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The Illusion of Alberta's Jobs Recovery: Government vs. Private Sector Employment

by Charles Lammam and Hugh MacIntyre

SUMMARY

- With a drop in commodity prices in 2014 and the ensuing economic downturn, Alberta's weakened labour market has attracted considerable attention. Nonetheless, Premier Rachel Notley's government has touted recent employment figures as a sign that the situation is improving, arguing that total employment has recovered to its pre-recession peak.
- However, focusing on total employment misses an important recent trend in Alberta's labour market: the primary driver of total employment growth is an increase in government sector employment.
- The recent growth in government sector employment began in July 2014 and has continued through the latest month of available data at the time of writing (May 2018). Over

- the period, government employment increased by 78,733 (21.5 percent) while private sector employment (excluding self-employed) fell by 46,267 (3.0 percent). As a result, the government sector's share of total employment (excluding self-employed) increased from 19.5 percent to 23.2 percent—a level not observed in Alberta since 1994.
- In contrast, Saskatchewan—another energy-dependent province affected by the drop in commodity prices—increased its government sector employment by just 2.1 percent from July 2014 to May 2018. That is a tenth of Alberta's government sector employment growth rate (21.5 percent) over the same period.
- Research suggests that the increase in government sector employment, and the decline in private sector employment, will translate into less overall prosperity for Albertans.

Introduction

With a drop in commodity prices in 2014 and the ensuing economic downturn, Alberta's weakened labour market¹ has attracted considerable attention. Nonetheless, Premier Rachel Notley's government has touted recent employment figures as a sign that the situation is improving, arguing that total employment has recovered to its pre-recession peak.²

However, as this bulletin shows, focusing on total employment misses an important trend in Alberta's labour market, namely, that the driver of total employment growth is an increase in government sector employment. Indeed, the heavy reliance on government sector employment growth along with an accompanying decline in private sector employment creates a misleading impression of Alberta's employment "recovery." Moreover, research finds that such growth in government sector employment can reduce economic growth and employment in the private sector.

The bulletin begins by describing employment trends in Alberta; it gives particular attention to the contrast between the growth in government sector employment and the decline in private sector employment. The second section briefly explains the potential economic implications of significant and exclusive government sector employment growth. The bulletin ends with a short conclusion.

Recent employment trends in Alberta

In Alberta's 2018 budget, the Notley government touted that the provincial economy had recovered from the economic downturn, noting that: "In the last three months of 2017, employment increased sharply, marking a full recovery of the number of jobs lost during the recession" (Alberta, Ministry of Finance, 2018: 108). This is true and, in fact, as of May 2018, the latest month of available data at the time of writing, Alberta's total employment level was 2.33 million, slightly more than the pre-recession peak of 2.31 million in August 2015 (see figure 1). (All monthly data presented in this bulletin are calculated as three-month moving averages to smooth out fluctuations.³) However, as we shall see, to accurately assess the premier's claim, it is important to understand the trends underlying the overall employment data.

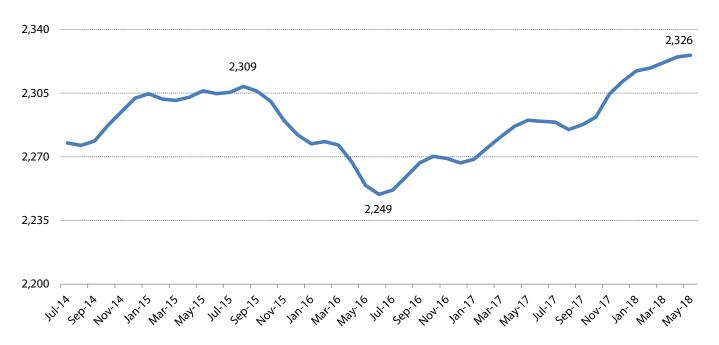
Total employment consists of three broad categories: private sector employment, government sector employment, and the self-employed. Statistics Canada broadly defines the government sector-which includes federal, provincial, and local governments-to include crown corporations and government-funded establishments such as schools and hospitals; it includes both part-time and full-time workers. Private sector employment encompasses Albertans who work in an employer-employee relationship for private businesses. An individual who is self-employed is a worker who is not in an employer-employee relationship and is categorized separately by Statistics Canada from other forms of employment. The self-employed include owners of incorporated and unincorporated businesses who may or may not have employees working for them.

¹ For instance, in analyzing Alberta's labour market performance relative to other Canadian provinces and US states on a host of indicators from 2014 to 2016, Lammam et al. (2017) found that Alberta performed poorly.

² For example, see https://twitter.com/ rachelnotley/status/962124215536189442 and Graney (2017).

³ All monthly figures in this bulletin are seasonally adjusted.

Figure 1: Total Employment in Alberta (thousands), July 2014 to May 2018



Notes:

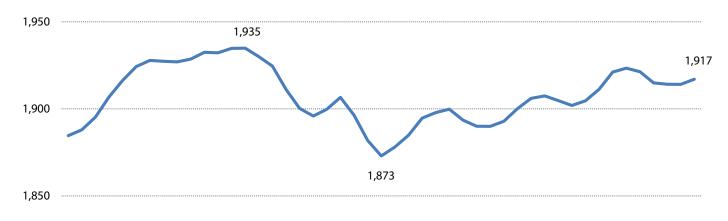
- 1) Data presented in each month are a three-month average to smooth fluctuations.
- 2) Total employment data includes government sector employment, private sector employment, and the self-employed.

Source: Statistics Canada, 2018a.

There are several reasons for someone to be self-employed. For instance, the individual might be an entrepreneur who is starting a new business. But people also pursue self-employment if they have trouble finding regular employment in a difficult labour market. Indeed, self-employment tends to increase during a recession (LaRochelle-Côté, 2010). Moreover, it is not always clear what sector the self-employed belong to since a self-employed individual may, for example, operate under a government contract (Di Matteo, 2015). Given these complications, this bulletin primarily focuses on analyzing government sector and private sector employment, but in some cases presents data on the self-employed for completeness.

When the self-employed are excluded from the total employment figures, a telling story emerges about Premier Notley's claims of Alberta's employment "recovery." Without the self-employed, it is apparent that Alberta has not in fact recovered to its pre-recession employment peak. As figure 2 shows, Alberta's total employment level in May 2018 (excluding the self-employed) was 1.92 million, which is still below the pre-recession peak of 1.94 million in August 2015 (also excluding the self-employed). In other words, the "recovery" of total employment is partially driven by growth in self-employment, which could very well be a relic of the recession rather than a spurt of true entrepreneurship in Alberta.

Figure 2: Total Employment Excluding Self-Employed in Alberta (thousands), July 2014 to May 2018





Note: Data presented in each month are a three-month average to smooth fluctuations.

Source: Statistics Canada, 2018a.

Trends in government sector employment

To get a sense of the longer-term trend from the various components that make up total employment, figure 3 displays data on Alberta's government sector employment, private sector employment, and self-employment over the 10-year period from May 2008 to May 2018. The data are presented in the form of an index, where the starting year is given the value of 100. This presentation allows us to more clearly observe the change in the respective data series over time. The 10-year period gives us enough data to determine a reasonable estimate of the longer-term trend.

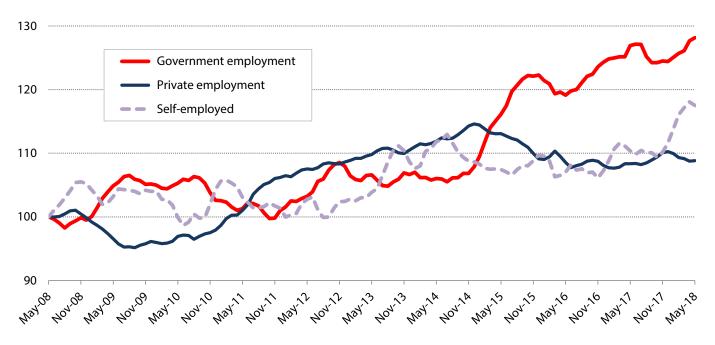
Figure 3 shows three periods where government sector employment ramps up. The first is

from August 2008 to July 2009, the second is from October 2011 to November 2012, and the third is from July 2014 to May 2018. Interestingly, the start of first and third periods corresponds roughly with the beginning of a recession in Alberta, while the second period took place in a time of economic growth. The most recent period—from July 2014 to May 2018—is notable for several reasons.

First, the duration of the upward trend in government sector employment growth is much longer: 46 months versus 11 months for the first and second periods. Moreover, growth in gov-

⁴ Measuring the exact start of the two recessions in Alberta is beyond the scope of this paper.

Figure 3: Index of Alberta's Government Employment, Private Employment, and **Self-Employment, May 2008 to May 2018 (where May 2008 = 100)**



Note: Data presented in each month are a three-month average to smooth fluctuations.

Source: Statistics Canada, 2018a.

ernment employment in the most recent period has continued despite the fact that Alberta is no longer in a recession (Alberta, Ministry of Finance, 2018). In contrast, not long after the 2008/09 recession, government sector employment in Alberta fell. Specifically, from September 2010 to October 2011, government employment declined by 6.0 percent.

Second, the total growth in government employment is considerably higher in the most recent period. Government sector employment increased by 8.2 percent from August 2008 to July 2009, and by 8.8 percent from November 2011 to November 2012. But from July 2014 to May 2018, government employment increased

by 21.5 percent-more than twice the growth in the previous two periods.⁵ Put simply, the most recent rise in government sector employment has been longer and more significant than in other periods of government sector employ-

⁵ Part of the reason for the larger growth in government sector employment in this most recent period (July 2014 to May 2018) is that the duration of growth has been longer than the previous two periods. However, if you consider just the first 11 months of growth in the latest period-a comparable length of time to the two previous growth periods-government sector employment still grew more in the most recent period: by 11.3 percent compared to 8.2 percent from 2008 to 2009 and 8.8 percent from 2011 to 2012.

Figure 4a: Change in Employment (number) in Alberta, July 2014 to May 2018

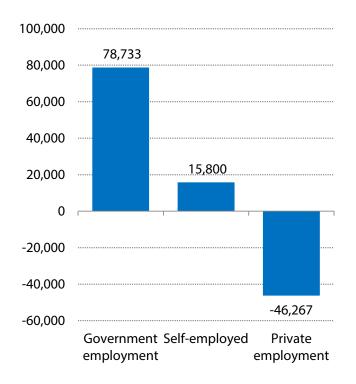
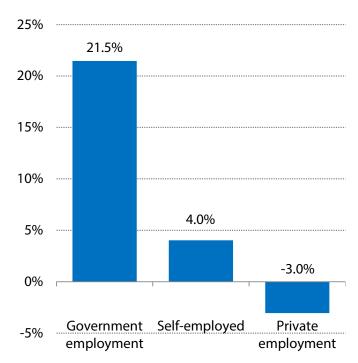


Figure 4b: Change in Employment (percent) in Alberta, July 2014 to May 2018



Note: Data presented in each month are a three-month average to smooth fluctuations.

Source: Statistics Canada, 2018a.

ment expansion—including the upward trend following the Great Recession.

Figures 4a and 4b illustrate the significance of the increase in government sector employment from July 2014 to May 2018 by comparing it to changes in private sector employment and self-employment. Government sector employment increased by 78,733 (or 21.5 percent) from July 2014 to May 2018 while private sector employment fell by 46,267 (or 3.0 percent). 6 Clearly,

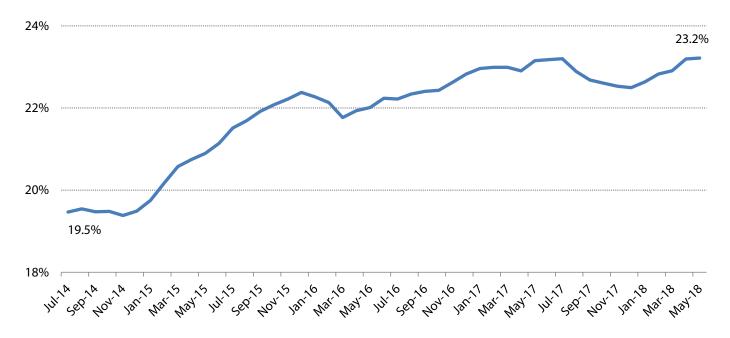
this was a period of significant growth in government sector employment while the private sector languished.

Another way to look at the data is to examine the government sector's share of total employment excluding self-employment. Figure 5 displays the share of government sector employment during the most recent period of its growth (July 2014 to May 2018). At the start of

age of 15 increased by only 5.3 percent from July 2014 to May 2018, approximately a quarter of the growth in government sector employment (Statistics Canada, 2018b).

⁶ It is reasonable to ask if the government sector grew to serve a growing population. The short answer is, not entirely. Alberta's population over the

Figure 5: Government Sector Share of Total Employment, Excluding Self-Employed, in Alberta, July 2014 to May 2018



Note: Data presented in each month are a three-month average to smooth fluctuations.

Source: Statistics Canada, 2018a.

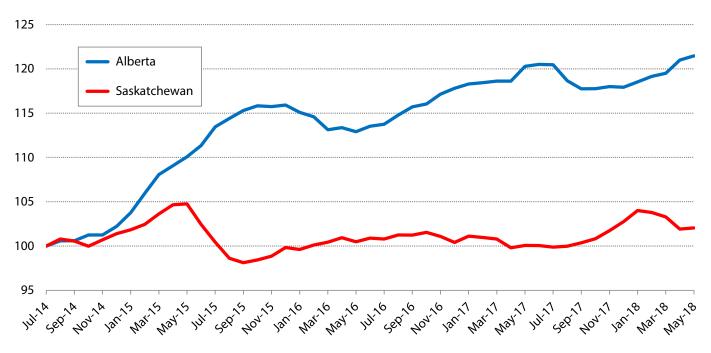
this period, the government sector's share of total employment (excluding self-employment) was 19.5 percent, which expanded markedly to 23.2 percent by May 2018-a high proportion of government employment by the standards of the past two decades. In fact, the last time the government sector's share of total employment was this high was in 1994 (Statistics Canada, 2018a).

Government sector employment growth in Alberta versus Saskatchewan

As we have seen, employment in Alberta's government sector expanded considerably from July 2014 to May 2018. An interesting comparison comes from next door Saskatchewan, another energy-dependent province affected by the drop in commodity prices.

Figure 6 displays government sector employment data from July 2014 to May 2018 in the form of an index for both provinces, where July 2014 is equal to 100. While government sector employment rose in Alberta, it remained largely flat in Saskatchewan for most of the period. Overall, government sector employment increased by a modest 2.1 percent in Saskatchewan, a tenth of the rate in Alberta (21.5 percent). Put simply, Saskatchewan did not experience the same growth in government sector employment as Alberta, despite also being affected by the drop in commodity prices.

Figure 6: : Index of Government Employment in Alberta and Saskatchewan, July 2014 to May 2018 (where July 2014 = 100)



Note: Data presented in each month are a three-month average to smooth fluctuations.

Source: Statistics Canada, 2018a.

Economic consequences of government employment growth

While some may argue that increasing government sector employment is an appropriate policy response to an economic downturn or when there is a sharp decline in private sector employment, there are a number of problems with this argument. For starters, in practice, increases in government employment may outlast the recession, as we have seen is currently the case in Alberta. Indeed, there is no sign that the growth of government sector employment in the province is abating, despite the recession having passed (Alberta, Ministry of Finance, 2018).

Further, it is important to recognize that the economic effects of an expansion in government sector employment are not equivalent to those of private sector employment.⁷ For one thing, productivity in the government sector tends to be lower than the private sector.⁸ This means that, on average, a unit of labour in the government sector produces less than a similar unit of labour in the private sector. Productivity

⁷ For a more complete discussion of the theory and empirical literature on the economic effects of expanding government sector employment growth, see Di Matteo (2015) and Karabegovic, Gabler, and Veldhuis (2012).

⁸ See Karabegovic, Gabler, and Veldhuis (2012) for discussion on productivity in the public sector.

tends to be lower in the government sector for a variety of reasons including reduced incentives to invest in capital and/or adopt innovative techniques or technology (Gylfason et al., 2001). As a result, an expansion in the government's share of total employment can hinder economic growth. In fact, a study published in the World Bank Economic Review found that an increase in the share of government sector employment by one standard deviation reduces per-person growth by one to two percentage points per year (Gylfason et al., 2001).⁹

Moreover, the government sector (and the employment related to it) is ultimately funded by drawing resources from the private sector through taxation. 10 This can contribute to a crowding out of private sector employment as government employment displaces resources in the private sector. Consider that government employment is funded by taxing businesses and individuals in the private sector. Taxes leave individuals with less money to save and invest, and leave private sector employers with fewer funds to grow their operations, hire new workers, or make further investments. In other words, taxes paid to fund growth in government sector employment come at the expense of potential innovation, productivity growth, and employment growth in the private sector. 11

Another way that government employment can crowd out private sector employment is through the effect on wages. 12 Government sector workers generally receive higher compensation than similar workers in the private sector (Lammam, Palacios, and Ren, 2017). When government sector employment increases, this can artificially drive up the general wage level as private sector employers compete with the government sector for workers. As a result, private employers are less able to afford to pay workers and so hire fewer employees. This is problematic because political factors largely determine the wage-setting process in the government sector while economic realities-such as productivity concerns, profitability, and resource constraints-guide the process in the private sector.¹³

While there is debate over the magnitude of this crowding out effect, it could be substantial (Di Matteo, 2015). For example, one study of 17 OECD countries (including Canada) from 1960 to 2000 found that the creation of 100 government jobs led to the reduction of 150 private sector jobs-leading to fewer jobs on net (Algan, Cahuc, and Zylberber, 2002).14

higher rates. The top provincial personal income tax rate is now 15 percent-up from 10 percent.

- 12 See Di Matteo (2015) for more discussion on the effect of growing government sector employment on real wages.
- ¹³ Moreover, the monopoly environment of the government sector amplifies these differences, compared to the competitive environment of the private sector.
- According to Algan, Cahuc, and Zylberber (2002), the crowding-out effect is only significant when government and private jobs are highly substitutable and the government sector offers higher compensation than the private sector, as it does in Alberta (Lammam, Palacios, Ren, 2017).

This study focuses on developing countries.

¹⁰ Governments can also borrow to fund government employment but since government debt must ultimately be repaid by future taxpayers, this debt is simply deferred taxation.

¹¹ Notably, provincial corporate and personal income tax rates in Alberta have both increased since 2014. Specifically, the general corporate income tax rate increased from 10 percent to 12 percent. In addition, the Alberta government ended the province's singlerate personal income tax system by adding four new,

Finally, the current trend of increasing government sector employment and declining private sector employment in Alberta is not sustainable in the long term. After all, it is the private sector that generates the wealth and supports the government's collective activities. A declining private sector means that there is less wealth in the economy to support the growing government sector.

Conclusion

While the Notley government claims that total employment in the province has returned to its pre-recession peak, the focus on total employment misses important recent developments in Alberta's labour market. Since July 2014, the growth in total employment has largely been driven by growth in government sector employment. Over the same period, private sector employment has declined. This matters because research suggests the increase in government sector employment and the decline in private sector employment will translate into less general prosperity for Albertans.

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Charles Lammam is Director of Fiscal Studies at the Fraser Institute. He has published over 100 studies and 400 original articles on a wide range of economic policy issues. He holds an MA in public policy and a BA in economics with a minor in business administration from Simon Fraser University.



Hugh MacIntyre is a Senior Policy Analyst at the Fraser Institute. He has co-authored numerous studies on government finances and government performance. He holds an MSc in Political Science from the University of Edinburgh, a post-baccalaureate in economics from Simon Fraser University, and an Honours BA from the University of Toronto.

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