberta has a long history of facing serious challenges to its economy, including shocks in the form of resource price instability, market access constraints, and federal energy policies. However, the recent and current challenges seem more threatening. It seems that this time is truly different.

The collapse of oil and gas prices in 2014 combined with the rapid growth of U.S. oil production, difficulties in obtaining approval for infrastructure to reach new markets and uncertainty regarding the impacts of climate change policies world-wide have proven to be strong headwinds for the province’s key energy sector. Together, the negative effects on employment, incomes and provincial government revenues have been substantial. To make matters worse, in early 2020 the Covid-19 pandemic struck a major blow to the lives and health of segments of the population and to livelihoods in many sectors. The result has been further employment and income losses, more reductions in government revenues and huge increases in government expenditures and debt. These events, combined with lagging productivity, rapid technological shifts, significant climate policy impacts and demographic trends, call for great wisdom, innovation, collective action and leadership to put the province on the path of sustainable prosperity.

It is in this context that we commissioned a series of papers from a wide range of authors to discuss Alberta’s economic future, its fiscal future and the future of health care. The plan is that these papers will ultimately be chapters in three e-books published by the School of Public Policy. However, in the interest of timeliness and encouraging discussion, we are releasing selected chapters as pre-publications.
INTRODUCTION

The economy of the province of Alberta is seemingly entering a period of transition away from a high growth, high employment economy heavily reliant on the development of fossil fuel resources. This transition is being driven by low and uncertain fossil fuel prices, problems in building pipeline capacity to ship fossil fuels to market, and a growing consensus of the need to respond to climate change by reducing reliance on carbon-emitting fuels. What this transition means for income and employment growth in the long-term is uncertain but the experience in the short-term has seen much lower rates of increase in aggregate measures of income and employment. These developments have had important impacts on both government revenues and household incomes.

It is well-established that high income and high levels of employment offer solutions to poverty and the social ills that accompany it. Higher incomes boost purchasing power so that people can better meet their needs. They also involve multiplier effects that sustain further growth and generate revenues for governments to provide the infrastructure necessary to sustain growth over the long-term. International organizations such as the OECD (Organization for Economic Co-operation and Development), WTO (World Trade Organization), and the World Bank measure a nation’s development by its real income per capita and emphasize higher levels as being the reason for dramatic declines in international rates of deep poverty. Within advanced economies, like Canada, differences in real per capita incomes justify policies that redistribute income between regions and regional economic development programs to increase incomes where they are relatively low. In short, higher income is a goal universally pursued by policymakers in part because of what it means for improving the lives of individuals and households whose incomes are at the low end of the income distribution. A corollary of this consensus view is that individuals and households with low income are possibly vulnerable to a transition to a lower growth, lower income economy.

To be sure, high aggregate income is never solely the source of poverty reduction. A higher level of aggregate income is not necessarily akin to an incoming tide that raises all boats; it does not always directly benefit everyone in society. Recognition of this is the reason why governments have put in place policies designed to redistribute increases in aggregate income. Any assessment of the possible long-term impact of lower income and employment on vulnerable populations must therefore also assess the potential for public policy measures to continue to provide support for those with incomes at the low end of the income distribution.

In this paper, we focus attention on understanding what the transition away from an energy-based economy might mean for individuals and families with low incomes in Alberta. Our approach is to describe how the rate of poverty — defined as the percentage of the population with incomes below the poverty line — has historically changed with changes in income and employment. We also describe how the rate of poverty has changed when governments have introduced public policies aimed directly at poverty reduction. In this way we show the extent to which people living with low incomes have shared in the benefits of aggregate income and employment.
growth and the extent to which poverty reduction has relied on public policies. We use these measures to comment on what it may mean for individuals and families with low incomes to transition to an economy with lower levels of income and employment and lower levels of tax revenue available to provide income and other supports.

In the next section we define variables measuring poverty, income, employment and public policies aimed at poverty reduction. For each variable we compare how values have changed over time relative to the rate of poverty. We then empirically estimate a simple model of how the rate of poverty has responded when all variables change simultaneously. We use these estimates to consider scenarios describing how the rate of poverty might have evolved had income, employment, and public policy choices been different from what was observed. We conclude by using these results to comment on the possible implications for the rate of poverty of Alberta transitioning to an economy that may be characterized by lower aggregate incomes and rates of employment.

**INCOME, EMPLOYMENT, PUBLIC POLICIES, AND RATES OF POVERTY**

**MEASURING POVERTY**

The number of households living in poverty is measured based on a definition of a poverty line. A poverty line defines an income below which someone is deemed to have insufficient income to satisfy certain basic needs. There are data on three measures of poverty available in Canada. Until very recently, none has been identified as an “official” poverty line.

In this study, we use the Low-Income Cut-Off (LICO) measure of poverty. We make this choice in part because data on this measure is available since 1976, making possible a time series analysis over a long time period. Our choice is also guided by the fact the LICO measures poverty in a way that the federal government recently identified as appropriate when it chose to adopt the Market Basket Measure (MBM) as its official poverty line. Both the LICO and the MBM establish a poverty line defined as a level of income deemed to be sufficient for an individual or family to be able to meet basic needs. Because that list of basic needs is held more or less constant over time, both MBM and LICO are referred to as absolute measures of poverty. A drawback with using the MBM to determine the rate of poverty is that it has a relatively short history with data available only since 2002. For this reason, and because like the MBM it is a measure of absolute poverty, we make use of the Low-Income Cut-Off (LICO).1

1 Using data on the third available measure of poverty, the Low-Income Measure, would also permit a long time series. The LIM is a *relative* measure of poverty. The LIM defines someone as experiencing poverty when their income falls a certain distance below the median income. Thus, when using the LIM, as part of the list of basic needs that income must be sufficient to satisfy is the need to maintain a certain level of social inclusion gained by being able to afford goods widely available to other citizens. When measured using the LIM, the rate of poverty may increase even though the real incomes of all households have increased. The LIM therefore defines a poverty line, and hence the poverty rate, in a way much different from the MBM or the LICO. Provinces frequently, though not necessarily consistently, use the Low-Income Measure (LIM) to evaluate policy progress. See Noël (2017) for discussion of the implications of provincial policymakers choosing to evaluate their policies using the LIM rather than absolute measures of poverty.
The LICO is based on a calculation of what the average family spends on necessities. The LICO threshold is defined as the income below which a family is likely to spend 20 percentage points more of its income on necessities than the average family. In 1992, when the base of the LICO was set, the average household spent 43% of its after-tax income on necessities. Thus, the LICO defines a family as being in “straightened circumstances” if that family is required to spend 63% or more of after-tax income on food, shelter and clothing. The LICO is measured for different family sizes and for different sized communities. Using these measures, Statistics Canada produces an estimate, for each province, of the percentage of the population with incomes below the LICO. We use this measure as our measure of the poverty rate.

Our focus is on poverty in Alberta and how it has changed over the period 1989-2019. Specifically, our goal is to describe how the percentage of Albertans living with incomes below the LICO responds to changes in economic conditions and changes in government policy choices aimed at poverty reduction. The measure of the LICO we use is an after-tax, after-transfer measure that incorporates the effect of policy initiatives.

While our focus is on Alberta, it is useful to show how Alberta compares to the rest of the country. Figure 1 plots data on the percentage of households in Alberta and in Canada with incomes below the LICO. The graph shows that poverty rates have fallen a great deal since the 1990s. Starting in 1996 when it had a rate of poverty equal to that in Canada as a whole, the rate of poverty in Alberta has fallen faster and by a larger amount. This was particularly so in the period from 2004 to 2012 when the poverty rate fell by 4.6 percentage points in Alberta but by only 1.4 percentage points in all of Canada.

**Figure 1: Poverty Rates in Alberta and Canada**

<table>
<thead>
<tr>
<th>Year</th>
<th>Alberta</th>
<th>Canada</th>
</tr>
</thead>
<tbody>
<tr>
<td>1989</td>
<td>18%</td>
<td>16%</td>
</tr>
<tr>
<td>1991</td>
<td>14%</td>
<td>12%</td>
</tr>
<tr>
<td>1993</td>
<td>12%</td>
<td>10%</td>
</tr>
<tr>
<td>1995</td>
<td>10%</td>
<td>8%</td>
</tr>
<tr>
<td>1997</td>
<td>8%</td>
<td>6%</td>
</tr>
<tr>
<td>1999</td>
<td>6%</td>
<td>4%</td>
</tr>
<tr>
<td>2001</td>
<td>4%</td>
<td>2%</td>
</tr>
<tr>
<td>2003</td>
<td>2%</td>
<td>1%</td>
</tr>
<tr>
<td>2005</td>
<td>1%</td>
<td>0%</td>
</tr>
<tr>
<td>2007</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>2009</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>2011</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>2013</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>2015</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>2017</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>2019</td>
<td>0%</td>
<td>0%</td>
</tr>
</tbody>
</table>

Sources: Poverty rates, based on the after-tax LICO, from Statistics Canada Table 11-10-0135-01.

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2. Statistics Canada suggests that the LICO is not intended as a measure of poverty but, rather, defines it as a measure of income that leaves one in “straightened circumstances.” The LICO is nonetheless regularly described and used as a measure of poverty. In what follows, nothing is lost should we refer to a “straightened circumstances rate” rather than a poverty rate.

3. Our measure of income support, which is discussed below, limits the starting data of our analysis to 1989.
The literature on the causes of movements in aggregate rates of poverty often relies on cross-section comparisons across countries. This is because policies and labour markets are seen to differ substantially across countries, and it is that variability that researchers hope to exploit as a way of identifying why rates of poverty differ. These studies identify influences on rates of poverty stemming from demographic variables (such as race, immigration status, sex of head of household, and age distribution), changing education levels, changing labour market opportunities and changes to government income support policies. While demographic and education rates are sometimes shown to play a minor role, it is changes in labour market opportunities and government income support programs that are most frequently found to play the key roles.4

In this paper we take a time series approach and so rely on variation in the values of variables over time in a single jurisdiction.5 As they are relatively slow to change over time, we do not emphasize the role of changes to demographic variables and instead focus on the influence of labour market conditions and measures of government policies.6

REAL PER CAPITA GDP

In Figure 2 we plot the percentage of the population of Alberta experiencing poverty against real GDP per capita. A clear negative correlation is apparent; as real per capita GDP increases, the percentage of Albertans experiencing poverty falls. Marx et al (2015) note that income growth benefits the poor directly by creating employment (although not necessarily proportionally so) and by increasing the fiscal base for redistributive policies. The importance of the latter is due to the observation that should per capita income growth slow to such an extent to require government spending cuts, it is not unusual for policies that redistribute income to be a target for those cuts.7 We will return to this issue when we discuss the implications of our empirical results.

In the figure it is shown that periods of recession, when real GDP per capita falls, are often associated with increases in the rate of poverty. For example, the declines in real per capita GDP in the early 1990s and in 2009 are matched by increases in the rate of poverty. A notable exception, however, is the recession starting in 2014 when the rate of poverty nonetheless continued to fall suggesting other factors also contribute to explaining rates of poverty.

4 For an excellent review see Marx, Nolan, and Olivera (2015).
5 Thus, our approach is similar to that taken by Hoynes, Page, and Stevens (2016), and Chaudry et al (2016).
6 We are also constrained to be parsimonious in our model specification by the fact that data limitations restrict us to only 31 annual observations.
7 See Noël (2019) whose review of minimum income protection in OECD countries suggests that a general downward trend in income support is due to government fiscal difficulties. Governments with high and growing public debt are more likely to allow social assistance incomes to fall.
THE EMPLOYMENT RATE

The extent to which increases in income reduce poverty depends on the degree to which the poor participate in the growth process and share in its proceeds. This is an important consideration in Alberta because changes in Alberta's GDP are often driven by changes in energy prices. While increasing the rents earned on energy assets, these changes in GDP may or may not translate into significant changes in levels of employment. However, it is employment and the rising income that accompanies it, that may most directly benefit households with low incomes and at risk of poverty.

Sources: Real GDP from Statistics Canada Table 36-10-0222-01. Population data from Table 17-10-0005-01.

Figure 2: The Rate of Poverty and Real Per Capita GDP

Figure 3: The Rate of Poverty and the Employment Rate

Sources: Ratio of employed to total adult population from Statistics Canada Table 14-10-0327-01.
Figure 3 shows how the poverty rate in Alberta varies relative to the employment rate, defined as the percentage of adults aged 15 years and over who are employed. The downturn in employment in the early 1990s is associated with an increase in the poverty rate and the long period of steady increase in the rate of employment from 1993 to 2008 is associated with a large decrease in the rate of poverty. Since 2008, however, the poverty rate has continued to fall despite a generally falling employment rate.

INEQUALITY

Even if the economy experiences zero aggregate income and employment growth, changes in the distribution of income can affect rates of poverty. If, for example, the distribution of earned incomes changes such that high incomes increase faster than low incomes, earned income inequality increases. If, in addition, earned incomes at the low end of the distribution do not increase sufficiently to keep up with the cost of living, rates of absolute poverty will also increase. In this way, increased income inequality may be observed along with an increase in the rate of absolute poverty. This depends, however, on whether earned incomes at the low end of the income distribution grow sufficiently to keep up with the cost of living. If they do, then increased earned income inequality may be observed at the same time as a decreased rate of absolute poverty.

Government income transfers have a role to play in determining the relative movements of income inequality and the rate of poverty when the latter is measured after the receipt of redistributive income transfers. If earned incomes, together with income transfers, grow sufficiently to prevent real after-tax income losses at the low end of the income distribution, then even if earned income inequality were to grow, rates of poverty may increase, decrease, or not change.

To consider the possible role of changing earned income inequality of the poverty rate, we use the earned income (before tax and transfer) Gini coefficient. The Gini coefficient is a summary measure of income inequality. Its possible values range from zero to one with higher values indicating greater income inequality in earned incomes.

Figure 4: The Rate of Poverty and Earned Income Inequality

Sources: Earned income Gini coefficient from Statistics Canada Table 11-10-0134-01.
Figure 4 relates the rate of poverty measured after taxes and transfers to the measure of earned income (before taxes and transfers) inequality measured by the Gini coefficient. It shows that following a period of volatility during the 1990s, earned income inequality remained more or less constant suggesting all income classes shared in the growth in aggregate income after 2000.\textsuperscript{8} The relative movements in these variables suggest that changes in earned income inequality have not played a pivotal role influencing the rate of poverty.

POVERTY REDUCTION POLICIES

The state of the economy affects the rate of poverty by raising incomes and providing employment. Public policies may also affect the rate of absolute poverty through their use of taxation and income transfer programs to redirect incomes from high to low-income households.

In Figure 5 we show how the poverty rate in Alberta has varied relative to a measure of the size of the real value of income support provided in Alberta. Our measure of income support is defined as the real income provided by the federal and provincial governments to a lone parent with one child. We choose this measure to capture the influence on the poverty rate of what has been a concerted effort by both the federal and the provincial governments to reduce child poverty by increasing the size of social assistance benefits made available to parents. We assume all benefits available to lone parents, including those made available as tax and carbon levy refunds, are claimed and received.

Figure 5: The Rate of Poverty and Social Assistance

Sources: Income support provided to a lone parent with one child from Laidley and Aldridge (2020). https://maytree.com/welfare-in-canada/alberta/. Converted to 2012 dollars using Canadian CPI, all-items from Statistics Canada Table 18-10-0005-01.

\textsuperscript{8} For more evidence of this, see Wilkins and Kneebone (2018).
The commitment to increase child benefits that started in 2005 is apparent in the measure of social assistance income. While that dramatic increase in real income has been associated with a fall in the rate of poverty, it is noteworthy that prior to that year the rate of poverty was falling despite a gradual erosion of the real value of social assistance benefits.

An increase in the real value of the minimum wage is another way that governments can reduce rates of poverty among the so-called working poor, people who are employed but earn too little income to place them above the poverty line. Figure 6 shows the relationship between the after-tax LICO and the real value of the minimum wage paid in Alberta.

Figure 6: The Rate of Poverty and the Minimum Wage

Sources: Minimum wage data from Minimum Wage Database, Government of Canada (http://srv116.services.gc.ca/dimt-wid/sm-mw/menu.aspx?GoCTemplateCulture=en-CA). Annual value is the weighted average (by month) of values before and after legislated changes made during the year. Real values calculated using all-items CPI for Canada.

We again see that a rising minimum wage is associated with a fall in the poverty rate though this is apparently only after 2005. Prior to that time, the real value of the minimum wage was constant even while the poverty rate fell.9

IS IT THE ECONOMY OR IS IT PUBLIC POLICY?

Our presentations of the data and discussion of relative movements in these data suggest the need to identify their independent associations with the rate of poverty. For this purpose, we employ regression analysis. Table 1 presents summary information on the data discussed in the previous section and which will be used in our regression analysis.

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9 It is noteworthy that both the minimum wage and the level of income support increased starting in 2005. It is sometimes claimed that governments seek to maintain a connection between the income available to the working poor (via the minimum wage) and the income made available to those unable to find employment and reliant on social assistance. The evidence in Figures 4 and 5 would seem to lend credence to that claim. In any event, these movements identify a level of collinearity in these variables that we will comment on below.
Table 1: Summary Statistics

<table>
<thead>
<tr>
<th></th>
<th>Employment Rate</th>
<th>Real GDP per capita, annual</th>
<th>% of population experiencing poverty</th>
<th>Real Minimum Hourly Wage</th>
<th>Earned income Gini Coefficient</th>
<th>Real social assistance income, annual</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mean</strong></td>
<td>68.3</td>
<td>72,897</td>
<td>9.8</td>
<td>8.39</td>
<td>0.403</td>
<td>15,905</td>
</tr>
<tr>
<td><strong>Median</strong></td>
<td>68.4</td>
<td>73,902</td>
<td>9.4</td>
<td>7.40</td>
<td>0.404</td>
<td>16,079</td>
</tr>
<tr>
<td><strong>Maximum</strong></td>
<td>71.9</td>
<td>85,716</td>
<td>17.1</td>
<td>13.42</td>
<td>0.432</td>
<td>20,344</td>
</tr>
<tr>
<td><strong>Minimum</strong></td>
<td>64.9</td>
<td>57,443</td>
<td>4.4</td>
<td>6.61</td>
<td>0.373</td>
<td>14,019</td>
</tr>
<tr>
<td><strong>Std. Dev.</strong></td>
<td>1.8</td>
<td>8,308</td>
<td>3.5</td>
<td>1.85</td>
<td>0.012</td>
<td>1,455</td>
</tr>
</tbody>
</table>

Annual data, 1989-2019. N= 31. Monetary values are measured in 2012 dollars. The percentage of the population experiencing poverty is measured using the after-tax LICO.

Table 2 presents the results of regressions of the rate of poverty — the percentage of Alberta’s population living in households with incomes below the LICO — against the natural logarithms of real GDP per capita, the employment rate, the earned income Gini coefficient, a measure of the real value of social assistance income, and the real value of the minimum hourly wage. Dividing regression coefficients by 100 provides a measure of the number of percentage points by which the poverty rate changes for each one percent change in an independent variable.

Table 2: Effects of Economic Growth, Inequality, and Public Policy on Poverty

<table>
<thead>
<tr>
<th></th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Constant</strong></td>
<td>608.48 (52.84)*</td>
<td>324.54 (27.99)*</td>
<td>467.59 (90.05)*</td>
</tr>
<tr>
<td><strong>Ln(GDP per capita)</strong></td>
<td>-20.64 (2.09)*</td>
<td>-7.54 (3.38)**</td>
<td>-12.87 (4.57)*</td>
</tr>
<tr>
<td><strong>Ln(Employment Ratio)</strong></td>
<td>-38.69 (10.94)*</td>
<td>-45.58 (11.43)*</td>
<td>-45.56 (11.06)*</td>
</tr>
<tr>
<td><strong>Ln(Gini Coefficient)</strong></td>
<td>19.08 (5.80)*</td>
<td>13.87 (5.83)**</td>
<td>15.93 (5.78)*</td>
</tr>
<tr>
<td><strong>Ln(Social Assistance)</strong></td>
<td>-19.33 (2.69)*</td>
<td>-12.02 (1.64)*</td>
<td>-6.72 (3.56)**</td>
</tr>
<tr>
<td><strong>Adj R²</strong></td>
<td>0.93</td>
<td>0.93</td>
<td>0.94</td>
</tr>
</tbody>
</table>

Dependent variable is the percentage of the provincial population with incomes below the after-tax LICO. Standard errors are reported in parentheses. Asterisks denote significance at the 1% (*), 5% (**), and 10% (***). Each model is estimated as OLS. N = 31. Annual data, 1989-2019. In each regression, Ljung-Box Q tests of the null hypothesis of independently distributed errors could not be rejected.

A comparison of the results reported in columns (1) and (2) shows that while the real minimum wage and real social assistance income have coefficients that are statistically different from zero when considered separately, their significance falls when they are both added to the analysis. This suggests what was noted earlier, namely, that collinearity between the minimum wage and the measure of social assistance makes it difficult to accurately measure the influence of each independently from the other.

The coefficients reported in column (3) indicate that both economic conditions and public policy variables are associated with changes to the rate of poverty. Based on
the equation that includes all of the independent variables, each 1 per cent increase in real GDP per capita is associated with a 0.129 percentage point (or 1.31 per cent when evaluated at the mean value of the poverty rate) reduction in the poverty rate. Similarly, a 1 per cent increase in the employment rate is associated with a 0.456 percentage point decrease in the poverty rate (or 4.65 per cent when evaluated at the mean). Finally, an increase of 1 per cent in earned income inequality is associated with an increase in the rate of poverty by 0.159 percentage points (or 1.64 per cent when evaluated at the mean).

The two policy variables also appear to influence the rate of poverty. A 1 per cent increase in real social assistance income is associated with a 0.096 reduction in the poverty rate (or 0.98 per cent when evaluated at the mean) while a 1 per cent increase in the real value of the minimum wage is associated with a 0.067 percentage point reduction in the poverty rate (or 0.68 per cent when evaluated at the mean).

Figure 7 uses the results reported in column (3) in Table 2 to produce a baseline prediction of the poverty rate and compares that baseline to observed data on the poverty rate. As suggested by the high value of the $R^2$ statistic, the model generates values of the poverty rate that closely match the observed values.

**Figure 7: Percentage of Population in Poverty, Baseline Model vs Actual**

Source: Authors’ calculations.

**SCENARIOS**

To better understand the implications of these statistical results, we use the estimated relationship reported in column (3) of Table 2 to consider alternative scenarios for the exogenous variables.

Figure 8 compares the baseline model against two alternatives. In the “Economy Only” scenario we hold the real values of the policy variables, the minimum wage and social assistance income, constant at their 1989 values. The result is a description of how the
rate of poverty would have evolved over the 1989-2019 period had no changes been made to the policy variables.\textsuperscript{10} In the “Policy Only” scenario we hold values of real GDP per capita, the employment rate, and the earned income Gini coefficient at their 1989 values. The result is a description of how the rate of poverty would have evolved over the period had no changes occurred in those three variables.\textsuperscript{11}

**Figure 8: Two Scenarios, Three Periods**

These two scenarios reveal three quite distinct periods of poverty reduction. During the period from 1989 to 2004, the change in the poverty rate was associated with strong income and employment growth and was realized despite minimal changes in policy variables.

For a short period from 2004 to 2008, both the economy and the policy variables were associated with reductions in the poverty rate. Changes in income, employment growth and changing earned income inequality explained 56 per cent of the fall in the poverty rate while the policy variables explained the remaining 44 per cent. With both policy actions and a strong economy working in unison, the poverty rate fell by 5 percentage points or 45 per cent in just four years.

After 2008, the economy in Alberta suffered the consequences of, first, the financial crisis in 2008-09, and then the fall in energy prices after 2014. The deteriorating

\textsuperscript{10} To be precise, we assume no change to the real values of the minimum wage and social assistance income. This would require policymakers changing nominal values just enough to offset the effects of changes in the price level.

\textsuperscript{11} These exercises assume no behavioural responses resulting from holding the policy variables constant or holding employment and income growth constant. This is limiting as we might assume, for example, that increasing the minimum wage and increasing social assistance benefits could influence employment, hiring and labour supply responses and so influence employment growth.
state of the economy was pushing the poverty rate quickly upward. In our scenarios, increases in the two policy variables starting in 2014 were sufficient to offset these effects and so cause the poverty rate to fall. Over this period, the two policy variables were wholly responsible for the fall in the rate of poverty.

Over the entire 1989-2019 period, income growth, increases in the employment rate, and the effects of changes to earned income inequality accounted for 24 per cent of the fall in the poverty rate. The remaining 76 per cent was due to increases in the real value of the minimum wage and the real value of income support.

**WHAT IT MEANS AND WHAT IT MAY MEAN FOR THE FUTURE**

For advocates who suggest that higher real income and higher rates of employment are the form of medicine needed to cure the illness of high rates of poverty, our results are both encouraging and discouraging. They are encouraging in that the results are suggestive of the power of increases in income and employment to reduce poverty quickly and steadily without the need to finance new publicly funded anti-poverty programs. They can point to our results for evidence to support the notion that increases in the employment rate is an effective anti-poverty tool. However, this is a double-edged sword. Economic slowdowns can quickly undo these gains. In an economy like Alberta’s where economic booms and busts are the norm, relying solely on the economy to address poverty means allowing for wide swings in the poverty rate. To avoid the costs of increases in poverty requires well-timed policy interventions.

For policy advocates, these findings are also both encouraging and discouraging. They can be encouraged by our results suggesting the power of public policy choices to reduce rates of poverty. Our scenarios suggest that had it not been for policy interventions after 2014, the downturn in the economy would have pushed the current rate of poverty in Alberta to be two and a half times what it is now. The results though, are also somewhat discouraging to policy advocates in that they show that public policies aimed at poverty reduction have limits to what they can do. As suggested by the data presented in Figures 5 and 6, it has taken dramatic increases in the real values of the minimum wage (an increase of 96% since 2014) and social assistance income (an increase of 44% since 2014) to obtain these policy-driven reductions in poverty. It may be unrealistic for advocates to suggest the possibility of still more increases in the real value of the minimum wage and still more increases in the real level of income support. This is so not only because of the need to maintain incentives for individuals to find employment, but also because of the expense that further increases in social assistance and minimum wages will impose on already-strapped public finances and the capacity of many businesses to absorb these costs.

If no further increases in the real values of minimum wages and income support seem likely, policy-induced reductions in the rate of poverty may also be unlikely and Alberta...
will need to rely, more than ever before, on income and employment growth to keep rates of poverty low. If the transition to a new economic future, one less reliant on the energy production as the powerful engine of wealth creation, is long and characterized by slow rates of growth and falling employment rates, Alberta may also need to become accustomed to a rising rate of poverty.

CONCLUSION

There is undoubtedly a lot of uncertainty surrounding Alberta’s economic future. As it always does, uncertainty weighs most heavily on individuals and families with limited incomes and savings and insecure employment prospects. This paper focuses on what Alberta’s economic and fiscal future might mean for individuals and families living in poverty.

We have shown how the percentage of Albertans experiencing poverty varies with changes to income and employment and changes to policy variables designed to address poverty. Our results suggest that both approaches to attacking poverty are effective but both have their limitations. In a boom-and-bust economy, relying solely on economic growth to reduce poverty means that rates of poverty will mirror those booms and busts and so create havoc for people living with limited means. In the past 10 years concerted efforts to increase the real value of social assistance payments and minimum wages have successfully contributed to poverty reduction but it is possible that the ammunition for that fight has been largely exhausted. If that is so, then keeping the poverty rate low will in the future require a focus on encouraging income and employment growth.

Our focus has been on associating changes in the rate of poverty to changes in economic conditions and public policy choices. But it is important to recognize that changes in the rate of poverty are in turn associated with many other social ills. Rates of homelessness, family violence, and poor health are just a few examples. If the Alberta economy transitions to what may be one characterized by lower real incomes, lower employment rates, and a smaller capacity for governments and employers to absorb the costs of income support programs, then all these conditions may worsen. This suggests that the costs of transitioning Alberta’s economy toward a different future may be borne most heavily by individuals and families least able to navigate this transition.
REFERENCES


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