

# Economic Performance

Our analysis of Ontario's economic performance over the last 20 years is based on three broad measures of economic performance: income, labour markets, and investment. Ontario's performance is evaluated both absolutely and relative to that of other Canadian provinces and the US states.

## I Income

Two measures are employed to evaluate Ontario's achievements in increasing the incomes of its residents: gross domestic product (GDP) and personal disposable income. Gross domestic product is a broad measure of income in that it measures the total value of goods and services produced in a specific jurisdiction over the course of a specific time period. Personal disposable income is a similar measure more narrowly defined: it measures the income received by individuals after the payment of direct taxes.

There are a variety of ways in which to measure performance in both of these areas. The most commonly employed method is to examine the aggregate trends in GDP and personal disposable income. This method is expedient but ignores population changes. This study focuses on per-capita measures of GDP and personal disposable income, both in terms of value and changes over time. In addition, all values are presented in real, inflation-adjusted, Canadian dollars.

### Gross Domestic Product

Gross domestic product (GDP) is a broad measure of income that assesses the value of all goods and services produced in an economy over the course of a particular time period. Economic Figure 1 presents the trend of real per-capita GDP in Ontario and Canada since 1981.

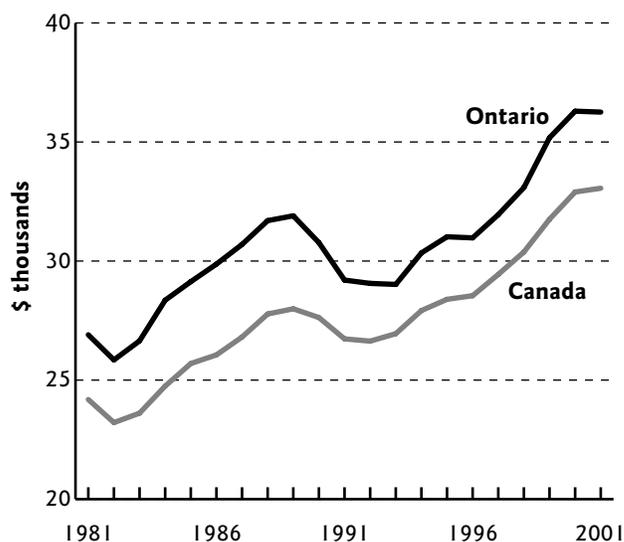
Ontario's real (inflation-adjusted)<sup>1</sup> per-capita GDP has increased 34.8% since 1981, increasing from \$26,903 in 1981 to \$36,256 in 2001. The pre-2000 peak occurred

in 1989, when real per-capita GDP hit \$31,899, only to recede to \$29,018 by 1993. Ontario's real per-capita GDP has grown 24.9% since reaching a low in 1993.

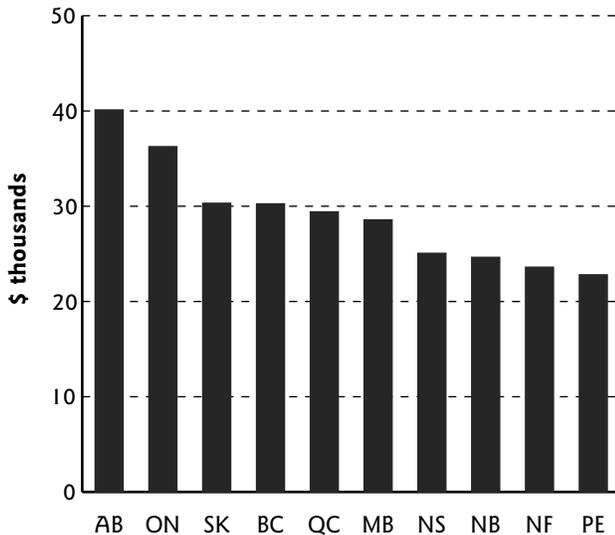
Economic Figure 2 depicts the 2001 provincial rankings for real per-capita GDP. Ontario possesses the second highest level of per-capita GDP at \$36,256. Alberta has the highest level of per-capita GDP at \$40,112. Alberta and Ontario significantly out-perform the remaining Canadian provinces including British Columbia, which has historically been a "have" province.

Economic Figure 3 is similar to the previous figure except that it compares Ontario to a select group of Canadian provinces and American states, Canada's four largest provinces (British Columbia, Alberta, Quebec and Ontario) and ten American states bordering Ontario (Illinois, Indiana, Iowa, Kentucky, Michigan, Minnesota, New York, Ohio, Pennsylvania, and Wisconsin). The rankings are for 2000 rather than 2001, as state-level data for 2001 were not available at the time of publication. In addition, nominal values are used rather

**Economic Figure 1: Ontario and Canada—Real Per-Capita GDP (\$1997)**



Sources: Statistics Canada, Provincial Economic Accounts; calculations by the authors.

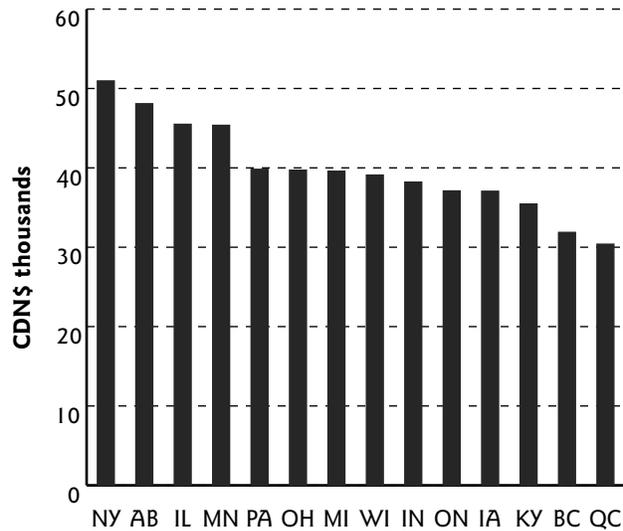
**Economic Figure 2: Canadian Provinces—Rank by Per-Capita GDP (\$1997), 2001**

Sources: Statistics Canada, Provincial Economic Accounts; calculations by the authors.

than real values due to differences in deflator series between Canada and the United States.<sup>2</sup> Purchasing Power Parity exchange rates were employed to convert US dollars to Canadian to account for differences in the prices of goods and services between the two countries.<sup>3</sup>

Ontario's relative performance drops significantly once bordering US states are included in the comparison<sup>4</sup> as Ontario drops from second place when ranked exclusively against Canadian provinces to tenth place once bordering US states are added. In fact, the only American jurisdictions that Ontario out-performs are Iowa and Kentucky and the difference between Ontario and Iowa is marginal. New York, the highest ranked American state included in the comparison, maintained a per-capita GDP 37.0% higher than Ontario. In addition, many of the US states included in Economic Figure 3 maintain a relatively large gap in per-capita GDP over Ontario. In particular, states with similar manufacturing and industrial economies, like Michigan and Ohio, both out-performed Ontario by a measurable amount.

More indicative of Ontario's overall performance and, indeed, of the Canadian provinces' generally poor performance is presented in Economic Figure 4, which shows the nominal per-capita GDP rankings for all

**Economic Figure 3: Selected Canadian Provinces and US States—Rank by Per-Capita GDP (\$nominal), 2000**

Sources: Statistics Canada, Provincial Economic Accounts; Bureau of Economic Analysis; Bureau of Labor Statistics; Organisation for Economic Cooperation and Development; calculations by the authors.

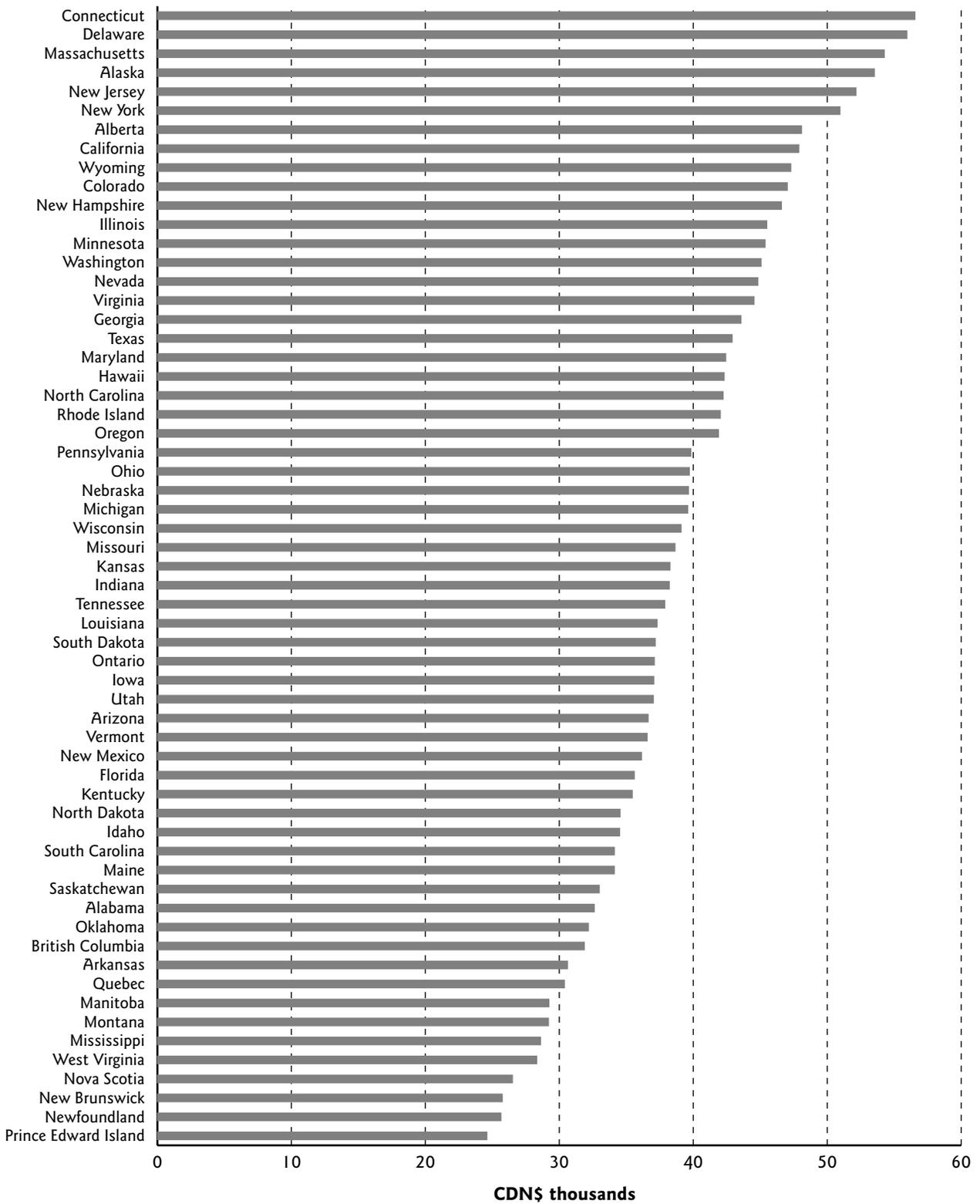
Canadian provinces and American states for 2000, the most recent year for which US data is available on a state basis. Ontario ranks 35<sup>th</sup> overall, just behind South Dakota and just barely ahead of Iowa. Seven of Canada's ten provinces ranked in the bottom quintile, with four of the Canadian provinces ranking dead last.

The performance of Ontario in facilitating increases in real per-capita GDP is relatively positive within the Canadian context. It has the second highest per-capita GDP in Canada. Ontario's relative performance drops significantly once bordering US states are included in the comparison and declines even further when all US states are included. Ontario's performance, although reasonably good in the Canadian context, must improve if Ontario is to achieve levels of income comparable to that of citizens in most US states.

#### **Personal disposable income**

Personal disposable income, a measure of the amount of income available after the payment of direct taxes, is a more narrow measure of income performance. Economic Figure 5 presents the trend of real per-capita personal disposable income in Ontario and Canada since 1981. The

**Economic Figure 4: Canadian Provinces and US States—Rank by Per-Capita GDP (\$nominal), 2000**



Sources: Statistics Canada, Provincial Economic Accounts; Bureau of Economic Analysis; Bureau of Labor Statistics; Organisation for Economic Cooperation and Development; calculations by the authors.

growth in personal disposable income in Ontario has been less robust than that of GDP, the broader measure of income: real per-capita personal disposable income in Ontario grew 11.7% between 1981 (\$20,650) and 1989 (\$23,062). Between 1989 and 1996, real per-capita personal disposable income declined by 8.5%, dropping to a low of \$21,103. It rebounded between 1996 and 2000, growing 10.4% and reaching \$23,290 in 2000 before dropping slightly to \$22,981 in 2001. All told, real per-capita personal disposable income in Ontario increased 11.3% over the entire period.

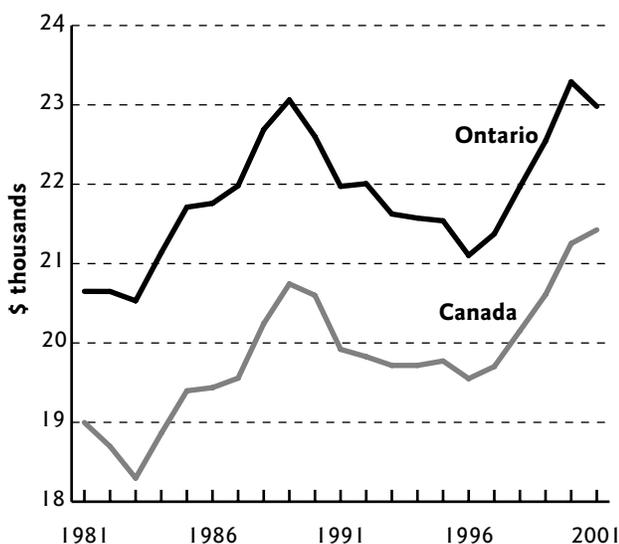
Economic Figure 6 presents the provincial per-capita personal disposable income rankings for 2001. Like the previous GDP measure, Ontario possesses the second highest per-capita personal disposable income in Canada, totalling \$22,981 in 2001. Alberta leads the country with per-capita personal disposable income valued at \$23,933. Ontario is well ahead of the remaining provinces, exceeding third-place British Columbia's per-capita personal disposable income by \$2,298 or 11.1%.

Economic Figure 7 presents the per-capita personal disposable income rankings for the select group of Canadian provinces and American states for 2001. As was the case for per-capita GDP, the performance of Ontario and,

indeed, of the Canadian provinces in general is low relative to the American states. Ontario drops from second place to twelfth out of 14 jurisdictions based on the 2001 value of per-capita personal disposable income. The four Canadian provinces included in the rankings contained in Economic Figure 7 occupy the bottom four rankings, indicating that the per-capita personal disposable incomes of the four Canadian provinces fail to exceed any of the same values in the group of US states. New York's per-capita personal disposable income exceeds that of Ontario by an astonishing \$12,605 or 54.8%. In fact, the only US state that either Alberta or Ontario comes close to matching in its per-capita personal disposable income is Kentucky, which still outperforms Ontario by \$2,834 or 12.3%.

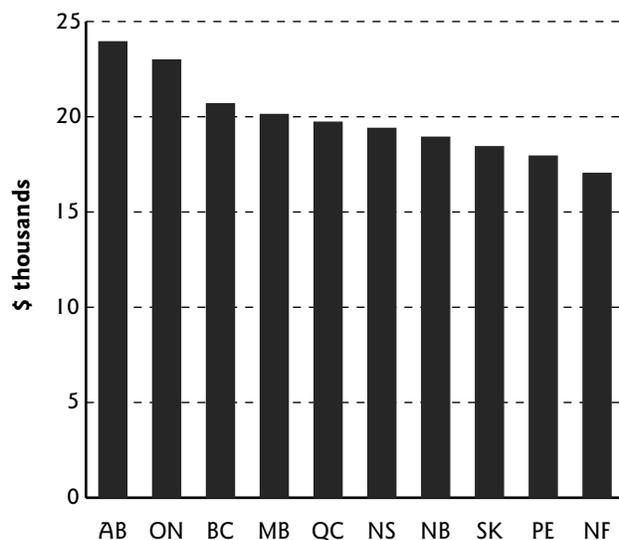
The relative positions of Ontario and the Canadian provinces in general worsen once all the US states are included. Economic Figure 8 presents the provincial and state rankings for per-capita personal disposable income for 2001. Alberta, the highest ranked Canadian province, achieves a ranking of 50<sup>th</sup>, beating only Mississippi and the other Canadian provinces. Ontario ranks 52<sup>nd</sup> out of the 60 Canadian provinces and US states. Ontario, therefore, is unable to out-perform any US state on this measure.

**Economic Figure 5: Ontario and Canada—Real Per-Capita Personal Disposable Income (\$2001)**



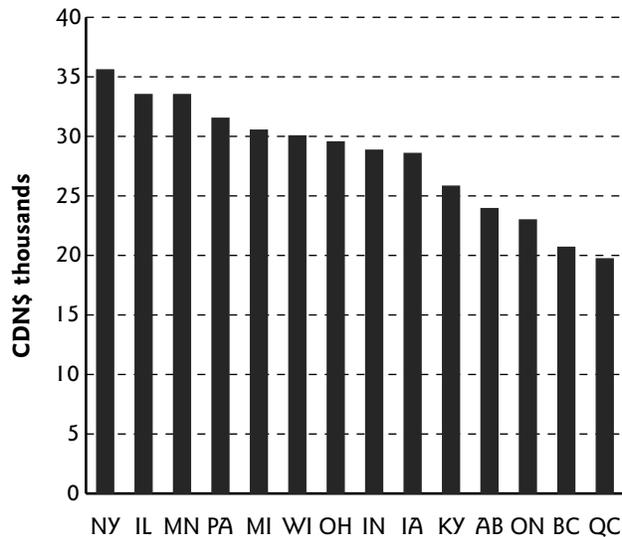
Sources: Statistics Canada, Provincial Economic Accounts; calculations by the authors.

**Economic Figure 6: Canadian Provinces—Rank by Per-Capita Personal Disposable Income (\$2001), 2001**



Sources: Statistics Canada, Provincial Economic Accounts; calculations by the authors.

**Economic Figure 7: Selected Canadian Provinces and US States—Rank by Per-Capita Personal Disposable Income (\$2001), 2001**



Sources: Statistics Canada, Provincial Economic Accounts; Bureau of Economic Analysis; Bureau of Labor Statistics; Organisation for Economic Cooperation and Development; calculations by the authors.

### Conclusion

Ontario performs well on both measures of income performance, per-capita GDP and per-capita personal disposable income, within the Canadian context, where it ranks second on both measures. It is within the context of bordering US states and the US states in general that Ontario's performance lags. When compared to our southern neighbours, Ontario's per-capita GDP and per-capita personal disposable income performance is weak. One of Ontario's immediate goals must be to raise its level of performance to that of average American states. It must begin to look beyond the borders of Canada for inspiration regarding the potential of the province. Ontario's long-term goal should be to achieve a level of income, defined both broadly in terms of per-capita GDP and more narrowly in terms of personal disposable income, that ranks in the top one-fifth of Canadian provinces and US states.

## 2 Labour market

A second measure of economic performance employed by this study is the performance of the labour market, the ability of a jurisdiction to increase employment, decrease unemployment, and maintain a flexible labour market.

### *Growth in employment, job creation, and unemployment rates*

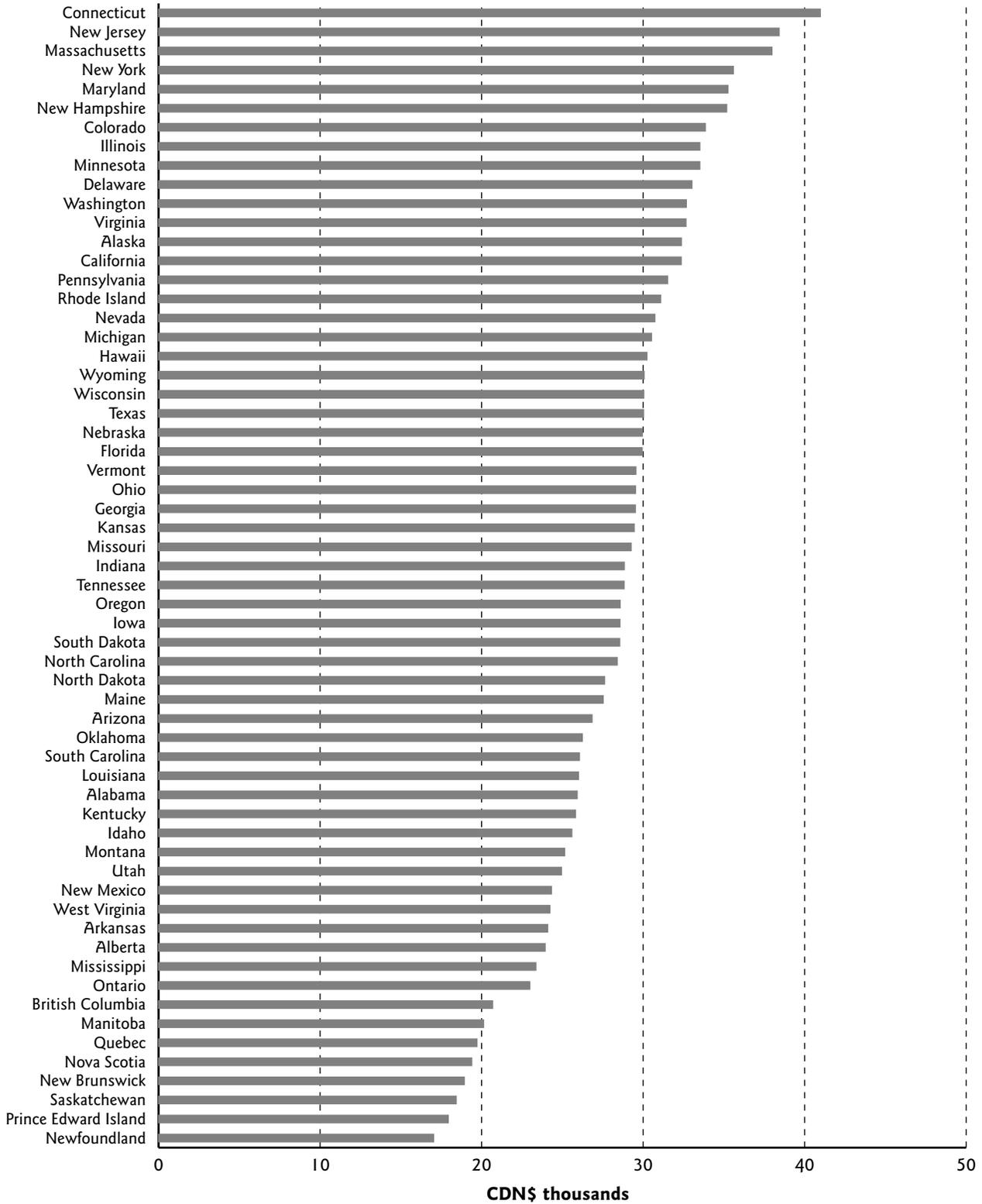
Ontario's performance with respect to both employment and unemployment rates is mixed compared with its performance on income. Economic Figure 9 presents employment figures for Ontario and Canada, constructed as an index of the number of individuals employed in 1980. The value of the index in 1980 is equal to 1.0 and, if employment increased by 10.0% from 1980 to 1981, the index value would be 1.1 in 1981.

Ontario and Canada clearly move in unison with respect to job creation. Both experience a relatively robust period of job creation between 1982 and 1989: Ontario increased its employment from 4.2 million in 1982 to 5.2 million in 1989, an increase of 23.8%. Ontario and Canada then experienced a retraction in employment, owing largely to the recession of the early 1990s. Employment bottomed in Ontario in 1992 at 4.9 million. It has since experienced accelerated growth, reaching just under 6.0 million in 2001.

Economic Figures 10 and 11 present average rates of employment growth for the Canadian provinces for the periods from 1981 to 1990 and from 1991 to 2001. Ontario recorded the highest rate of employment growth of any province between 1980 and 1990, recording an average growth rate of 2.2%. Ontario recorded strong employment growth in 1990s as well, although it was only able to achieve a fourth-place ranking with its average rate of employment growth of 1.3% from 1991 to 2001.

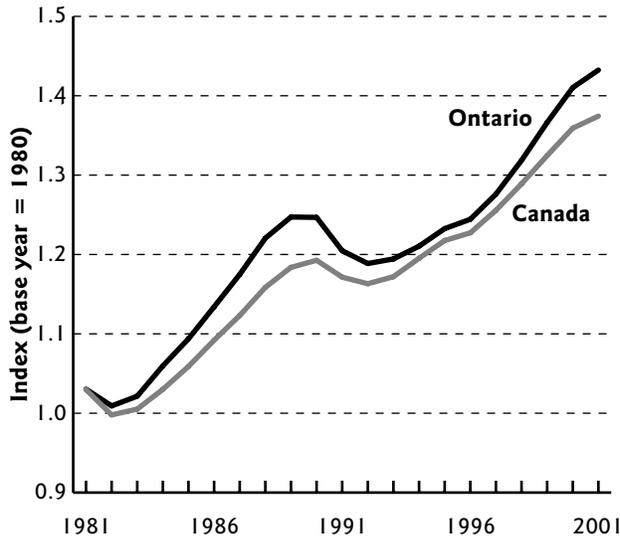
Economic Figure 12 compares the employment growth of Ontario with a select group of Canadian provinces and American states from 1991 to 2001. Ontario ranks sixth out of the 14 jurisdictions analyzed, recording an average rate of employment growth of 1.3% over the period. This compares with a top rate of 2.2% recorded by Alberta and a bottom rate of near 0.0% by New York. Economic Figure 13 presents the rankings for

**Economic Figure 8: Canadian Provinces and US States—Rank by Per-Capita Personal Disposable Income (\$2001), 2001**



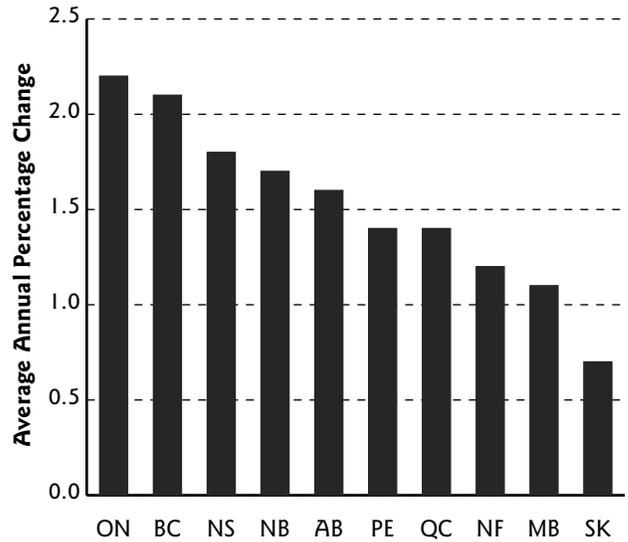
Sources: Statistics Canada, Provincial Economic Accounts; Bureau of Economic Analysis; Bureau of Labor Statistics; Organisation for Economic Cooperation and Development; calculations by the authors.

**Economic Figure 9: Ontario and Canada—Growth in Employment, 1981–2001**



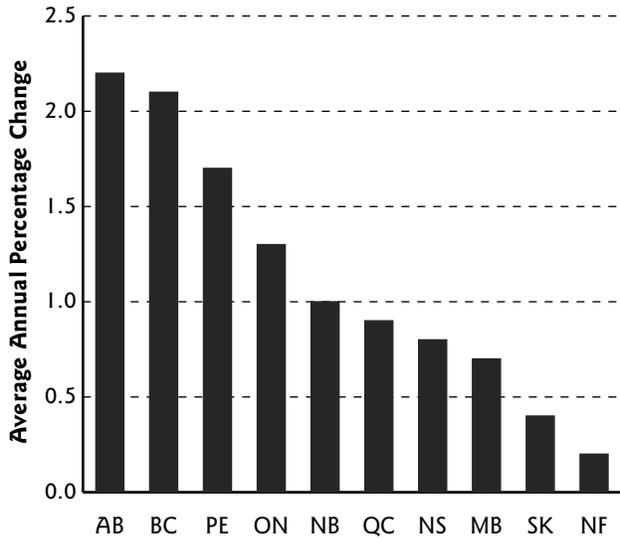
Sources: Statistics Canada, Provincial Economic Accounts; calculations by the authors.

**Economic Figure 10: Canadian Provinces—Average Growth in Employment, 1981–1990**



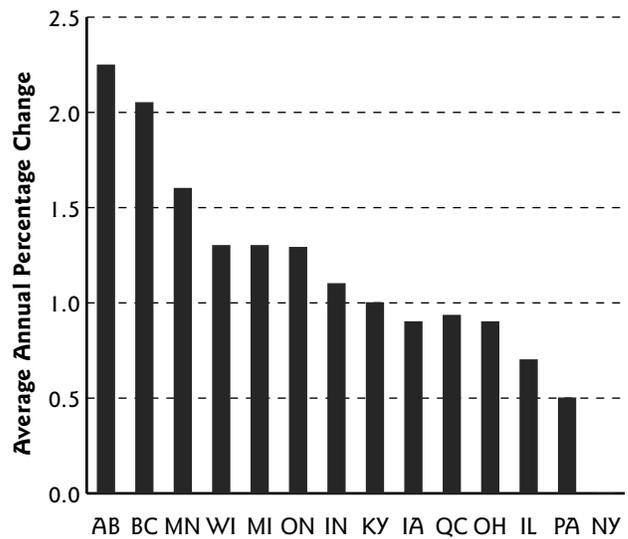
Sources: Statistics Canada, Provincial Economic Accounts; calculations by the authors.

**Economic Figure 11: Canadian Provinces—Average Growth in Employment, 1991–2001**



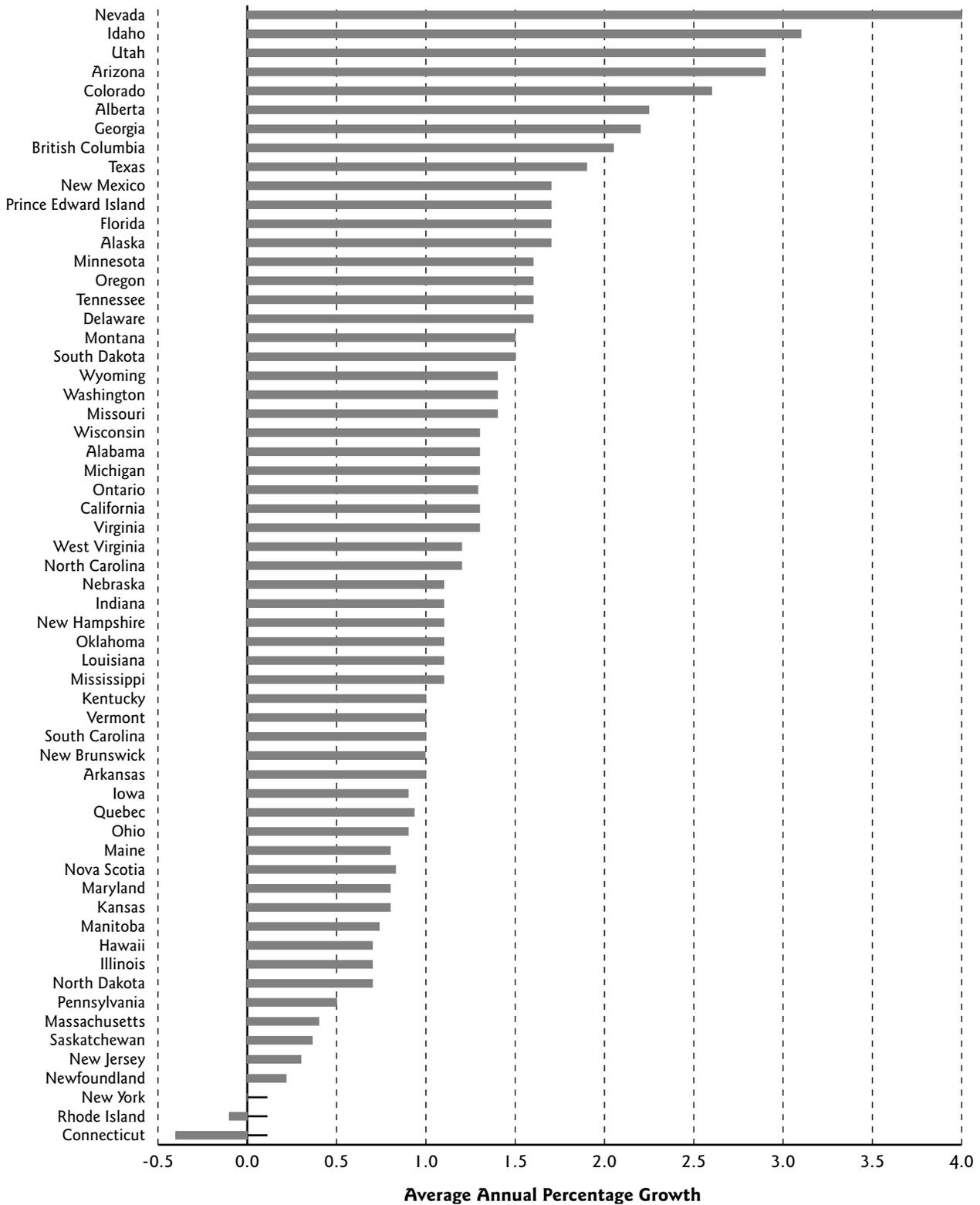
Sources: Statistics Canada, Provincial Economic Accounts; calculations by the authors.

**Economic Figure 12: Selected Canadian Provinces and US States—Average Annual Growth in Employment, 1991–2001**



Sources: Statistics Canada, Provincial Economic Accounts; Bureau of Labor Statistics; calculations by the authors.

**Economic Figure 13: Canadian Provinces and US States—Average Annual Growth in Employment, 1991–2001**



Sources: Statistics Canada, Provincial Economic Accounts; Bureau of Labor Statistics; calculations by the authors.

the average annual growth in employment from 1991 to 2001 for all Canadian provinces and US states. Overall, Ontario ranks 26<sup>th</sup> out of 60 jurisdictions. Canada's top-ranked province was Alberta, which ranked sixth. Nevada maintained the top position with an average employment growth rate of 4.0%.

### ***Employment in the public sector***

There is an important aspect missing from the previous discussion: the nature of employment growth. At first reading, readers may assume that the previous section referred to employment growth in the private sector only. On the contrary, employment growth is a broad measure of the labour market and includes employment in both the private sector and the public sector. The following section delineates employment growth within the government sector.

### ***Economic effects of a growing public sector***

How the labour market is split between private-sector and public-sector employment is an important aspect of its performance. A public sector that is growing, both absolutely and relative to the private sector, can have negative economic effects such as misallocations of capital, lower productivity of labour and capital, and, ultimately, services of lower quality at higher prices. The following brief discussion outlines some of the important differences between the private and public sectors.

There are several fundamental differences between private-sector businesses and government entities. Kornai (1992) identified budget constraints as one of the major and unchangeable differences between private-sector business enterprises and government. This is because government budget constraints are "soft" since it is impossible for government to become de-capitalized. Private-sector businesses, on the other hand, face "hard" budget constraints since losses can lead to a decrease in capital and ultimately to bankruptcy.<sup>5</sup> The hard resource constraints of the private sector and the real risk of bankruptcy and failure forces the private sector to react to consumer demands and preferences. In addition, it allows for the reallocation of capital from areas of low priority and low return on investment to those of higher priority and with higher returns, thus ensuring the efficient

allocation of resources. The public sector, with its softer budget and resource constraints face no such competitive pressure nor do they face the risk of bankruptcy and flight of capital.

Another essential difference is that governments are preoccupied with fulfilling social goals and objectives rather than pursuing economic or business objectives (Megginson and Netter 2001). This often leads to the inefficient allocation of resources. Megginson and Netter (2001) found that government businesses tend to develop with less capital and thus are more labour intensive than their private-sector counterparts. The under-capitalization of government entities has negative implications for both labour and total factor productivity. Ehrlich (1994) found that a shift from state to full private ownership can increase the long-run annual rate of total factor productivity (TFP)<sup>6</sup> by 1.6% to 2.0% and the rate of unit cost can decline by 1.7% to 1.9%. In other words, government entities maintained both lower total factor productivity and higher unit costs.

Another important difference, one that particularly affects employee incentives and consumer prices, is that government entities tend to operate in a monopoly environment that precludes competition whereas private-sector businesses normally operate in highly competitive markets.<sup>7</sup> The monopoly environment within which the public sector generally operates results in significantly diminished pressures to serve consumers, react to market demands, and offer competitive prices. In fact, the general characteristics of a monopoly are poor customer service, products of lower quality, and higher prices.

Mueller (2000) found that public-sector employees in Canada tend to be paid a wage premium compared with their private sector counterparts.<sup>8</sup> Gunderson (2000) found that the public-sector wage premium was roughly 9.0%. Bender (1998) concluded that the wage premium of public-sector workers ranged between 5% and 15% in Canada and 5% and 20% in the United States. This should be of paramount concern since research indicates that the public sector maintains lower levels of productivity.

The public-private split in employment is an important aspect of labour market performance as the incentives, productivity, and performance of labour activity in the private sector is different from that present in the

public sector. The reasons for the differences include lower threat of competition, possible presence of protectionist policies, higher unionization rates (discussed later), and the presence of vastly different incentives. Thus, the overall productivity of the labour market will be different depending upon how much employment is in the public sector and how much in the private.

*Number of jobs in the public sector*

Economic Figure 14 shows the number of full-time equivalent public-sector jobs between 1981 and 2001. To aid comparison with the United States, public-sector employment has been broadly defined to include both the public sector and government business enterprises (Crown Corporations). As depicted in Economic Figure 14, there was a significant escalation in the number of Ontarians employed by the public sector between 1981 and 1991: public-sector employment (broadly defined) in Ontario increased by 29.2% between 1981 and 1991, rising from 660,437 to 853,007.<sup>9</sup> The growth rate of total public-sector employment over this period exceeded the comparable growth rate for total employment by roughly 10-percentage points.

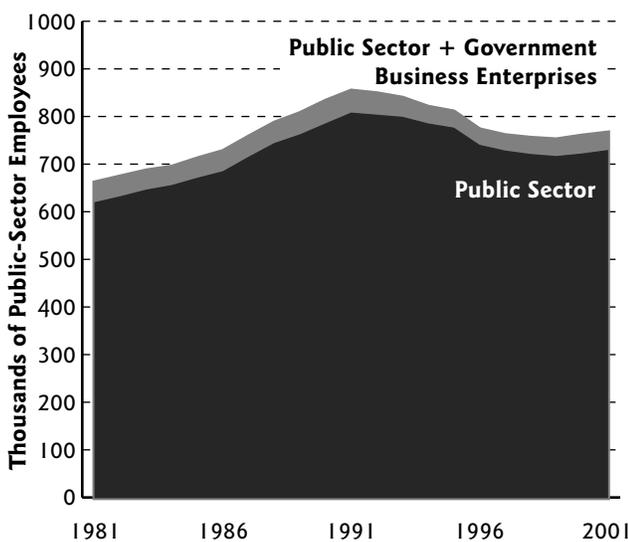
On an annual basis, Ontario's public-sector employment growth averaged 2.6% between 1981 and 1991,

while total employment of the province grew at an average rate of only 2.2% over the same time period. In fact, Ontario recorded the second highest average annual growth rate in the public sector over this time period.

The growth of Ontario's public sector changed course dramatically during the 1990s. Ontario tied for the second highest rate of decline in the public sector between 1990 and 2001, averaging -0.7% per year. Only Alberta recorded larger average declines (-1.2%). Nevertheless, even after the reductions implemented in the 1990s, Ontario's public sector in 1999 (750,606) was still 13.7% larger than the public sector that existed in the province in 1981. Since its low in 1999, the public sector in Ontario has begun to grow again and stood at 764,872 in 2001, the most recent year for which data is available. These rather large annual declines in the public sector during the 1990s did not, however, dampen the entire labour market. Ontario still recorded the fourth highest average annual growth rate for overall employment (Economic Figure 11) during this period.

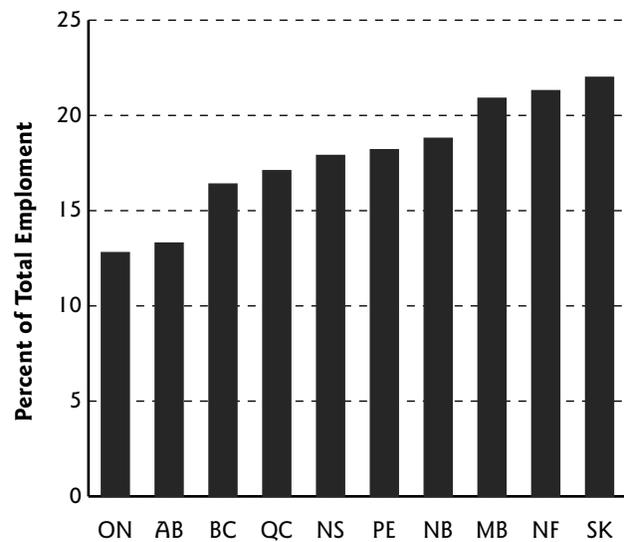
Ontario currently has the smallest public sector as a percent of total employment (Economic Figure 15), 12.8% of total employment<sup>10</sup> for the 2001. Alberta, in

**Economic Figure 14: Ontario—Growth in Public Sector, 1981–2001**



Sources: Statistics Canada, Public Institutions Division, Financial Management System; calculations by the authors.

**Economic Figure 15: Canadian Provinces—Rank by Employment in the Public Sector as a Percent of Total Employment, 2001**



Sources: Statistics Canada, Provincial Economic Accounts; Statistics Canada, Public Institutions Division, Financial Management System; calculations by the authors.

comparison, ranks second, with a public sector at 13.3% of total employment. Saskatchewan maintains the largest public sector, 22.0% of total employment.

Ontario performs moderately well on this measure of labour performance even after American states are included in the analysis (Economic Figures 16 and 17), ranking sixth out of the 14 jurisdictions—bordering US states and a select group of Canadian provinces—included in Economic Figure 16. Ontario is competitive particularly with those border states closest to it: Indiana (12.5%), Michigan (12.7%), and Ohio (12.7%). In comparison, Pennsylvania tops the rankings as its public sector represents 11.0% of total employment.

Ontario drops to twelfth position when all Canadian provinces and US states are included (Economic Figure 17). This places Ontario just outside of the top one-fifth of American and Canadian jurisdictions. Alberta, the second highest Canadian province, ranks 22<sup>nd</sup> overall. Unfortunately, the remaining provinces place at the bottom of the ranking.

Ontario, based on all three measures of the public sector, maintains a public sector of relatively competi-

tive size. This is particularly true when compared with all Canadian provinces and US states (Economic Figure 17). That should not, however, be taken as suggesting that it can begin to expand the public sector at rates beyond overall employment growth. Rather, this competitive level of employment in the public sector requires vigilance on the part of government in resisting temptations, to which it yielded in the late 1980s, to increase the public sector.

### Unionization

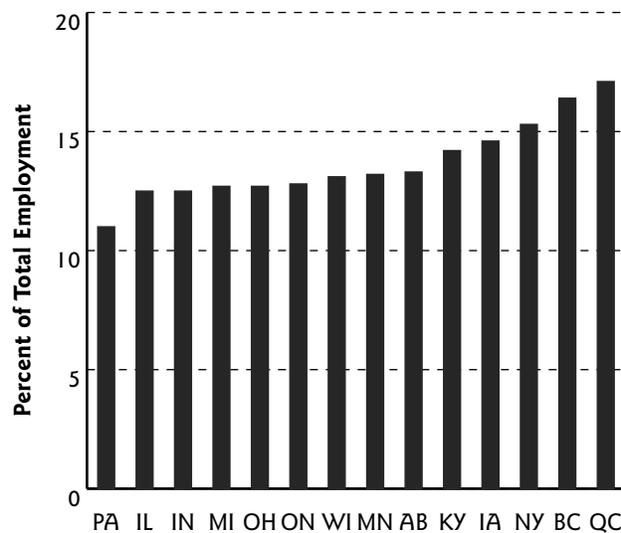
Another important structural attribute of labour markets that affects productivity is unionization, in both the public and the private sectors. Hirsch (1997), in a review of research on unionization, noted that the evidence indicates that unions tend to increase wages but not productivity.<sup>11, 12</sup> Hirsch also concluded that unions reduce profitability, investment in physical capital and research and development<sup>13</sup> as well as reducing growth of employment. He found, for instance, that unionized firms have profits that are 10% to 20% lower than the profits of similar non-unionized firms. Hirsch (1991) found that the market value and earnings of unionized firms are 10% to 15% lower than non-unionized firms in the United States.

Hirsch described the wage premium as a tax on capital that effectively lowered the net rate of return on investment,<sup>14</sup> leading to less investment in physical and innovative capital, leading to slower growth in sales and employment (Baldwin 1983; Grout 1984; Hirsch and Prasad 1995, Addison and Chilton 1997; and Hirsch 1997).

Metcalf (2003) compared the productivity of unionized labour in the United States, Canada, the United Kingdom, Japan, Germany, and Australia. He found that unionization reduces investment by one fifth compared with the investment rate in a non-union workplace for North America and parts of Europe.

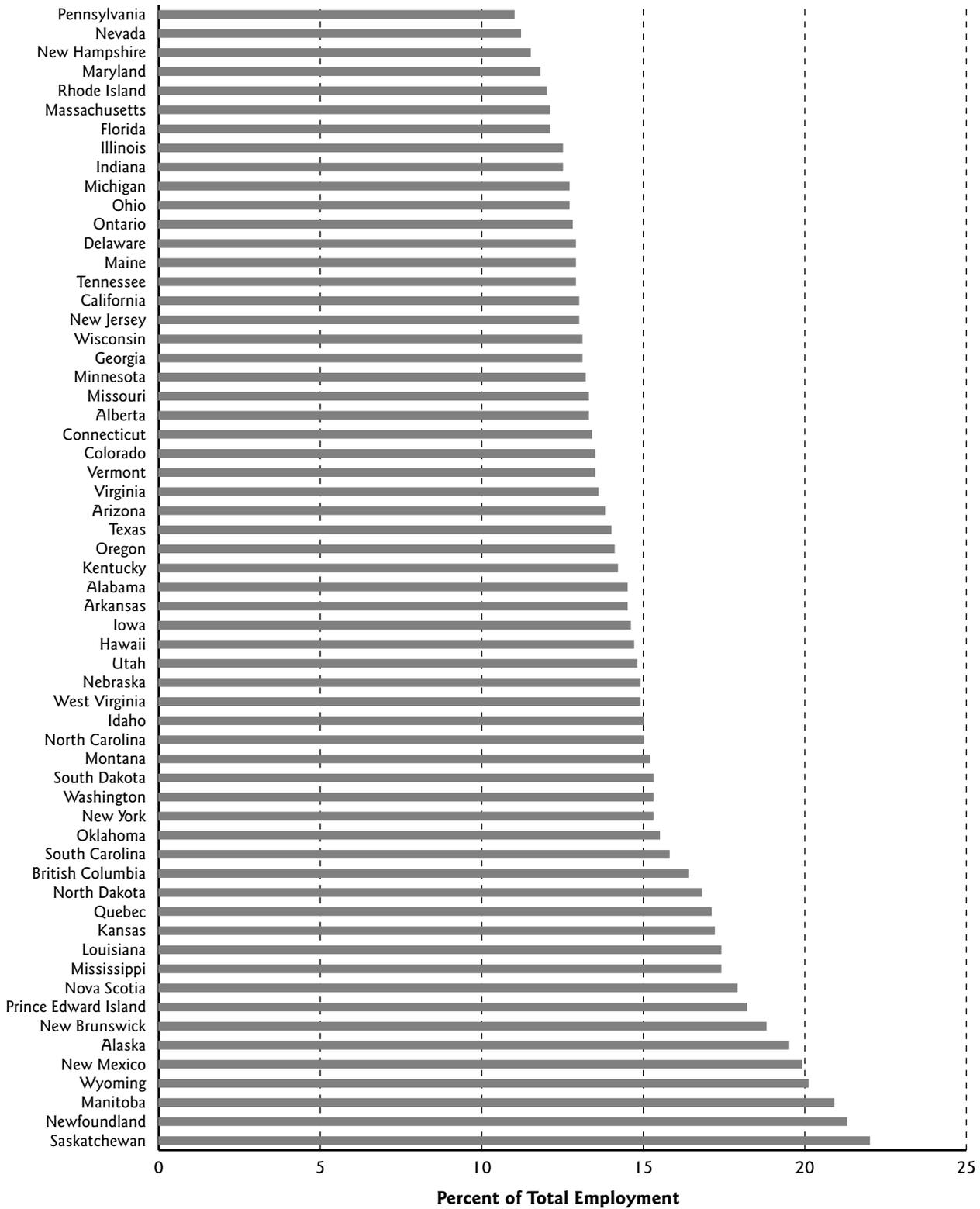
A more recent study published by the World Bank collaborates the findings of earlier studies. Aidt et al. (2002), in a review of the literature on unions and their effects on economic performance, concluded that union members and other workers covered by collective agreements receive, on average, wage premiums

**Economic Figure 16: Selected Canadian Provinces and US States—Rank by Employment in the Public Sector as a Percent of Total Employment, 2001**



Sources: Statistics Canada, Provincial Economic Accounts; Statistics Canada, Public Institutions Division, Financial Management System; Bureau of Economic Analysis; Bureau of Labor Statistics; calculations by the authors.

**Economic Figure 17: Canadian Provinces and US States—Rank by Employment in the Public Sector as a Percent of Total Employment, 2001**



Sources: Statistics Canada, Provincial Economic Accounts; Statistics Canada, Public Institutions Division, Financial Management System; Bureau of Economic Analysis; Bureau of Labor Statistics; calculations by the authors.

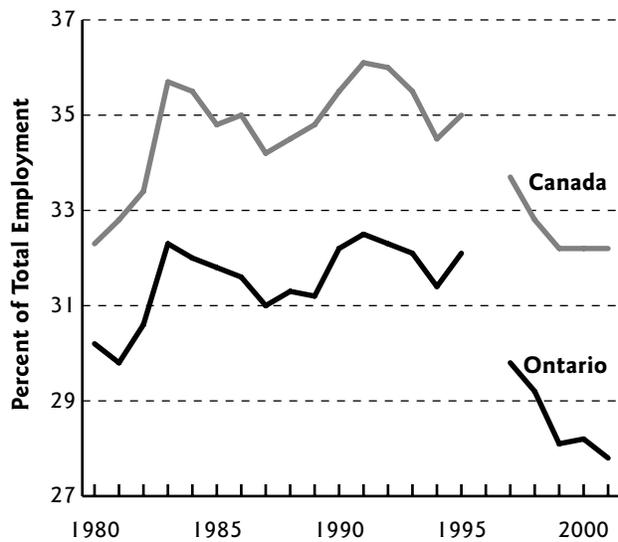
over their non-unionized counterparts in developed and developing countries. This wage premium was estimated to be 15% in the United States and 5% to 10% in other industrial countries. Further, Aidt et al. found that net profits, investment rate (physical capital), and spending on R&D tend to be lower in unionized firms than they are in non-unionized firms even though unionized firms tend to adopt new technology as fast as non-unionized firms.

The following section compares the level of unionization<sup>15</sup> in Ontario with that of other Canadian provinces and American states.

*Extent of unionization*

Economic Figure 18 shows unionization as a percentage of total employment. Ontario's unionization rate has experienced both expansion and contraction over the last two decades. Unionization, as a percent of total employment, was 30.2% in 1980 and increased to 32.3% by 1983. It declined slightly as Ontario's economy expanded over the late 1980s but was still 32.5% of total employment in 1991. After 1991, unionization began a steady decline, reaching 27.8% of total employment in 2001.

**Economic Figure 18: Ontario and Canada—Rate of Unionization**



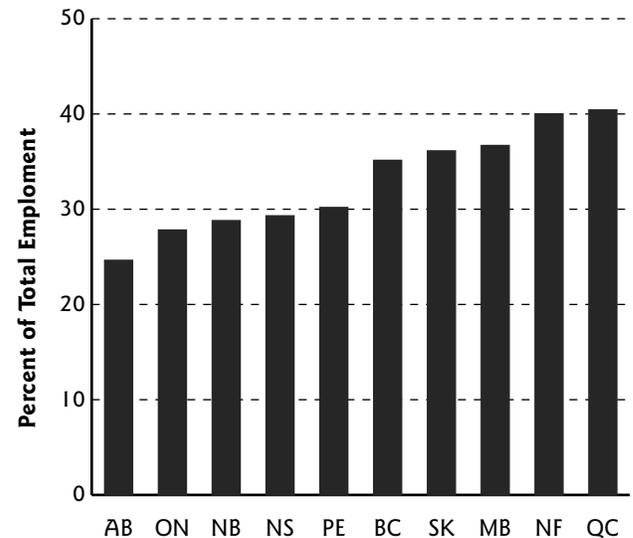
Note: No data is available for 1996 so there is a material break between 1995 and 1997.  
Sources: Statistics Canada, Labour Force Historical Review 2001, Cansim II; calculations by the authors.

The gap between Ontario's unionization rate and the national average also increases after 1991. The gap generally amounted to between 2.1 and 3.7 percentage points between 1980 and 1991. By 2001, the gap between Ontario's unionization rate and the national rate increased to 4.4 percentage points.

Economic Figure 19 presents the Canadian provincial rankings for unionization. Ontario ranks second for the percentage of total employment constituted by union members. Alberta ranks first with 24.6% of its employment in unions, while Quebec ranks last with unionization representing 40.4% of its total employment.

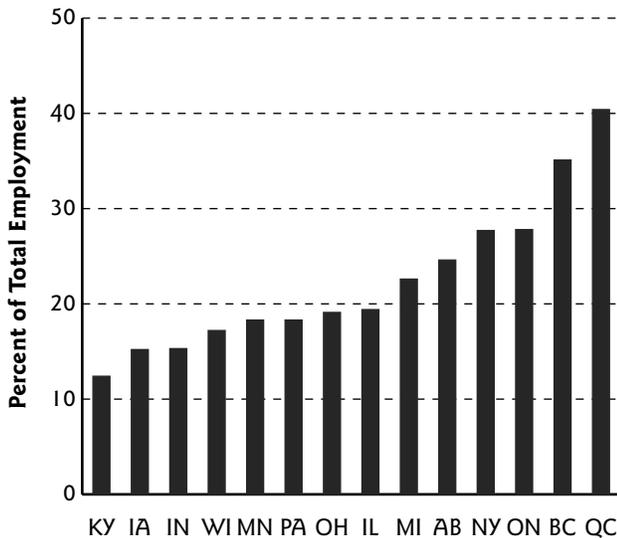
Economic Figure 20 expands the Canadian provincial rankings presented in the previous figure to include American states bordering Ontario. Ontario's performance and, indeed, the performance of all the Canadian provinces drops significantly. Alberta achieves the highest Canadian ranking, tenth out of the 14 jurisdictions. Ontario achieves a ranking of twelfth. Kentucky, which obtained the highest ranking, had a unionization rate less than half that of Alberta, Canada's top-ranked province. It is also important to note that many of the US border states included in this analysis have similar

**Economic Figure 19: Canadian Provinces—Rank by Unionization as a Percent of Total Employment, 2001**



Sources: Statistics Canada, Provincial Economic Accounts; Statistics Canada, Labour Force Historical Review 2001; calculations by the authors.

**Economic Figure 20: Selected Canadian Provinces and US States—Rank by Unionization as a Percent of Total Employment, 2001**



Sources: Statistics Canada, Provincial Economic Accounts; Statistics Canada, Labour Force Historical Review 2001; Bureau of Labor Statistics; calculations by the authors.

economic structures to that of Ontario; that is, many have large manufacturing sectors.

Economic Figure 21 further expands the unionization analysis by including all US states and Canadian provinces. Canada's poor performance is strikingly clear as nine of the ten Canadian provinces occupy the last nine positions on the rankings. Only Alberta performs better, out-ranking a single US state in its unionization rate. Ontario ranks 52<sup>nd</sup> in the unionization rankings, out-performing only the eight remaining Canadian provinces.

Like many of the previous indicators, Ontario's performance within the Canadian context is relatively strong but, once US states are included, Ontario's performance, like that of all Canadian provinces, declines significantly.

### Unemployment Rates

As expected, unemployment rates in Ontario and Canada as a whole fluctuated with the fortunes of the economy, peaking in 1983 and 1993 after the recessions of 1981 and 1991 (Economic Figure 22). Ontario's unemployment rate peaked at 10.3% in 1983 and at 10.9%

in 1993. Unemployment rates dropped rather quickly as the economy recovered, reaching lows of 5.1% in 1988/89 and 5.7% in 2000. Ontario's unemployment rate in 2001 was 6.3%.

Economic Figure 23 presents the Canadian provincial rankings for unemployment rates in 2001. Ontario maintained the fourth lowest unemployment rate in 2001. Alberta achieved the top position with an average unemployment rate of 4.6%, 1.7 percentage points better than Ontario. Newfoundland ranked last with an average unemployment rate of 16.1%.

Economic Figure 24 expands the Canadian provincial rankings by including bordering US states. Ontario's performance declines significantly. Ontario ranks twelfth out of the 14 jurisdictions in terms of its unemployment rate for 2001. Alberta, the highest ranking Canadian province was able to achieve only a ranking of sixth. Iowa, the top-ranked jurisdiction had an average unemployment rate of 3.3% in 2001, nearly half of Ontario's rate.

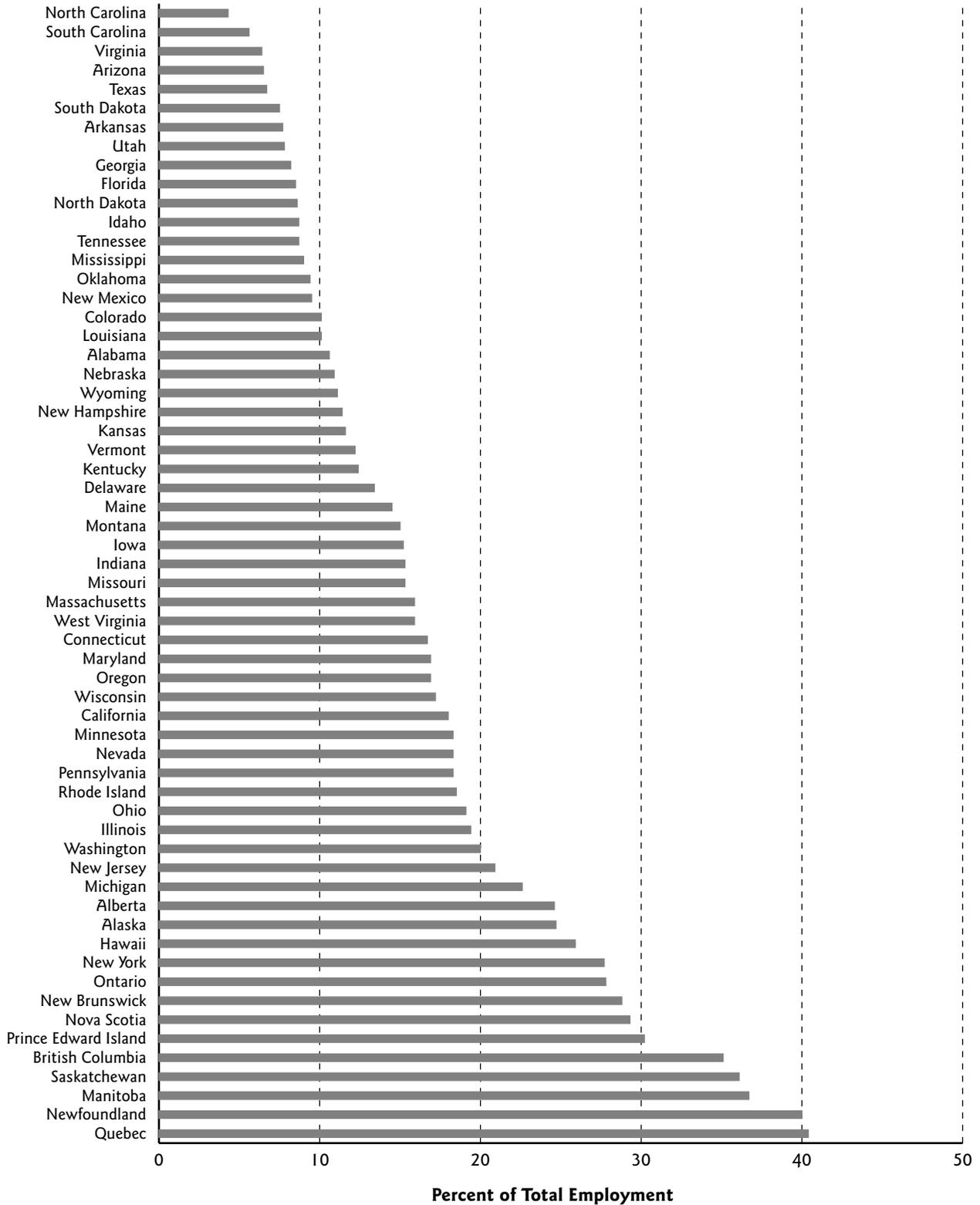
Economic Figure 25 gives a comparison that includes all US states and Canadian provinces and Ontario's relative performance drops significantly once again. Ontario is only able to achieve a ranking of 53<sup>rd</sup> (out of 60 jurisdictions). In fact, it is only able to out-perform one US state, Washington. Alberta, Canada's highest ranked province, achieves only 27<sup>th</sup> position.

Ontario's performance in unemployment rates is similar to that of most other indicators: it does well within the Canadian context but quite poorly relative to our southern neighbours.

### Conclusion

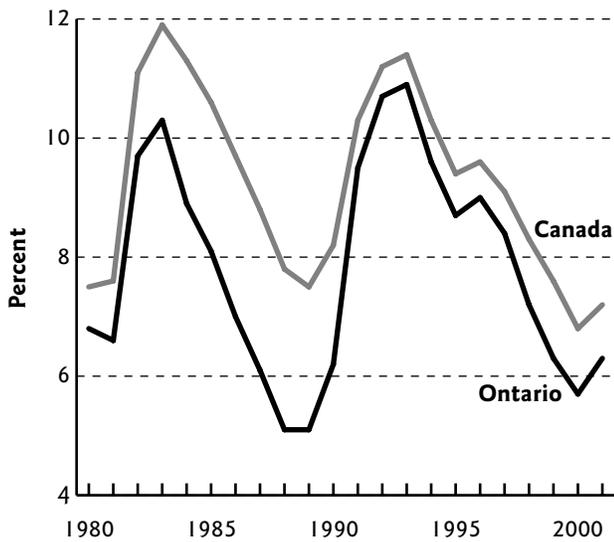
Ontario generally performs well within the Canadian context on generating employment, maintaining relatively low unemployment rates, expanding employment in the private sector while containing public-sector employment, and maintaining a flexible labour market. Unfortunately, Ontario's performance, like the rest of the country, declines when compared with the United States and its employment growth, unemployment rates, and unionization rates are generally not competitive with the labour-market performance achieved in the United States.

**Economic Figure 21: Canadian Provinces and US States—Rank by Unionization as a Percent of Total Employment, 2001**



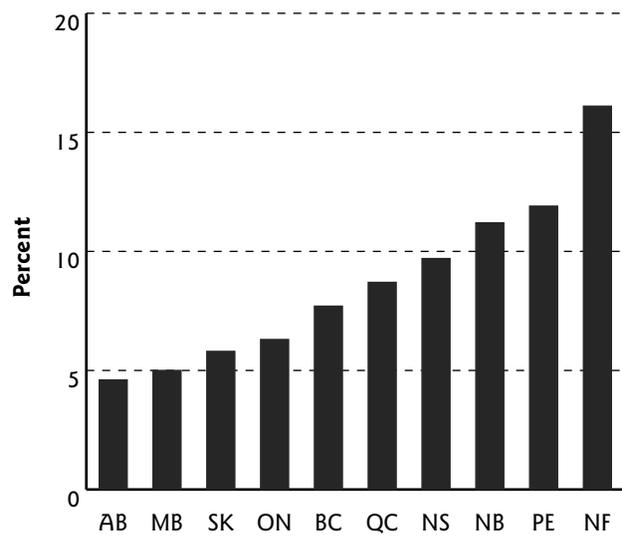
Sources: Statistics Canada, Provincial Economic Accounts, Labour Force Historical Review 2001; Bureau of Labor Statistics; calculations by the authors.

**Economic Figure 22: Ontario and Canada—Unemployment Rates, 1980–2001**



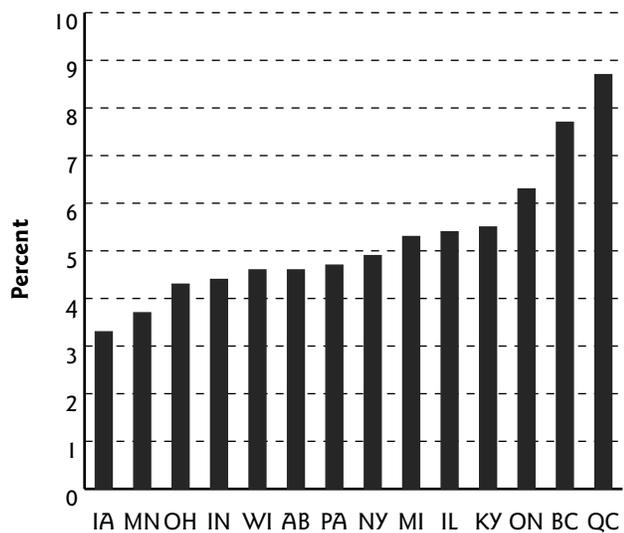
Sources: Statistics Canada, Provincial Economic Accounts; calculations by the authors.

**Economic Figure 23: Canadian Provinces—Rank by Unemployment Rate, 2001**



Sources: Statistics Canada, Provincial Economic Accounts; calculations by the authors.

**Economic Figure 24: Selected Canadian Provinces and US States—Rank by Unemployment, 2001**



Sources: Statistics Canada, Provincial Economic Accounts; Bureau of Labor Statistics; calculations by the authors.

### 3 Investment

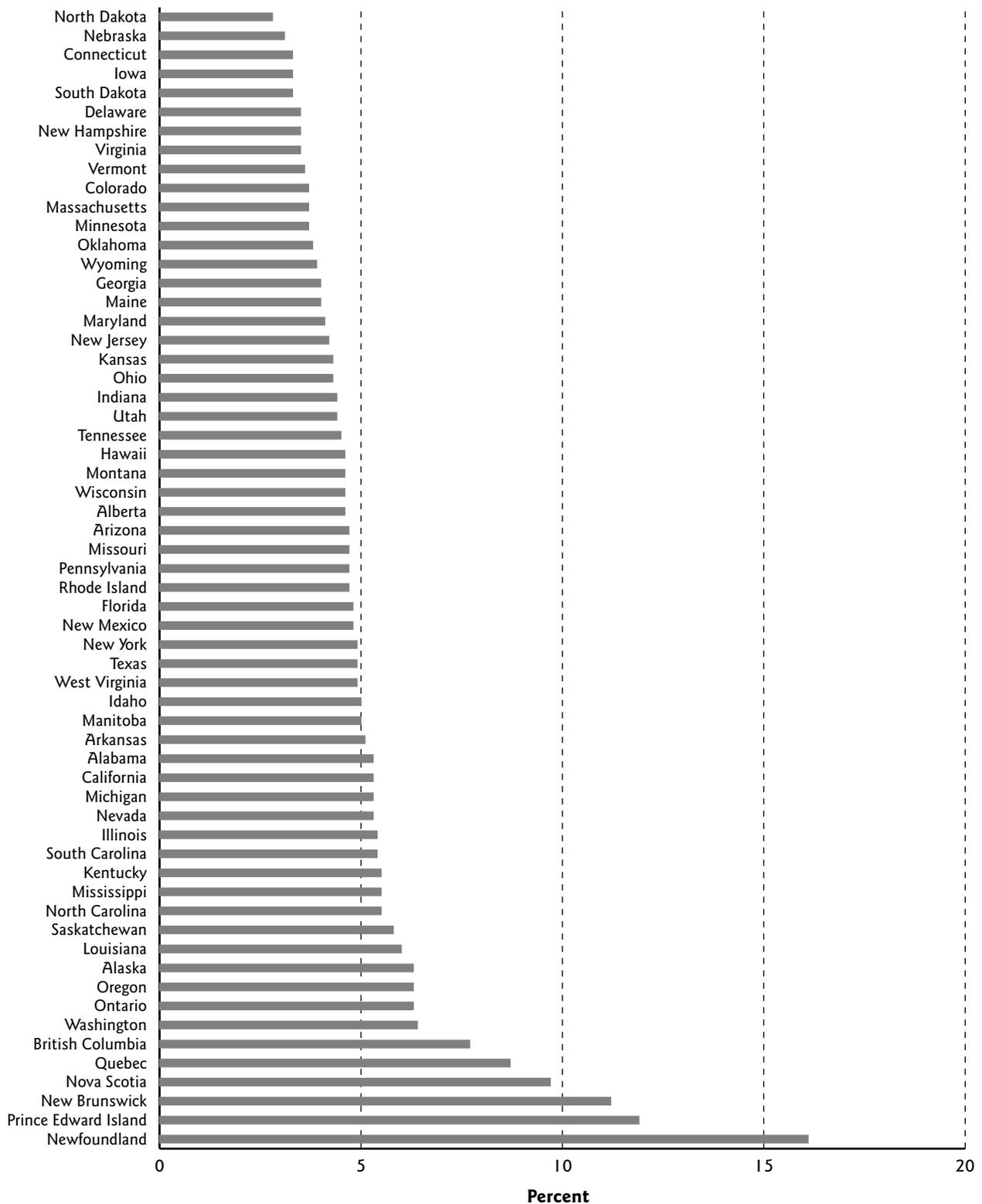
The third area of economic performance is investment. Unfortunately, data for the investment performance of individual US states is not available. Instead, we provide a limited comparison between Ontario and the US average.

#### *Business investment*

This particular indicator of economic performance is especially important to the long-term health of an economy. Investment in plants, machinery, equipment, and new technologies in general are, in part, what augments and facilitates growth of productivity,<sup>16</sup> which, in turn, drives improvements in wages and salaries.<sup>17</sup> Thus, not only does business investment make production more efficient and total productivity increase, it also ultimately increases the earnings of labour.

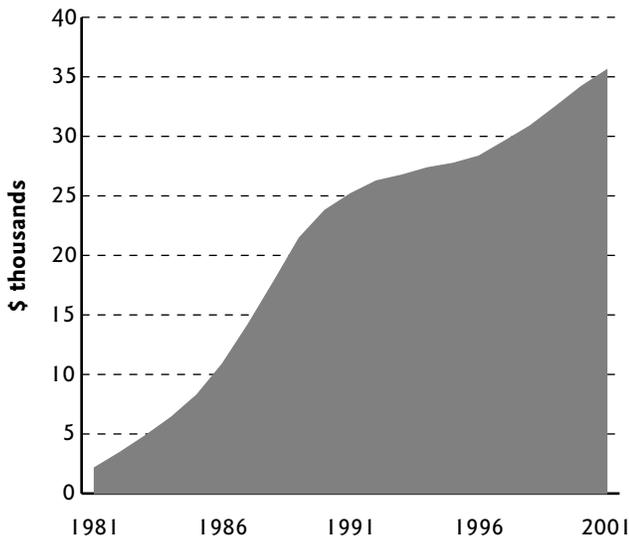
Economic Figure 26 illustrates the accumulated real per-capita business investment (capital formation) net of depreciation<sup>18</sup> for Ontario between 1981 and 2001. Note that 1981 is used as a base year upon which subsequent investments are accumulated. It is important to acknowledge that the measure used is based on per-capita analysis. The total accumulated, real per-capita

**Economic Figure 25: Canadian Provinces and US States—Rank by Unemployment Rate, 2001**



Sources: Statistics Canada, Provincial Economic Accounts, Labour Force Historical Review 2001; Bureau of Labor Statistics; calculations by the authors.

**Economic Figure 26: Ontario—Real, Per-Capita, Net Capital Formation, 1981–2001**



Sources: Statistics Canada, Provincial Economic Accounts; calculations by the authors.

net capital formation in Ontario increased over 15 times from its base in 1981 to each \$35,577 in 2001.

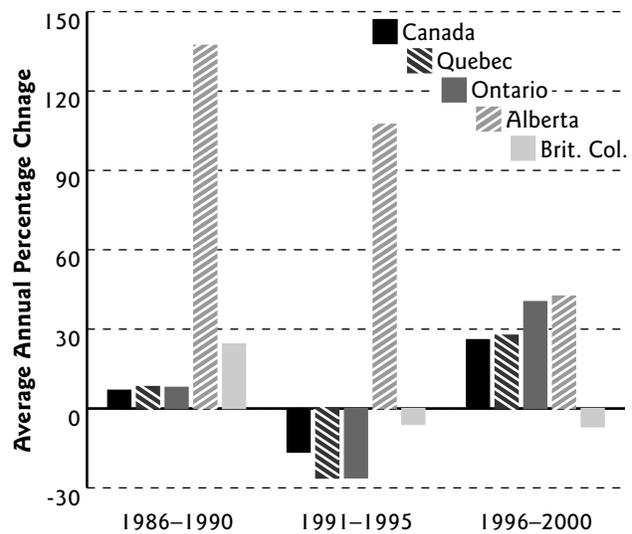
Economic Figure 27 compares provincial average annual growth rates in real per-capita net capital formation (business investment) over the last 15 years broken into three periods. Ontario performs well in comparison to the national average, out-performing it in two of the three periods examined. Ontario also performed better than Quebec and British Columbia but does not compare well with Alberta, which out-performed Ontario in its average annual growth rate in all three periods.

Alberta's strong performance is also illustrated in Economic Figure 28, which shows the real accumulated per-capita net capital formation (business investment) for several provinces as well as the national average for the period between 1981 and 2001. Alberta significantly out-performs Ontario and the rest of the country in per-capita real net business investment. Ontario does, however, perform relatively well compared with the national average and Quebec.

*Comparison with the United States*

State-level data for net business investment in the United States are not available. However, a comparison between

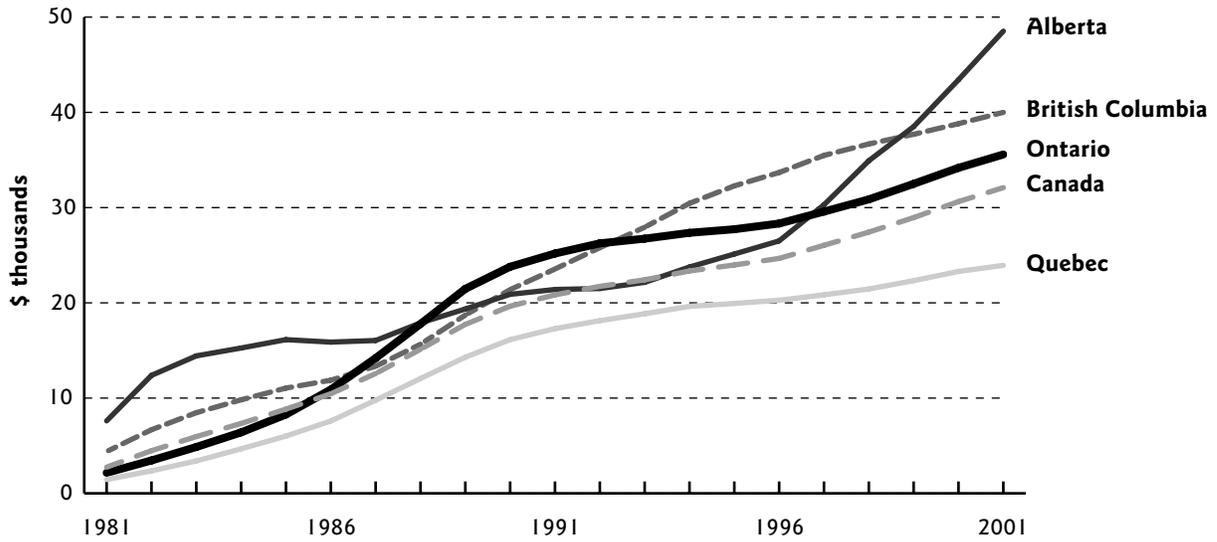
**Economic Figure 27: Canada and Selected Provinces—Average Annual Change in Real, Per-Capita, Net Capital Formation, 1986–2000**



Sources: Statistics Canada, Provincial Economic Accounts; calculations by the authors.

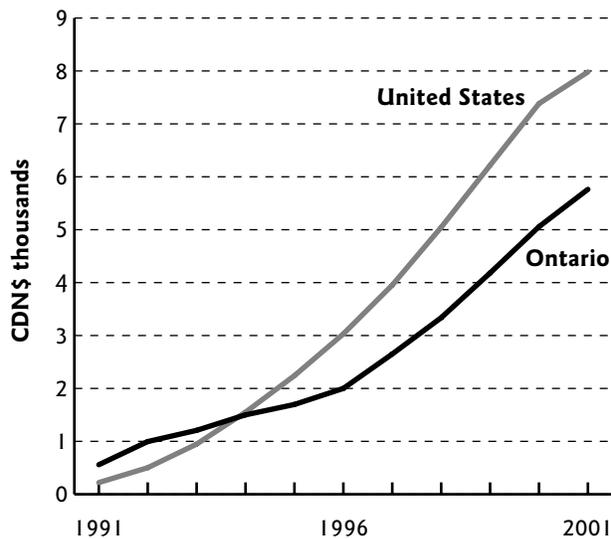
Ontario's performance over the last decade and that of the United States nationally provides some insight into Ontario's weak performance.<sup>19</sup> Economic Figure 29 illustrates the real accumulated per-capita net business investment for Ontario and the United States for the period from 1991 to 2001. Ontario begins the period with per-capita net business investment exceeding that of the national average of the United States. By 1994, the accumulated per-capita net business investment amounts were essentially identical: US at \$1,551 and Ontario at \$1,501. The United States then experiences an accelerated period of investment, seeing the accumulated per-capita net business investment rise 414.7% between 1994 and 2001, reaching \$7,981. Ontario experienced growth but at nowhere near the rate recorded in the United States: its real accumulated net business investment increased 284.0% between 1994 and 2001, rising from \$1,501 in 1994 to \$5,763 in 2001. Ontario's real per-capita net business investment stood at 72.2% of comparable investment in the United States in 2001. Put differently, the amount businesses invested in the United States over the course of the last decade exceeded the comparable amount in Ontario by 38.5% as of 2001 on an accumulated basis.

**Economic Figure 28: Canada and Selected Provinces—Real, Accumulated, Per-Capita, Net Capital Formation, 1981–2000**



Sources: Statistics Canada, Provincial Economic Accounts; calculations by the authors.

**Economic Figure 29: Ontario and the United States—Real, Accumulated, Per-Capita, Net Business Investment, 1981–2000**



Statistics Canada, Provincial Economic Accounts; Bureau of Economic Analysis; Bureau of Labor Statistics; Organisation for Economic Cooperation and Development; calculations by the authors.

The Task Force on Competitiveness, Productivity, & Economic Progress (2002) also compared Ontario's investment levels with the US national average. Unlike the previous comparison, The Task Force looked at gross investment, which does not account for depreciation of existing assets. Nonetheless, it came to similar conclusions regarding Ontario's performance relative to the United States:

Ontario firms have clearly been investing in machinery and equipment, but the data show that after Ontario firms spend their last dollar, their US counterparts keep spending another 10 to 15 percent on making their operations more competitive and efficient through more intense use of machinery and equipment. (2002: 35)

Although the comparisons between Canada and the United States thus far have been sub-national, the data comparisons and conclusions presented above indicate a consistent pattern for Ontario in terms of business investment and other indicators of economic performance. That is, Ontario performs well within the Canadian context but struggles to match the performance of the US national average in terms of investment.

**Rating the investment climate**

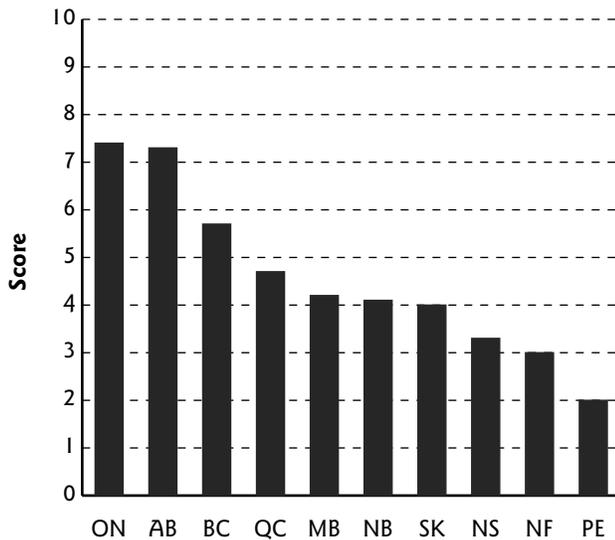
A survey of senior investment and pension fund managers in 2002<sup>20</sup> ranked Ontario number one for a positive investment climate. The survey, done annually, has consistently indicated a strong performance by Ontario, which has ranked first or second in every survey since 1997 (Economic Figure 30). Ontario and Alberta out-

performed all other provinces by a substantial margin and Ontario's strong showing should translate into positive gains in investment in the future, assuming a stable set of public policies conducive to investment.

**Conclusion**

Ontario performs relatively well within the Canadian context in generating investment. It also has maintained a strong and stable investment climate. Although comparable US data is not available at the state level, Ontario is unable to match the US national average in business investment.

**Economic Figure 30: Canadian Provinces—Rank by Provincial Investment Climate, 2002**



Source: Fraser Institute 2002.

**Conclusion on economic performance**

Ontario's economic performance, broadly defined to include income, labour markets, and investment is comparatively strong within Canada. Only Alberta was able to outperform Ontario on a consistent basis. It is in comparison with US states that Ontario's performance is weak. Ontario's performance in both income and labour markets is significantly less than one would expect and, indeed, below the potential of the province. Ontario's performance for business investment is also markedly weak in comparison with the American national average.