

# One Energy Boom, Two Approaches

**Fiscal Restraint Has Left Texas in Better Shape than Alberta**

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## Contents

Executive summary	/	iii
Introduction	/	1
Economic performance in Alberta, 2004–2014	/	3
Fiscal performance in Alberta and Texas	/	9
Alberta and Texas today	/	15
Conclusion	/	18
References	/	19
About the authors	/	23
Acknowledgments	/	24
Publishing information	/	25
Supporting the Fraser Institute	/	26
Purpose, funding, & independence	/	26
About the Fraser Institute	/	27
Editorial Advisory Board	/	28



## Executive summary

Prior to the recent fall in energy prices, the economies of Alberta and Texas enjoyed prolonged economic booms.

The booms began in earnest in 2004, when real economic growth in the two jurisdictions reached approximately 5 percent. Although there have been significant fluctuations in the years since, both jurisdictions generally enjoyed enviable economic performance between 2004 and 2014.

Although both Alberta and Texas both experienced prolonged booms between the start of the energy price rally in 2004 and the downturn in commodity prices starting in late 2014, there are important differences between the two jurisdictions' economic experiences both during the years of the boom itself and in very recent years since energy prices fell.

This paper examines the similarities and differences between the two jurisdictions' experience in recent years, both in terms of overall economic performance and in terms of successful management of public finances by their governments.

We find that Texas enjoyed slightly faster growth in terms of gross domestic product per capita, while Alberta produced a slightly faster rate of job creation. Each jurisdiction has some metrics on which it outperformed the other but, on the whole, we conclude that the two jurisdictions enjoyed comparably strong overall economic performance.

By contrast, we find that there was a marked difference between Alberta and Texas in terms of how successfully their governments managed public finances during the 2004–2014 period. Program spending per person in Alberta increased by 49 percent during this timeframe, compared to 37.3 percent in Texas. Further, public sector employment growth was approximately twice as rapid in Alberta (2.6 percent) as in Texas (1.2 percent).

The absence of spending discipline in Alberta led to a string of budget deficits, something which did not occur in Texas. As a result, Alberta saw significant erosion in its financial position during this period. In 2006/07, Alberta held net assets representing 12.4 percent of provincial GDP. By 2013/14, provincial net assets had declined to 2.9 percent of GDP. By contrast, Texas saw very little change in its financial asset position during this period.

Problematically, this decline in Alberta's assets was occurring during a period when commodity prices and provincial resource revenue were generally high. In this report, we document the extent to which these developments put the province in a precarious financial position, such that when energy prices did fall, the province's budget deficit ballooned and its pace of asset erosion increased quickly. The province will this year become a net debtor for the first time since 2000/2001, and is projected to see a rapid run-up in debt over the next several years. By contrast, Texas—thanks largely to more prudent fiscal management during the boom years—faces no similar run-up in debt and generally brighter fiscal prospects.

Although Alberta's economy is much more diversified than some cartoonish descriptions of the province as a "petrostate" suggest, the province nonetheless relies heavily on its energy sector as a major driver of economic growth. This means Alberta is more prone to pronounced economic booms and slumps than most other jurisdictions.

This feature of the Albertan economy makes it especially important for governments to manage public finances cautiously and prudently during good economic times in preparation for revenue dips and other challenges. The evidence presented here shows that successive Alberta governments did not meet this test during the recent boom.

Alberta and Texas are now on very different fiscal trajectories, as Texas' financial position is comparatively strong while Alberta faces a potentially costly and economically damaging run-up in debt. One can hope that when Alberta's economy does recover and begins to grow strongly again, policy-makers will have learned the lesson from this energy price cycle and will manage the province's finances more prudently during good times, in order to avoid painful fiscal consequences in the future similar to those the province is confronting today.

## Introduction

Prior to the recent fall in energy prices and resulting economic downturns in most energy-producing jurisdictions, the economies of Alberta and Texas enjoyed prolonged economic booms. The booms began in earnest in 2004, when real economic growth in both jurisdictions reached approximately 5 percent. Although there have been significant fluctuations in the years since (including a steep recession in Alberta in 2009), both jurisdictions generally enjoyed enviable economic performance between 2004 and 2014, posting strong growth and job creation numbers in excess of their respective countries' national averages in most years, while their residents enjoyed high and improving standards of living.

There are several reasons the two jurisdictions fared so well. Both benefited from natural resource development and energy prices that generally remained high throughout this period. Further, both places were boosted by pro-growth tax and regulatory frameworks that helped make them magnets for people and investment.

The two jurisdictions invite comparisons with one another, firstly because energy production represents a major share of each jurisdiction's economy, and secondly because both are relatively prosperous jurisdictions in their respective countries.<sup>1</sup>

Although both Alberta and Texas both experienced prolonged booms between the start of the energy price rally in 2004 and the downturn in commodity prices starting in late 2014, there are important differences between the two jurisdictions' economic experiences both during the years of the boom itself and in very recent years since energy prices fell.

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1. Alberta is Canada's most prosperous province; Texas ranked 14<sup>th</sup> out of 51 US jurisdictions in per-capita real GDP in 2015 (author's calculation based on US Bureau of Economic Analysis Regional Data available at [bea.gov](http://bea.gov)).

This study will examine the similarities and differences between the economic experiences of the two jurisdictions and will address two overarching questions:

- ◆ Which of the two economies experienced a more pronounced economic boom during the high-growth period (defined as 2004–2014 for the purposes of this paper)?
- ◆ How successfully did governments in each jurisdiction manage public finances during these same years? More specifically, how do the two jurisdictions compare on key fiscal metrics including fiscal balances, prudent public spending control, and financial asset/debt accumulation?

After addressing these two groups of questions in the second and third sections of this paper, we turn in the fourth section to compare the fiscal positions and prospects of the two jurisdictions today, in light of the sharp recent downturn in energy prices. Specifically, we discuss how the decisions surrounding public spending, public sector employment growth, and government deficits that were made during the boom years helped determine the fiscal circumstances in which the two governments find themselves today, and their outlook for the future.

All figures in this report have been converted to Canadian dollars and, unless otherwise noted, the years analyzed in this study are from 2004 to 2014 inclusive.<sup>2</sup>

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2. Nominal US GDP values are converted to real using a rebased (2009 to 2007) implicit price deflator and are converted to Canadian dollars using the PPP conversion rate.



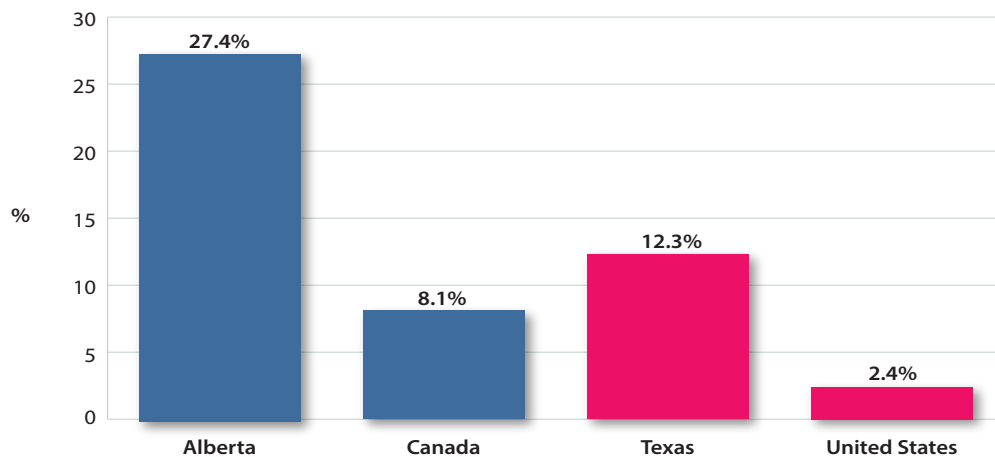
# Economic performance in Alberta, 2004–2014

## The Alberta and Texas economies

Comparisons between Alberta and Texas are interesting and relevant because the two jurisdictions share a number of important features. Of particular importance, they are linked by the fact that oil and gas activity constitutes a significant part of both economies. In 2015, oil and gas activity represented 27.4 percent of all economic activity in Alberta (**figure 1**). The provincial economy has diversified over time—energy accounted for more than one-third of GDP in 1985. Nevertheless, the energy sector contributes a sizable percentage of provincial GDP.

In Texas, oil and gas activity represented 12.3 percent of total gross domestic product (GDP) in 2015.<sup>3</sup> Although these sectors represent a proportionally larger share of the Albertan economy, oil and gas activity is an important component of both jurisdictions' economies.

**Figure 1: Oil and gas as a share of the economy, 2015**



Sources: Statistics Canada, 2016a, 2016b; BEA, 2016a.

**3.** Note that these ratios are for direct impacts only; adding estimates for indirect and induced effects would produce even larger ratios.

Since the early years of the millennium, energy prices have generally been high notwithstanding a significant drop in 2009. These high energy prices contributed to a prolonged economic boom in both jurisdictions (**figure 2**). In terms of overall output growth, the two economies performed somewhat similarly in these years, with Alberta enjoying a slight advantage. Despite a much deeper recession in 2009, average annual economic growth in Alberta outpaced Texas during this period in 8 out of 11 years. Alberta's real output grew at an average annual rate of 3.6 percent compared to 3.4 percent in Texas. For comparison, the Canadian economy as a whole averaged real economic growth of 2.0 percent while the American economy grew at an average annual rate of 1.5 percent during these years. Clearly, the 2004–2014 period was generally a strong period of economic growth for both Alberta and Texas.

**Figure 2: Real GDP growth, 2004–2014**

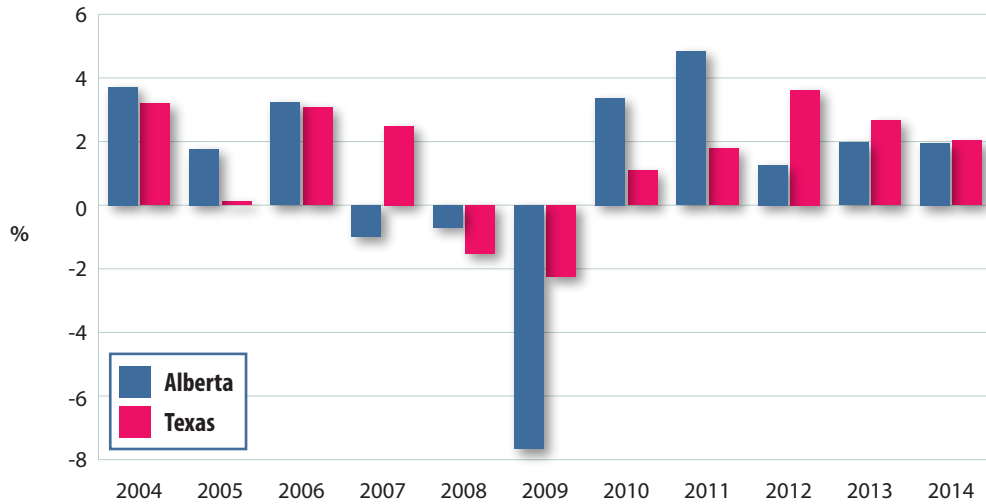


Note: Alberta's 2015 real GDP value is based on the growth rate shown in the all-industry total of Statistics Canada (2016a).

Sources: Statistics Canada, 2015a, 2016a; BEA, 2016a, 2016b; IMF, 2016.

While Alberta experienced stronger real output growth than Texas during this period, it should be noted that the province's population was growing somewhat faster than Texas' during this period. Both provinces experienced rapid population growth during this timeframe, as people were attracted to the high incomes and employment prospects in both places, but population growth was particularly robust in Alberta. Alberta's population grew at an average annual rate of 2.4 percent during this period, compared to 1.9 percent in Texas. We can account for this difference with respect to economic growth by comparing real GDP growth per person in the two jurisdictions from 2004–2014 (**figure 3**). Real per-person growth in Alberta outstripped Texas in six out of the 11 years examined but, due partly to Alberta's deep economic slump in 2009, average annual GDP growth per capita in the two jurisdictions over

**Figure 3: Real per-capita GDP growth, 2004–2014**



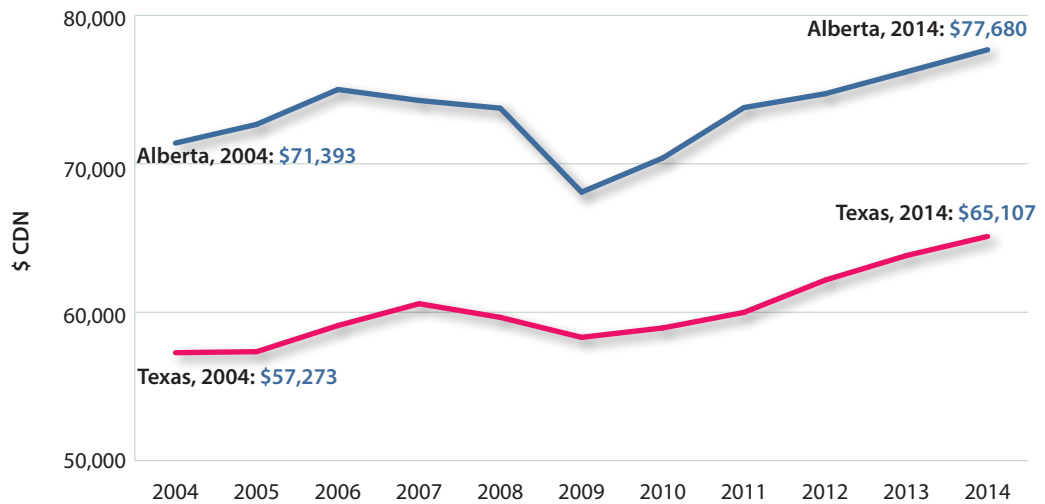
Note: Alberta’s 2015 real GDP value is based on the growth rate shown in the all-industry total of Statistics Canada, 2016a.

Sources: Statistics Canada, 2015a, 2015b, 2016a; BEA, 2016a, 2016b, 2016c; IMF, 2016.

the entire period was stronger in Texas (1.5 percent) than in Alberta (1.2 percent). While real-person growth rates in the two jurisdictions were comparable, Texas performed slightly better than Alberta on this indicator.

At the outset of the period being analyzed, Alberta’s per-capita gross domestic product was substantially higher than Texas’ (figure 4). In 2007 dollars, Alberta’s GDP per person stood at \$71,393 at the beginning of this period compared to \$57,273 in Texas. This amounted to a gap of \$14,120 per person.

**Figure 4: Real per-capita GDP, 2004–2014**



Note: Alberta’s 2015 real GDP value is based on the growth rate shown in the all-industry total of Statistics Canada, 2016a.

Sources: Statistics Canada, 2015a, 2015b; BEA, 2016a, 2016b, 2016c; IMF, 2016.

Texas' slightly faster rate of per-person economic growth during the period under consideration allowed the state to very slightly narrow the gap between the two jurisdictions in terms of GDP per capita. In 2014, that gap had been reduced somewhat, and stood at \$12,574. Whereas Alberta's GDP per person was 24.7 percent higher than Texas' in 2004, the gap was slightly smaller at 19.3 percent in 2014. In short, Alberta's GDP per person remained substantially higher than Texas' throughout this period of growth in both jurisdictions, although Texas was able to narrow the gap slightly.

Our examination of changes in overall economic output shows comparable levels of economic performance in the two jurisdictions between 2004 and 2014. However, gross domestic product is not the only measure of economic progress. On some other indicators, there are meaningful differences between the two jurisdictions. For example, total employment growth was significantly stronger in Alberta than in Texas throughout most of the period in question, although it is important to note that both jurisdictions beat their respective national averages for this indicator. In 7 out of the 11 years from 2004 to 2014, Alberta outperformed Texas in annual total employment growth ([figure 5](#)). On average, total employment growth averaged 2.5 percent annually in Alberta (compared to 1.2 percent across Canada). By comparison, annual employment growth averaged 1.9 percent annually in Texas (compared to 0.6 percent across the United States) over this period.

**Figure 5: Total employment growth, 2004–2014**



Sources: Statistics Canada, 2016c; BLS, 2000–2002a, 2003–2014b.

Anticipating the possible objection that Alberta’s superior performance in job creation may be driven by an expanding public sector, **figure 6** presents annual private sector employment growth in Alberta and Texas during this period. On this indicator, Alberta beats Texas in 6 out of 11 years. Private sector employment growth averaged 2.7 percent annually in Alberta compared to 2.3 percent in Texas. As we will see in the next section, it is true that public sector employment growth in Alberta significantly outstripped growth in Texas (with important implications for the two provinces’ overall fiscal records, which we discuss in the next section), but figure 6 suggests that this difference is not primarily responsible for the overall higher level of employment growth in Alberta during this period.

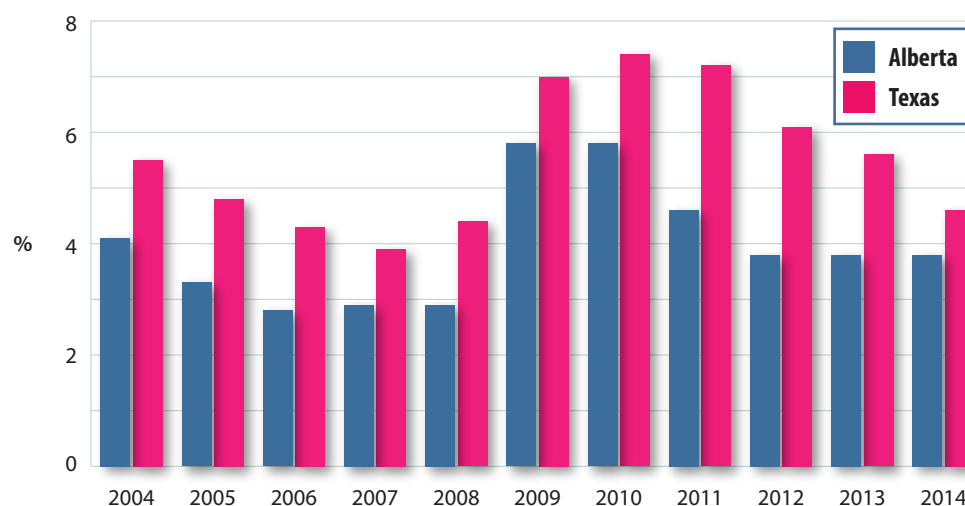
**Figure 6: Private sector employment growth, 2004–2014**



Sources: Statistics Canada, 2016c; BLS, 2000–2002a, 2003–2014a.

A closely related metric on which Alberta outperforms Texas is its unemployment rate.<sup>4</sup> **Figure 7** compares the annual unemployment rate in the two provinces in each year between 2004 and 2014. In every year since 2004, Alberta has maintained a lower unemployment rate than Texas (although both provinces easily beat their national averages on this metric). Over the period taken as a whole, unemployment averaged 4.0 percent in Alberta (the national average rate across Canada was 6.2 percent). By comparison, Texas’

4. The unemployment rate does not provide a complete picture of labour market performance at any given time. Some economists have also noted that it has become a less meaningful metric since the economic downturn in 2007 (see Zmitrowicz and Khan, 2014). Increasingly, economists are focused on other metrics including employment rates and labour market participation rates. Since no single indicator provides a perfect barometer of labour market performance, we supplement this analysis of unemployment rates with other metrics including private sector employment growth and overall employment growth.

**Figure 7: Unemployment rate, 2004–2014**

Sources: Statistics Canada, 2015c; BLS, 2000–2002b, 2003–2014b.

unemployment rate was, on average, 1.5 points higher than Alberta’s during this period, at 5.5 percent. Texas’ unemployment rate was nonetheless substantially lower than the US national figure, which averaged 6.8 percent during this period.<sup>5</sup>

### Summary of the economic record

The data presented above suggests that, in many respects, the overall economic performance of both Alberta and Texas was comparably strong. Over the period examined here, economic growth rates in the two jurisdictions were comparable. Real inflation-adjusted output growth was slightly higher in Alberta than in Texas but, once an adjustment is made for population, we see that real GDP growth per capita was slightly higher in Texas.

On the whole, we can conclude that both Alberta and Texas significantly outperformed their respective national averages during this period, and that the overall economic performance of Texas and Alberta were similarly strong during the period in question. While their economic growth rates were comparably strong over this period, there are some important indicators on which Alberta outperformed Texas. Alberta enjoyed more private sector job creation and maintained a lower unemployment rate than Texas in most years from 2004 to 2014.

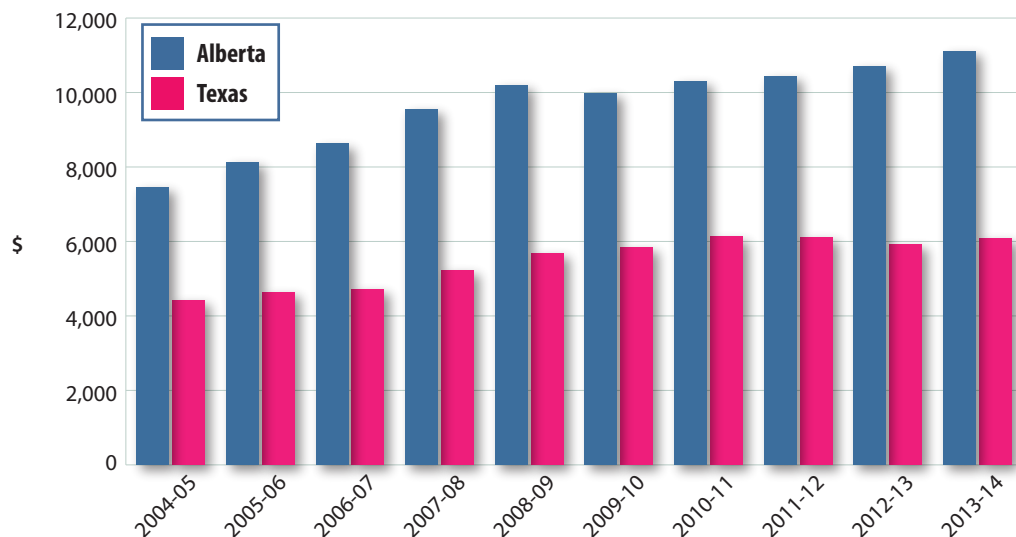
5. Canadian data are from Statistics Canada’s “R3” supplemental unemployment rate, which the organization says is “comparable to the United States rate.” The main difference between the two is that R3 excludes full-time students.

## Fiscal performance in Alberta and Texas

The previous section showed that Alberta and Texas performed comparably well economically between 2004 and 2014. However, one area where the two jurisdictions diverge significantly is the extent to which they chose to manage their public finances prudently. Specifically, Texas maintained a generally superior fiscal record compared to Alberta during this period.

**Figure 8** compares per-capita provincial/state government expenditures in the two jurisdictions. It shows that throughout the period under consideration, per-person government spending in Alberta was substantially higher than in Texas. In 2004/05, per-person spending in Alberta stood at \$7,458 compared to \$4,428 in Texas. In 2013/14 (the last year for which we have comparable data for both jurisdictions), provincial spending stood at \$11,113 per person in Alberta compared to state spending of \$6,079 per person in Texas.

**Figure 8: Per-capita government expenditure, 2004/05–2013/14**



Sources: BEA, 2016c; Finance Canada, 2015; Statistics Canada, 2015b; Urban Institute, 2016; US Census Bureau, 2014; IMF, 2016.

Canadian provinces and American states do have different roles in the financing and delivery of various public services (particularly healthcare), which partly accounts for the higher per-person spending levels in Alberta. However, it is significant to note that the gap between the two jurisdictions grew both in nominal and percentage terms. Whereas in 2004/05, spending was 68.4 percent higher in Alberta than Texas, by 2013/14 that gap had increased to 82.8 percent. While the existence of a gap between the jurisdictions may be partially explained by different responsibilities under the federal systems in the two countries, it is a less compelling explanation for the significant growth in the size of the gap over the course of this period.

Provincial spending per person increased by 49.0 percent in Alberta during this period compared to 37.3 percent in Texas. Again, comparing growth rates between the two jurisdictions is important because it helps measure the extent to which each jurisdiction has managed to control spending despite any differences in specific program spending responsibilities.

One reason for the larger increase in provincial spending in Alberta compared to state spending in Texas was significantly greater public sector employment growth over the course of the period being analyzed ([figure 9](#)). While public sector employment growth varied widely from year to year between 2004 and 2014, the average annual public sector employment growth during this stretch was 2.6 percent in Alberta, more than double the 1.2 percent in Texas. This increase in public sector employment undoubtedly was a source of pressure on the provincial budget, and contributed to the rate of per-capita government expenditure growth discussed earlier.

**Figure 9: Public sector employment growth, 2004–2014**

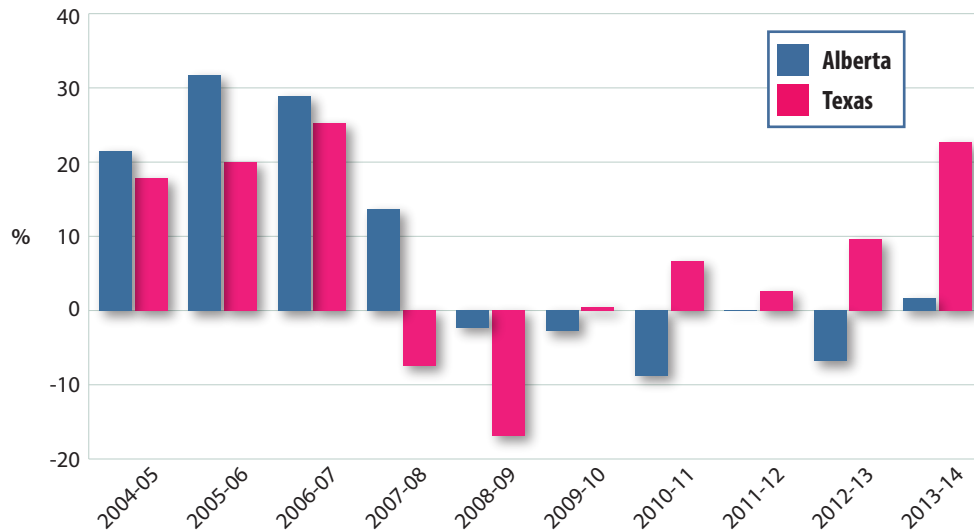


Sources: Statistics Canada, 2016c; BLS, 2000–2002a, 2003–2014a.



These different rates of public sector employment growth and overall expenditure increase contributed to somewhat different fiscal outcomes in the two jurisdictions. **Figure 10** compares the annual budget balance in the two jurisdictions between 2004 and 2014. There was a marked change in the two jurisdictions' typical fiscal outcomes from the first half of the period under consideration to the second. In the first 5 years, Alberta's budget balance was superior to Texas'. However, that changed in 2009/10, when Texas posted a small surplus while Alberta posted a deficit. In the final five years of the analysis (2013/14 is the most recent year with comparable data), Texas posted a budget balance superior to Alberta's. Over the course of the period taken as a whole, the average budget balance for the two jurisdictions was very similar, with Texas' being slightly superior. Alberta's average annual budget balance during this period was a surplus equal to 7.6 percent of total provincial government spending. In Texas, the average annual budget balance was a surplus equal to 8.1 percent of total government spending.<sup>6</sup>

**Figure 10: Provincial and state surplus/deficit as a percentage of total government spending**



Sources: Finance Canada, 2015; Urban Institute, 2016; US Census Bureau, 2014.

Although both governments posted similar average budget surpluses over the entire course of this period, figure 10 hints at some of the storm clouds that were coming onto the horizon for Alberta. The province's average over the period taken as a whole is buoyed by large surpluses in the first four years. In the final 6 years under analysis, Alberta posted just one very small surplus in 2011/12. By comparison, Texas ran four surpluses during this period.

6. One contributing factor to this outcome may be the fact that Texas has a constitutional requirement that its legislature cannot pass an operating budget that is in deficit.

Figure 10 showed similar outcomes, over the period taken as whole, if you compare average budget surpluses and deficits between the two jurisdictions. However, annual budget balances don't tell the whole story about a jurisdiction's fiscal well-being, because governments often acquire additional debt through their capital budgets that does not show up on the annual operating budget or the province's "bottom line" deficit number for a given year.

When governments in Canada report a budget "deficit" this reference is often to the operating budget—the difference between annual revenues collected and the money spent on day-to-day expenses like healthcare, education and remuneration of public employees. This is the number reported in figure 10.

However, when governments in Canada borrow to pay for capital spending (roads, schools, hospitals), they typically record only the annual interest payments and amortization expense in the operating budget. The capital budget is where the province borrows money to pay for its long term infrastructure spending. This accounting process helps spread costs of major projects out over many years, but it can disguise the amount of money governments add to their financial debt burden in a given year if one only considers the operating budget. This is a critical point to recognize, since governments can sometimes add more debt to their books for capital projects than from operating deficits announced in the budget which are widely reported.

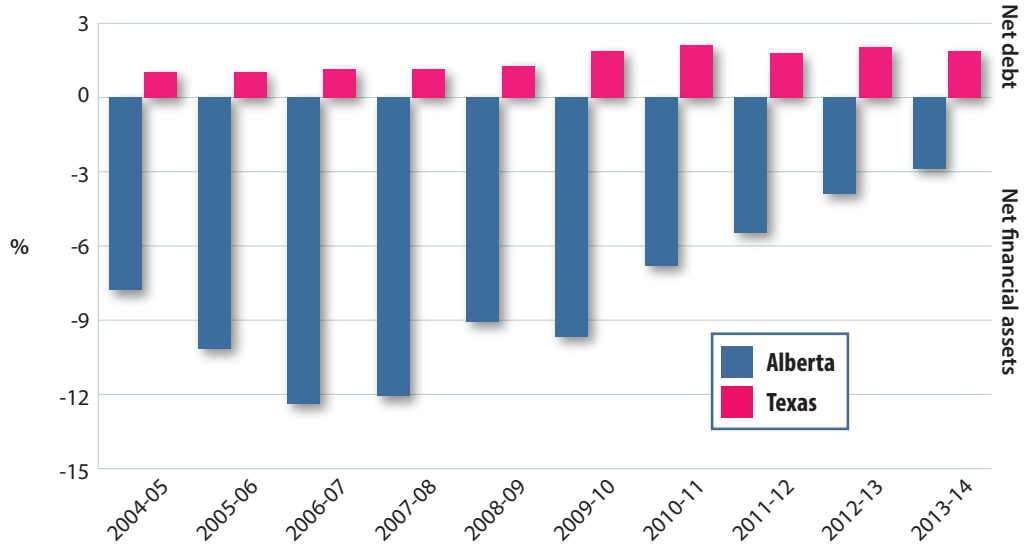
We can account for these facts by comparing the two jurisdictions in terms of their overall change in financial assets from year to year from 2004 to 2014. Compare the evolution of the jurisdictions' net financial asset position<sup>7</sup> relative to GDP: while Alberta began this period with a much stronger net asset position than Texas, it has seen its financial position deteriorate significantly while Texas' has remained roughly unchanged.

**Figure 11** expresses the net financial position of each jurisdiction by comparing net public debt to GDP. Alberta began the period with a significant net asset position, so it is shown as having substantial negative net debt in 2004/05. Specifically, the province enjoyed net financial assets that represented 7.8 percent of provincial GDP at that time. By comparison, Texas had a net debt position equal to 1.0 percent of GDP. Over the course of the period being analyzed, however, Alberta's financial position initially improved but then deteriorated. By 2013/14, Alberta's net assets relative to GDP had declined by 4.9 percentage points, falling to 2.9 percent of GDP, driven in large part by persistent operating deficits. The province ran seven operating deficits in eight years beginning in 2008/09, and most of those deficits took place with oil prices—and provincial government revenue—at historic highs

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7. Net financial assets are defined as the difference between financial assets and total liabilities. The term net public debt is used here to represent negative net financial assets (liabilities exceed financial assets). Negative net public debt implies a positive financial asset position.

Figure 11: Net public debt to GDP ratio



Sources: Finance Canada, 2015; TD Economics, 2016a, 2016b; Statistics Canada, 2016d; Urban Institute, 2016; US Census Bureau, 2014; BEA, 2016b.

(Lafleur et al., 2015). Texas did not experience a comparable deterioration in its financial position, as Texas’ net public debt to GDP ratio increased by just 0.9 percentage points, from 1.0 percent to 1.9 percent. Although Texas’ net debt essentially doubled, it remains a small share of GDP.

Alberta is expected to become a net debt province this year, which will make its overall debt position comparable to Texas’ for the time being. However, a comparison of changes in assets during the period under analysis favours Texas, and suggests that Texas’ future fiscal prospects are brighter than Alberta’s. Also, it is the trends in the latter part of the period that are of particular importance for Alberta, as developments during those years helped set the table for recent negative fiscal developments which will be discussed in the next section.

Figure 11 shows that after the province’s net assets peaked relative to GDP in 2006/07 at 12.4 percent, the province has begun to see substantial and sustained year-to-year deterioration in its financial position. In fact, on average, Alberta’s net assets relative to GDP declined at an average annual rate of 1.4 percentage points from 2007/08 until 2013/14. The result was that the province’s net financial assets fell from 12.4 percent of GDP in 2006/07 to just 2.9 percent of GDP over just seven years. By comparison, Texas’ net debt increased by just 0.9 percentage points during the same period, or less than Alberta’s average change in every year over the period.

It is important to recognize that this erosion of Alberta’s net asset position occurred, as the first section of this report established, during a period of strong economic growth. A crucial reason that this happened, as noted above, is that Alberta enacted significant year-over-year spending increases

throughout the period in question. Not only was spending growth substantially higher than in Texas, but it was also faster than key economic metrics including the combined rate of inflation plus population, and overall economic growth. One recent analysis shows that if spending growth had been held to the same rate as either of these indicators, the persistent budgets of the latter years of our analysis period would not have emerged (Lafleur et al., 2015).

The rapid pace of asset deterioration during times that were generally good should have set off alarm bells about what would happen when a negative economic shock occurred—such as what happened beginning in 2015, a development we discuss in the following section.

### **Summary of fiscal analysis**

Generally speaking, Texas' fiscal performance was stronger than Alberta's over the course of the period examined. The gap between the two provinces, however, is much more pronounced during the later years of our analysis period. Provincial government spending and public sector employment both grew significantly faster in Alberta than in Texas. While the two provinces both ran, on average, budget surpluses over the period in question, Texas' performance was much better than Alberta's when changes in the two jurisdictions' overall net asset position are considered. While Texas' financial position remained relatively unchanged over this ten year period, Alberta experienced significant erosion in its net asset position, a process which accelerated significantly in the latter years of the analysis. On the whole, we can conclude that the government of Texas managed its finances more successfully than did the government of Alberta.

## Alberta and Texas today

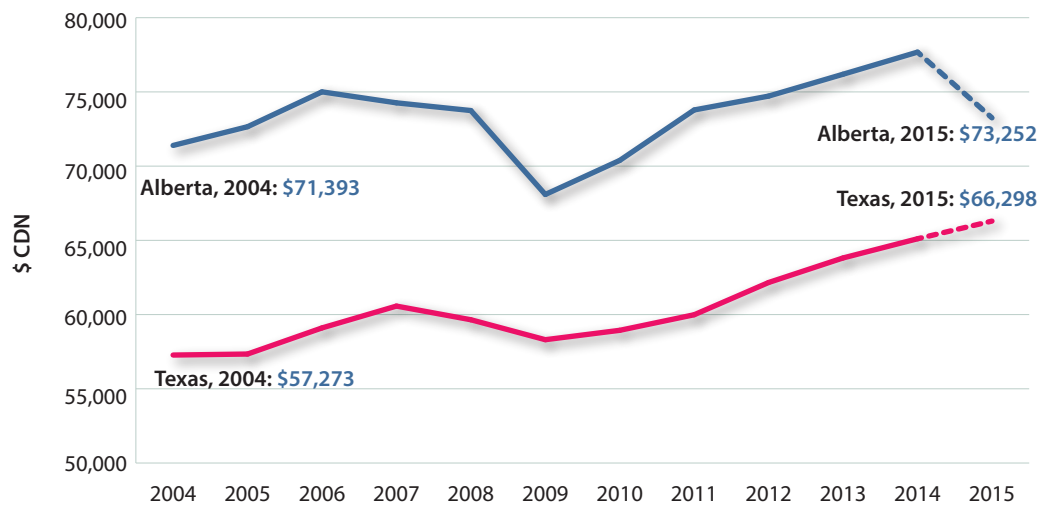
We have seen that while Alberta and Texas both experienced generally strong economic growth from 2010–2014, Texas’ public financial management was generally more successful than Alberta’s. Of particular importance, we have seen that Alberta’s pace of asset erosion was accelerating significantly in the final years of our analysis despite relatively high energy prices and strong economic performance.

When the good times finally came to a sudden halt in 2015 with the rapid fall of energy prices, Alberta’s finances were poorly positioned to absorb the blow and the province now faces significantly bleaker economic prospects than Texas.

The fall in energy prices has done considerably more damage to the Albertan economy than to the Texan one. This is true in part because, as was shown in figure 1, Alberta’s economy is centered to a greater extent than Texas on its oil and gas industry. This is an important reason why prudent financial management and spending restraint is especially important in Alberta during good economic times—the province is naturally inclined towards bigger booms and bigger busts than jurisdictions less reliant on energy prices, and therefore must manage their finances accordingly when times are good, recognizing that harder times will likely eventually arrive.

And hard times did indeed arrive as oil prices began to plunge in late 2014, triggering a deep recession in 2015. Alberta’s economy shrank by 4 percent (in real terms) in 2015. By comparison, Texas’ economy grew in real terms 3.8 percent that year. This is not to suggest Texas has emerged unscathed—in 2016, the state is expected to trail the national average in job creation for the first time since 2000, partly as a result of lower energy prices. However, it is clear that Alberta has suffered a substantially worse economic downturn.

The sudden contraction in the Alberta economy is represented graphically in **figure 12**, which reproduces figure 4, but adds the evolution of each jurisdiction’s real GDP per capita in 2015. The sharp contraction in Alberta’s GDP and the continued increase in Texas’ caused the gap in the two entities’ real GDP per person to shrink dramatically. The gap in GDP per person shrank from \$12,574 (2007 dollars) in 2014 to just \$6,954 in 2015. The sudden reduction of the gap between the two provinces in terms of real GDP per capita—by nearly half—speaks to the severity of the economic downturn in

**Figure 12: Real per-capita GDP, 2004–2015**

Note: Alberta's 2015 real GDP value is based on the growth rate shown in the all-industry total of Statistics Canada (2016a).

Sources: Statistics Canada, 2015a, 2015b; BEA, 2016a, 2016b, 2016c; IMF, 2016; .

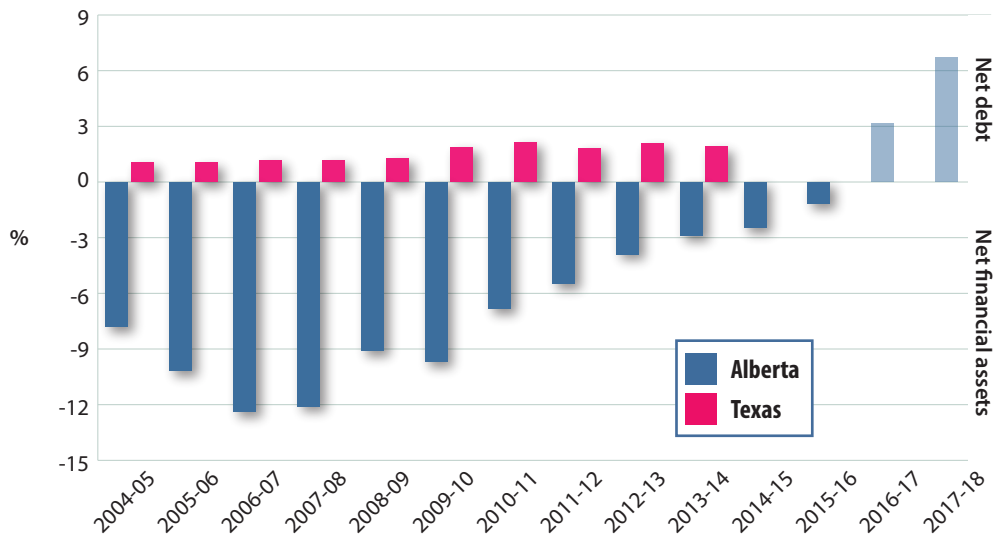
Alberta and the extent to which Texas, to date, has been able to successfully weather the storm of lower energy prices.

Given that we have seen that Alberta's financial position was already eroding quickly in the years leading up to the recent recession in that province, it should come as no surprise that this trend has accelerated alarmingly with the recent sharp economic contraction. **Figure 13** illustrates this fact by reproducing figure 11, and adding the most recent net debt statistics in Alberta (for FY 2014/15 and 2015/16, for which no strictly comparable Texan data exists), as well as projections for this fiscal year and next presented in a lighter shade.

Figure 13 shows that the erosion in Alberta's fiscal position is now expected to continue and indeed to accelerate in the years ahead. The province is expected to arrive at a net debt position in this fiscal year, and the province's net debt is expected to reach 6.7 percent of GDP in 2017/18, a level that would put it far beyond where Texas stands today.

As noted, we do not have strictly comparable data for Texas. However, given the stability of the state's financial assets over the course of the past decade (including during the recession of 2009), the fact that the state has not experienced a severe economic shock, and the fact that state fiscal plans currently call for surpluses through to 2017, it is possible to confidently predict that Texas will not experience a comparable run-up in debt over the next two years. While some analysts have warned that the state's surpluses may be smaller than expected and Moody's has in fact warned it may disappear entirely by 2017, there is no plausible reason to expect large budget deficits and a rapid run-up in debt in Texas such as Alberta is expecting in the years ahead (Moody's, 2016).

**Figure 13: Net debt to GDP ratio**



Sources: Alberta budget and public accounts, various years; BEA, 2016b; Statistics Canada, 2016d; US Census Bureau, 2014.

Figure 13 shows that by the end of this fiscal year, Alberta will have fully squandered the substantial net asset position advantage that it held over Texas in 2004 at the beginning of the period analyzed in this report. In fact, the province’s net debt is projected to climb to 6.7 percent of GDP by the end of 2017/18, which is much larger than the net debt burden carried by Texas at any point considered in this analysis.

And the accumulation of debt is not expected to end after 2017/18. Alberta’s finance minister has stated that his government does not expect to balance the budget until 2024, and the province’s debt burden is therefore expected to continue increasing until then. Further, government projections are based on promises of spending restraint that go beyond what this or previous governments have yet demonstrated themselves sufficiently disciplined to deliver. If the government fails to deliver promised spending restraint, debt will increase even faster than the government currently projects (Lafleur, Eisen, and Palacios, 2016).

In summary, the data show that the rapid asset erosion that began in Alberta in the latter part of the boom period considered here has accelerated dramatically since recession hit the province in 2015. By comparison, Texas is not at risk of a similar run-up in debt and has a significantly brighter fiscal outlook than Alberta at least in the short and medium term.

## Conclusion

Although Alberta's economy is considerably more diversified than it was 20 years ago, and is much more diversified than some cartoonish descriptions of the province as a "petrostate" suggest, the province nonetheless relies heavily on its energy sector as a major driver of economic growth. This means that the province is more prone to pronounced economic booms and slumps than most other jurisdictions.

This feature of the Albertan economy makes it especially important for governments to manage public finances cautiously and prudently during good economic times in preparation for revenue dips and other challenges during more difficult periods.

The period from 2004 to 2014, which despite some fluctuations amounted to a prolonged boom for the Albertan economy, should therefore be recognized as a remarkable missed opportunity for Alberta. Despite strong economic growth in most years, the province failed to build its financial assets and provide a cushion in preparation for an eventual downturn. In fact, the province's financial asset position began to erode as early as 2007/08, even during several years when energy prices were high.

As a result of these errors of fiscal management, the province found itself facing very large budget deficits and an even more rapid run-up in debt when energy prices began a steep decline near the end of 2014. Texas, on the other hand, increased spending at a more prudent rate and prevented any substantial increase in its net debt burden during its years of strong growth, putting the state in a much better position than Alberta to address any public finance challenges that may emerge as a result of the recent drop in energy prices.

Partly as a result of different policy choices, Alberta and Texas are now on very different fiscal trajectories as Texas' financial position is comparatively strong while Alberta faces large budget deficits and a potentially costly and economically damaging run-up in debt. One can hope that when Alberta's economy does recover and begins to grow strongly again, policy-makers will have learned the lesson from this energy price cycle and will manage the province's finances more prudently during good times, in order to avoid painful fiscal consequences in the future similar to those the province is confronting today.



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