

# Contents

About the authors	/ 2
Acknowledgments	/ 3
Executive summary	/ 4
Introduction	/ 6
Performance of Labour Markets	/ 7
Characteristics of Labour Market Regulation	/ 18
Profile of British Columbia	/ 32
Profile of Alberta	/ 34
Profile of Saskatchewan	/ 36
Profile of Manitoba	/ 38
Profile of Ontario	/ 40
Profile of Quebec	/ 42
Profile of New Brunswick	/ 44
Profile of Nova Scotia	/ 46
Profile of Prince Edward Island	/ 48
Profile of Newfoundland	/ 50
Conclusion and Summary of Provincial and State Rankings	/ 53
Appendix: Methodology	/ 60
References	/ 61

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## Executive summary

*Measuring Labour Markets in Canada and the United States* is a first attempt at quantifying labour-market performance and the characteristics that affect performance across Canadian provinces and US states. The study includes comprehensive measures of how well labour markets across Canada and the US have performed over the last five years as well as critical characteristics such as unionization rates and public-sector employment rates, which affect labour market performance. Below are some of the main findings of the study.

**(1)** Alberta and Ontario, with overall scores of 7.5 and 5.5, respectively, on the Index of Labour Market Performance, which measures job creation, unemployment, and productivity, dominate labour market performance in Canada. The only other province to receive a passing score was Manitoba, with a score of 5.1.

**(2)** Only the province of Alberta was able to compete with US states in general with respect to its labour

market performance. Even Ontario struggled when US states were included, falling to 24th position. Seven of the 10 provinces occupied ranks in the bottom one-third of jurisdictions. In addition, almost all Canadian provinces were outperformed by bordering US states. Most striking are the stark differences between the Atlantic provinces and the Northeastern states. This despite the fact that Canada has enjoyed a relatively robust economy over the past five years, particularly when compared with the United States.

**(3)** Newfoundland had the dubious distinction of recording the worst labour market performance over the last five years of any Canadian province or US state, based on the Index of Labour Market Performance. British Columbia ranked 59<sup>th</sup>, second last, just barely ahead of Newfoundland. Newfoundland and British Columbia were also joined by Quebec and New Brunswick at the bottom of the Canada-US rankings.

### Summary of Provincial Rankings

	PERFORMANCE OF LABOUR MARKETS							
	Index of Labour Market Performance		Average Total Employment Growth (1998–2002)		Average Private Sector Employment Growth (1997–2001)		Average Unemployment Rate (1998–2002)	
	Rank out of 60	Score	Rank out of 60	%	Rank out of 60	%	Rank out of 60	%
<b>British Columbia</b>	59	3.7	31	1.1	41	1.0	55	8.1
<b>Alberta</b>	2	7.5	3	2.8	2	4.3	43	5.2
<b>Saskatchewan</b>	49	4.4	44	0.5	34	1.3	50	5.7
<b>Manitoba</b>	35	5.1	24	1.5	18	2.3	42	5.2
<b>Ontario</b>	24	5.5	4	2.7	5	3.4	53	6.5
<b>Quebec</b>	55	4.0	8	2.4	12	2.8	56	9.1
<b>New Brunswick</b>	51	4.3	10	2.2	17	2.3	58	10.8
<b>Nova Scotia</b>	46	4.7	9	2.2	3	3.8	57	9.7
<b>Prince Edward Island</b>	43	4.8	5	2.6	6	3.4	59	12.9
<b>Newfoundland</b>	60	3.2	6	2.5	4	3.6	60	16.9

(4) There are clearly some national barriers to improved performance that affect all provinces. The national unemployment system is one example of a national policy affecting the ability of provincial labour markets to improve their performance.

(5) All Canadian provinces, including Alberta and Ontario, maintain relatively high rates of unionization and employment in the public sector. A comprehensive review of the research on unionization and public-sector employment confirmed their deleterious economic effects. Since this is the case, all Canadian provinces should reduce public-sector employment and revise the framework of laws affecting labour to reduce unionization rates to more competitive levels.

(6) All Canadian provinces except Alberta maintain a relatively high real minimum wage as measured by the ratio of minimum wage earnings to per-capita GDP: six of the bottom 10 jurisdictions (ranked from lowest to highest) were Canadian. Such high real minimum wages will impede the efficient functioning of the labour market.

(7) All Canadian provinces require improvements in their labour-relations laws. Specifically, all Canadian provinces would be well served to introduce some type of worker-protection laws and establish more balance with respect to successor rights. In addition, some provinces,

in particular Saskatchewan and Quebec, maintain unbalanced certification and decertification regulations. Other areas for improvement include the treatment of technology, third-party picketing, and the use of replacement workers. All Canadian provinces would experience improved labour-market outcomes by affording greater flexibility through reformed labour-relations laws.

(8) Similarly, all provinces must review the operations of their respective Labour Relations Boards, the entities charged with enforcing the labour relations laws. At the very least, these influential and powerful boards must become more transparent and open by divulging greater information in a more timely manner.

(9) It is also important to recognize that there are other influential bodies within the labour markets that were not covered, or only covered superficially, in this study. These include the Labour Standard Acts and the various boards enforcing such laws, the various Worker Compensation Boards, and the courts that adjudicate differences. As was found with the labour relations laws and the Labour Relations Boards that enforce such laws, these other bodies can have extraordinary influence on labour markets by substantially increasing or decreasing the level of labour-market flexibility.

**CHARACTERISTICS OF LABOUR MARKET REGULATION**

Average Duration of Unemployment (1996–1998; 2000–2002)		Average Productivity per Worker (1997–2001)		Average Public Sector Employment as a % of Total Employment (1997–2001)		Average Unionization as a % of Total Employment (1998–2002)		Average Minimum Wage as a % of Per-Capita GDP (1997–2001)		Index of Labour Relations Laws and Labour Relations Boards	
Rank out of 60	%	Rank out of 60	Value	Rank out of 60	%	Rank out of 60	%	Rank out of 60	%	Rank out of 10	Score
53	19.2	49	66,146	50	16.2	56	35.4	57	49.5	9	3.3
19	11.1	9	91,565	46	14.3	49	24.7	6	27.2	1	6.1
42	15.2	43	68,914	59	21.5	57	35.6	44	39.8	8	3.5
39	14.6	56	61,283	58	20.8	58	36.4	50	42.9	7	3.6
57	20.8	37	72,571	43	13.9	52	28.3	47	40.8	3	5.1
60	26.8	52	64,282	53	18.5	60	40.0	60	50.2	10	1.9
49	16.5	57	60,230	56	19.4	53	28.7	54	47.1	6	4.4
54	20.3	58	58,433	54	18.8	54	29.7	56	47.8	4	5.0
28	12.1	60	53,364	55	19.4	55	29.7	59	49.9	5	4.5
59	26.6	53	63,493	60	22.7	59	39.6	58	49.6	2	5.2

# Introduction

Labour markets are one of the most important components of a functioning economy. They are the mechanism through which society allocates its human capital, arguably the most important source of capital available to an economy. Labour markets facilitate the matching of human skills with demand for labour and allow individuals to earn a living.

The key to a high-performing, efficient labour market is flexibility in terms of wages and changes to the mix of labour and capital. Empirical evidence from around the world indicates that countries with more flexible labour markets enjoy greater benefits from technological change, have better records in job creation, and experience faster growing economies (OECD 1994).

Flexibility allows the labour market to adjust to market changes and reallocate resources to maximize productivity. It allows employees to shift their efforts to endeavours that provide the greatest return to them. Similarly, it allows employers to invest and focus on ventures that generate the greatest financial returns.

Interventions by governments tend to reduce the level of flexibility by introducing rigidities. These rigidities, although most often well intentioned, reduce the efficiency of labour markets and, thus, their performance.

This is first of a series of studies planned to reverse the neglect of research into labour markets. It provides a

large number of measurements of the Canadian and American labour markets in an easily accessible, succinct manner. The study also gives information about the performance and the characteristics of labour markets and provides a foundation for further research of wider scope.

## Organization

The first section presents indicators of labour-market performance and ranks the performance of all 10 Canadian provinces and 50 US states. The second section presents rankings and information about various characteristics of labour-market regulation such as unionization and how employment is split between the public and private sectors. It also presents a comparative analysis of labour-relations laws across the Canadian provinces and looks at areas for future research. The third section of the paper presents provincial profiles, summarizing the performance rankings and characteristics of each provincial labour market. The fourth section gives some conclusions and a table summarizing all the provincial and state rankings. The appendix gives a short, technical description of the methodology used in constructing the indexes.

Notes are numbered section by section and will be found at the end of each section.

# Performance of Labour Markets

This section of the study presents performance data for the 10 provincial and 50 state labour markets across five indicators for the last five years in which data is available: average total employment growth (1998–2002), average private-sector employment growth (1997–2001), average unemployment rates (1998–2002), the average duration of unemployment (1996–1998/2000–2001),<sup>1</sup> and average productivity (1997–2001). Five-year averages were employed in order to balance the need for historical data while weighing current performance. In addition, an overall index of labour-market performance is presented.

The format of the study is largely a presentation of the rankings coupled with a brief discussion. General observations, including a discussion of the top- and bottom-ranked jurisdictions, Canadian-specific information, and general trends, are offered for each of the indicators as well as the overall index.

In some cases, the study notes results for Right-to-Work (RTW)<sup>2</sup> states.<sup>3</sup> Right-to-Work refers to worker-protection laws that prohibit unions from forcing individual workers into joining or financially supporting a union as a condition of employment. No such worker-protection legislation exists in Canada. There is a growing body of evidence that concludes that RTW jurisdictions enjoy higher rates of economic growth, higher rates of job creation, and lower rates of unemployment compared with non-RTW jurisdictions.<sup>4</sup> It is, therefore, both important and interesting to isolate the performance of the RTW states in order to assess whether or not such legislation may be contributing to positive labour-market outcomes.

Finally, it is important to understand the larger economic context within which the following analysis was undertaken. Canada has enjoyed a particularly strong economy over the last five years (1998–2002), both in absolute and relative terms. For instance, Canada averaged real GDP growth of 3.8% over the last five years versus 3.0% in the United States. Canada's GDP growth rate was higher than that of the United States in four of the five years between 1998 and 2002. There is no five-period dating back to 1975 in which Canada's economic growth has been as strong vis-à-vis the United States. Strong economic growth has

translated into robust performances in other areas including labour markets. Canada's unemployment rate, for instance, declined from 8.3% in 1998 to 7.7% in 2002, while the United States experienced an increase over the same period from 4.5% to 5.8%. It is unclear whether or not Canada's strong performance is an anomaly owing to particular events in the United States, such as the attack of 9/11, the subsequent war, and the precipitous decline in US stock markets or whether Canada has entered a new period of economic strength. What is clear, however, is that Canada's overall economic performance has been stronger when compared with the United States over the last five years than it has been for decades.

## Index of Labour Market Performance

The Index of Labour Market Performance provides an accessible overview of each jurisdiction's overall labour-market performance, as measured by the five indicators discussed above. Each component received an equal weighting in the index.

### General observations

Nevada tops the list of Canadian provinces and US states in terms of labour-market performance over the last five years. Its strong performance in employment growth, both in total and in the private sector (placed first in both), as well as its 8<sup>th</sup> place ranking on productivity enabled it to achieve the highest overall score of 8.4.

The Southwestern US states (Nevada, Utah, Colorado, Arizona, New Mexico, and California) dominated the top rankings with three in the top five and all six jurisdictions in the top 15.

The top-ranked Canadian province was Alberta, placing 2<sup>nd</sup> with an overall score of 7.5. Ontario was the next highest-ranked Canadian province at 24<sup>th</sup> position with an overall score of 5.5. Unfortunately, there was only one other Canadian province that obtained a score in excess of 5.0: Manitoba received a score of 5.1, which placed it 35<sup>th</sup> of the 60 jurisdictions examined.

Newfoundland ranked last with a score of 3.2. Unfortunately for Canada, four of the bottom 10 jurisdictions were Canadian: New Brunswick, Quebec, British Columbia, and Newfoundland. Further, as already indicated, seven of the 10 provinces failed to achieve scores in excess of 5.0.

The Southern US states and Canadian provinces in general dominated the lower rankings.

Right-to-Work states did well on the overall Labour Market Performance index. Half of the top 10 and 11 of the top 20 jurisdictions were RTW states even though they represent a little over one third<sup>5</sup> of the total number of jurisdictions.<sup>6</sup>

The following section examines each of the components of the Index of Labour Market Performance in greater detail.

### **Indicator 1: Average Total Employment Growth (1998–2002)**

Indicator 1 measures the average year-over-year growth rates of total employment for each jurisdiction over the last five years. Total employment includes full-time and part-time employment in both the public (government) and private (business and non-profit) sectors of the economy.

It is important to recognize a definitional difference between Canada and the United States. Canada tabulates employment data for those over the age of 15 while the United States uses a threshold of 16 years of age. This is a rather small difference.

#### **Observations**

Nevada tops the list of Canadian provinces and US states with average total employment growth over the last five years of 4.7%. Nevada outperforms all other jurisdictions by a sizeable margin. For instance, it outperforms the 2<sup>nd</sup> ranked jurisdiction, Arizona, by nearly one full percentage point.

The Southwestern states in general performed well: Nevada (1<sup>st</sup>), Arizona (2<sup>nd</sup>), Colorado (13<sup>th</sup>), Utah (14<sup>th</sup>), New Mexico (19<sup>th</sup>), and California<sup>7</sup> (20<sup>th</sup>).

The top ranked Canadian province is Alberta, placing 3<sup>rd</sup> with average total employment growth of 2.8%.

The top 10 jurisdictions for average total employment growth are dominated by Canadian jurisdictions. Seven of the top 10 jurisdictions are Canadian: Alberta, Ontario, Prince Edward Island, Newfoundland, Quebec, Nova Scotia, and New Brunswick.

The lowest ranked Canadian province was Saskatchewan, which recorded average total employment growth of 0.5%, ranking it 44<sup>th</sup> among Canadian provinces and US states for the time period, 1998 to 2002.

Alabama placed last, recording average total employment growth of  $-0.8\%$  over the last five years. In all, four US states recorded negative average total employment growth figures: Louisiana, Michigan, North Dakota, and Alabama.

The states of the industrial belt (those surrounding and including Michigan) as well as the Southern US states ranked poorly for average total employment growth over the last five years.

### **Indicator 2: Average Private Sector Employment Growth (1997–2001)**

There is an important aspect missing in the first indicator of labour market performance: the nature of employment growth. How employment growth is split between the public and private sectors is an important aspect of labour-market performance. Strong employment growth that is largely fuelled by the public sector can have serious negative economic consequences such as the misallocation of capital and, hence, lower productivity.<sup>8</sup>

The second indicator of labour-market performance measures the average private-sector employment growth for each jurisdiction over the last five years; growth is defined as new full-time and part-time private sector employment.

In this instance as well, Canada tabulates employment data for those over the age of 15 while the United States uses a threshold of 16 years of age.

#### **Observations**

Nevada ranks 1<sup>st</sup> with average private-sector employment growth totalling 4.4% over the last five years.

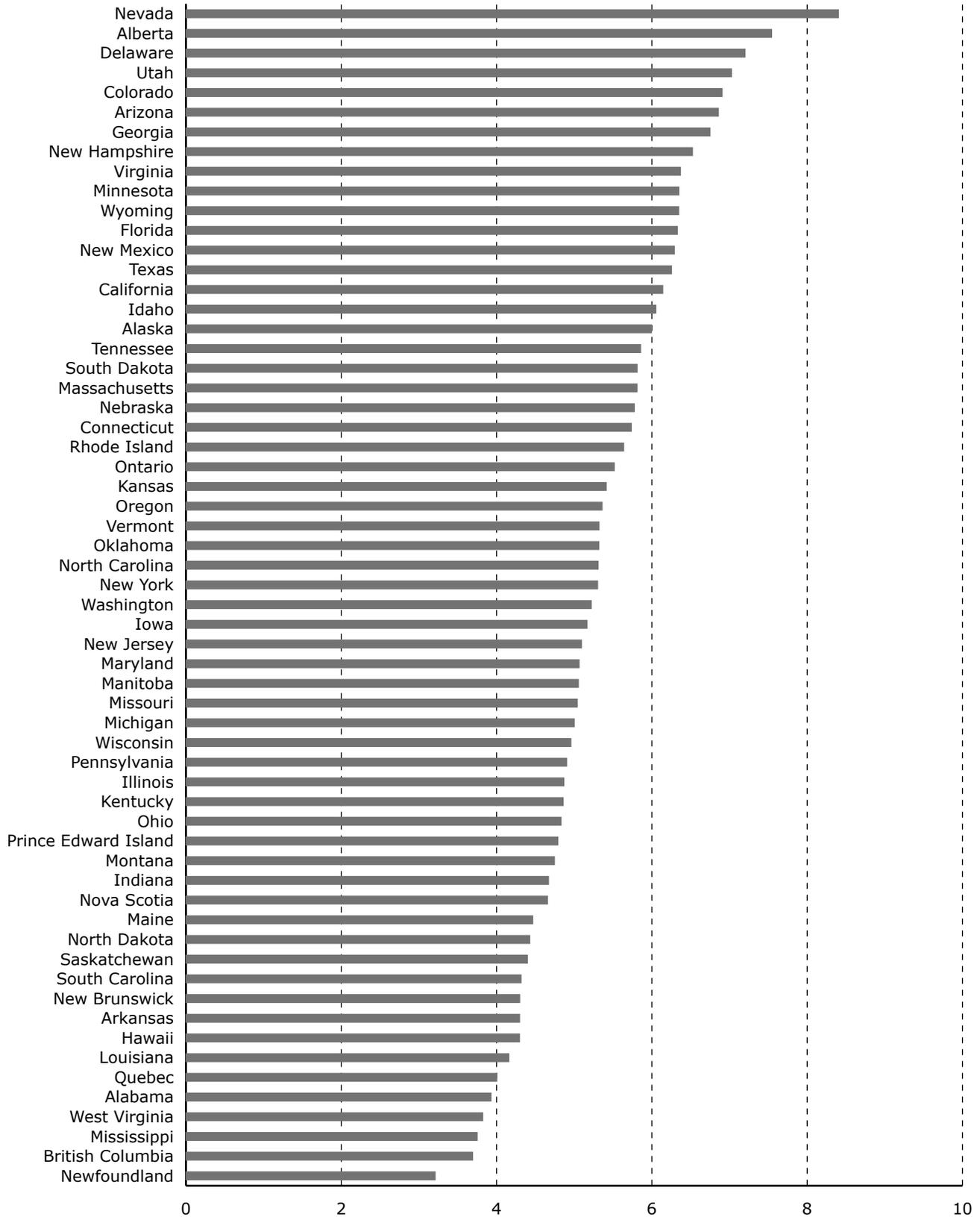
The top-ranked Canadian province is Alberta, which ranked 2<sup>nd</sup>, with average private-sector employment growth of 4.3% from 1997 to 2001.

The Canadian provinces again fared well in terms of top 10 rankings. Five of the jurisdictions ranked in the top 10 were Canadian: Alberta, Nova Scotia, Newfoundland, Ontario, and Prince Edward Island. Interestingly, three of the five Canadian provinces are Maritime provinces, which normally experience less than robust economic performance.

British Columbia was the lowest ranked Canadian province at 41<sup>st</sup>, recording average private-sector employment growth of 1.0%.

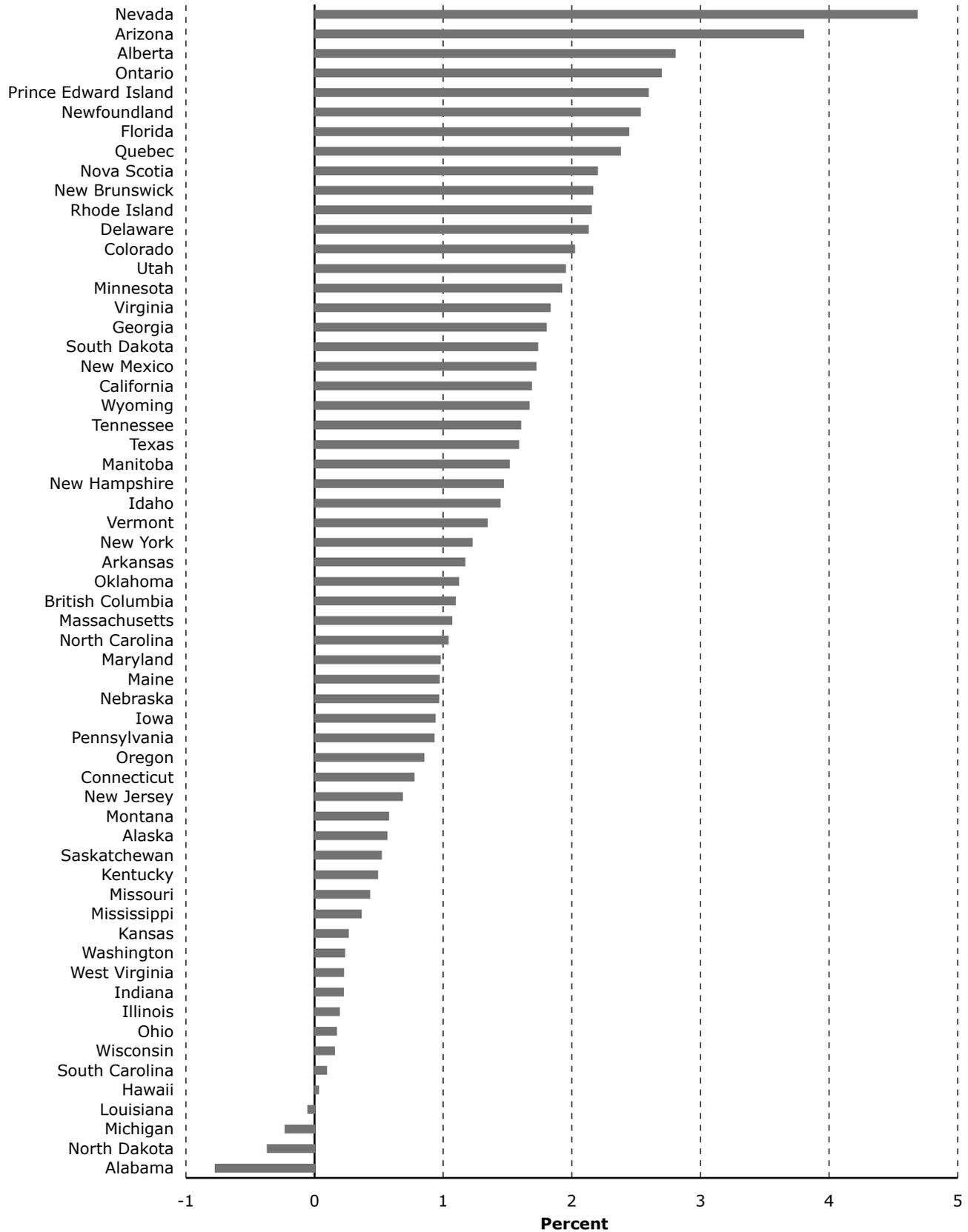
Arkansas ranked last with average private-sector employment growth of  $-0.7\%$ . Arkansas was the only jurisdiction to record an average contraction in private-sector employment.

**Index of Labour Market Performance**



Source: The Fraser Institute

**Indicator 1: Average Total Employment Growth (1998–2002)**



Sources: Statistics Canada, Provincial Economic Accounts; US Department of Labor, Bureau of Labor Statistics, available at <http://www.bls.gov/lau/> (as of June 16, 2003); calculations by the authors.

The Southern and Northeastern US states generally performed poorly on this indicator and were, therefore, ranked low.

One of the interesting observations to note is the relationship between the results in the first labour market performance indicator, average total employment growth, and the second indicator, average private-sector employment growth.

There are several jurisdictions that were in the process of altering the size of their public sector. There is, therefore, a stark contrast between the two indicators. For example, Alabama records the lowest average total employment growth of  $-0.8\%$  but its private-sector employment growth was  $0.9\%$ , indicating a rather large-scale reduction in public-sector employment in the state. Similarly, Alaska records average total employment growth of  $0.6\%$  while averaging  $2.1\%$  private-sector employment growth, again indicating rather large declines in the public sector.

Arizona and Arkansas exhibit the opposite: low average private-sector employment growth coupled with much higher average total employment growth, indicating an expansion in the public sector.

### **Indicator 3: Average Unemployment Rates (1998–2002)**

Indicator 3 is partially a reflection of the first two indicators, in that an economy unable to generate employment growth will also, to a certain extent, experience higher unemployment rates. Indicator 3 specifically measures the five-year average percentage of citizens actively seeking work who were unable to secure employment.

It is important to recognize that a certain portion of the differences between the Canadian provinces and the US states are due to the differences in the two countries' employment insurance programs.<sup>9</sup> In general, Canada has a more generous employment insurance program than the United States, which provides higher benefits, for longer periods, for a greater percentage of its unemployed. The result, not surprisingly is that Canada tends to have higher average unemployment rates. In addition, the Canadian federal government made changes to the Employment Insurance system in 2000 that benefit workers in Atlantic Canada.

#### **Observations**

South Dakota records the lowest average unemployment rate for the last five years at  $2.9\%$ .

Three of the Plain States (South Dakota, Nebraska, and North Dakota) and five of the Northeastern states (Vir-

ginia, Connecticut, New Hampshire, Vermont, and Massachusetts) appear in the top 10 jurisdictions.

Alberta and Manitoba tie for the highest-ranking Canadian provinces. Unfortunately, they tie for 42<sup>nd</sup> place overall with a five-year average unemployment rate of  $5.2\%$ , nearly double the average rate of South Dakota.

Newfoundland ranks last, with an average unemployment rate of  $16.9\%$  over the last five years. Newfoundland's average unemployment rate stands in stark contrast to that of South Dakota; it is 5.9 times greater.

Further evidence of Canada's poor performance on this indicator is the fact that the bottom six positions are all Canadian provinces: British Columbia, Quebec, Nova Scotia, New Brunswick, Prince Edward Island, and Newfoundland.

One of the facts that emerges at the bottom of the rankings is how high average unemployment rates are in Atlantic Canada. Nova Scotia, New Brunswick, Prince Edward Island and Newfoundland recorded average unemployment rates of  $9.7\%$ ,  $10.8\%$ ,  $12.9\%$ , and a startling  $16.9\%$ , respectively, over the last five years. These averages diverge significantly from the average for the top 20 jurisdictions ( $3.6\%$ ) or even the Canadian average ( $9.0\%$ ).

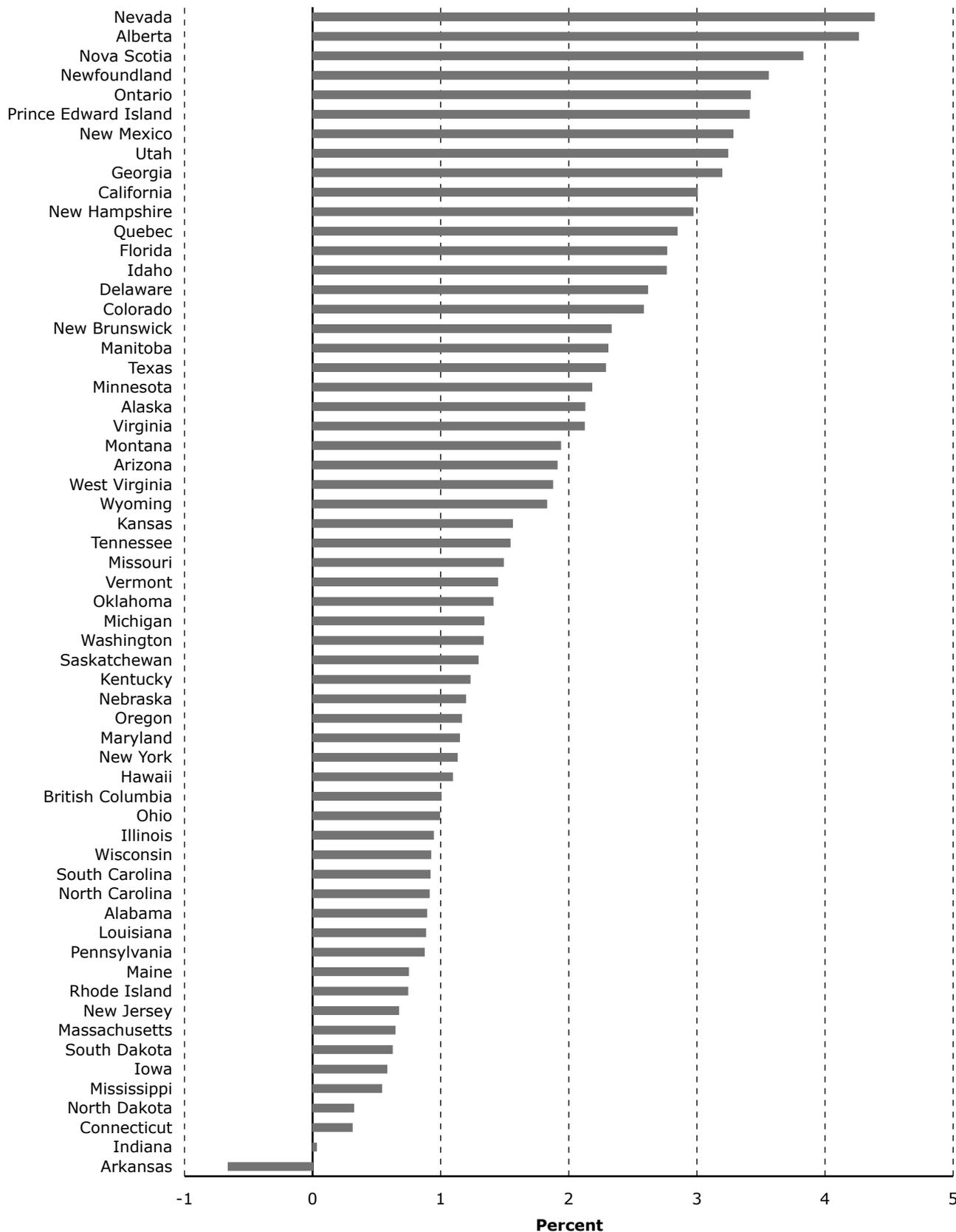
It is interesting to note the contrast between the bordering Northeastern US states, which dominated the top of the rankings, and the Canadian Atlantic provinces. The Northeastern US states generally maintained low average unemployment rates while the bordering Canadian Atlantic provinces placed at the bottom of the unemployment rate rankings with high average unemployment rates.

The RTW states performed well on this indicator of labour market performance. Five of the top 10, and 13 of the top 25 jurisdictions are RTW states.

### **Indicator 4: Average Duration of Unemployment (1996–1998 / 2000–2001)<sup>10</sup>**

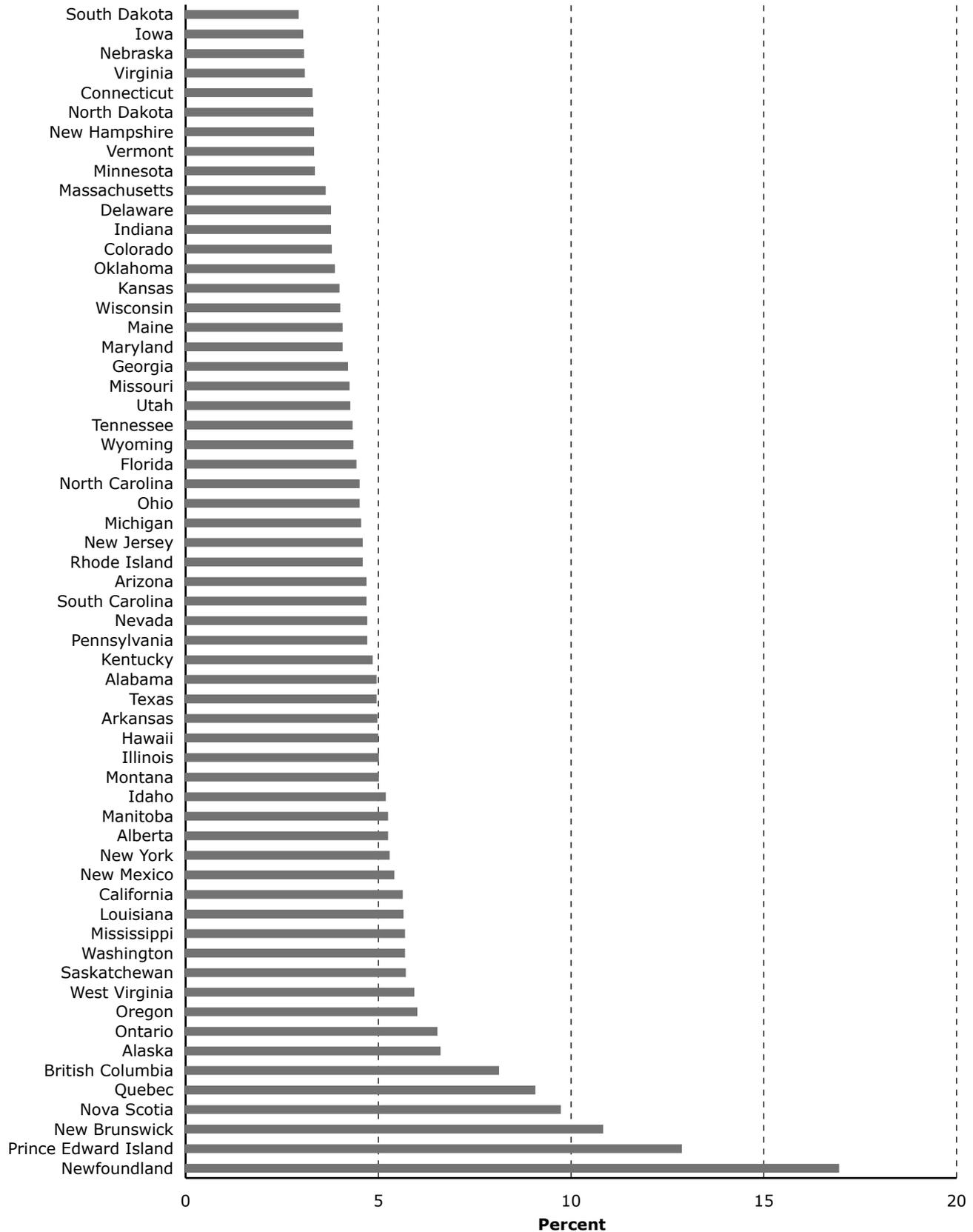
The fourth indicator of labour market performance is an adjunct to the previous measure, average unemployment rates. It is meant to indicate the severity of unemployment. That is, two jurisdictions with similar unemployment rates (inability of job seekers to secure employment) may have differing labour-market problems if the duration or spells of unemployment are drastically different. This indicator measures the percentage of employees experiencing unemployment for 27 weeks or longer. The Canadian and US data are directly comparable although the relative generosity of the Canadian system vis-à-vis the US system will obviously affect the results.

**Indicator 2: Average Private Sector Employment Growth (1997–2001)**



Sources: Statistics Canada, *Labour Force Historical Review 2002* (CD-ROM); US Department of Labor, Bureau of Labor Statistics, available at <http://www.bls.gov/opub/gp/laugp.htm>; calculations by the authors.

**Indicator 3: Average Unemployment Rates (1998–2002)**



Sources: Statistics Canada, Provincial Economic Accounts; US Department of Labor, Bureau of Labor Statistics, available at <http://www.bls.gov/lau/> (as of June 16, 2003); calculations by the authors.

## Observations

Utah ranks first with the lowest percentage of its unemployed, 5.1%, experiencing unemployment in excess of 27 weeks.

Interestingly, it was the Plain States (Nebraska, South Dakota, Idaho, North Dakota, and Wyoming) and industrial states such as Iowa, Wisconsin, Michigan, Indiana, and Minnesota, that dominated the top of the rankings. These same states performed poorly on the previous indicator, average unemployment rates, indicating that the states have a higher level of unemployment but with shorter spells. It may also relate to the nature of the economies, particularly as the industrial states may be more prone to short periods of unemployment.

The top-ranked Canadian province was Alberta, ranking 19<sup>th</sup> with 11.1% of its unemployed experiencing unemployment in excess of 27 weeks.

Quebec attains the dubious distinction of being last, with 26.8% of its unemployed experiencing unemployment in excess of 27 weeks.

Worse still for Canada, five of the bottom 10 jurisdictions were Canadian: British Columbia (19.2%), Nova Scotia (20.3%), Ontario (20.8%), Newfoundland (26.6%), and Quebec (26.8%).

The rather large percentage of unemployed experiencing unemployment in excess of 27 weeks in Canada stands in rather stark contrast with the general experience of the United States. For example, the top 10 ranked jurisdictions, all US states, averaged 8.3% of their unemployed experiencing unemployment in excess of 27 weeks. This is significantly lower than even the highest ranked Canadian province (Alberta) to say nothing of those provinces that ranked lower. It is important to note that part of the explanation for differences in the duration of unemployment in Canada and the United States relates to the differences in the two countries' unemployment insurance programs.<sup>11</sup>

The RTW states ranked quite well on this indicator of labour market performance. Specifically, seven of the top 10, and 13 of the top 20 jurisdictions were RTW states.

## Indicator 5: Average GDP per Worker, 1997–2001 (Labour Productivity)<sup>12</sup>

The ultimate goal of a well-functioning labour market is high and growing labour productivity, which in turn translates into higher wages and salaries for workers.<sup>13</sup> The final indicator of labour-market performance measures the average total value of goods and services (GDP) per worker over the last five years (1997–2001).<sup>14</sup>

Please note that Purchasing Power Parity (PPP), a unique conversion rate calculated by Statistics Canada to account for price differences between Canada and the United States, was used to convert US dollars to Canadian dollars.

## Observations

Delaware ranked 1<sup>st</sup>, with average GDP per worker totalling \$118,758.

The Northeastern states, such as Delaware, Connecticut, New York, Massachusetts, and New Jersey dominated the top of the rankings with four of the top five, and five of the top 10 jurisdictions.

Alberta was the top-ranked Canadian province at 9<sup>th</sup> place, with average GDP per worker of \$91,565. The next highest-ranked Canadian province was Ontario at 37<sup>th</sup> place with \$72,571 per worker in GDP.

Prince Edward Island ranked last with GDP per worker of \$53,364, less than half that of the top-ranked jurisdiction, Delaware.

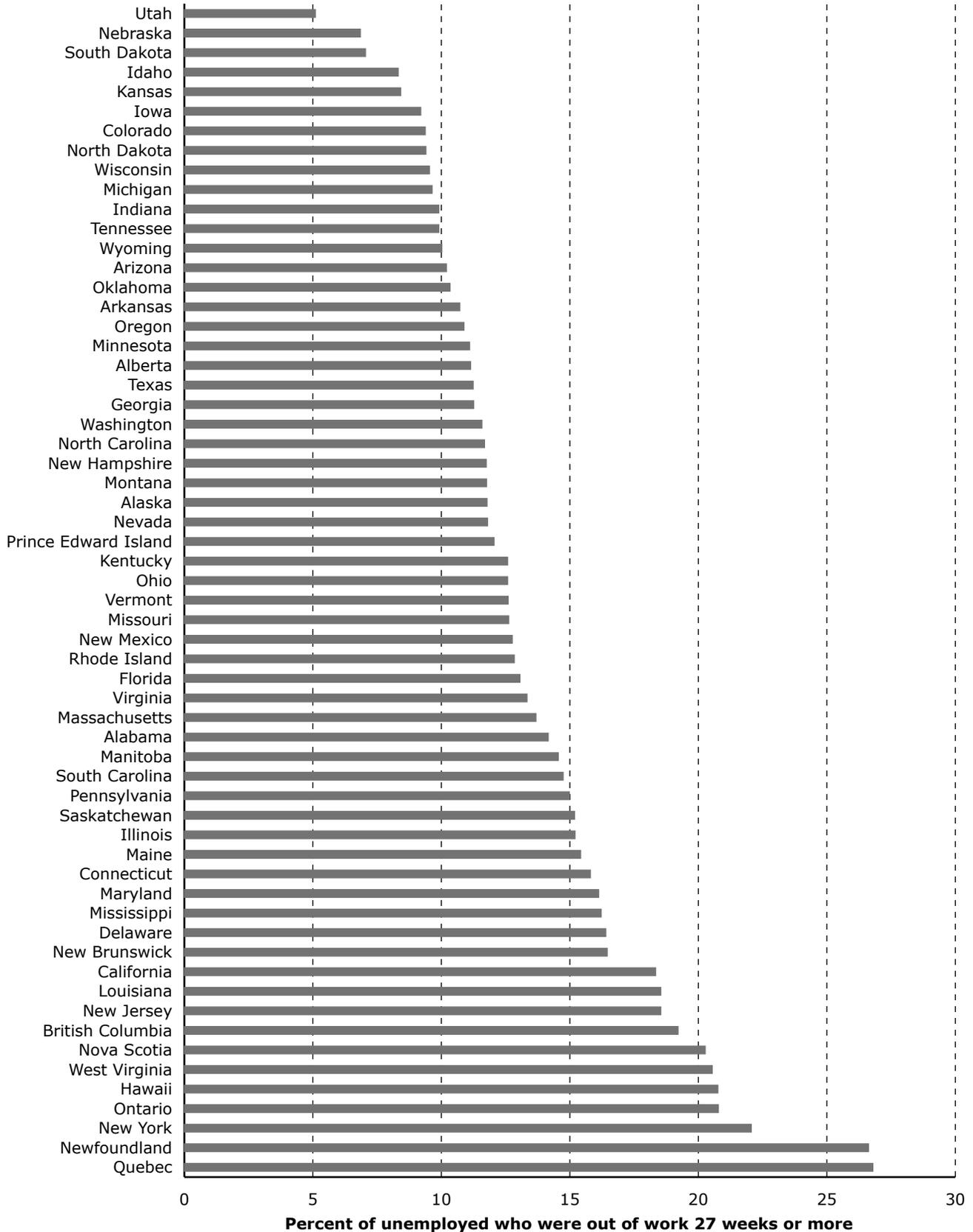
Sadly, six of the 10 jurisdictions at the bottom of the rankings were Canadian: Quebec, Newfoundland, Manitoba, New Brunswick, Nova Scotia, and Prince Edward Island.

The Southern states are generally poorer (i.e. have lower productivity) than the other US states. However, they still outperform most of the Canadian provinces, which dominate the bottom of the rankings.

## Notes

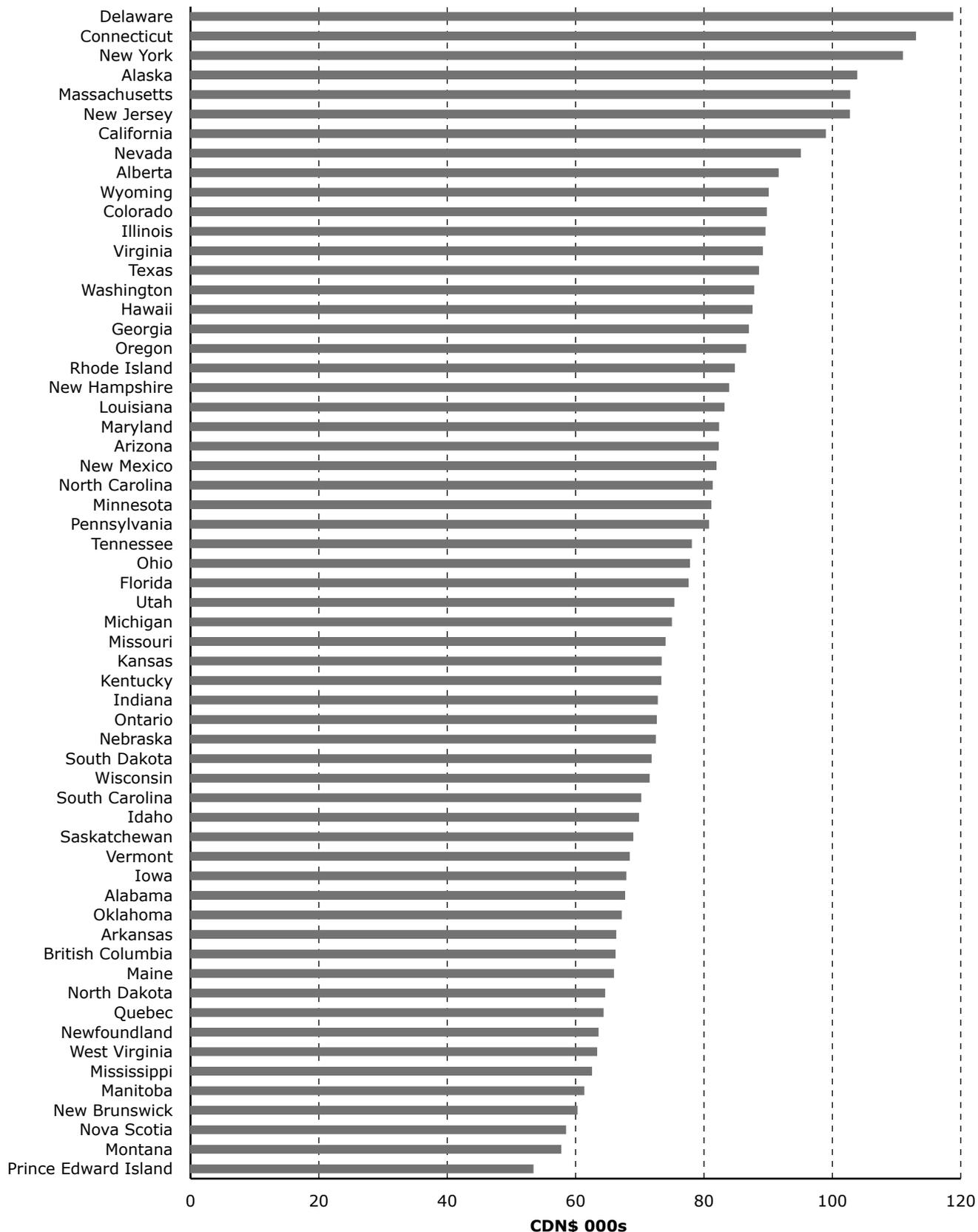
- 1 The US Department of Labor did not report the 1999 results for the duration of unemployment because it deemed the sample for US states too small.
- 2 Right-to-Work (RTW) refers to labour legislation that essentially precludes closed-shop unionization. In other words, it precludes mandatory union dues. For more information on RTW in the United States, see <http://www.nrtw.org>.
- 3 In all there are 22 RTW states: Alabama, Arizona, Arkansas, Florida, Georgia, Idaho, Iowa, Kansas, Louisiana, Mississippi, Nebraska, Nevada, North Carolina, North Dakota, Oklahoma, South Carolina, South Dakota, Tennessee, Texas, Utah, Virginia, and Wyoming. RTW states are generally located in the South, the Midwest, and the Southwest excluding California. There are no RTW states in the Northeast or in the industrial belt surrounding Michigan.
- 4 For further information on RTW, see: Bennett 1994; Kendrick 2001; Mihlar 1998; Moore et al. 1985; Moore 1998; and Wilson 2002.

**Indicator 4: Average Duration of Unemployment (1996–1998; 2000–2001)**



Sources: Statistics Canada, *Labour Force Historical Review 2002* (CD-ROM); US Department of Labour, Bureau of Labour Statistics, available at <http://www.bls.gov/opub/gp/laugp.htm> (as of June 17, 2003); calculations by the authors.

**Indicator 5: Average GDP per Worker (1997–2001)**



Source: Statistics Canada, Provincial Economic Accounts; Statistics Canada, *Purchasing Power Parities and Real Expenditures, United States and Canada, 1992–2001*, 13-604-MIB no. 39, June 2002; US Department of Commerce, Bureau of Economic Analysis, available at <http://www.bea.doc.gov/> (as of July 11, 2003); US Department of Labor, Bureau of Labor Statistics, available at <http://www.bls.gov/lau/> (as of June 16, 2003); calculations by the authors.

- 5 There are currently 22 US states with Right-to-Work (RTW) laws, representing 36.7% of the jurisdictions—10 Canadian provinces and 50 US states—that were studied.
- 6 The number of RTW states for analytical purposes would actually be less than the current number of 22 since Oklahoma only recently enacted RTW laws (2001), which would obviously not have affected their performance over the last five years.
- 7 California can be considered both a Southwestern state as well as a west-coast state.
- 8 For further discussion of the economic effects of public versus private employment growth, see Clemens et al. 2003.
- 9 For more information on the two countries' Unemployment Insurance systems, see, for Canada, [http://www.hrdc-drhc.gc.ca/ae-ei/employment\\_insurance.shtml](http://www.hrdc-drhc.gc.ca/ae-ei/employment_insurance.shtml) and, for the United States, <http://workforcesecurity.doleta.gov/unemploy/uifactsheet.asp>.
- 10 The US Department of Labor did not report the 1999 results for the duration of unemployment because it deemed the sample for US states too small.
- 11 For a discussion of the economic effects of Unemployment Insurance programs, see Grubel and Walker 1978.
- 12 Figures are presented in 2001 Canadian dollars.
- 13 Note the deleterious effects associated with circumstances wherein wage growth consistently exceeds productivity growth.
- 14 Data for 2002 at the sub-national level (state) was not available for the United States at the time this study was written.

# Characteristics of Labour Market Regulation

This second section of the study examines particular characteristics of labour market regulation in each of the 60 jurisdictions: public sector employment as a percent of total employment, unionized employment as a percent of total employment, minimum wage as a percent of per-capita GDP, and a host of labour relations laws.<sup>1</sup> There is empirical evidence—as we show in this section—that each of these characteristics affect the performance of labour markets and it is not surprising to find that jurisdictions with unfavourable labour-market regulations also experience poor labour-market performance.

## Characteristic 1: Average Public Sector Employment as a Percent of Total Employment (1997–2001)<sup>2</sup>

The split between private- and public-sector 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 in the public sector.<sup>3</sup> The following brief discussion outlines some of the important differences between the private and public sectors.

First are budget constraints, which Kornai (1992) identified as one of the major and unchangeable differences between private-sector business enterprises and government. Government budget constraints are “soft” since it is impossible for government to be de-capitalized whereas private sector budget constraints are “hard” since losses lead to a decrease in capital and ultimately to bankruptcy. The real risk of bankruptcy and failure forces the private sector to react to consumer demands and preferences and to efficiently allocate capital to maximize returns. The public sector, with its softer budget and no risk of bankruptcy faces no such competitive pressure.

Another key 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. Ehrlich (1994) found that the under-capitalization of government entities leads to lower total factor productivity and labour productivity.<sup>4</sup> Lower labour productivity is of particular concern, given that research shows that public-sector employees tend to be paid a wage premium compared with their private-sector counterparts.<sup>5</sup>

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. 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, lower quality products, and higher prices.

Characteristic 1 is a measure of the ratio between total employment in each province or state and public-sector employment, both directly in government as well as in government business enterprises. Note that federal employees have been removed as it is beyond the control of provincial and state governments to alter federal government employment.

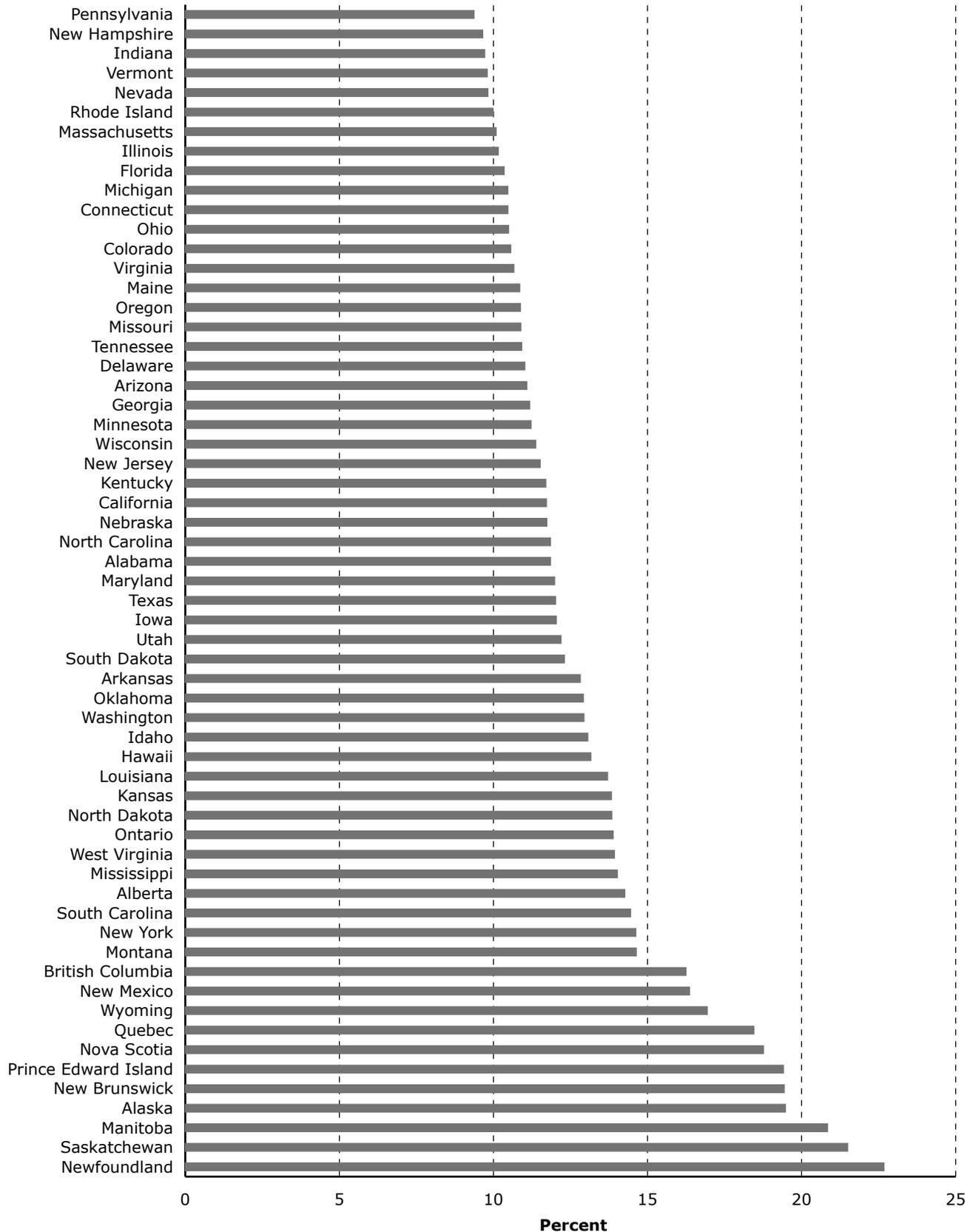
### Observations

Pennsylvania tops the list of Canadian provinces and US states with the lowest percentage of its employment in the public sector, 9.4%.

States of the Northeast and the industrial states surrounding and including Michigan dominated the top of the rankings. Five of the top 10 and eight of the top 20 jurisdictions were located in the Northeast while the industrial states occupied two of the top 10 and five of the top 20 positions.

Ontario was the highest ranked Canadian province. Unfortunately, it ranked 43<sup>rd</sup> with 13.9% of its total employment represented by public-sector employment. Alberta followed Ontario closely at 46<sup>th</sup> position with 14.3% of employment in the public sector.

**Characteristic 1: Average Public Sector Employment as a Percent of Total Employment (1997-2001)**



Sources: Statistics Canada, Public Institutions Division, Financial Management System; US Department of Labor, Bureau of Labor Statistics, available at <http://www.bls.gov/opub/gp/laugp.htm>; calculations by the authors.

Newfoundland occupied the last position, with public-sector employment representing 22.7% of total employment, more than double the rate of the top ranked jurisdiction, Pennsylvania.

The results for Canada worsen when the bottom 10 jurisdictions are examined. Seven of the bottom 10 jurisdictions are Canadian provinces: Quebec, Nova Scotia, Prince Edward Island, New Brunswick, Manitoba, Saskatchewan, and Newfoundland. British Columbia ranked 50<sup>th</sup>, only one spot out of the bottom 10 jurisdictions.

### **Characteristic 2: Average Unionized Employment as a Percent of Total Employment<sup>6</sup> (1998–2002)**

Another important structural attribute of labour markets is unionization. Unionization has been demonstrated to affect a number of economic variables, including productivity. A large body of empirical research has concluded that unionized firms perform worse on productivity growth, investment growth, employment creation, and profitability than non-unionized firms (Becker and Olsen 1986; Maki and Meredith 1986; Long 1993; Addison and Wagner 1993; Laporta and Jenkins 1996; Hirsch 1997). For example, Hirsch (1997), in a major review of research on unionization, noted that the evidence indicates that unions tend to increase wages, reduce profitability, reduce investment in physical capital and research and development; they also lower employment growth.<sup>7</sup> Hirsch described the wage premium as a tax on capital, which effectively lowered the net rate of return on investment.

Similarly, Metcalf (2003) compared the productivity of unionized labour in the United States, Canada, United Kingdom, Japan, Germany, and Australia. He found that unionization reduced 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 corroborates the findings of earlier studies. Aidt et al. (2002), in a literature review on unions and their effects on economic performance, concluded that union members and other workers covered by collective agreements receive, on average, wage premiums over their non-unionized counterparts in developed and developing countries. Furthermore, Aidt et al. noted that net profits, investment rate (physical capital), and spending on research and development tend to be lower in unionized than in non-unionized firms even though unionized firms tend to adopt new technology as fast as non-unionized firms.

It is clear that unions in general reduce labour market flexibility, productivity, and adversely affect the overall efficiency of labour markets. It is, therefore, critical to measure the extent of unionization, in both the public and private sectors.

### **Observations**

This labour market characteristic measures the percentage of total employment represented by unionized employment, on average, over the last five years.

North Carolina maintains the lowest ratio of unionized workers to total employment, with 4.4% of its employment unionized. South Carolina ranks a close 2<sup>nd</sup>, with 5.1% of its employment unionized.

The top-ranked Canadian province was Alberta. Unfortunately, it ranked 49<sup>th</sup> with 24.7% of its employment unionized. Worse still, Alberta performed better than only two US states: Hawaii and New York State.

Canadian provinces occupied ranks 52 to 60 inclusively. Put differently, the bottom nine ranks for unionization were occupied by Canadian provinces. Quebec attains the dubious distinction of occupying last place with 40.0% of its employment unionized.

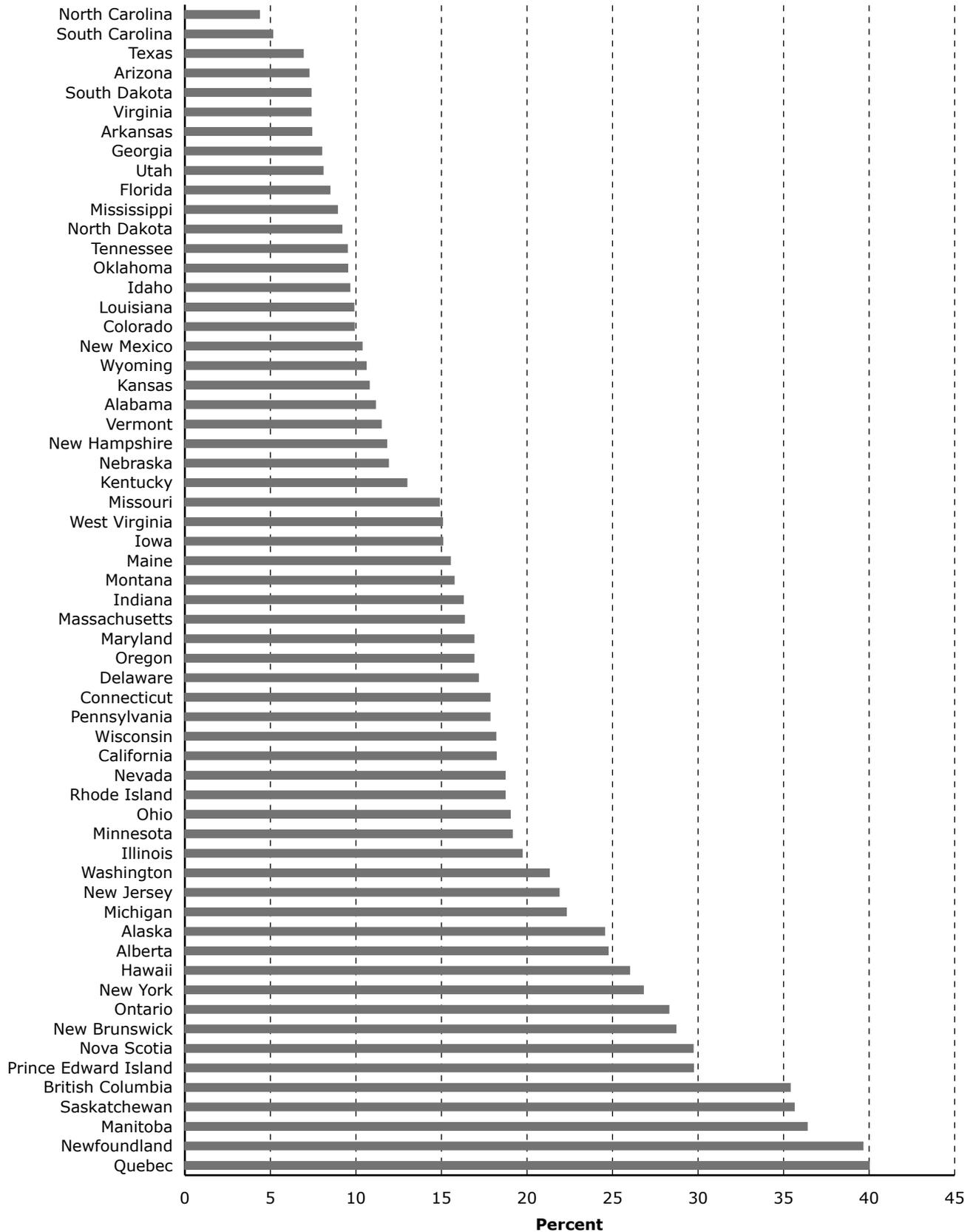
The top 10 jurisdictions are dominated by Southern US states (7) and to a lesser extent Southwestern US states (2).

The Right-to-Work states, not surprisingly, dominate the top of the rankings. RTW states occupied 10 of the top 10 rankings, 18 of the top 20 rankings, and 21 of the top 25 rankings. The lowest ranked RTW state was Nevada, which occupied 41<sup>st</sup> position with 18.7% of its employment unionized.

Part of the explanation for the Canadian provinces' poor showing is contained in the previous labour-market characteristic, the percent of workers employed by the public sector. There is a much higher propensity for the public sector to be unionized than for the private sector.<sup>8</sup> For example, in 2002, 19.6% of the private sector was unionized in Canada while 75.9% of the public sector was unionized.<sup>9</sup> The fact that Canada generally maintains a larger public sector than the United States is, therefore, an important explanation for the higher rates of unionization observed in Canada.<sup>10</sup>

Another potent explanation for the difference between Canadian and US unionization rates relates to the presence of closed-shop unions in Canada, which are outlawed in many US states. Closed-shop unionism basically requires workers to join or, if not willing to do so, financially support a single union or bargaining agent as a condition of their employment. In other words, individuals wishing to work at a unionized company must join the union or, if not

**Characteristic 2: Average Unionized Employment as a Percent of Total Employment<sup>6</sup> (1998–2002)**



Sources: Statistics Canada, CANSIM II; Statistics Canada, *Labour Force Historical Review 2002* (CD-ROM); Guillard, Marie-Claire, *Economist*, Local Area Unemployment Statistics, Bureau of Labour Statistics, US Department of Labour, personal communication; calculations by the authors.

willing to do so, still pay union dues. Currently, some 22 US states have specific legislation that prevents such union monopolies and provides workers with more choice. A number of studies have suggested that such differences in the choice afforded workers in the two countries accounts for some of the observed differences in unionization.<sup>11</sup>

### **Characteristic 3: Average Minimum Wage<sup>12</sup> as a Percent of Per-Capita GDP (1997–2001)**

High minimum wages reduce employment opportunities for young and unskilled workers and do not necessarily raise the incomes of the poor.<sup>13</sup> In addition, high minimum wages restrict the ability of employers and employees to negotiate mutually beneficial contracts. In particular, minimum-wage legislation restricts the ability of low-skilled workers and new entrants to negotiate for employment they might otherwise accept.<sup>14</sup>

Empirical studies have estimated that a 10% increase in the minimum wage results in a reduction of the employment rate among youth (ages 15 to 25) by 1% to 3%. Similarly, a 10% increase in the minimum wage has also been estimated to reduce employment rates of teenagers by 2% to 4%.<sup>15</sup>

Increases in the minimum wage have other adverse economic impacts. Empirical studies show that when minimum wages rise, employers offer fewer fringe benefits and reduce on-the-job training.<sup>16</sup> Furthermore, high minimum-wage rates are associated with higher school dropout rates,<sup>17</sup> as the increase in the minimum wage induces teenage workers to leave school in search of employment.<sup>18</sup>

Another factor concerning minimum wages, which is often overlooked, is the age of those who generally receive such wages. Most minimum-wage workers are young: 70% of men working at minimum wage are between 16 and 23 years old; 78% of these young minimum-wage workers live at home with their parents. Over 55% of women working at minimum wage fall between 16 and 23 years of age; of these young minimum-wage workers, over 60% live at home. The “typical” minimum-wage worker is, therefore, a young person living at home with his or her parents.<sup>19</sup>

In addition, and perhaps most surprising, international evidence shows that most of those earning minimum wage are not in low-income families. Rather, they tend to be young people working part-time while living in high-income homes. Increases in the minimum wage are, therefore, unlikely to “trickle down” to low-income households. The benefits of higher minimum wages accrue largely to teenagers and young workers living in relatively affluent households.

Characteristic 3 is obtained by calculating the annual income earned by someone working at the minimum wage<sup>20</sup> as a ratio of per-capita GDP, the average value of all goods and services produced per person in a jurisdiction over a specific time period. Since per-capita GDP is a proxy for the average productivity in a jurisdiction, this ratio takes into account differences in the ability to pay wages across jurisdictions based on productivity. As the minimum wage grows relative to productivity, the range of employment contracts that can be negotiated is reduced and economic performance is eroded.

#### **Observations**

Delaware ranks 1<sup>st</sup> with its minimum wage constituting 25.0% of average per-capita GDP in the state. In other words, a citizen of Delaware earning the minimum wage could earn up to 25% of the average per-capita GDP (income) of the state. Delaware, by maintaining a relatively low real minimum wage, facilitates greater participation by those possessing relatively low skill sets or entering the labour force. It also affords more opportunities for employees and employers to negotiate contracts that benefit both parties.

Alberta was the top-ranked Canadian province, occupying 6<sup>th</sup> position with a minimum wage of 27.2% of the province’s average per-capita GDP.

Saskatchewan ranked next highest among Canadian provinces; unfortunately it was only able to achieve a ranking of 44<sup>th</sup> with its minimum wage representing 39.8% of the province’s average per-capita GDP.

The Northeastern US states generally dominated the top of the rankings, with five of the top 10 jurisdictions.

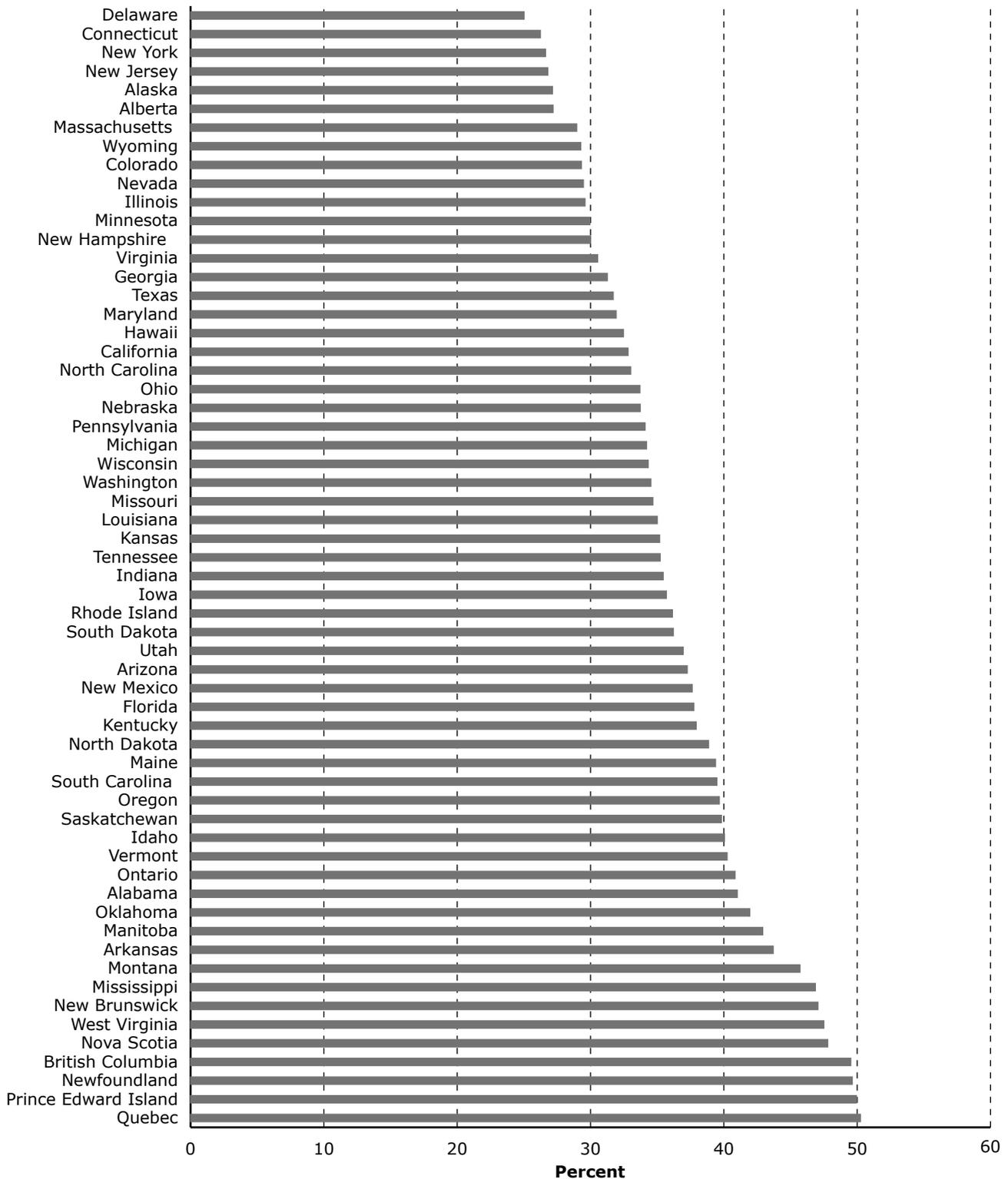
Quebec held the last position, ranking 60<sup>th</sup> out of 60 Canadian provinces and US states. Quebec’s minimum wage represented 50.2% of the province’s average per-capita GDP.

Worse still for Canada, six of the bottom 10 jurisdictions were Canadian: New Brunswick, Nova Scotia, British Columbia, Newfoundland, Prince Edward Island, and Quebec. Manitoba narrowly escaped the bottom 10 by placing 50<sup>th</sup>.

### **Characteristic 4: Labour Relations Laws and Labour Relations Boards**

The fourth characteristic of labour markets differs from the previous characteristics in being much more qualitative in nature. In addition, only Canadian provincial labour relations laws were reviewed due to resource constraints. The Labour Relations Laws and Labour Relations Boards section deals with the rules that govern relations between

**Characteristic 3: Average Minimum Wage as a Percent of Per-Capita GDP (1997–2001)**



Sources: Human Resources Development Canada, [http://labour-travail.hrdc-drhc.gc.ca/psait\\_spila/lmneq\\_eslc/eslc/salaire\\_minwage/report2/report2c\\_e.cfm](http://labour-travail.hrdc-drhc.gc.ca/psait_spila/lmneq_eslc/eslc/salaire_minwage/report2/report2c_e.cfm) (June 6, 2003); Statistics Canada, Provincial Economic Accounts; Council of State Governments, *The Book of the States* (various issues); US Department of Labor, Employment Standards Administration Wage and Hour Division, [http://www.dol.gov/esa/contacts/state\\_of.htm](http://www.dol.gov/esa/contacts/state_of.htm) (various state labour departments) (as of July 14, 2003); US Department of Commerce, Bureau of Economic Analysis, <http://www.bea.doc.gov/> (as of June 16, 2003); calculations by the authors.

employers and employees, as expressed in the Labour Relations laws of each province,<sup>21</sup> as well as the openness and accountability of the various Labour Relations Boards.

This section evaluates whether or not the rules established by the various labour-relations acts facilitate flexibility in the labour market while balancing the needs of both employees and employers. One of the over-arching objectives of government should be to establish an environment within which fruitful economic activities can not only occur, but also flourish. Labour laws tilted too heavily in favour of one group at the expense of another or laws that are overly prescriptive and prevent innovation and flexibility will inhibit the proper functioning of the labour market.

It is important to note that this section analyzes the labour laws, not the interpretation or enforcement of such laws. Thus, two jurisdictions with very similar labour laws, but different levels of enforcement would perform equally in our analysis even though the reality of their labour markets may be quite different. In other words, this study does not attempt to measure the level of intervention or possible bias of the Labour Relations Boards or the courts. Rather, this study investigates differences in the laws themselves. The distinction between the article of law and its enforcement is critical since there is at least one case where the labour laws may be materially disconnected from the interpretation and enforcement of those laws.<sup>22</sup>

This section specifically looks at several aspects of the provincial labour relations laws: certification and decertification, arbitration, union security, successor rights, treatment of technology, replacement workers, and third-party picketing. In addition, an index calculating the transparency and openness of the provincial Labour Relations Boards is presented. Finally, an overall score for the labour relations laws and Labour Relations Boards is included at the end of this section.

### **A. Certification and Decertification**

This indicator studies the process used to certify and decertify unions as bargaining agents for a unit of employees. A number of aspects were analyzed, including the use of secret ballots, voting thresholds, and union membership requirements (see table 1).

Seven of the 10 provinces require workers to complete union membership cards in order for a union or employees to submit an application to the Labour Relations Board to conduct a vote for union certification or to certify a union where a vote is not required. This is clearly a more stringent requirement than simply requiring employees to indicate support through either letters or petitions. It also requires workers to consider their decision more carefully

since it requires employees to formally join a union. It is, however, also more open to fraud and manipulation.

The threshold of either union membership cards completed or indications of support ranges from a low of 25% in Saskatchewan to 50% + 1 in Prince Edward Island. In other words, it is much easier to facilitate a vote for union certification in provinces like Saskatchewan (25%), and Quebec (35%) than in a province like PEI (50% + 1), which maintains a higher threshold.

More importantly than the particular threshold for triggering a certification vote is the process by which certification is completed. Only five provinces, British Columbia, Alberta, Ontario, Nova Scotia, and Newfoundland, require a vote by secret ballot. The remaining five provinces all allow automatic certification if the number of union membership cards exceeds a specified threshold. The threshold varies from 50% in Saskatchewan and Quebec to 65% in Manitoba.

The threshold required to force a vote on decertification often differs from the threshold required for a certification vote. Specifically, four provinces maintain a different threshold for initiating a certification vote than for decertification. Tellingly, all four provinces have higher thresholds for decertification than for certification. Interestingly, however, all provinces, except Prince Edward Island, require secret ballots for decertification and the threshold for a decertification vote is standard: 50% + 1.<sup>23</sup>

When the details concerning the certification and decertification processes are examined, it becomes clear that most jurisdictions in Canada are attempting to promote labour flexibility and choice while balancing the needs of both employees and employers. Only two provinces stand out as having certification and decertification processes that heavily favour one party: Saskatchewan and Quebec. That said, there is still room for improvement in nearly every province. For instance, the five provinces that still allow automatic certification of unions should move quickly to requiring confirmation of union certification by secret ballot.

### **B. Arbitration Requirements**

Six provinces require immediate arbitration for disputes regarding a collective agreement, its meaning, application, or alleged violations. The remaining four provinces either allow for voluntary, non-binding mediation or other avenues of resolution prior to the imposition of binding arbitration or do not cover all industrial disputes in binding arbitration (see table 2).

This is an important aspect of industrial relations in Canada since it means that most disputes with collective agreements in place will be referred immediately to binding

**Table 1: Certification and Decertification**

	<b>Union Membership Required for Application to Certify<sup>1</sup></b>	<b>Threshold Required to Apply for Certification</b>	<b>Secret Ballot Vote Re-quired for Certification</b>	<b>Automatic Certification</b>	<b>Threshold Required for Decertification Vote</b>	<b>Secret Ballot Vote Required for Decertification</b>	<b>Score (Out of 10)</b>
<b>BC</b>	Yes	45%	Yes	N/A	45%	Yes	9.2
<b>AB</b>	No	40%	Yes	N/A	40%	Yes	8.4
<b>SK</b>	No	25%	No	50%	50% + 1	Yes	3.2
<b>MB</b>	No	40%	No	65%	50%	Yes	5.2
<b>ON</b>	Yes	40%	Yes	N/A	40%	Yes	9.2
<b>QC</b>	Yes	35%	No	50%	50% + 1	Yes	4.4
<b>NB</b>	Yes	40%	No	60%	40%	Yes	8.0
<b>NS</b>	Yes	40%	Yes	N/A	50% + 1	Yes	7.2
<b>PEI</b>	Yes	50% + 1 <sup>2</sup>	No	50% + 1	50% + 1	No	7.6
<b>NF</b>	Yes	40%	Yes	N/A	40%	Yes	9.2

Sources: See Labour Code References in the References Section; calculations by the authors.

Notes: (1) Jurisdictions where union membership is not required to apply for certification rely on petitions, letters of intent, or similar statements of support. (2) There is a great deal of discretion afforded the PEI Labour Relations Board in determining what constitutes a majority of employees within the certification process. The threshold for automatic certification based on union membership cards can vary from 50% to 70%.

Note on the calculation of scores: In all, five variables were used to calculate the overall score included in Column 8: membership cards required for certification vote, threshold of employees indicating preference for certification vote required to trigger a vote, whether secret ballots are required for certification and decertification votes (2 variables), and whether there is a difference in the threshold for certification and decertification votes. Optimal thresholds for voting, namely 50% + 1, were included in the score calculations for both certification and decertification. Each variable was weighted equally in the overall score calculation.

arbitration for settlement. The selection of arbitrators<sup>24</sup> and, indeed, the members of the various Labour Relations Boards thus have the potential to exact an enormous amount of influence over the resolution of industrial disputes.

It should be noted that strikes or other types of work actions are generally precluded by legislation during a contract across Canada. It is also important to recognize that public-sector unions are treated differently from their private-sector counterparts.<sup>25</sup>

The arbitration process, participants, and the regulation of the process are critical aspects of industrial relations in Canada. An analysis of this process in greater depth is beyond the scope of this study; it is sufficient for our purposes to conclude that there is a standard approach to industrial disputes across provinces when a collective agreement is in place: arbitration.

### C. Union Security

Union security is the protection of unions and union power within industrial settings. Specifically, it determines

**Table 2: Mandatory Arbitration**

	<b>Immediate Binding Arbitration Required</b>
<b>British Columbia</b>	Yes
<b>Alberta</b>	No
<b>Saskatchewan</b>	Yes
<b>Manitoba</b>	Not for all disputes
<b>Ontario</b>	Yes
<b>Quebec</b>	Yes
<b>New Brunswick</b>	Yes
<b>Nova Scotia</b>	No
<b>Prince Edward Island</b>	Yes
<b>Newfoundland</b>	No

Sources: See Labour Code References in the References Section; calculations by the authors.

whether workers can choose whether or not to join and support a union in a unionized company, factory, or establishment. Put differently, this indicator measures whether or not closed-shop unionism is permitted.<sup>26</sup>

Unfortunately, no Canadian province has adopted worker-protection laws or what are commonly referred to as Right-to-Work laws in the United States and so all provinces received a score of zero on this indicator.<sup>27</sup> Such legislation would grant workers the right to choose whether or not to join or financially support a union in their place of work.<sup>28</sup> It would allow workers to attain employment with any willing employer without having to join or pay union dues to an exclusive bargaining agent or union. Such legislation would provide at least two economic benefits: (1) it would help to constrain excessive wage demands by unions and help keep wages increases in line with productivity increases; (2) it would ensure competition for the right to represent workers during contract negotiations.

#### D. Successor Rights

This aspect of labour law determines whether, and how, collective agreements survive the sale, transfer, or consolidation of a business. That is, successor rights pertain to whether or not collective agreements (contracts) apply to purchasers when a business sells, transfers, or otherwise disposes of a department, sector, or the entire business.

This is an important aspect of labour law and, to a larger extent, the process of capital reallocation. If a business or portion of a business is rendered uneconomical due to changes in the market, reductions in competitiveness, or other reasons, stringent successor laws will impede the reorganization of the business or the efficient reallocation of its capital.

Unfortunately, every Canadian province enforces collective agreements when a business or part of it is sold, leased, transferred, merged, or otherwise disposed of. There is very little variance in the labour laws regarding successor rights across Canadian province. Thus, all the provinces received a score of zero on this measurement. Some jurisdictions provide the Labour Relations Boards with a degree of latitude in certain circumstances but the general direction of the laws in all provinces is to protect the collective agreement even after businesses are in some way disposed of.

#### E. Technological Change

This aspect of labour law relates to the presence of barriers to technological change within the various Labour Relations acts.<sup>29</sup> Specifically, this indicator measures whether or not the Labour Relations Acts indicate the need for no-

tice of technological investment, development, and change by the employer to the union (see table 3).

Surprisingly, four Canadian provinces (British Columbia, Saskatchewan, Manitoba, and Quebec) actually require employers to notify the union<sup>30</sup> in advance when technological change is to be introduced that will materially affect either the collective agreement or employment. It further permits the union to lodge complaints with the Labour Relations Board.

Such a barrier to technological change could have serious and adverse effects on productivity and investment. The productivity of workers is in part dependent on the capital (machinery and equipment) available to workers and it is one of the key drivers of wages and benefits. Thus, any reduction or mitigation of the capital available to workers in the form of plants, machinery, equipment, and new technologies could adversely affect their wages and benefits.

**Table 3: Barriers to Technological Change**

	<b>Notice Required for Introduction of Technology</b>	<b>Score (Out of 10)</b>
<b>British Columbia</b>	Yes	0
<b>Alberta</b>	No	10
<b>Saskatchewan</b>	Yes	0
<b>Manitoba</b>	Yes	0
<b>Ontario</b>	No	10
<b>Quebec</b>	Yes	0
<b>New Brunswick</b>	No	10
<b>Nova Scotia</b>	No	10
<b>Prince Edward Island</b>	No	10
<b>Newfoundland</b>	No	10

Sources: See Labour Code References in the References Section; calculations by the authors.

#### F. Replacement Workers

This measurement examines whether replacement workers are permitted during strikes and lock-outs and whether striking or locked-out workers are guaranteed their positions back after the resolution of the dispute (see table 4).<sup>31</sup>

Half of the Canadian provinces allow the hiring of replacement workers during strikes and lock-outs. Those five provinces also require that striking or locked out workers displace or have the right to displace replacement workers once the dispute has been resolved. Two of the remaining provinces specifically prohibit the hiring of replacement workers while the last three provinces do not address the issue in their respective labour laws.

**Table 4: Replacement Workers**

	Allowed	Entitled to Displace Replacement Workers	Score (Out of 10)
<b>BC</b>	No	N/A	0
<b>AB</b>	Yes	Yes	10
<b>SK</b>	Yes	Yes	10
<b>MB</b>	Yes	Yes	10
<b>ON</b>	Yes	Yes	10
<b>QC</b>	No	N/A	0
<b>NB</b>	not specified <sup>1</sup>	N/A	6
<b>NS</b>	not specified <sup>1</sup>	N/A	6
<b>PEI</b>	Yes	Yes	10
<b>NF</b>	not specified <sup>1</sup>	N/A	6

Sources: See Labour Code References in the References Section; calculations by the authors.

Note: (1) The Act contains no specific allowance for, or prohibition against, replacement workers.

### G. Third-Party Picketing

Third-party (or second-site) picketing refers to the ability of striking workers and their union to picket, and thus disrupt, the operations of enterprises not covered by the collective agreement. For example, third-party picketing might include suppliers or retailers. The ability to picket other sites or third parties means that the union and workers have an ability to affect not only the employer covered by the collective agreement but also any other company doing business with the primary firm (see table 5).

Only two provinces, British Columbia and Alberta, specifically prohibit third-party picketing. The remaining eight provinces regulate third-party picketing through the courts. This effectively means that third-party picketing may or may not occur depending on the persuasion of the particular court. A “medium” score of 6.0 was granted to these eight provinces since each may provide reasonable protection. A more in-depth analysis of court decisions would be required for a more accurate assessment.

### H. Transparency and Openness of Labour Relations Boards

This characteristic measures the transparency and openness of the 10 Labour Relations Boards based on their reporting of 22 indicators:

- 1 biographies of board members;
- 2/3 certification information, filed/granted;
- 4/5 decertification information, filed/granted;
- 6/7 unfair labour practices, filed/granted;
- 8/9 duty of fair representation, filed/granted;
- 10/11 strike votes, filed/granted;

**Table 5: Third-Party Picketing**

	Third-Party Picketing Permitted	Score (Out of 10)
<b>BC</b>	No	10
<b>AB</b>	No	10
<b>SK</b>	Regulated by Courts	6
<b>MB</b>	Regulated by Courts	6
<b>ON</b>	Regulated by Courts	6
<b>QC</b>	Regulated by Courts	6
<b>NB</b>	Discretion of LRB and Courts	6
<b>NS</b>	Regulated by Courts	6
<b>PEI</b>	Regulated by Courts	6
<b>NF</b>	Regulated by Courts	6

Sources: See Labour Code References in the References Section; calculations by the authors.

- 12/13 technological change, filed/granted;
- 14/15 reinstatement of workers, filed/granted;
- 16/17 successor applications, filed/granted;
- 18/19 replacement workers, filed/granted;
- 20/21 time required to process application, certification/decertification);
- 22 average annual cost per disposed case.

It is meant to indicate the degree to which Labour Relations Boards are transparent and open to citizens in their reporting of their activities (see table 6).

There is clearly a disclosure problem with respect to the various Labour Relations Boards. Saskatchewan’s Labour Relation Board received the highest score for disclosure but

**Table 6: Transparency and Openness of Labour Relations Boards**

	Number of Indicators Contained in the Most Recent Annual Report	Score (Out of 10)
<b>British Columbia</b>	16	7.3
<b>Alberta</b>	10	4.5
<b>Saskatchewan</b>	19	8.6
<b>Manitoba</b>	13	5.9
<b>Ontario</b>	12	5.5
<b>Quebec</b>	10	4.5
<b>New Brunswick</b>	11	5.0
<b>Nova Scotia</b>	10	4.5
<b>Prince Edward Island</b>	6	2.7
<b>Newfoundland</b>	11	5.0

Sources: See Labour Relations Boards in the References Section; calculations by the authors.

only attained an 8.6 out of 10; disclosed 19 of 22 indicators. Only six provinces' Labour Relations Boards received passing grades and two of those were scores of 5.0. Labour Relations Boards across Canada clearly need to improve their reporting of information.

In addition, there is a serious issue of timeliness. Many, if not most, of the Labour Relations Boards failed to produce annual reports in a timely manner. Given the importance of the Labour Relations Boards and their decisions to the proper functioning of labour markets across Canada, it is vital that they improve their accountability, transparency, and openness by providing more detailed information in a timely and reasonable fashion.

#### *Labour Relations Law and the Index of Labour Relations Boards*

This composite index of the eight measures (A–H) in the preceding section provides an overview of how each province performed with respect to their labour relations laws and the openness of their Labour Relations Board. As indicated by the scores in table 7, only four provinces (Alberta, Ontario, Newfoundland, and Nova Scotia) achieved overall scores of 5.0 or above. All of the remaining six provinces had scores below 5.0. Quebec received the lowest score of 1.9 out of 10.

More importantly, for all 10 provinces the scores indicate room for improvement in the labour laws governing industrial relations based on the goal of promoting labour market flexibility. In particular, all 10 provinces performed poorly in the areas of mandatory arbitration, successor rights, and union security. In addition, clear improvements could be made in most provinces with respect to third-party picketing rules and the openness of the Labour Relations Boards.

**Table 7: Labour Relations Laws and the Index of Labour Relations Boards**

	<b>Overall Score (out of 10)</b>
<b>British Columbia</b>	3.3
<b>Alberta</b>	6.1
<b>Saskatchewan</b>	3.5
<b>Manitoba</b>	3.6
<b>Ontario</b>	5.1
<b>Quebec</b>	1.9
<b>New Brunswick</b>	4.4
<b>Nova Scotia</b>	5.0
<b>Prince Edward Island</b>	4.5
<b>Newfoundland</b>	5.2

Note: All eight indicators were weighted equally in the calculation of the overall scores.

Caution should again be noted with respect to the nature of the preceding analysis. This section of the paper has analyzed critical aspects of the various provincial Labour Relations Acts. It has not assessed the level of intervention, vigilance, or persuasion of those entities charged with enforcing the laws. Thus, two jurisdictions with similar laws, may in fact have varying levels of labour flexibility based on the enforcement of laws by provincially appointed organizations such as Labour Relations Boards. It is nonetheless important to assess the flexibility accorded the labour markets by the various provincial labour laws. The next required step is to assess the enforcement of those laws. It is also important to note that attempts were made to analyze the level of intervention by the Labour Relation Boards across Canada but the extreme lack of data provided by the various boards made such an analysis extremely difficult at this time.

## **Other Areas of Concern**

### **Labour Standards Acts**

Another important component of labour law is contained in the various provincial governments' Labour Standard Acts. These laws cover such aspects of the labour market as mandatory overtime pay and exemptions from minimum wages. The following summarizes two of the main similarities and differences across provinces with respect to their Labour Standard laws and codes.

#### *(1) Overtime Requirements*

All 10 provinces have some type of measure included in their Labour Standards Acts that requires overtime pay. Four provinces, British Columbia, Alberta, Saskatchewan, and Manitoba, have overtime requirements based on both the number of hours worked within a day as well as within a week. The remaining six provinces, those east of Manitoba, prescribe mandatory overtime payments based on a certain number of hours worked in a week.

Table 8 presents the hour thresholds and exemptions for overtime pay for each province.

British Columbia, Saskatchewan, Manitoba, and Newfoundland maintain the lowest weekly threshold for the number of hours required to receive overtime pay at 40 hours. In addition, British Columbia is the only province to impose a tiered system of overtime pay wherein hours worked in excess of 40 require 1.5 times normal pay and hours in excess of 48 require 2.0 times regular pay. Nova Scotia and Prince Edward Island maintain the highest number of hours required in a week to trigger overtime pay, 48.

Interestingly, several provinces (New Brunswick, Nova Scotia, and Newfoundland) restrict the application of overtime pay mainly to minimum-wage workers. This seems rather odd as it discourages employers from increasing the number of hours for low-skilled workers (minimum-wage workers) and encourages them to increase the number of workers.

*(2) Minimum Wage Exemptions*

Another important aspect of the Labour Standards Codes is the minimum wage exemptions provided for in the various acts. Only three provinces, Saskatchewan, New Brunswick, and Newfoundland, do not provide minimum wage exemptions for certain types of employment. Alberta, for example, provides for not less than seven job classification exemptions, including farm and ranch employees, students, and instructors and counsellors at non-profit educational or recreational camps. Quebec and Nova Scotia include a number of broad job category exemptions. Interestingly, British Columbia’s Labour Standards Act includes one of the broadest exemptions: non-experienced employees.

There are some important similarities and differences between the provinces in their Labour Standards Acts and we hope that a more detailed evaluation of the Labour Standards Acts will be undertaken in future years so as to provide meaningful analysis and scores for the provincial governments.

**Licensing and WCB**

Two additional areas where research needs to be undertaken in the future are occupational licensing and the op-

erations of the provincial Workers’ Compensation Boards. Occupational licensing creates barriers to entry for those jobs covered by such requirements. They can, therefore, impede the entry (supply) of workers and affect the overall allocation and efficiency of the larger labour market.

The operations of the Workers’ Compensation Boards are also of importance. Like Labour Relations Boards, Workers’ Compensation Boards are granted substantial authority. It is, therefore, critical to measure the operations and efficiency of the various boards.

**Interpretation and enforcement**

It would also be useful to investigate the decisions made by adjudicating courts for those disputes reaching the judicial system. Again, this is an area where jurisdictions may appear to have similar labour laws but where major differences may arise due to differing interpretation and enforcement.

In addition to this future research into provincial labour markets, it is also important to assess federal laws and programs pertaining to labour markets. This paper is a first attempt to quantify the performance and critical characteristics of labour markets in Canada and the United States. It is very much a first step in a series planned to produce a comprehensive evaluation of labour markets in Canada and the United States. That said, this study provides valuable insights into labour market performance and some critical aspects of labour markets in both countries.

**Table 8: Overtime Pay Requirements**

	<b>Number of Hours Required for Overtime Pay</b>	<b>Restrictions</b>
<b>British Columbia</b>	40*	
<b>Alberta</b>	44	
<b>Saskatchewan</b>	40	
<b>Manitoba</b>	40	
<b>Ontario</b>	44	
<b>Quebec</b>	44	
<b>New Brunswick</b>	44	An employee cannot be paid less than the 1.5 times the minimum wage for hours worked in excess of 44.
<b>Nova Scotia</b>	48	An employee cannot be paid less than the 1.5 times the minimum wage for hours worked in excess of 48.
<b>Prince Edward Island</b>	48	
<b>Newfoundland</b>	40	An employee cannot be paid less than the 1.5 times the minimum wage for hours worked in excess of 40.

Sources: See Employment Standards Acts References in the References Section.

Notes: \* All provinces require overtime pay at the rate of 1.5 times the normal rate of pay but British Columbia increases the rate of overtime pay to 2.0 times the regular rate of pay for hours in excess of 48.

## Notes

- 1 The data presented for labour codes is restricted to Canadian data only due to resource constraints. The remaining indicators are presented for all Canadian provinces and US states.
- 2 Public-sector employment is specifically measured as the number of provincial/state and local government employees plus employees of government business enterprises (GBEs). Please note that data for US states excluding GBE employment is not available. In addition, please note that federal employees have been excluded from the analysis in order to measure provincial and state government employment more precisely.
- 3 For a discussion of these differences, see Clemens and Esmail 2002a, 2002b; Clemens et al. 2003.
- 4 Ehrlich specifically (1994) found that a shift from state to full private ownership can increase the long-run annual rate of total factor productivity (TFP) by 1.6% to 2.0% and the rate of unit cost can decline by 1.7% to 1.9%.
- 5 See Bender 1998, Gunderson 2000, and Mueller 2000 for further discussion.
- 6 Note that self employment is excluded.
- 7 In fact, some studies have actually concluded that unionization negatively affects productivity (Clark 1984; Hirsch 1991a).
- 8 It is important to recognize that public-sector unions tend to face different rules and thus behave differently than their private-sector counterparts. For further information, see Christensen 1980.
- 9 Private-sector unionization ranged from a low of 9.5% in Prince Edward Island to a high of 27.4% in Quebec. Public-sector unionization rates ranged from a low of 70.8% in Ontario to 82.0% in Quebec.
- 10 Canada's overall unionization rate in 2002 was 32.2% compared with 14.6% in the United States.
- 11 For more information on how such legislation has affected unionization rates in Canada and the United States, see Taras and Ponak 2001.
- 12 For a more thorough discussion of the economic effects of minimum wages, see Law 1998.
- 13 It is important to note that many jurisdictions differentiate between minimum wages for younger, unskilled workers and minimum wages for older, more skilled workers.
- 14 For an excellent discussion of this phenomenon, see Palda 2000.
- 15 Baker, Benjamin, and Stanger (1999) specifically found that a 10% increase in the minimum wage resulted in a 2.5% decline in employment.
- 16 Neumark and Wascher (2001) specifically found that "for young workers in their early 20s, the estimated effects indicate elasticities of the incidence of formal training with respect to the minimum wage ranging from about  $-1$  to  $-2$ , implying sizable deleterious effects of minimum wages. Moreover, there is little or no evidence that minimum wages raise the amount of training obtained by workers."
- 17 Chaplin, Turner, and Pape (2003) recently concluded that higher minimum wages were related to reduced school enrolment among teenagers, particularly among students making the transition from grade 9 to 10. These findings are buttressed by the findings of Neumark and Wascher (2003).
- 18 Most minimum-wage workers are low-skilled workers. In 1995, over 35% of all minimum-wage workers were high-school dropouts. Less than 7% of minimum-wage workers had a university degree. See Law 1998.
- 19 See Law 1998.
- 20 The nominal values of minimum wages in Canada in 2002 ranged from a low of CDN\$5.90 in Alberta to a high of CDN\$8.00 in British Columbia. The nominal values of minimum wages in the United States ranged from a low of US\$0.00 in several states, which essentially means the federal rate of US\$5.15 was applied, to a high of US\$6.90 in Washington State.
- 21 Roughly 10% of Canadian workers fall under federal labour laws rather than provincial labour laws.
- 22 Three of the reviewers and the authors questioned the performance of Newfoundland on this indicator and suggested that a void existed between the laws and their interpretation and enforcement.
- 23 Please note the difference between the process used to force a vote on certifying or decertifying a union and the actual vote for certification or decertification. The two are distinct processes with varying rules and requirements.
- 24 The selection and appointment of arbitrators is a critical aspect of the arbitration process and one that deserves additional research. Unfortunately, the information shortfalls of the various Labour Relation Boards impedes such an analysis at this time.
- 25 For further information, see Christensen 1980.
- 26 Ultimately, this indicator relates to what is referred to as the Rand Formula. It pertains to a legal de-

cision that stated that unionized shops were able to force all workers to pay union dues since all employees garnered benefits from the presence of the union.

- 27 Canada is one of only two industrial nations (Australia being the other) that have not outlawed closed-shop unionism and mandatory union dues.
- 28 For more information on Right-to-Work, see <http://www.nrtw.org> and Mihlar 1997.
- 29 For information regarding associated legislation outside of the labour code, see Friesen 1996.
- 30 Saskatchewan also requires notification to be sent to the Minister (defined in the act as the members of the Executive Council to whom the administration of the act is assigned).
- 31 For a more thorough discussion of the differences in the treatment of replacement workers in North America, see Singh and Jain 2001.

## Profile of British Columbia

Labour Market Performance Indicators	Canadian Rank	Canada/US Rank	Value
Average Total Employment Growth (1998-2002)	9	31	1.1%
Average Private Sector Employment Growth (1997-2001)	10	41	1.0%
Average Unemployment Rate (1998-2002)	5	55	8.1%
Duration of Unemployment (1996-1998 / 2000-2001)	6	53	19.2%
Productivity Per Worker (1997-2001)	4	49	\$66,146
Overall Labour Market Performance Index Score	9	59	3.7
<b>Labour Market Characteristics</b>			
Public Sector as a Percent of Total Employment (1997-2001)	3	50	16.2%
Unionization as a Percent of Total Employment (1998-2002)	6	56	35.4%
Minimum Wage as a Percent of Per-Capita GDP (1997-2001)	7	57	49.5%
Labour Relations Laws and Labour Relations Boards	9	N/A	3.3

British Columbia's overall labour market performance was, in a word, dismal. It received an overall score of 3.7 out of 10 on its labour-market performance, placing it 9<sup>th</sup> in Canada and 59<sup>th</sup> overall (Canada and the United States).

British Columbia's labour-market performance is particularly troubling when compared with bordering jurisdictions. British Columbia's overall score (3.7) compares poorly with the scores for Washington State (5.8), Oregon (5.5) and Alberta (7.5).

Part of the explanation for British Columbia's poor performance relates to the rules and structure of its labour market. British Columbia ranked 50<sup>th</sup> in the ratio of the public sector to total employment and 56<sup>th</sup> in the ratio of unionized workers to total employment. It has been demonstrated that higher relative unionization rates and larger public sectors lead to poorer economic performance showing adverse effects like lower levels of productivity.

British Columbia ranked 57<sup>th</sup> in terms of the value of minimum wage employment at 49.5% of per-capita GDP. As previously discussed, relatively high effective minimum wages negatively affect labour markets by introducing wage rigidity.

British Columbia's labour-market characteristics further stand out when compared with bordering US states. For example, British Columbia, with a unionization rate of 35.4% and public sector employment of 16.2%, stands in stark contrast to Washington State and Oregon, where the unionization rates are 21.3% and 16.9% and public-sector employment is 12.9% and 10.9%.

Like those of most Canadian provinces, British Columbia's labour relations laws and the operations of its Labour Relations Board failed to receive a passing score. Specifically, British Columbia's labour relations laws and Board received a score of 3.3 out of 10, ranking it 9<sup>th</sup> among the provinces, ahead of only Quebec. Particular areas of concern for British Columbia were its poor ratings on mandatory arbitration without alternative options, failure to allow replacement workers during strikes, and its treatment of technology (requiring notice to unions before the introduction of technology). In addition, British Columbia, like all Canadian provinces protects unions through closed-shop legislation and inhibits innovation and capital reallocation through restrictive successor rights.

The performance of British Columbia's labour market, like that of any labour market, can be improved by changing the rules and its structure so as to promote greater flexibility. British Columbia should effect changes in the framework of laws affecting employment to bring its unionization rate in line with bordering US states and Alberta. It should also bring its public-sector employment in line with neighbouring jurisdictions. Ultimately, however, the goal should be to bring both rates into line at least with the US average, which is 12.1% for public-sector employment and 14.0% for unionization. In addition, British Columbia needs to reduce the effective value of its minimum wage so as to introduce greater flexibility at the lower end of the skills spectrum.

Equally as important is the need for reform of the labour relations laws in British Columbia to promote greater flexibility. British Columbia should change its labour laws regarding mandatory arbitration, replacement workers, and its treatment of technology so as to make its labour relations laws more competitive with other Canadian jurisdictions. In addition, British Columbia should consider worker protection laws that would prohibit closed-shop unionism. Such a change would facilitate greater labour market flexibility while at the same time creating an economic advantage for the province based on the fact that none of the bordering Canadian provinces nor Washington State and Oregon possess such worker protection laws.

There are a number of other critical labour market characteristics that need to be accounted for when explaining British Columbia's performance, including other sets of laws governing the labour market such as the Employment Standards Act. In addition, it is critical to assess the interpretation and enforcement of labour laws by appointed bodies and courts. Finally, national laws and national programs will also affect provincial labour markets.

## Profile of Alberta

Labour Market Performance Indicators	Canadian Rank	Canada/US Rank	Value
Average Total Employment Growth (1998-2002)	1	3	2.8%
Average Private Sector Employment Growth (1997-2001)	1	2	4.3%
Average Unemployment Rate (1998-2002)	1	42	5.2%
Duration of Unemployment (1996-1998 / 2000-2001)	1	19	11.1%
Productivity Per Worker (1997-2001)	1	9	\$91,565
Overall Labour Market Performance Index Score	1	2	7.5
<b>Labour Market Characteristics</b>			
Public Sector as a Percent of Total Employment (1997-2001)	2	46	14.3%
Unionization as a Percent of Total Employment (1998-2002)	1	49	24.7%
Minimum Wage as a Percent of Per-Capita GDP (1997-2001)	1	6	27.2%
Labour Relations Laws and Labour Relations Boards	1	N/A	6.1

Alberta's labour market performance was nothing short of stellar. It out-performed all Canadian provinces and every US state except Nevada. Alberta received a score of 7.5 out of 10 for labour-market performance, placing it 1<sup>st</sup> in Canada and 2<sup>nd</sup> overall (Canada and the US). Among the provinces, Alberta ranked 1<sup>st</sup> on all five indicators of labour market performance (see above). While Alberta's average employment growth and worker productivity are competitive among all 60 jurisdictions, its average unemployment rate (42<sup>nd</sup>) and duration of unemployment (19<sup>th</sup>) lagged many US states. This most probably, however, relates to the nature of Canada's national unemployment system rather than any particular deficiency in Alberta's labour market.

A pivotal explanation for Alberta's performance within Canada relates to the rules and structure of its labour market. Alberta ranked 2<sup>nd</sup> in the ratio of employment in the public sector to total employment and 1<sup>st</sup> in the ratio of unionized workers to total employment. However when US states are included, Alberta's rank in the ratio of the public-sector employment falls to 46<sup>th</sup> and its rank in the ratio of unionized workers to total employment falls to 49<sup>th</sup>. It has been demonstrated that higher relative unionization rates and larger public sectors lead to poorer economic performance showing adverse effects like lower levels of productivity.

Alberta is one of only four provinces to attain a passing score for its labour relations laws and labour relations board. Specifically, Alberta received a score of 6.1 out of 10, ranking 1<sup>st</sup> among the provinces, although with a relatively low absolute score. There are particular areas of concern for Alberta. It, like all Canadian provinces, protects unions through closed-shop legislation and inhibits innovation and capital reallocation through restrictive successor rights. In addition, Alberta provides little information on the operations of its Labour Relations Board. In fact, Alberta tied (with Nova Scotia and Quebec) for the second-worst score for the openness of its Labour Relations Board.

Alberta's labour market, while out-performing most jurisdictions, can nonetheless improve by promoting even greater labour-market flexibility. It should effect changes in the framework of laws affecting employment to make its unionization rate more competitive with leading US states. It should also bring its public-sector employment in line with neighbouring jurisdictions.

Equally as important is the need for reform of the labour-relations laws in Alberta to promote greater flexibility. In particular, Alberta should consider worker-protection laws that would prohibit closed-shop unionism. Such a change would facilitate greater flexibility in the labour market while at the same time maintaining Alberta's economic advantage based on the fact that none of the Canadian provinces and less than half of US states have such worker-protection laws.

There are a number of other critical labour market characteristics that need to be accounted for when explaining Alberta's performance, including other sets of laws governing the labour market such as the Employment Standards Act. In addition, it is critical to assess the interpretation and enforcement of labour laws by appointed bodies and courts. Finally, national laws and national programs will also affect provincial labour markets.

## Profile of Saskatchewan

Labour Market Performance Indicators	Canadian Rank	Canada/US Rank	Value
Average Total Employment Growth (1998-2002)	10	44	0.5%
Average Private Sector Employment Growth (1997-2001)	9	34	1.3%
Average Unemployment Rate (1998-2002)	3	50	5.7%
Duration of Unemployment (1996-1998 / 2000-2001)	4	42	15.2%
Productivity Per Worker (1997-2001)	3	43	\$68,914
Overall Labour Market Performance Index Score	6	49	4.4
<b>Labour Market Characteristics</b>			
Public Sector as a Percent of Total Employment (1997-2001)	9	59	21.5%
Unionization as a Percent of Total Employment (1998-2002)	7	57	35.6%
Minimum Wage as a Percent of Per-Capita GDP (1997-2001)	2	44	39.8%
Labour Relations Laws and Labour Relations Boards	8	N/A	3.5

Saskatchewan's labour-market performance, both within Canada and overall (Canada and the United States) lagged significantly. It received an overall score of 4.4 out of 10 on its labour-market performance for the past five years, placing it 6<sup>th</sup> in Canada and 49<sup>th</sup> overall. Saskatchewan's labour market performance was generally weak across all five categories. It maintained the lowest average total employment growth and the second lowest average private-sector employment growth among the provinces. Saskatchewan performed relatively well on its average unemployment rate although its success in this area is largely a result of high emigration of workers.<sup>1</sup>

Saskatchewan's labour-market performance is even more disturbing when compared with bordering US states. Saskatchewan's overall score (4.4) looks weak when compared with the average score for Montana (4.7%), South Dakota (5.8), and Wyoming (6.3).

Like any labour market, Saskatchewan's labour market is affected by the governing rules (laws) and its structure. Saskatchewan ranked 59<sup>th</sup> (second last) in the ratio of employment in the public sector to total employment and 57<sup>th</sup> in the ratio of unionized workers to total employment. It has been demonstrated that higher relative unionization rates and larger public sectors lead to poorer economic performance showing adverse effects like lower levels of productivity.

Saskatchewan's labour market characteristics further stand out when compared with bordering US states. For example, Saskatchewan, with a unionization rate of 35.6% and public-sector employment of 21.5%, stands in stark contrast to Montana, North Dakota, South Dakota and Wyoming, where the unionization rates are 15.7%, 9.2%, 7.4% and 10.6% and public-sector employment is 14.6%, 13.8%, 12.3% and 16.9%, respectively.

Like most Canadian provinces, Saskatchewan's labour-relations laws and operations of its labour relations board failed to receive a passing score. Specifically, Saskatchewan received a score of 3.5 out of 10, ranking it 8<sup>th</sup> among the provinces. Particular areas of concern for Saskatchewan were its poor ratings on requirements for certification and decertification, mandatory arbitration, and its treatment of technology. In addition, Saskatchewan, like all Canadian provinces continues to protect monopoly union power through closed-shop legislation and inhibits innovation and capital reallocation through restrictive and onerous successor rights.

Saskatchewan's labour-market performance can be improved by adjusting the rules and structure of its labour market to promote greater flexibility. Saskatchewan should effect changes in the framework of laws affecting employment to bring its unionization rate in line with other Canadian provinces and, ultimately, in line with US states. It should also bring its public-sector employment in line with neighbouring jurisdictions.

Equally as important is the need for reform of Saskatchewan's labour relations laws. Saskatchewan should, at the very least, change its requirements for certification and decertification, arbitration requirements, and treatment of new technology so as to bring its labour relations laws more in line with other Canadian provinces. The province should also consider worker-protection laws that prohibit closed-shop unionism. Such a change would facilitate greater labour-market flexibility while becoming more competitive with bordering US states (North Dakota, South Dakota and Wyoming all have such worker protection).

There are a number of other critical labour market characteristics that need to be accounted for when explaining Saskatchewan's performance, including other sets of laws governing the labour market such as the Employment Standards Act. In addition, it is critical to assess the interpretation and enforcement of labour laws by appointed bodies and courts. Finally, national laws and national programs will also affect provincial labour markets.

**Note**

- 1 For a more thorough discussion of this phenomenon, see Bastarache 1999 and Clemens et al. 2002.

## Profile of Manitoba

Labour Market Performance Indicators	Canadian Rank	Canada/US Rank	Value
Average Total Employment Growth (1998-2002)	8	24	1.5%
Average Private Sector Employment Growth (1997-2001)	8	18	2.3%
Average Unemployment Rate (1998-2002)	1	42	5.2%
Duration of Unemployment (1996-1998 / 2000-2001)	3	39	14.6%
Productivity Per Worker (1997-2001)	7	56	\$61,283
Overall Labour Market Performance Index Score	3	35	5.1
<b>Labour Market Characteristics</b>			
Public Sector as a Percent of Total Employment (1997-2001)	8	58	20.8%
Unionization as a Percent of Total Employment (1998-2002)	8	58	36.4%
Minimum Wage as a Percent of Per-Capita GDP (1997-2001)	4	50	42.9%
Labour Relations Laws and Labour Relations Boards	7	N/A	3.6

Manitoba's overall labour-market performance was mixed: it received an overall score of 5.1 out of 10, placing it 3<sup>rd</sup> in Canada and 35<sup>th</sup> overall (Canada and the US). Manitoba, with a labour-market performance of 5.1, falls short when compared with bordering US states like Minnesota, which scored 6.3.

Part of the explanation for Manitoba's mixed performance relates to the rules and structure of its labour market. Manitoba ranked 58<sup>th</sup> in both the ratio of employment in the public sector to total employment and the ratio of unionized workers to total employment. It has been demonstrated that higher relative unionization rates and larger public sectors lead to poorer economic performance showing adverse effects like lower levels of productivity.

Manitoba also maintained a relatively high effective minimum wage. It ranked 50<sup>th</sup> in terms of the value of minimum wage employment at 42.9% of per-capita GDP. Relatively high effective minimum wage adversely affect labour markets by introducing wage rigidities.

Manitoba's labour-market characteristics further stand out when compared with bordering US states. For example, Manitoba, with a unionization rate of 36.4% and public-sector employment at 20.8%, stands in stark contrast to North Dakota,

Wisconsin, and Minnesota, where the unionization rates are 9.2%, 18.2%, and 19.1% and public-sector employment is 13.8%, 11.4%, and 11.2%.

Like most Canadian provinces, Manitoba's labour-relations laws and operations of its Labour Relations Board failed to receive a passing score. Specifically, Manitoba's received a score of 3.6 out of 10, ranking it 7<sup>th</sup> among the provinces. Areas of concern for Manitoba were its poor ratings on requirements for certification and decertification, mandatory arbitration, and its treatment of technology. In addition, Manitoba, like all Canadian provinces protects unions through closed shop legislation and impedes innovation and capital reallocation through restrictive successor rights.

The performance of Manitoba's labour market, like that of any labour market, can be improved by increasing flexibility and reducing or eliminating rigidities. Manitoba should effect changes in the framework of laws affecting employment to bring its unionization rate in line other Canadian provinces and, ultimately, in line with US states. It should also bring its public-sector employment in line with neighbouring jurisdictions. Manitoba should also reduce the effective value of its minimum wage so as to increase labour flexibility.

Equally as important is the need for reform of Manitoba's labour-relations laws. Manitoba should, at the very least, alter its requirements for certification and decertification, arbitration requirements, and treatment of new technology so as to bring its labour code more in line with other Canadian provinces. Manitoba should also consider worker-protection laws that prohibit closed-shop unionism. Such a change would increase labour-market flexibility while at the same time creating an economic advantage for the province based on the fact that none of the bordering Canadian provinces or Minnesota possesses such laws.

There are a number of other critical labour market characteristics that need to be accounted for when explaining Manitoba's performance, including other sets of laws governing the labour market such as the Employment Standards Act. In addition, it is critical to assess the interpretation and enforcement of labour laws by appointed bodies and courts. Finally, national laws and national programs will also affect provincial labour markets.

## Profile of Ontario

Labour Market Performance Indicators	Canadian Rank	Canada/US Rank	Value
Average Total Employment Growth (1998-2002)	2	4	2.7%
Average Private Sector Employment Growth (1997-2001)	4	5	3.4%
Average Unemployment Rate (1998-2002)	4	53	6.5%
Duration of Unemployment (1996-1998 / 2000-2001)	8	57	20.8%
Productivity Per Worker (1997-2001)	2	37	\$72,571
Overall Labour Market Performance Index Score	2	24	5.5

Labour Market Characteristics	Canadian Rank	Canada/US Rank	Value
Public Sector as a Percent of Total Employment (1997-2001)	1	43	13.9%
Unionization as a Percent of Total Employment (1998-2002)	2	52	28.3%
Minimum Wage as a Percent of Per-Capita GDP (1997-2001)	3	47	40.8%
Labour Relations Laws and Labour Relations Boards	3	N/A	5.1

Ontario recorded strong labour-market performance within Canada, ranking 2<sup>nd</sup> only to Alberta. Unfortunately, Ontario's strong performance deteriorates once US states are included, although not to the same extent as other provinces. Specifically, Ontario received a score of 5.5 out of 10 on its labour-market performance, placing it 2<sup>nd</sup> in Canada and 37<sup>th</sup> overall (Canada and the US). Ontario's labour-market performance was mixed across the five categories. It performed well in the area of employment growth (total and private), weak in the area of unemployment (average rate and duration) and moderate in the productivity measure.

Ontario's labour market performance is quite strong when compared solely with bordering Canadian provinces and bordering US states. For example, Ontario's score of 5.5 for overall labour-market performance compares well with the scores of bordering US states such as Michigan (5.0), Ohio (4.8), and Wisconsin (5.0).

Part of the explanation for Ontario's relatively strong performance relates to the rules and structure of its labour market. Ontario maintains the lowest level of public-sector employment of any province and the second lowest unionization rate in Canada. In addition, it maintains the third lowest effective minimum wage in Canada.

Unfortunately, its structural rankings deteriorate when compared with US states. Ontario ranked 43<sup>rd</sup> in the ratio of employment in the public sector to total employment and 52<sup>nd</sup> in the ratio of unionized workers to total employment, thus partially explaining its lower overall ranking in the Canada-US measurements. More specifically, Ontario's labour market characteristics stand out when compared with bordering US states.<sup>1</sup> For example, Ontario's unionization rate (28.3%) and public-sector employment (13.9%) stand in stark contrast to the unionization rates and public-sector employment rates for the industrial states bordering Ontario.<sup>2</sup>

Ontario ranks relatively high on its labour-relations laws and operations of its Labour Relations Board. Specifically, it received a score of 5.1 out of 10. Although still a weak absolute performance, Ontario's score places it 3<sup>rd</sup> among Canadian provinces. Given the low absolute score, there are areas for improvement including mandatory arbitration, ambiguity with respect third-party picketing, and limited information disseminated on the operations of its Labour Relations Board. In addition, Ontario, like all Canadian provinces protects unions through closed-shop legislation and inhibits innovation and capital reallocation through restrictive successor rights.

The performance of Ontario's labour market can be improved by promoting greater flexibility through reform of the labour market's governing rules and its structure. Ontario should effect changes in the framework of laws affecting employment to bring its unionization rate in line with US states, particularly neighbouring states with with similar economies. It should also bring its public-sector employment in line with neighbouring jurisdictions.

Equally as important is the need for reform of the labour-relations laws in Ontario to promote greater flexibility. Ontario should adjust its labour laws regarding mandatory arbitration, provide clarification in law regarding third-party picketing, and force greater openness on its Labour Relations Board. In addition, Ontario should consider worker-protection laws that would prohibit closed-shop unionism. Such a change would increase labour-market flexibility while at the same time creating an economic advantage for the province based on the fact that none of the bordering Canadian provinces or US states possess such worker-protection laws.

There are a number of other critical labour market characteristics that need to be accounted for when explaining Ontario's performance, including other sets of laws governing the labour market such as the Employment Standards Act. In addition, it is critical to assess the interpretation and enforcement of labour laws by appointed bodies and courts. Finally, national laws and national programs will also affect provincial labour markets.

## Notes

1 For a more thorough discussion of Ontario's economic performance, see Clemens et al. 2003.

2 Includes Michigan, Ohio, Pennsylvania, Wisconsin, Illinois, and Indiana. See the table, Summary of Provincial and State Rankings, pages 54 to 57.

## Profile of Quebec

Labour Market Performance Indicators	Canadian Rank	Canada/US Rank	Value
Average Total Employment Growth (1998-2002)	5	8	2.4%
Average Private Sector Employment Growth (1997-2001)	6	12	2.8%
Average Unemployment Rate (1998-2002)	6	56	9.1%
Duration of Unemployment (1996-1998 / 2000-2001)	10	60	26.8%
Productivity Per Worker (1997-2001)	5	52	\$64,282
Overall Labour Market Performance Index Score	8	55	4.0

Labour Market Characteristics	Canadian Rank	Canada/US Rank	Value
Public Sector as a Percent of Total Employment (1997-2001)	4	53	18.5%
Unionization as a Percent of Total Employment (1998-2002)	10	60	40.0%
Minimum Wage as a Percent of Per-Capita GDP (1997-2001)	10	60	50.2%
Labour Relations Laws and Labour Relations Boards	10	N/A	1.9

Quebec's overall labour-market performance, both within Canada exclusively and within Canada and the United States was extremely poor. It failed to receive a passing score, achieving only a 4.0 out of 10 for its labour-market performance, which ranked 8<sup>th</sup> in Canada and 55<sup>th</sup> overall (Canada and the U.S.) Although Quebec managed to generate strong employment growth, both in total and in the private sector, its unemployment rate and the duration of unemployment along with its average worker productivity weighed negatively on the province's overall performance.

A key explanation for Quebec's poor performance are the rules that govern its labour market and its structure. Quebec maintains the highest ratio of unionized employment relative to total employment (40.0%) of any Canadian province or US state. It has been demonstrated that higher relative unionization rates and larger public sectors lead to poorer economic performance showing adverse effects like lower levels of productivity.

Although ranking 4<sup>th</sup> in Canada in the size of the public sector relative to total employment, Quebec's public-sector places it 53<sup>rd</sup> overall for the Canadian provinces and US states. The functioning, behaviour, and performance of the public sector is significantly different from that of the private sector and will, therefore, influence economic performance.

Quebec also maintains the highest value of minimum wage employment at 50.2% of per-capita GDP of any Canadian province or US state. The relatively high effective minimum wage in Quebec will obviously affect the functioning of the labour market by reducing wage flexibility.

Quebec's labour relations laws were deemed to be the most rigid of any of the Canadian provinces. Specifically, Quebec received a score of 1.9 out of 10, ranking it last among the Canadian provinces for its labour-relations laws and the operations of its Labour Relations Board. In particular, Quebec received poor ratings for its rules for certification and decertification, requiring mandatory arbitration without alternative options, requiring notification of technological changes, banning replacement workers, and providing little information on the operations of its labour relations board. In addition, Quebec like all Canadian provinces protects unions through closed-shop legislation and inhibits innovation and capital reallocation through restrictive successor rights.

The performance of Quebec's labour market can be improved by altering the rules and structure of its labour market so as to minimize or eliminate rigidities and maximize labour flexibility. Quebec should effect changes in the framework of laws affecting employment to bring its unionization rate in line with other Canadian provinces and, ultimately, in line with US states. It should also bring its public-sector employment in line with neighbouring jurisdictions. In addition, Quebec should reduce or at least freeze the nominal value of the minimum wage for the foreseeable future in order to reduce its effective value so as to promote flexibility and opportunity for those at the lower end of the skills spectrum.

Equally as important is the need for large-scale reform of the labour-relations laws in Quebec in order to promote greater flexibility. Quebec should reform its rules for certification and decertification, mandatory arbitration requirement, loosen its restrictive policy on the treatment of technological changes, allow replacement workers, and force greater openness on the operations of its labour relations board. In addition, Quebec should consider worker-protection laws similar to Right-to-Work laws in the United States that would prohibit closed-shop unionism. Such a change would facilitate greater flexibility in the labour market while at the same time creating an economic advantage for Quebec based on the fact that none of the bordering Canadian provinces or US states possesses such worker protection laws.

There are a number of other critical labour market characteristics that need to be accounted for when explaining Quebec's performance, including other sets of laws governing the labour market such as the Employment Standards Act. In addition, it is critical to assess the interpretation and enforcement of labour laws by appointed bodies and courts. Finally, national laws and national programs will also affect provincial labour markets.

## Profile of New Brunswick

Labour Market Performance Indicators	Canadian Rank	Canada/US Rank	Value
Average Total Employment Growth (1998-2002)	7	10	2.2%
Average Private Sector Employment Growth (1997-2001)	7	17	2.3%
Average Unemployment Rate (1998-2002)	8	58	10.8%
Duration of Unemployment (1996-1998 / 2000-2001)	5	49	16.5%
Productivity Per Worker (1997-2001)	8	57	\$60,230
Overall Labour Market Performance Index Score	7	51	4.3
<b>Labour Market Characteristics</b>			
Public Sector as a Percent of Total Employment (1997-2001)	7	56	19.4%
Unionization as a Percent of Total Employment (1998-2002)	3	53	28.7%
Minimum Wage as a Percent of Per-Capita GDP (1997-2001)	5	54	47.1%
Labour Relations Laws and Labour Relations Boards	6	N/A	4.4

New Brunswick's labour-market performance was weak compared with other Canadian provinces and US states. It received an overall score of 4.3 out of 10 on its labour-market performance for the past five years, placing it 7<sup>th</sup> in Canada and 51<sup>st</sup> overall (Canada and the US). New Brunswick's labour-market performance was generally weak in all five categories, achieving Canadian-only ranks of 7<sup>th</sup> and 8<sup>th</sup> in four of the five categories.

New Brunswick's labour-market performance is particularly troubling when compared with bordering US states. New Brunswick's overall score (4.3) fares poorly when compared with the scores for Northeastern US states.<sup>1</sup>

Part of the explanation for New Brunswick's poor performance relates to the rules and structure of its labour market. New Brunswick ranked 56<sup>th</sup> in the ratio of employment in the public sector to total employment and 53<sup>rd</sup> in the ratio of unionized workers to total employment. It has been demonstrated that higher relative unionization rates and larger public sectors lead to poorer economic performance showing adverse effects like lower levels of productivity.

In addition, New Brunswick ranked 54<sup>th</sup> in terms of the value of minimum wage employment at 47.1% of per-capita GDP. Relatively high effective minimum wages adversely affect the labour market by creating wage rigidities.

New Brunswick's labour market characteristics further stand out when compared with bordering US states. For example, New Brunswick's unionization rate (28.7%) and public sector (19.4%) stand in stark contrast to unionization rates and public-sector employment rates for the Northeastern US states (see the table, Summary of Provincial and State Rankings, pages 54 to 57).

One factor affecting Atlantic Canada and a few other isolated areas in the rest of Canada, which is beyond the control of any individual province, is regionally extended Employment Insurance.<sup>2</sup> This program enables people to collect EI for most of the year based on only a few weeks of work. The result is that in some communities in Atlantic Canada, over 80% of two-income households collect EI payments at some point during the year. The program has dramatically inflated wage costs in the region and forced employers to bid against the EI program to hire workers, who often would only work long enough to collect benefits. This has significantly reduced labour-market flexibility in the region and thus affected the region's performance on measures such as unemployment and the duration of unemployment.

Like most Canadian provinces, New Brunswick's labour-relations laws and operations of its Labour Relations Board failed to receive a passing score. Specifically, New Brunswick received a score of 4.4 out of 10, ranking it 6<sup>th</sup> among the provinces. Particular areas of concern for New Brunswick were its poor ratings on mandatory arbitration, ambiguity with respect to replacement workers and third party picketing, and providing little information on the operations of its Labour Relations Board. In addition, New Brunswick, like all Canadian provinces, protects unions through closed-shop legislation and inhibits innovation and capital reallocation through onerous successor rights.

New Brunswick's labour market, like any labour market, can be improved by increasing the level of flexibility. One way to improve flexibility is to change the rules and structure of the labour market. New Brunswick should effect changes in the framework of laws affecting employment to bring its unionization rate in line with other Canadian provinces and, ultimately, in line with US states. It should also bring its public-sector employment in line with neighbouring jurisdictions. In addition, New Brunswick should aim to reduce the value of its effective minimum wage so as to offer more opportunity and flexibility for low-skilled workers.

Equally as important is the need for reform of the labour-relations laws in New Brunswick to promote greater flexibility. New Brunswick should adjust its labour-relations laws so as to be more competitive with other Canadian provinces. This includes allowing alternatives before mandatory arbitration, providing legal clarification with respect to replacement workers and third party picketing, and providing more information and accountability on the part of its Labour Relations Board. In addition, New Brunswick should consider worker-protection laws that would prohibit closed-shop unionism. Such a change would facilitate labour-market flexibility while at the same time creating an economic advantage for the province based on the fact that none of the bordering Canadian provinces or US states possess such worker protection laws.

There are a number of other critical labour market characteristics that need to be accounted for when explaining New Brunswick's performance, including other sets of laws governing the labour market such as the Employment Standards Act. In addition, it is critical to assess the interpretation and enforcement of labour laws by appointed bodies and courts. Finally, national laws and national programs will also affect provincial labour markets.

## Notes

- 1 Includes Vermont, New Hampshire, Maine, Massachusetts, New Jersey, Rhode Island, and Connecticut. See the table, Summary of Provincial and State Rankings, pages 54 to 57, for more information.
- 2 For more information on regionally extended employment insurance, see the Department of Human Resources Development Canada at [www.hrdc-drhc.gc.ca](http://www.hrdc-drhc.gc.ca).

## Profile of Nova Scotia

Labour Market Performance Indicators	Canadian Rank	Canada/US Rank	Value
Average Total Employment Growth (1998-2002)	6	9	2.2%
Average Private Sector Employment Growth (1997-2001)	2	3	3.8%
Average Unemployment Rate (1998-2002)	7	57	9.7%
Duration of Unemployment (1996-1998 / 2000-2001)	7	54	20.3%
Productivity Per Worker (1997-2001)	9	58	\$58,433
Overall Labour Market Performance Index Score	5	46	4.7

Labour Market Characteristics	Canadian Rank	Canada/US Rank	Value
Public Sector as a Percent of Total Employment (1997-2001)	5	54	18.8%
Unionization as a Percent of Total Employment (1998-2002)	4	54	29.7%
Minimum Wage as a Percent of Per-Capita GDP (1997-2001)	6	56	47.8%
Labour Relations Laws and Labour Relations Boards	4	N/A	5.0

Nova Scotia's labour-market performance lagged within Canada as well as within Canada and the United States. It received an overall score of 4.7 out of 10, placing it 5<sup>th</sup> in Canada and 46<sup>th</sup> overall (Canada and the US). Nova Scotia's labour-market performance was weak in four of the five categories. It did, however, achieve strong private-sector employment growth, ranking 2<sup>nd</sup> in Canada and 3<sup>rd</sup> overall. Unfortunately, this strong performance did not translate into a generally strong overall performance.

Nova Scotia's labour-market performance worsens when compared with bordering US states. Nova Scotia's overall score (4.7) fares poorly when compared with the scores for Northeastern US states.<sup>1</sup> Nova Scotia did fair well among the Atlantic provinces, ranking second behind Prince Edward Island (4.8).

Part of the explanation for Nova Scotia's poor performance relates to the rules and structure of its labour market. Nova Scotia ranked 54<sup>th</sup> in both the ratio of employment in the public sector to total employment and the ratio of unionized workers to total employment. It has been demonstrated that higher relative unionization rates and larger public sectors lead to poorer economic performance showing adverse effects like lower levels of productivity.

In addition, Nova Scotia ranked 56<sup>th</sup> in terms of the value of minimum wage employment at 47.8% of per-capita GDP, nearly half the value of average per-capita GDP. Relatively high effective minimum wages adversely affect labour market flexibility and performance.

Nova Scotia's labour-market characteristics further stand out when compared with bordering US states. For example, Nova Scotia's unionization rate (29.7%) and public sector (18.8%) stand in stark contrast to the unionization rates and public-sector employment rates observed in the Northeastern US states (see the table, Summary of Provincial and State Rankings, pages 54 to 57).

One factor affecting Atlantic Canada and a few other isolated areas in the rest of Canada, which is beyond the control of any individual province, is regionally extended Employment Insurance.<sup>2</sup> This program enables people to collect EI for most of the year based on only a few weeks of work. The result is that in some Atlantic Canada communities, over 80% of two income households collect EI payments at some point during the year. The program has dramatically inflated wage costs in the region and forced employers to bid against the EI program to hire workers, who often would only work long enough to collect benefits. This has significantly reduced labour market flexibility in the region and thus affected the region's performance on measures such as unemployment and the duration of unemployment.

Nova Scotia was one of only four Canadian provinces to receive a passing score for its labour-relations laws and the operation of its Labour Relations Board. Specifically, Nova Scotia received a score of 5.0 out of 10, ranking it 4<sup>th</sup> among the provinces. Although Nova Scotia garnered a weak absolute score, it nonetheless was better than most provinces. Particular areas of concern for Nova Scotia were its poor ratings on ambiguity with respect to replacement workers and third-party picketing, and providing little information on the operations of its Labour Relations Board. In addition, Nova Scotia, like all Canadian provinces, protects unions through closed-shop legislation and inhibits innovation and capital reallocation through restrictive successor rights.

Nova Scotia's labour-market performance can be improved by changing the rules and structure of its labour market so as to promote greater labour-market flexibility. Nova Scotia should effect changes in the framework of laws affecting employment to bring its unionization rate in line with other Canadian provinces and, ultimately, in line with US states. It should also bring its public-sector employment in line with neighbouring jurisdictions. In addition, Nova Scotia should reduce the effective value of its minimum wage by freezing or even reducing the nominal value of the minimum wage. This would afford greater opportunities and flexibility for low-skilled workers.

Equally as important is the need for reform of the labour-relations laws in Nova Scotia to promote greater flexibility. Nova Scotia must legally clarify the ambiguity surrounding replacement workers and third-party picketing, and provide more information on the operations of its Labour Relations Board. In addition, Nova Scotia should consider worker-protection laws that would prohibit closed-shop unionism. Such a change would facilitate greater labour-market flexibility while at the same time creating an economic advantage for the province based on the fact that none of the bordering Canadian provinces or US states possess such worker protection laws.

There are a number of other critical labour market characteristics that need to be accounted for when explaining Nova Scotia's performance, including other sets of laws governing the labour market such as the Employment Standards Act. In addition, it is critical to assess the interpretation and enforcement of labour laws by appointed bodies and courts. Finally, national laws and national programs will also affect provincial labour markets.

## Notes

1 Includes Vermont, New Hampshire, Maine, Massachusetts, New Jersey, Rhode Island, and Connecticut. See the table, Summary of Provincial and State Rankings, pages 54 to 57, for more information.

2 For more information on regionally extended employment insurance, see the Department of Human Resources Development Canada at [www.hrdc-drhc.gc.ca](http://www.hrdc-drhc.gc.ca).

## Profile of Prince Edward Island

Labour Market Performance Indicators	Canadian Rank	Canada/US Rank	Value
Average Total Employment Growth (1998-2002)	3	5	2.6%
Average Private Sector Employment Growth (1997-2001)	5	6	3.4%
Average Unemployment Rate (1998-2002)	9	59	12.9%
Duration of Unemployment (1996-1998 / 2000-2001)	2	28	12.0%
Productivity Per Worker (1997-2001)	10	60	\$53,364
Overall Labour Market Performance Index Score	4	43	4.8
<b>Labour Market Characteristics</b>			
Public Sector as a Percent of Total Employment (1997-2001)	6	55	19.4%
Unionization as a Percent of Total Employment (1998-2002)	5	55	29.7%
Minimum Wage as a Percent of Per-Capita GDP (1997-2001)	9	59	49.9%
Labour Relations Laws and Labour Relations Boards	5	N/A	4.5

Prince Edward Island's overall labour-market performance was weak, receiving a score of 4.8 out of 10, although it ranked 4<sup>th</sup> in Canada and 1<sup>st</sup> among the Atlantic Provinces, even with a failing score. Prince Edward Island's overall ranking drops significantly, to 43<sup>rd</sup>, when US states are included. On specific labour-market performance indicators, Prince Edward Island's results were mixed with relatively strong results in the employment growth categories coupled with relatively weak performances in the unemployment and productivity categories. In fact, PEI had the lowest per-worker productivity numbers and the second worst average unemployment rate of any Canadian province or US state. Prince Edward Island's labour-market performance worsens when compared with near-by US states. Prince Edward Island's overall score (4.8) fares poorly when compared with the scores for Northeastern US states.<sup>1</sup>

Part of the explanation for Prince Edward Island's poor performance relates to the rules and structure of its labour market. Prince Edward Island ranked 55<sup>th</sup> in both the ratio of employment in the public sector to total employment and the ratio of unionized workers to total employment. It has been demonstrated that higher relative unionization rates and larger public sectors lead to poorer economic performance showing adverse effects like lower levels of productivity.

In addition, Prince Edward Island ranked 59<sup>th</sup> in terms of the value of minimum wage employment at 49.9% of per-capita GDP, nearly half the value of average per-capita GDP. Relatively high effective minimum wages adversely affect labour markets by introducing rigidities into the wage structure.

Prince Edward Island's labour market characteristics further stand out when compared with near-by US states. For example, Prince Edward Island's unionization rate (29.7%) and public sector (19.4%) stand in stark contrast to the unionization rates (16.2%) and public-sector employment rates for the Northeastern US states (see the table, Summary of Provincial and State Rankings, pages 54 to 57).

One factor affecting Atlantic Canada and a few other isolated areas in the rest of Canada, which is beyond the control of any individual province, is regionally extended Employment Insurance.<sup>2</sup> This program enables people to collect EI for most of the year based on only a few weeks of work. The result is that in some Atlantic Canada communities, over 80% of two-income households collect EI payments at some point during the year. The program has dramatically inflated wage costs in the region and forced employers to bid against the EI program to hire workers, who often would only work long enough to collect benefits. This has significantly reduced labour-market flexibility in the region and thus affected the region's performance on measures such as unemployment and the duration of unemployment.

Like most Canadian provinces, Prince Edward Island's labour-relations laws and operations of its Labour Relations Board failed to receive a passing score. Specifically, PEI received a score of 4.5 out of 10, ranking it 5<sup>th</sup> among the provinces. Particular areas of concern for Prince Edward Island were its poor ratings on requiring arbitration without alternative options, ambiguity with respect to third-party picketing, and providing little information on the operations of its Labour Relations Board. In fact, PEI's Labour Relations Board received the lowest score (2.7) of any in Canada. In addition, Prince Edward Island, like all Canadian provinces, protects unions through closed-shop legislation and inhibits innovation and capital reallocation through restrictive successor rights.

Prince Edward Island's labour market performance can be improved by changing the rules and structure of its labour market so as to promote greater labour-market flexibility. PEI should effect changes in the framework of laws affecting employment to bring its unionization rate in line with other Canadian provinces and, ultimately, in line with US states. It should also bring its public-sector employment in line with neighbouring jurisdictions. PEI must also reduce the effective value of its minimum wage so as to afford greater flexibility at the low-end of the skills spectrum.

Reform of the labour-relations laws in Prince Edward Island is also a critical facet of improving its labour-market performance. PEI should reform its arbitration requirements to allow for alternatives and provide legal clarity with respect to third-party picketing. In addition, PEI must deal with the lack of transparency, accountability, and openness of its Labour Relations Board. In addition, Prince Edward Island should consider worker protection laws that would prohibit closed-shop unionism. Such a change would facilitate greater labour-market flexibility while at the same time creating an economic advantage for the province based on the fact that none of the near-by Canadian provinces or US states possess such worker-protection laws.

There are a number of other critical labour market characteristics that need to be accounted for when explaining Prince Edward Island's performance, including other sets of laws governing the labour market such as the Employment Standards Act. In addition, it is critical to assess the interpretation and enforcement of labour laws by appointed bodies and courts. Finally, national laws and national programs will also affect provincial labour markets.

## Notes

- 1 Includes Vermont, New Hampshire, Maine, Massachusetts, New Jersey, Rhode Island, and Connecticut. See the table, Summary of Provincial and State Rankings, pages 54 to 57, for more information.
- 2 For more information on regionally extended employment insurance, see the Department of Human Resources Development Canada at [www.hrdc-drhc.gc.ca](http://www.hrdc-drhc.gc.ca).

## Profile of Newfoundland

Labour Market Performance Indicators	Canadian Rank	Canada/US Rank	Value
Average Total Employment Growth (1998-2002)	4	6	2.5%
Average Private Sector Employment Growth (1997-2001)	3	4	3.6%
Average Unemployment Rate (1998-2002)	10	60	16.9%
Duration of Unemployment (1996-1998 / 2000-2001)	9	59	26.6%
Productivity Per Worker (1997-2001)	6	53	\$63,493
Overall Labour Market Performance Index Score	10	60	3.2
<b>Labour Market Characteristics</b>			
Public Sector as a Percent of Total Employment (1997-2001)	10	60	22.7%
Unionization as a Percent of Total Employment (1998-2002)	9	59	39.6%
Minimum Wage as a Percent of Per-Capita GDP (1997-2001)	8	58	49.6%
Labour Relations Laws and Labour Relations Boards	2	N/A	5.2

Newfoundland has the dubious distinction of placing last among the 10 Canadian provinces and 50 US states for its labour-market performance. It received an overall score of 3.2 out of a possible 10 on its labour-market performance for the past five years, placing it 10<sup>th</sup> in Canada and 60<sup>th</sup> overall (Canada and the US). Newfoundland's poor rating occurs despite rather strong performance in both total employment growth and private-sector employment growth.

Newfoundland's labour market performance is particularly troubling when compared with near-by jurisdictions both in Canada and the United States. For instance, Newfoundland's overall score (3.2) fares poorly when compared with the scores for Northeastern US states.<sup>1</sup>

Part of the explanation for Newfoundland's poor performance relates to the rules and structure of its labour market. Newfoundland ranked last (60<sup>th</sup>) in the ratio of the public sector to total employment and second last (59<sup>th</sup>) in the ratio of unionized workers to total employment. It has been demonstrated that higher relative unionization rates and larger public sectors lead to poorer economic performance showing adverse effects like lower levels of productivity.

In addition, Newfoundland ranked 58<sup>th</sup> in terms of the value of minimum wage employment at 49.6% of per-capita GDP, nearly half the average per-capita GDP. The relatively high effective minimum wage in Newfoundland will obviously affect the functioning of the labour market.

Newfoundland's labour-market characteristics further stand out when compared with near-by US states. For example, Newfoundland's unionization rate (39.6%) and public sector (22.7%) stand in stark contrast to the unionization rates and public-sector employment rates for the Northeastern US states. In fact, Newfoundland's unionization rate and public-sector employment stand out even within Atlantic Canada.

One factor affecting Atlantic Canada and a few other areas in the rest of Canada, which is beyond the control of any individual province, is regionally extended Employment Insurance.<sup>2</sup> This program enables people to collect EI for most of the year based on only a few weeks of work. The result is that in some Atlantic Canada communities, over 80% of two-income households collect EI payments at some point during the year. The program has dramatically inflated wage costs in the region and forced employers to bid against the EI program to hire workers, who often would only work long enough to collect benefits. This has significantly reduced labour-market flexibility in the region and thus affected the region's performance on measures such as unemployment and the duration of unemployment.

Quite surprisingly, Newfoundland scores relatively well on its labour-relations laws and operations of its Labour Relations Board. Specifically, Newfoundland received a score of 5.2 out of 10. Although still a relatively weak absolute performance, Newfoundland's score places it 2<sup>nd</sup> among Canadian provinces. Given the low absolute score, there are areas of concern for Newfoundland such as ambiguity with respect to replacement workers and third-party picketing, and providing little information on the operations of its Labour Relations Board. It is also important to understand that the score reflects the letter of the law of Newfoundland regarding labour relations and may differ significantly from their interpretation and enforcement. In addition, Newfoundland, like all Canadian provinces, protects unions through closed-shop legislation and inhibits innovation and capital reallocation through successor rights.

Newfoundland's labour-market performance can be improved by changing the rules and structure of its labour market so as to promote greater labour-market flexibility. Newfoundland should effect changes in the framework of laws affecting employment to bring its unionization rate in line with other Canadian provinces and, ultimately, in line with US states. It should also bring its public-sector employment in line with neighbouring jurisdictions. Newfoundland must also reduce the effective value of its minimum wage so as to afford greater labour-market flexibility at the lower end of the skills spectrum.

Equally as important is the need for reform of the labour-relations laws in Newfoundland. Newfoundland should provide legal clarification regarding replacement workers and third-party picketing and provide more information on the operations of its Labour Relations Board. In addition, Newfoundland should consider worker-protection laws that would prohibit closed-shop unionism. Such a change would facilitate greater labour-market flexibility while at the same time creating an economic advantage for the province based on the fact that none of the near-by Canadian provinces or US states possess such worker-protection laws.

There are a number of other critical labour market characteristics that need to be accounted for when explaining Newfoundland's performance, including other sets of laws governing the labour market such as the Employment Standards Act. In addition, it is critical to assess the interpretation and enforcement of labour laws by appointed bodies and courts. Finally, national laws and national programs will also affect provincial labour markets.

## Notes

- 1 Includes Vermont, New Hampshire, Maine, Massachusetts, New Jersey, Rhode Island, and Connecticut. See the table, Summary of Provincial and State Rankings, pages 54 to 57, for more information.
- 2 For more information on regionally extended employment insurance, see the Department of Human Resources Development Canada at [www.hrdc-drhc.gc.ca](http://www.hrdc-drhc.gc.ca).



## Conclusions

**(1)** Alberta and Ontario, with overall scores for labour-market performance of 7.5 and 5.5, respectively, dominate labour-market performance in Canada. The only other province to receive a passing score for overall labour-market performance was Manitoba, with a score of 5.1.

**(2)** Only the province of Alberta was able to compete with US states in general with respect to its labour-market performance. Even Ontario struggled when US states were included, falling to 24<sup>th</sup> position. Seven of the 10 provinces occupied ranks in the bottom one-third of jurisdictions. In addition, almost all Canadian provinces were out-performed by bordering US states. Most striking are the stark differences between the Atlantic provinces and the North-eastern states. This, despite the fact that Canada has enjoyed a relatively robust economy over the past five years, particularly when compared with the United States.

**(3)** Newfoundland had the dubious distinction of recording the worst labour-market performance over the last five years of any Canadian province or US state. Unfortunately, British Columbia ranked 59<sup>th</sup>, second last, just barely ahead of Newfoundland. Newfoundland and British Columbia were also joined by Quebec and New Brunswick at the bottom of the Canada-US rankings.

**(4)** There are clearly some national barriers to improved performance that affect all provinces. The national unemployment system is one example of a national policy that is affecting the ability of provincial labour markets to improve their performance.

**(5)** All Canadian provinces, including Alberta and Ontario, maintain relatively high rates of unionization and employment in the public sector. A comprehensive review of the research on unionization and public-sector employment confirmed their deleterious economic effects. Since this is the case, all Canadian provinces should reduce public-sector employment and revise the framework of laws affecting labour to reduce unionization rates to more competitive levels.

**(6)** All Canadian provinces except Alberta maintain a relatively high real minimum wage as measured by the ratio of minimum wage earnings to per-capita GDP. For instance, six of the bottom 10 jurisdictions (ranked from lowest to highest) were Canadian. Such high real minimum wages will impede the efficient functioning of the labour market.

**(7)** All Canadian provinces require improvements in their labour-relations laws. Specifically, all Canadian provinces would be well served to introduce some type of worker-protection laws and establish more balance with respect to successor rights. In addition, some provinces, in particular Saskatchewan and Quebec, maintain unbalanced certification and decertification regulations. Other areas for improvement include the treatment of technology, third-party picketing, and the use of replacement workers. All Canadian provinces would experience improved labour market outcomes by affording greater flexibility through reformed labour-relations laws.

**(8)** Similarly, all provinces must review the operations of their respective Labour Relations Boards, the entities charged with enforcing the labour relations laws. At the very least, these influential and powerful boards must become more accountable, transparent, and open by divulging greater information in a more timely manner.

**(9)** It is also important to recognize other influential bodies within the labour markets that were not covered, or only covered superficially. These include the Labour Standard Acts and the various boards enforcing such laws, the various Worker Compensation Boards, and the courts that adjudicate differences. As was found with the labour-relations laws and the Labour Relations Boards that enforce such laws, these other bodies can have extraordinary influence on labour markets by substantially increasing or decreasing the level of labour-market flexibility.

## Summary of Provincial and State Rankings

	PERFORMANCE OF LABOUR MARKETS							
	Overall Labour Market Performance Index		Average Total Employment Growth (1998-2002)		Average Private Sector Employment Growth (1997-2001)		Average Unemployment Rate (1998-2002)	
	Rank out of 60	Score	Rank out of 60	Percent	Rank out of 60	Percent	Rank out of 60	Percent
<b>CANADA</b>								
<b>British Columbia</b>	59	3.7	31	1.1	41	1.0	55	8.1
<b>Alberta</b>	2	7.5	3	2.8	2	4.3	43	5.2
<b>Saskatchewan</b>	49	4.4	44	0.5	34	1.3	50	5.7
<b>Manitoba</b>	35	5.1	24	1.5	18	2.3	42	5.2
<b>Ontario</b>	24	5.5	4	2.7	5	3.4	53	6.5
<b>Quebec</b>	55	4.0	8	2.4	12	2.8	56	9.1
<b>New Brunswick</b>	51	4.3	10	2.2	17	2.3	58	10.8
<b>Nova Scotia</b>	46	4.7	9	2.2	3	3.8	57	9.7
<b>Prince Edward Island</b>	43	4.8	5	2.6	6	3.4	59	12.9
<b>Newfoundland</b>	60	3.2	6	2.5	4	3.6	60	16.9
<b>UNITED STATES</b>								
<b>Alabama</b>	56	3.9	60	-0.8	47	0.9	35	4.9
<b>Alaska</b>	17	6.0	43	0.6	21	2.1	54	6.6
<b>Arizona</b>	6	6.9	2	3.8	24	1.9	30	4.7
<b>Arkansas</b>	52	4.3	29	1.2	60	-0.7	37	5.0
<b>California</b>	15	6.1	20	1.7	10	3.0	46	5.6
<b>Colorado</b>	5	6.9	13	2.0	16	2.6	13	3.8
<b>Connecticut</b>	22	5.7	40	0.8	58	0.3	5	3.3
<b>Delaware</b>	3	7.2	12	2.1	15	2.6	11	3.8
<b>Florida</b>	12	6.3	7	2.4	13	2.8	24	4.4

Average Duration of Unemployment (1996-1998; 2000-2001)		Average Productivity per Worker (1997-2001)		CHARACTERISTICS OF LABOUR MARKET REGULATION					
				Average Public Sector Employment as a Percent of Total Employment (1997-2001)		Average Unionization as a Percent of Total Employment (1998-2002)		Minimum Wage as a Percent of Per-Capita GDP (1997-2001)	
Rank out of 60	Percent	Rank out of 60	Value	Rank out of 60	Percent	Rank out of 60	Percent	Rank out of 60	Percent
53	19.2	49	66,146	50	16.2	56	35.4	57	49.5
19	11.1	9	91,565	46	14.3	49	24.7	6	27.2
42	15.2	43	68,914	59	21.5	57	35.6	44	39.8
39	14.6	56	61,283	58	20.8	58	36.4	50	42.9
57	20.8	37	72,571	43	13.9	52	28.3	47	40.8
60	26.8	52	64,282	53	18.5	60	40.0	60	50.2
49	16.5	57	60,230	56	19.4	53	28.7	54	47.1
54	20.3	58	58,433	54	18.8	54	29.7	56	47.8
28	12.1	60	53,364	55	19.4	55	29.7	59	49.9
59	26.6	53	63,493	60	22.7	59	39.6	58	49.6
38	14.2	46	67,642	29	11.9	21	11.1	48	41.0
26	11.8	4	103,806	57	19.5	48	24.5	5	27.2
14	10.2	23	82,224	20	11.1	4	7.3	36	37.3
16	10.7	48	66,252	35	12.8	7	7.4	51	43.7
50	18.3	7	98,913	26	11.7	39	18.2	19	32.8
7	9.4	11	89,722	13	10.6	17	9.9	9	29.3
45	15.8	2	112,955	11	10.5	36	17.8	2	26.2
48	16.4	1	118,758	19	11.0	35	17.2	1	25.0
35	13.1	30	77,536	9	10.3	10	8.5	38	37.7

## Summary of Provincial and State Rankings, continued

	PERFORMANCE OF LABOUR MARKETS							
	Overall Labour Market Performance Index		Average Total Employment Growth (1998-2002)		Average Private Sector Employment Growth (1997-2001)		Average Unemployment Rate (1998-2002)	
	Rank out of 60	Score	Rank out of 60	Percent	Rank out of 60	Percent	Rank out of 60	Percent
<b>Georgia</b>	7	6.7	17	1.8	9	3.2	19	4.2
<b>Hawaii</b>	53	4.3	56	0.0	40	1.1	38	5.0
<b>Idaho</b>	16	6.1	26	1.4	14	2.8	41	5.2
<b>Illinois</b>	40	4.9	52	0.2	43	0.9	39	5.0
<b>Indiana</b>	45	4.7	51	0.2	59	0.0	12	3.8
<b>Iowa</b>	32	5.2	37	0.9	55	0.6	2	3.0
<b>Kansas</b>	25	5.4	48	0.3	27	1.6	15	4.0
<b>Kentucky</b>	41	4.9	45	0.5	35	1.2	34	4.8
<b>Louisiana</b>	54	4.2	57	-0.1	48	0.9	47	5.6
<b>Maine</b>	47	4.5	35	1.0	50	0.7	17	4.1
<b>Maryland</b>	34	5.1	34	1.0	38	1.1	18	4.1
<b>Massachusetts</b>	20	5.8	32	1.1	53	0.6	10	3.6
<b>Michigan</b>	37	5.0	58	-0.2	32	1.3	27	4.5
<b>Minnesota</b>	10	6.3	15	1.9	20	2.2	9	3.3
<b>Mississippi</b>	58	3.8	47	0.4	56	0.5	48	5.7
<b>Missouri</b>	36	5.0	46	0.4	29	1.5	20	4.2
<b>Montana</b>	44	4.7	42	0.6	23	1.9	40	5.0
<b>Nebraska</b>	21	5.8	36	1.0	36	1.2	3	3.1
<b>Nevada</b>	1	8.4	1	4.7	1	4.4	32	4.7
<b>New Hampshire</b>	8	6.5	25	1.5	11	3.0	7	3.3
<b>New Jersey</b>	33	5.1	41	0.7	52	0.7	28	4.6

Average Duration of Unemployment (1996-1998; 2000-2001)		Average Productivity per Worker (1997-2001)		CHARACTERISTICS OF LABOUR MARKET REGULATION					
				Average Public Sector Employment as a Percent of Total Employment (1997-2001)		Average Unionization as a Percent of Total Employment (1998-2002)		Minimum Wage as a Percent of Per-Capita GDP (1997-2001)	
Rank out of 60	Percent	Rank out of 60	Value	Rank out of 60	Percent	Rank out of 60	Percent	Rank out of 60	Percent
21	11.3	17	86,919	21	11.2	8	8.0	15	31.3
56	20.8	16	87,494	39	13.2	50	26.0	18	32.5
4	8.3	42	69,802	38	13.1	15	9.6	45	40.0
43	15.2	12	89,513	8	10.2	44	19.7	11	29.6
11	9.9	36	72,738	3	9.7	31	16.3	31	35.5
6	9.2	45	67,828	32	12.0	28	15.1	32	35.7
5	8.4	34	73,333	41	13.8	20	10.8	29	35.2
29	12.6	35	73,286	25	11.7	25	13.0	39	37.9
51	18.5	21	83,114	40	13.7	16	9.9	28	35.0
44	15.4	50	65,898	15	10.9	29	15.5	41	39.4
46	16.1	22	82,275	30	12.0	33	16.9	17	31.9
37	13.7	5	102,704	7	10.1	32	16.3	7	29.0
10	9.6	32	74,931	10	10.5	47	22.3	24	34.2
18	11.1	26	81,076	22	11.2	43	19.1	12	30.0
47	16.2	55	62,476	45	14.0	11	8.9	53	46.9
32	12.6	33	73,932	17	10.9	26	14.9	27	34.7
25	11.8	59	57,698	49	14.6	30	15.7	52	45.7
2	6.9	38	72,424	27	11.7	24	11.9	22	33.7
27	11.8	8	95,015	5	9.8	40	18.7	10	29.5
24	11.8	20	83,850	2	9.7	23	11.8	13	30.0
52	18.5	6	102,664	24	11.5	46	21.9	4	26.8

## Summary of Provincial and State Rankings, continued

	PERFORMANCE OF LABOUR MARKETS							
	Overall Labour Market Performance Index		Average Total Employment Growth (1998-2002)		Average Private Sector Employment Growth (1997-2001)		Average Unemployment Rate (1998-2002)	
	Rank out of 60	Score	Rank out of 60	Percent	Rank out of 60	Percent	Rank out of 60	Percent
<b>New Mexico</b>	13	6.3	19	1.7	7	3.3	45	5.4
<b>New York</b>	30	5.3	28	1.2	39	1.1	44	5.3
<b>North Carolina</b>	29	5.3	33	1.0	46	0.9	25	4.5
<b>North Dakota</b>	48	4.4	59	-0.4	57	0.3	6	3.3
<b>Ohio</b>	42	4.8	53	0.2	42	1.0	26	4.5
<b>Oklahoma</b>	28	5.3	30	1.1	31	1.4	14	3.9
<b>Oregon</b>	26	5.4	39	0.9	37	1.2	52	6.0
<b>Pennsylvania</b>	39	4.9	38	0.9	49	0.9	33	4.7
<b>Rhode Island</b>	23	5.6	11	2.2	51	0.7	29	4.6
<b>South Carolina</b>	50	4.3	55	0.1	45	0.9	31	4.7
<b>South Dakota</b>	19	5.8	18	1.7	54	0.6	1	2.9
<b>Tennessee</b>	18	5.9	22	1.6	28	1.5	22	4.3
<b>Texas</b>	14	6.3	23	1.6	19	2.3	36	4.9
<b>Utah</b>	4	7.0	14	2.0	8	3.2	21	4.3
<b>Vermont</b>	27	5.3	27	1.3	30	1.4	8	3.3
<b>Virginia</b>	9	6.4	16	1.8	22	2.1	4	3.1
<b>Washington</b>	31	5.2	49	0.2	33	1.3	49	5.7
<b>West Virginia</b>	57	3.8	50	0.2	25	1.9	51	5.9
<b>Wisconsin</b>	38	5.0	54	0.2	44	0.9	16	4.0
<b>Wyoming</b>	11	6.3	21	1.7	26	1.8	23	4.3

Average Duration of Unemployment (1996-1998; 2000-2001)		Average Productivity per Worker (1997-2001)		CHARACTERISTICS OF LABOUR MARKET REGULATION					
				Average Public Sector Employment as a Percent of Total Employment (1997-2001)		Average Unionization as a Percent of Total Employment (1998-2002)		Minimum Wage as a Percent of Per-Capita GDP (1997-2001)	
Rank out of 60	Percent	Rank out of 60	Value	Rank out of 60	Percent	Rank out of 60	Percent	Rank out of 60	Percent
33	12.8	24	81,873	51	16.4	18	10.4	37	37.6
58	22.1	3	110,928	48	14.6	51	26.8	3	26.6
23	11.7	25	81,278	28	11.9	1	4.4	20	33.0
8	9.4	51	64,527	42	13.8	12	9.2	40	38.9
30	12.6	29	77,742	12	10.5	42	19.0	21	33.7
15	10.3	47	67,121	36	12.9	14	9.5	49	42.0
17	10.9	18	86,511	16	10.9	34	16.9	43	39.7
41	15.0	27	80,704	1	9.4	37	17.8	23	34.1
34	12.8	19	84,729	6	10.0	41	18.7	33	36.1
40	14.7	41	70,145	47	14.5	2	5.1	42	39.5
3	7.1	39	71,757	34	12.3	5	7.4	34	36.2
12	9.9	28	78,034	18	10.9	13	9.5	30	35.2
20	11.2	14	88,496	31	12.0	3	6.9	16	31.7
1	5.1	31	75,301	33	12.2	9	8.1	35	37.0
31	12.6	44	68,363	4	9.8	22	11.5	46	40.2
36	13.3	13	89,102	14	10.7	6	7.4	14	30.5
22	11.6	15	87,754	37	12.9	45	21.3	26	34.5
55	20.5	54	63,277	44	13.9	27	15.1	55	47.5
9	9.5	40	71,462	23	11.4	38	18.2	25	34.3
13	10.0	10	90,012	52	16.9	19	10.6	8	29.3

## Appendix: Methodology

This report is written for the interested but non-technical reader. For those who require more detail, a technical discussion of the methodology is included here. The goal of this report was to develop an objective measure of labour-market performance and labour-market laws. While it is impossible to eliminate all subjectivity, our goal is to minimize the degree of subjectivity.

### Methodology for computing the Index of Labour Market Performance

The Index of Labour Market Performance assesses the performance of the 10 provincial and 50 state labour markets across five indicators:

- 1 Average total employment growth (1998–2002)
- 2 Average private-sector employment growth (1997–2001)
- 3 Average unemployment rates (1998–2002)
- 4 Average duration of unemployment (1998–2002)
- 5 Average productivity (1997–2001)

Each indicator is standardized such that the lowest score is zero and the highest score is 10. The scores of the five indicators are then averaged, with all five indicators given equal weighting, to obtain a overall score from 0 to 10 on the Index of Labour Market Performance. The jurisdictions are then ranked according to their final score.

Depending on whether higher values are indicative of better or worse labour-market performance, alternative formulas are used to transform the five indicators to a 0-to-10 scale. When higher values are indicative of better labour market performance, the formula used to derive the 0-to-10 ratings is:  $(V_i - V_{\min}) / (V_{\max} - V_{\min})$  multiplied by 10.  $V_i$  is the jurisdiction's actual value for the indicator,  $V_{\max}$  is the maximum value among all of the jurisdictions and  $V_{\min}$  is the minimum value among all of the jurisdictions. A jurisdiction's rating will be 10 when its value of the indicator is the highest among all jurisdictions and 0 when it is the lowest among all the jurisdictions. When higher values are indicative of worse labour-market performance, the formula used to derive the 0-to-10 ratings is  $(V_{\max} - V_i) / (V_{\max} - V_{\min})$  multiplied by 10.

### Methodology for computing the Index of Labour Market Regulation

The Index of Labour Market Regulation assesses several indicators of the provincial labour-relations laws. Specifically, the following aspects of the relation laws are examined: (1) processes of certification and decertification; (2) arbitration process; (3) union security; (4) successor rights; (5) treatment of technology; (6) replacement workers; (7) third-party picketing; and (8) openness of the provincial Labour Relations Boards.

Provinces are scored from 0 to 10 on each indicator. A score of 10 indicates an optimal labour law in terms of providing labour-market flexibility. The scores on the eight indicators are then averaged, with all eight indicators given equal weighting, to obtain a score on the Index of Labour Market Regulation.

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