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Measuring Labour Markets in Canada and the United States: 2007 Edition

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Executive Summary

Measuring Labour Markets in Canada and the United States: 2007 Edition is the third instalment in ongoing research to assess the performance of labour markets and explain why results differ among jurisdictions. The study provides a series of specific evaluations as well as a comprehensive measure of labour market performance. Such indicators of labour performance as job creation, unemployment, and productivity are used to assess Canadian provincial and US state labour market performance. The study also examines those characteristics and regulations of the labour market that have been shown to affect its performance. Below are some of the main findings of the 2007 edition of *Measuring Labour Markets in Canada and the United States*.

Index of Labour Market Performance

The Index of Labour Market Performance is a composite measure of labour market performance based on five equally-weighted indicators: average total employment growth, average private-sector employment growth, average unemployment rates, average duration of unemployment, and average labour productivity. An average of the last five years (2002-2006) was calculated for each indicator.

Key results

1. Alberta tops the list of Canadian provinces and US states in terms of labour-market performance over the last five years. Its strong showing in total employment growth (4th out of 60 jurisdictions), employment growth in the private sector (10th), low duration of unemployment (1st), and average labour productivity (4th) enabled it to achieve the highest overall score of 8.3 out of a possible 10.
2. Western US states dominated the top of the rankings with 6 states (Nevada, Arizona, Utah, Alaska, Idaho, and Wyoming) in the top 10. Saskatchewan was the only other Canadian jurisdiction with a top-10 ranking.
3. Mississippi scored the lowest of any jurisdiction (2.8). It ranked poorly across all five measures of labour market performance: average total employment growth (58th), average private-sector employment growth (58th), average unemployment rate (52nd), average duration of unemployment (53rd), and average labour productivity (55th).
4. Newfoundland and Labrador was the lowest-ranked Canadian province, occupying the 50th position with a score of 4.3. It recorded the worst average unemployment rate (15.8%) yet surprisingly ranked 6th in terms of labour productivity. On the remaining indicators, Newfoundland and Labrador ranked 27th to 31st.
5. Regionally, the western Canadian provinces outperformed the other provinces. In addition to Alberta (first) and Saskatchewan (10th), British Columbia performed relatively well,

Executive Summary Table 1: Summary of Provincial and State Rankings, Labour Market Performance

	Index of Labour Market Performance, 2007		Average Total Employment Growth, 2002-2006		Average Private Employment Growth, 2002-2006		Average Unemployment Rates, 2002-2006		Average Duration of Unemployment, 2002-2006		Average productivity per worker, 2002-2006	
	Rank (out of 60)	%	Rank (out of 60)	%	Rank (out of 60)	%	Rank (out of 60)	%	Rank (out of 60)	%	Rank (out of 60)	2006 CDN\$
Newfoundland	50	4.3	29	1.2	27	1.5	60	15.8	31	17.0	6	\$113,388
Prince Edward Island	39	4.7	19	1.5	16	1.8	59	11.2	2	9.2	60	61,960
Nova Scotia	38	4.7	26	1.3	30	1.3	57	8.8	11	13.0	51	71,559
New Brunswick	34	4.8	20	1.5	17	1.8	58	9.8	8	12.3	56	69,714
Quebec	41	4.6	13	1.8	14	1.9	56	8.5	42	19.0	48	74,374
Ontario	21	5.4	12	1.8	22	1.6	50	6.7	16	15.3	27	84,426
Manitoba	20	5.4	28	1.2	36	1.1	24	4.9	4	10.7	50	73,595
Saskatchewan	10	6.0	22	1.4	12	2.0	32	5.3	9	12.3	18	90,025
Alberta	1	8.3	4	2.8	10	2.4	14	4.5	1	7.7	4	120,398
British Columbia	12	5.9	5	2.7	8	2.7	53	6.9	25	16.6	34	80,545
Alabama	57	3.8	38	0.8	51	0.3	19	4.7	58	23.7	47	74,486
Alaska	5	6.8	21	1.4	9	2.6	55	7.2	10	12.9	2	126,534
Arizona	3	7.0	2	3.1	1	5.0	25	5.1	20	16.2	43	76,516
Arkansas	17	5.6	16	1.6	6	3.1	37	5.4	18	15.7	52	71,201
California	37	4.7	33	1.0	49	0.4	47	6.0	49	20.8	9	100,621
Colorado	13	5.8	9	2.0	25	1.6	36	5.4	26	16.7	14	93,928
Connecticut	24	5.3	42	0.8	42	0.8	22	4.8	57	22.4	3	122,085
Delaware	8	6.4	32	1.0	50	0.4	8	4.0	21	16.3	1	135,310
Florida	9	6.2	6	2.7	4	3.3	16	4.6	37	18.3	41	76,891
Georgia	25	5.2	10	1.9	20	1.6	23	4.8	55	22.0	21	88,302
Hawaii	19	5.5	24	1.3	32	1.2	1	3.2	36	17.9	19	89,831
Idaho	6	6.6	7	2.3	3	3.4	15	4.6	3	9.9	58	65,840
Illinois	55	3.9	45	0.7	55	0.0	46	5.9	59	25.2	10	100,403
Indiana	48	4.3	47	0.6	47	0.6	30	5.2	43	19.5	28	83,576
Iowa	36	4.7	51	0.4	38	1.0	11	4.2	19	16.1	45	76,177
Kansas	40	4.6	41	0.8	43	0.8	28	5.2	30	16.9	35	80,108
Kentucky	51	4.2	43	0.8	54	0.0	43	5.8	32	17.3	39	78,625
Louisiana	35	4.7	57	-0.1	39	0.9	41	5.7	22	16.4	11	98,363
Maine	42	4.6	37	0.9	41	0.8	17	4.7	23	16.5	53	71,091
Maryland	33	4.9	25	1.3	40	0.9	12	4.3	45	20.2	26	85,773

Executive Summary Table 1: Summary of Provincial and State Rankings, Labour Market Performance

	Index of Labour Market Performance, 2007		Average Total Employment Growth, 2002-2006		Average Private Employment Growth, 2002-2006		Average Unemployment Rates, 2002-2006		Average Duration of Unemployment, 2002-2006		Average productivity per worker, 2002-2006	
	Rank (out of 60)	%	Rank (out of 60)	%	Rank (out of 60)	%	Rank (out of 60)	%	Rank (out of 60)	%	Rank (out of 60)	2006 CDN\$
Massachusetts	47	4.3	59	-0.2	46	0.6	30	5.2	56	22.3	7	109,504
Michigan	58	3.1	60	-0.6	59	-0.8	51	6.8	54	21.8	17	92,181
Minnesota	29	5.1	48	0.5	26	1.6	13	4.4	27	16.7	24	86,536
Mississippi	60	2.8	58	-0.2	58	-0.6	52	6.8	53	21.6	55	70,712
Missouri	56	3.8	56	0.1	52	0.3	34	5.3	48	20.5	31	81,763
Montana	23	5.3	23	1.3	15	1.8	10	4.0	12	13.7	59	63,553
Nebraska	26	5.1	52	0.4	23	1.6	4	3.7	15	14.9	38	78,958
Nevada	2	7.6	1	3.6	2	4.8	21	4.8	14	14.9	25	86,250
New Hampshire	30	5.0	36	0.9	37	1.0	8	4.0	24	16.6	33	80,943
New Jersey	27	5.1	35	0.9	34	1.1	27	5.1	52	21.5	8	107,445
New Mexico	18	5.5	15	1.8	11	2.4	34	5.3	29	16.8	37	79,459
New York	43	4.5	44	0.7	35	1.1	40	5.6	60	26.6	5	113,413
North Carolina	28	5.1	17	1.6	24	1.6	42	5.7	47	20.5	20	88,703
North Dakota	31	4.9	46	0.6	28	1.5	2	3.4	17	15.6	54	70,861
Ohio	54	4.0	54	0.2	57	-0.3	45	5.9	38	18.4	22	88,118
Oklahoma	46	4.4	50	0.4	31	1.2	20	4.8	41	19.0	42	76,741
Oregon	53	4.0	34	1.0	45	0.7	54	6.9	50	21.1	32	81,397
Pennsylvania	45	4.4	49	0.5	44	0.8	32	5.3	44	19.7	23	87,302
Rhode Island	22	5.4	31	1.0	7	3.1	28	5.2	34	17.7	29	83,486
South Carolina	44	4.5	18	1.5	33	1.1	49	6.5	46	20.2	40	77,747
South Dakota	14	5.8	39	0.8	13	2.0	3	3.5	5	11.0	49	74,278
Tennessee	49	4.3	40	0.8	56	-0.1	39	5.5	40	18.4	30	82,939
Texas	16	5.6	14	1.8	18	1.7	44	5.9	35	17.8	15	93,423
Utah	4	6.9	3	2.8	5	3.2	17	4.7	7	11.3	44	76,199
Vermont	32	4.9	30	1.1	48	0.5	6	3.8	13	14.0	57	67,623
Virginia	11	5.9	11	1.9	29	1.4	4	3.7	28	16.8	16	92,523
Washington	15	5.6	8	2.0	19	1.7	48	6.3	39	18.4	13	97,032
West Virginia	59	3.0	53	0.2	60	-1.9	37	5.4	51	21.2	46	75,273
Wisconsin	52	4.1	55	0.1	53	0.1	26	5.1	33	17.4	36	79,915
Wyoming	7	6.4	27	1.2	21	1.6	7	3.9	6	11.0	12	\$98,235

Note: These rankings are based on data that contain several decimal places. In this table, there are cases where one jurisdiction appears to rank differently from another, even though their scores are the same. This is because the underlying data for the jurisdictions are different.

ranking 12th with a score of 5.9. Only two other provinces, Manitoba and Ontario, scored in excess of 5.0, placing them 20th and 21st respectively.

6. Western US states also performed well, with six states (Nevada, Arizona, Utah, Alaska, Idaho, and Wyoming) in the top 10. On the other hand, four of the industrial belt states (Wisconsin, Ohio, Illinois, and Michigan) were in the bottom 10 ranked jurisdictions as were two southern states (Alabama and Mississippi).

Labour Market Characteristics and Regulation

The second section of this study identifies and measures four key characteristics and regulations that affect labour market performance in each of the 60 jurisdictions: public-sector employment, minimum wages, unionization, and labour relations laws. In addition to the measurement of each indicator, each section presents a review of the research into the effects of the characteristic or regulation on labour market performance.

Public-sector employment

The review of research into public-sector employment generally indicates that the public sector operates under vastly different institutional arrangements and incentives than the private sector, which ultimately leads to differing outcomes. In particular, the public sector tends to operate as a monopoly to a much greater extent than the private sector, leading to the anticipated outcomes associated with monopolies such as higher costs, lower average quality, and less responsiveness to customers. In addition, research shows that different institutional arrangements and incentives in the public sector results in lower productivity. Lower productivity is particularly problematic given that workers in the public sector tend to receive a wage premium compared to their private sector counterparts.

Key results

1. Nevada tops the list of Canadian provinces and US states with the lowest percentage of its employment in the public sector (federal, sub-national, and local) (10.8%).
2. Alberta is the highest ranked Canadian province. Unfortunately, it ranks 30th with 14.7% of its total employment represented by the public sector. Ontario (16.1%) and British Columbia (17.5%) followed, ranking 37th and 43rd, respectively.
3. Saskatchewan occupied the last position, with public-sector employment representing 27.0% of total employment, a full 2-and-a-half times Nevada's rate. Saskatchewan's rate of public-sector employment was also nearly double that of neighbouring Alberta.
4. Northeastern and industrial belt states dominated the top of the rankings, each having four in the top 10.

5. The results for Canada in general are poor on this characteristic. Six of the bottom 10 jurisdictions are Canadian provinces: New Brunswick, Nova Scotia, Manitoba, Prince Edward Island, Newfoundland and Labrador, and Saskatchewan. Quebec ranked 49th, just two places above the bottom 10 jurisdictions.
6. There is a clear difference between Canada and that in the United States in the size of the public sector at the sub-national level. From 2002 to 2006, Canadian provinces have consistently maintained higher levels of public-sector employment than have US states.

Minimum Wages

There is a general consensus in the literature that high minimum wages have an adverse impact on the labour market. For example, the literature concludes that high minimum wages reduce employment opportunities for young and unskilled workers and do not necessarily raise the incomes of the poor. In addition, increasing the minimum wage is found to result in reduced fringe benefits and on-the-job training. Furthermore, high minimum wages are associated with higher school dropout rates, as the increase in the minimum wage induces teenagers to leave school in search of employment. Finally, data indicate that those earning minimum wages are generally young: 63 percent of minimum wage workers in Canada are between the ages of 15 and 24, and of these, 84 percent live at home with their parents. This study measures minimum wages by calculating the annual income earned by someone working at the minimum wage as a ratio of per-capita GDP. 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.

Key results

1. Delaware ranks first; its minimum wage constitutes the smallest percentage of average per-capita GDP (20.3%).
2. Alberta is the top-ranked Canadian province, occupying the second position overall with a minimum wage of 21.9 percent of the province's average per-capita GDP.
3. Prince Edward Island holds the last position, ranking 60th out of 60 Canadian provinces and US states. Prince Edward Island's minimum wage represented 46.7 percent of the province's average per-capita GDP.
4. US states dominated the top of the rankings, holding nine of the top 10 positions.
5. The Canadian provinces generally fared poorly on this measure with six of the 10 Canadian provinces (New Brunswick, Nova Scotia, Manitoba, Quebec, British Columbia, and

Prince Edward Island) occupying the bottom six rankings overall. Other than Alberta, Canada's provinces were in the bottom half of the rankings.

6. There is a clear difference between minimum wages as a percent of average GDP in Canada and those in the United States: the average Canadian province has a minimum wage that is 38.7 percent of its average GDP while the average US state has a minimum wage that is 30.6 percent of its average GDP over the last 5 years (2002-2006).

Unionization

Unionization has been demonstrated to have a wide effect on economic performance. For example, a major review of academic literature on unionization noted that the evidence indicates that unions tend to reduce employment growth, profitability, and investment. There is a growing consensus that unions in general reduce labour market flexibility, productivity, and adversely affect the overall efficiency of labour markets.

Key results

1. North Carolina maintains the lowest ratio of unionized workers to total employment, with 3.9 percent of its employed workers unionized. South Carolina ranks a close second, with 4.6 percent of its employment unionized.
2. The top-ranked Canadian province was Alberta—a dismal 48th with 24.2 percent of its employment unionized. Alberta performed better on this characteristic than only three US states: Alaska, Hawaii, and New York.
3. Quebec occupies last place; 40.4 percent of its employed workforce is unionized.
4. Southern US states occupied eight of the top 10 rankings: North Carolina, South Carolina, Arkansas, Texas, Virginia, Georgia, Florida, and Mississippi.
5. Not surprisingly, the Right-to-Work states—those that permit workers to choose whether or not to join and financially support a union—dominate the top of the rankings. The 22 Right-to-Work states occupy all of the top 10 rankings and 17 of the top 20 rankings.
6. Canadian provinces performed poorly on this indicator, occupying nine of the bottom 10 positions.
7. The divide between Canada and the United States is evident in this measure. From 2002 to 2006, Canada's average total unionization rate was 32.0 percent compared with 13.9 percent for the United States.

Labour Relations Laws

This measure is based on The Fraser Institute's 2006 study, *An Empirical Examination of Labour Relations Laws in Canada and the United States* (Godin *et al.*, 2006). The study measures and evaluates labour relations laws in the private sector for the Canadian provinces and US states based on whether or not they facilitate flexibility and choice by balancing the needs of both employers and employees. Three areas of labour relations laws are examined: certification and decertification, union security, and regulation of unionized firms.

An overall Index of Labour Relations Laws is presented for each Canadian province and US state. The overall index is based on scores for each of the three aspects of labour relations laws. It represents a measure of each jurisdiction's overall labour relations policy. Jurisdictions with labour relations laws that encourage a greater degree of labour market flexibility receive higher scores while jurisdictions with more restrictive approaches receive lower scores.

There are differences in jurisdictional authority over labour relations laws between Canada and the United States. In Canada, labour relations laws are largely decentralized; each province has its own set of laws. In the United States, however, private-sector labour relations laws are almost entirely centralized, regulated through federal law, and enforced under federal authority. There is, therefore, very little variance amongst US states regarding labour relations laws.

Key results

1. In addition to being able to choose whether or not to join a union, which is a worker's right in all 50 US states, 22 states possess Right-to-Work laws, which also prohibit mandatory union dues payment as a condition of employment. The labour relations laws in these 22 Right-to-Work states best facilitate labour market flexibility amongst the 10 Canadian provinces and 50 US states, so each of these states received a score on this measure of 9.2 out of a possible 10.
2. The remaining 28 US states tied for the 23rd position with an overall score of 7.5.
3. The Canadian provinces occupied the last 10 positions (51st to 60th).
4. The only province that scored above 5 was Alberta (6.0).
5. Quebec (at a score of 1.2) has the most restrictive set of labour relations laws in all of Canada and the United States, followed closely by Prince Edward Island (2.2) and Saskatchewan (2.3).

Executive Summary Table 2: Summary of Provincial and State Rankings, Labour Market Regulation and Characteristics

	Average Provincial/ State and Local Public Sector Employment* as a % of Total Employ- ment, 2002-2006		Average Federal, Provincial/State, and Local Public Sector Employment* as a % of Total Employ- ment, 2002-2006		Average Minimum Wage as a % of Per- Capita GDP, 2002-2006		Average Unionization as a % of Total Employment, 2002-2006		Index of Labour Relations Laws, 2006	
	Rank (out of 60)	%	Rank (out of 60)	%	Rank (out of 60)	%	Rank (out of 60)	%	Rank (out of 60)	Score (out of 10)
Newfoundland	59	22.6	59	26.0	36	33.0	59	38.4	52	3.8
Prince Edward Is.	57	19.9	58	25.2	60	46.7	55	31.1	59	2.2
Nova Scotia	55	18.5	55	22.4	56	41.8	54	28.6	54	3.5
New Brunswick	54	18.2	53	21.3	55	41.7	53	28.2	56	3.0
Quebec	52	16.6	49	18.7	58	44.3	60	40.4	60	1.2
Ontario	39	13.5	37	16.1	46	36.0	52	28.2	52	3.8
Manitoba	58	21.1	56	24.1	57	42.2	58	37.0	57	2.7
Saskatchewan	60	24.7	60	27.0	43	35.3	57	35.6	58	2.3
Alberta	37	13.3	30	14.7	2	21.9	48	24.2	51	6.0
British Columbia	49	15.7	43	17.5	59	44.6	56	33.3	55	3.2
Alabama	29	12.3	32	15.4	42	34.5	22	10.6	1	9.2
Alaska	56	19.0	57	24.7	11	26.8	49	24.3	23	7.5
Arizona	25	11.9	21	14.1	32	31.4	11	7.7	1	9.2
Arkansas	33	12.6	27	14.5	49	36.7	3	6.2	1	9.2
California	26	12.1	20	14.0	38	33.3	43	18.0	23	7.5
Colorado	10	10.9	18	13.7	5	24.5	17	9.0	23	7.5
Connecticut	18	11.4	12	12.8	16	27.9	39	16.9	23	7.5
Delaware	22	11.9	22	14.2	1	20.3	26	12.4	23	7.5
Florida	8	10.6	8	12.6	37	33.0	9	7.5	1	9.2
Georgia	13	11.3	15	13.5	17	28.3	7	6.9	1	9.2
Hawaii	38	13.4	50	19.3	35	32.4	50	25.5	23	7.5
Idaho	36	12.8	29	14.7	45	35.5	12	7.8	1	9.2
Illinois	4	10.4	6	12.1	23	29.4	44	18.4	23	7.5
Indiana	5	10.4	5	11.9	24	29.5	27	13.2	23	7.5
Iowa	34	12.7	26	14.4	20	28.8	29	13.6	1	9.2
Kansas	45	14.8	42	17.3	25	29.6	20	9.9	1	9.2
Kentucky	40	13.7	38	16.3	41	33.7	24	11.5	23	7.5
Louisiana	42	13.9	36	16.1	28	29.7	15	8.4	1	9.2
Maine	19	11.5	17	13.6	53	39.9	31	13.9	23	7.5
Maryland	20	11.5	52	21.0	12	26.8	33	15.1	23	7.5
Massachusetts	3	10.1	4	11.9	22	29.3	34	15.2	23	7.5
Michigan	17	11.4	10	12.7	31	30.1	47	21.9	23	7.5

Executive Summary Table 2: Summary of Provincial and State Rankings, Labour Market Regulation and Characteristics

	Average Provincial/ State and Local Public Sector Employment* as a % of Total Employ- ment, 2002-2006		Average Federal, Provincial/State, and Local Public Sector Employment* as a % of Total Employ- ment, 2002-2006		Average Minimum Wage as a % of Per- Capita GDP, 2002-2006		Average Unionization as a % of Total Employment, 2002-2006		Index of Labour Relations Laws, 2006	
	Rank (out of 60)	%	Rank (out of 60)	%	Rank (out of 60)	%	Rank (out of 60)	%	Rank (out of 60)	Score (out of 10)
Minnesota	15	11.3	11	12.8	9	26.1	42	17.6	23	7.5
Mississippi	50	16.0	48	18.5	54	40.8	10	7.6	1	9.2
Missouri	14	11.3	16	13.5	30	30.1	28	13.4	23	7.5
Montana	43	14.4	44	17.7	47	36.1	30	13.7	23	7.5
Nebraska	32	12.6	31	14.9	14	27.7	21	10.1	1	9.2
Nevada	1	9.3	1	10.8	8	25.4	36	15.8	1	9.2
New Hampshire	7	10.5	7	12.3	13	27.2	23	11.3	23	7.5
New Jersey	30	12.5	28	14.6	4	23.9	46	21.4	23	7.5
New Mexico	51	16.3	54	22.2	34	32.4	19	9.8	23	7.5
New York	47	14.9	40	16.8	7	24.7	51	26.3	23	7.5
North Carolina	35	12.8	25	14.4	15	27.9	1	3.9	1	9.2
North Dakota	48	14.9	46	18.2	26	29.7	16	9.0	1	9.2
Ohio	12	11.1	13	13.0	21	29.0	40	17.0	23	7.5
Oklahoma	31	12.6	39	16.4	40	33.7	13	7.9	1	9.2
Oregon	21	11.5	14	13.2	52	39.7	37	16.0	23	7.5
Pennsylvania	2	9.7	3	11.8	19	28.6	35	15.7	23	7.5
Rhode Island	9	10.6	9	12.6	44	35.4	41	17.1	23	7.5
South Carolina	44	14.8	41	16.8	39	33.7	2	4.6	1	9.2
South Dakota	27	12.2	34	15.4	18	28.3	8	7.3	1	9.2
Tennessee	11	11.1	19	13.9	27	29.7	14	8.2	1	9.2
Texas	28	12.3	24	14.3	10	26.7	4	6.3	1	9.2
Utah	23	11.9	33	15.4	33	31.6	5	6.7	1	9.2
Vermont	24	11.9	23	14.2	51	39.6	25	12.0	23	7.5
Virginia	16	11.4	45	18.2	6	24.7	6	6.7	1	9.2
Washington	41	13.7	35	16.0	48	36.3	45	20.5	23	7.5
West Virginia	46	14.9	47	18.5	50	39.0	32	15.0	23	7.5
Wisconsin	6	10.5	2	11.7	29	29.9	38	16.7	23	7.5
Wyoming	53	16.9	51	19.7	3	22.7	18	9.8	1	9.2

*Including employment in government business enterprises.

Note: These rankings are based on data that contain several decimal places. In this table, there are cases where one jurisdiction appears to rank differently from another, even though their scores are the same. This is because the underlying data for the jurisdictions are different.

Introduction

The interest in labour markets ebbs and flows with the economy as a whole. Recently, extremely tight labour markets in western Canada and parts of Atlantic Canada, coupled with an increasing concern over the effects of an aging population and globalization, have combined to produce a high interest in the way this country's labour market functions. Changing market conditions and demographic factors will continue to influence our labour market, which is why there is a need to measure our performance. Measurement allows comparison, which is the first step to understanding differences in labour market conditions and addressing potential problems.

This study provides an overview of labour market conditions in Canada and the United States. It examines the performance of labour markets in both Canada and the US and offers potential explanations for that performance. Measuring differences in performance on the one hand, and examining the potential explanations for the differences in performance on the other, enables us to understand why some regions have better labour market conditions than others. As a result, we can begin to examine how public policy and other factors affect labour markets.

Organization

The study is divided into two main sections: labour market performance, and labour market characteristics and regulation. The first section presents the performance measures for the Canadian provinces and US states across five indicators: average total employment growth, average private sector employment growth, average unemployment rates, average duration of unemployment, and average labour productivity. This section also gives an overall score for labour market performance which combines the five indicators listed above.

The second section, labour market characteristics and regulation, examines a number of aspects of labour markets that contribute to their performance. This section includes an analysis of public sector employment, minimum wages, unionization, and labour relations laws. Each of the four sub-sections reviews the research and data for each province and state, as well as the overall rankings. This section concludes with an overview of other characteristics, including minimum wage exemptions, overtime requirements, and occupational licensing, each of which affect labour market performance but for which, unfortunately, there are currently no comparable empirical analyses available.

Labour Market Performance

Understanding the importance of labour market flexibility

Labour markets are one of the most important components of an economy. They are the mechanism through which societies allocate one of their most valuable and productive resources: human capital. Labour markets match human skills, supplied by individuals seeking to earn a living, with the demand for labour from firms, governments, and households.

The key to a high performing, efficient labour market (which is characterized by high rates of job creation, low unemployment, short durations of unemployment, and a highly productive workforce) is flexibility. Labour market flexibility is the ease with which workers and employers alike are able to adjust their efforts given changes in the marketplace. For employees, flexibility allows them to supply their labour as they wish and shift their efforts to endeavours that provide the greatest return or benefit. Similarly, flexibility allows employers to adjust the mix of labour and capital to respond to market changes.

Regulation has an influential impact on labour market flexibility because it restricts the ability of employees and employers to adjust their efforts. Rigid and overly prescriptive labour market regulation can impede the incentives or ability for workers to change jobs. It can also limit employers' ability to change their labour inputs, such as the number of workers or the nature of their work. In other words, burdensome labour regulation impedes the speed and extent to which employees and employers can react to changing market conditions.

A large body of scholarly research illustrates how labour market flexibility leads to better labour market performance. The seminal study among these was completed by the Organization for Economic Cooperation and Development (OECD) in 1994; it is commonly referred to as the Jobs Study. It concluded that countries with more flexible labour markets (ones where regulation facilitates the ability of workers and employers to react easily to changing market conditions) enjoy better records of job creation and higher rates of economic growth than countries with less flexible labour markets.

In 2006, the OECD published a reassessment of the original Jobs Study. The reassessment again emphasized labour market flexibility. For example, the OECD (2006a, 2006b) specifically recommended the adoption of policies that encourage greater flexibility for workers and employers, including working-time arrangements that allow workers to choose their hours of work and fewer restrictions on changing wages to enhance performance.

A number of studies support the OECD's conclusions. For example, Kiander and Viren (2001) tested the effect of population increases from immigration on the unemployment rate of 22 OECD countries from 1960 to 1997. They found that the United States, which maintained the most flexible labour market, responded quickly to the population increases and consequently saw no change in the unemployment rate whereas European countries, characterized by much less flexible labour markets, were slower to respond and saw an increase in their unemployment rates.

Another study by Rafael Di Tella and Robert MacCulloch (2005) examined the effect of flexibility on a number of labour market variables such as employment and participation rates. Using data for 21 OECD countries from 1984 to 1990, the authors found that countries with more flexible labour markets enjoyed increased employment and participation rates as well as

lower unemployment rates than those with more rigid labour markets. For instance, they determined that if France were to make its labour market as flexible as that of the United States, its employment rate would increase 1.6 percentage points and its participation rate would increase by 3.5 percentage points.

A study by Alonso *et al.* (2004), using data from 19 OECD countries for a period of 35 years, examined the relationship between labour market conditions and performance. The authors found that income and capital per worker tend to be higher, and unemployment rates lower, in regions with more flexible labour markets.

A number of studies have specifically examined the effect of the flexibility of wages on labour markets. For example, a study by Edward Bierhanzl and James Gwartney (1998) found that higher rates of centralized wage-setting, stricter employee dismissal policies, and generous employment insurance led to higher unemployment rates in OECD countries.¹

Another study by Bertola *et al.* (2002), using data for 17 OECD countries over the period from 1960 to 1996, analyzed the impact of institutions on the relative employment of specific demographic groups—youth, women, and older individuals. The authors found that countries where unions were more extensively involved in wage-setting tended to feature relatively low employment levels among the young and the elderly, and relatively high unemployment rates among women. In fact, union wage-setting policies and accordant wage premiums effectively priced the young and elderly out of employment.

Similarly, Nickell *et al.* (2005) presented an empirical analysis of unemployment patterns in the OECD countries from the 1960s to the 1990s. The authors found that unemployment across the OECD can be explained by shifts in labour market conditions, namely generous benefits, trade union power, taxes and wage inflexibility (p. 3). For instance, unemployment tends to be higher where the power of unions is greater and where they can use their power to set wages too high relative to workers' productivity.² Specifically, the authors found that changes in union density explained around 19 percent of the rise in European unemployment from the 1960s to the first half of the 1990s.

Another area of research shows jurisdictions with more flexible labour markets can react to changing market conditions faster and to a greater extent than jurisdictions with less flexible labour markets. The inability to react to changing market conditions has an adverse effect on employment opportunities, and ultimately on economic growth. A paper by Caballero *et al.* (2004), using data from 60 countries for the period 1980 to 1998, found that countries that increased their labour regulations also decreased both the speed at which they adjusted to market changes and their annual productivity growth. Most recently, Cuñat and Melitz (2007) found that countries with more flexible labour markets adjust to market shocks much faster and to a greater extent than countries with inflexible labour markets.

Overall, there is a growing consensus among economists that labour market flexibility does indeed result in better labour market outcomes. Over a wide range of countries and time,

1 Similarly, a recent paper by Eriksson and Westergaard-Nielsen (2007), using Denmark as a case study, found the shift in that country's wage bargaining institutions from being highly centralized to more decentralized coincided with deregulation and increased product market competition.

2 The OECD (2006b) concluded that the effect of union power may result in low-skilled workers being excluded from employment.

a wealth of research has shown that flexible labour markets record less unemployment, higher employment growth, higher productivity, and generally more economic progress than inflexible labour markets. Labour market flexibility allows workers and employers to react easily to changing market conditions, affording workers mobility to get jobs that increase the return to their efforts and allowing employers to adjust their business inputs.

Measuring labour market performance

This section of the study presents data on the performance of the 10 provincial and 50 state labour markets for five indicators over the past five years (2002-2006)³: average total employment growth, average private-sector employment growth, average unemployment rates, average duration of unemployment, and average labour productivity. This study employed five-year averages to balance the need for historical data while weighing current performance. Put differently, a 5-year average helps prevent indicators from being skewed by recent anomalous data and avoids reliance on information that no longer reflects the jurisdiction. In addition, this section includes an overall Index of Labour Market Performance.

The format of this section is largely a presentation of the rankings coupled with a brief discussion. The section includes general observations for each of the indicators, including a discussion of the top- and bottom-ranked jurisdictions, as well as information specific to Canada and general trends. It also includes the overall index.

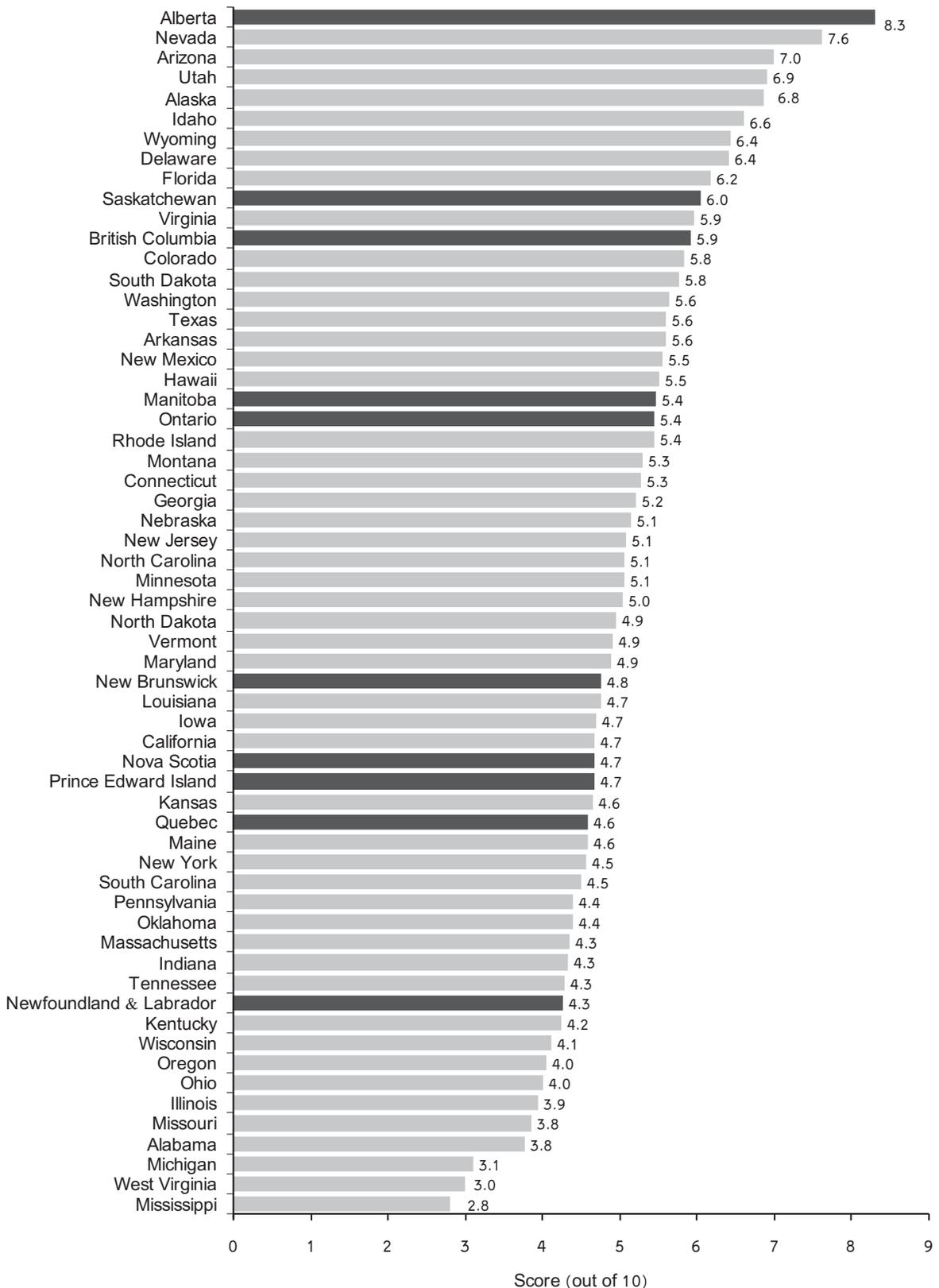
Finally, it is important to understand the larger economic context within which the following analysis was undertaken. While both Canada and the United States have enjoyed relatively strong economies from 2002 to 2006 (both have experienced an average real GDP growth rate of 2.8 percent per year), there are differences between them in economic growth at the sub-national level. Typically, strong economic growth translates into robust performances in other areas including labour markets.

Index of Labour Market Performance

The Index of Labour Market Performance provides an overview of each jurisdiction's overall labour market performance, as measured by the five indicators listed above: average total employment growth, average private sector employment growth, average unemployment rates, average duration of unemployment, and average labour productivity. Each component was weighted equally in the index (for discussion of methodology, see Appendix A: Methodology).

3 Average private sector employment, public sector employment, and duration of unemployment for 2006 was estimated for US states based on historic growth rates. For a detailed discussion of the methodology see Appendix A: Methodology.

Figure 1: Index of Labour Market Performance, 2007



Source: The Fraser Institute.

General observations

Alberta's labour market performance tops the list of Canadian provinces and US states over the last five years. The province's strong performance in total employment growth (ranked fourth out of 60 jurisdictions), employment growth in the private sector (ranked 10th), low duration of unemployment (ranked first), and average labour productivity (ranked fourth) enabled it to achieve the highest overall score of 8.3 out of a possible 10.

Western US states dominated the top of the rankings with six (Nevada, Arizona, Utah, Alaska, Idaho, and Wyoming) of the top 10.⁴ Saskatchewan was the only other Canadian jurisdiction to place in the top 10.

In addition to Alberta and Saskatchewan, British Columbia performed relatively well, ranking 12th with a score of 5.9. Only two other provinces, Manitoba and Ontario, scored over 5.0, placing them 20th and 21st respectively.⁵ The remaining five Canadian provinces scored less than 5.0. Newfoundland and Labrador ranked last among the provinces with a score of 4.3, ranking it 50th out of 60 jurisdictions.

Four of the industrial belt states (Wisconsin, Ohio, Illinois, and Michigan) were in the bottom 10 ranked jurisdictions as were two southern states (Alabama and Mississippi). Mississippi had the worst labour market performance out of the 60 jurisdictions with a score of 2.8.

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

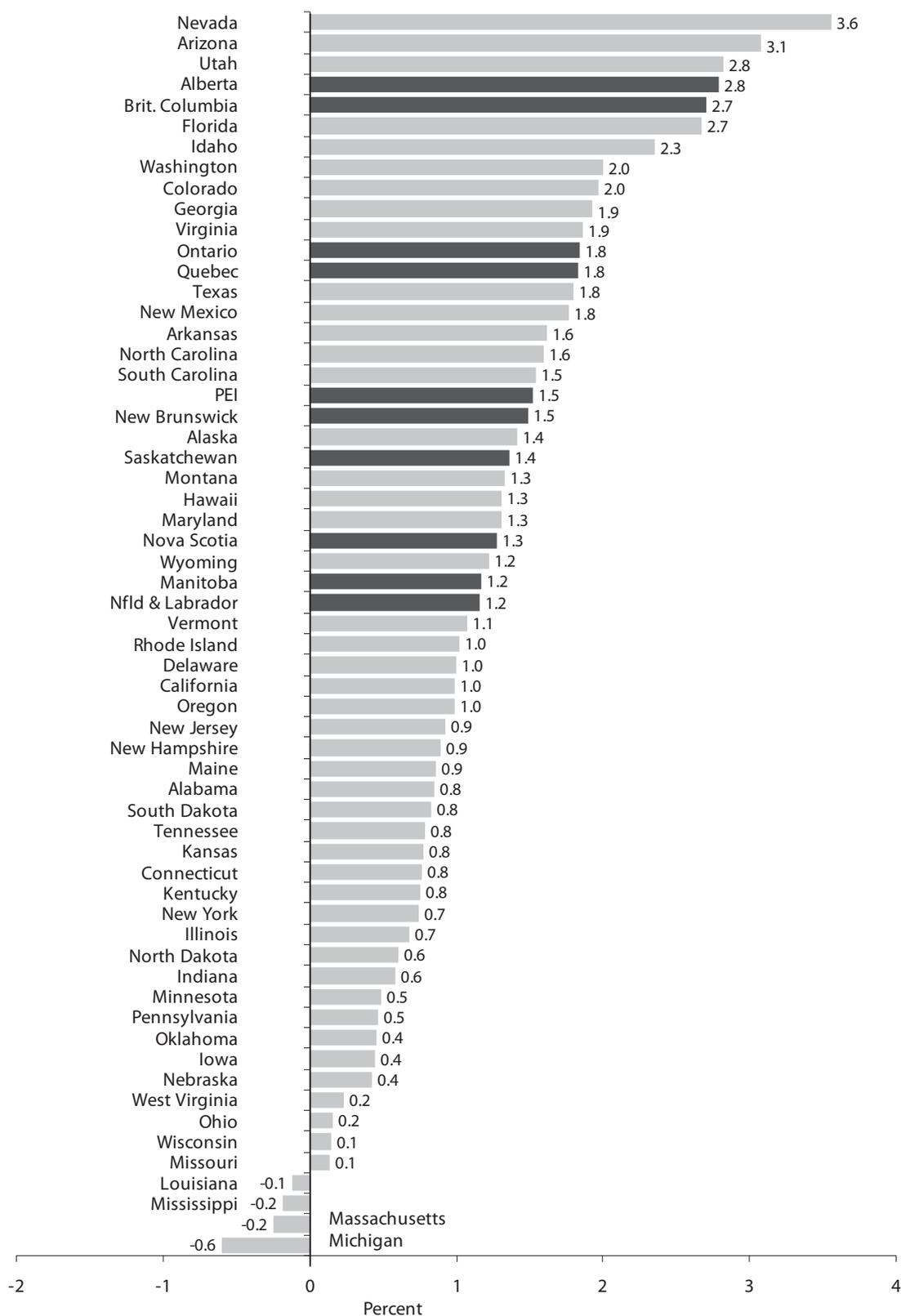
Indicator 1: Average total employment growth

Indicator 1 measures the average year-over-year growth rates of total employment for each jurisdiction over the five years from 2002 to 2006. Total employment includes full-time and

4 Throughout this study US states are often grouped into geographical regions. Definitions for these geographical regions come from the US Census Bureau (2007b), *Geographic Areas Reference Manual*. In this manual the US is divided into four major groups: West, Midwest, Northeast, and South. Each of these regions is further subdivided. The West consists of the Pacific (Alaska, Hawaii, Washington, Oregon, and California) and the Mountain (Idaho, Montana, Wyoming, Nevada, Utah, Colorado, Arizona, and New Mexico) groups. The Midwest consists of the West North Central (North Dakota, South Dakota, Minnesota, Nebraska, Iowa, Kansas, and Missouri) and the East North Central (Wisconsin, Illinois, Indiana, Ohio, and Michigan) groups. The East North Central group is often referred to as the industrial belt; the two terms are used interchangeably throughout the study. The Northeast consists of the New England (Maine, Vermont, New Hampshire, Massachusetts, Connecticut, and Rhode Island) and the Middle Atlantic (New York, New Jersey, and Pennsylvania) groups. The South consists of the West South Central (Oklahoma, Texas, Arkansas, and Louisiana), the East South Central (Kentucky, Tennessee, Mississippi, and Alabama), and the South Atlantic (Maryland, Delaware, West Virginia, Virginia, North Carolina, South Carolina, Georgia, and Florida) groups.

5 Manitoba and Ontario scored the same (5.4) because of rounding. Without rounding, Manitoba's score is 5.45 while Ontario's is 5.44.

Indicator 1: Average Total Employment Growth, 2002-2006



Sources: Statistics Canada, 2007b, *Provincial Economic Accounts*; U.S. Department of Labor, Bureau of Labor Statistics (2007a), *Historical State Labor Force Data*; calculations by authors.

part-time employment in both the public (government) and private (business and non-profit) sectors of the economy.⁶ It excludes measures of self employment.

Observations

Nevada tops the list of Canadian provinces and US states with average total employment growth of 3.6 percent over the last five years, followed by Arizona at 3.1 percent and Utah at 2.8 percent. Two Canadian provinces round out the top five jurisdictions: Alberta tied Utah in third place with average total employment growth of 2.8 percent. British Columbia ranked fifth with average total employment growth of 2.7 percent.

The top 10 jurisdictions for average total employment growth are dominated by US states. Six states from the west (Nevada, Arizona, Utah, Idaho, Washington, and Colorado) and two states from the south (Florida and Georgia) were in the top 10 rankings.

All Canadian provinces ranked in the top half of the 60 jurisdictions, broadly indicating strong total employment growth in Canada over this time. Ontario and Quebec ranked just outside of the top 10 at 12th and 13th, respectively. The lowest ranked Canadian provinces were Manitoba and Newfoundland and Labrador, which scored 28th and 29th respectively.⁷

The bottom 10 rankings contained six states from the Midwest (Iowa, Nebraska, Ohio, Wisconsin, Missouri, and Michigan) and two states from the south (Louisiana and Mississippi). Michigan placed last, recording declining total employment of 0.6 percent on average over the last five years. In all, four US states recorded a decrease of total employment on average over the last five years: Louisiana, Mississippi, Massachusetts, and Michigan.

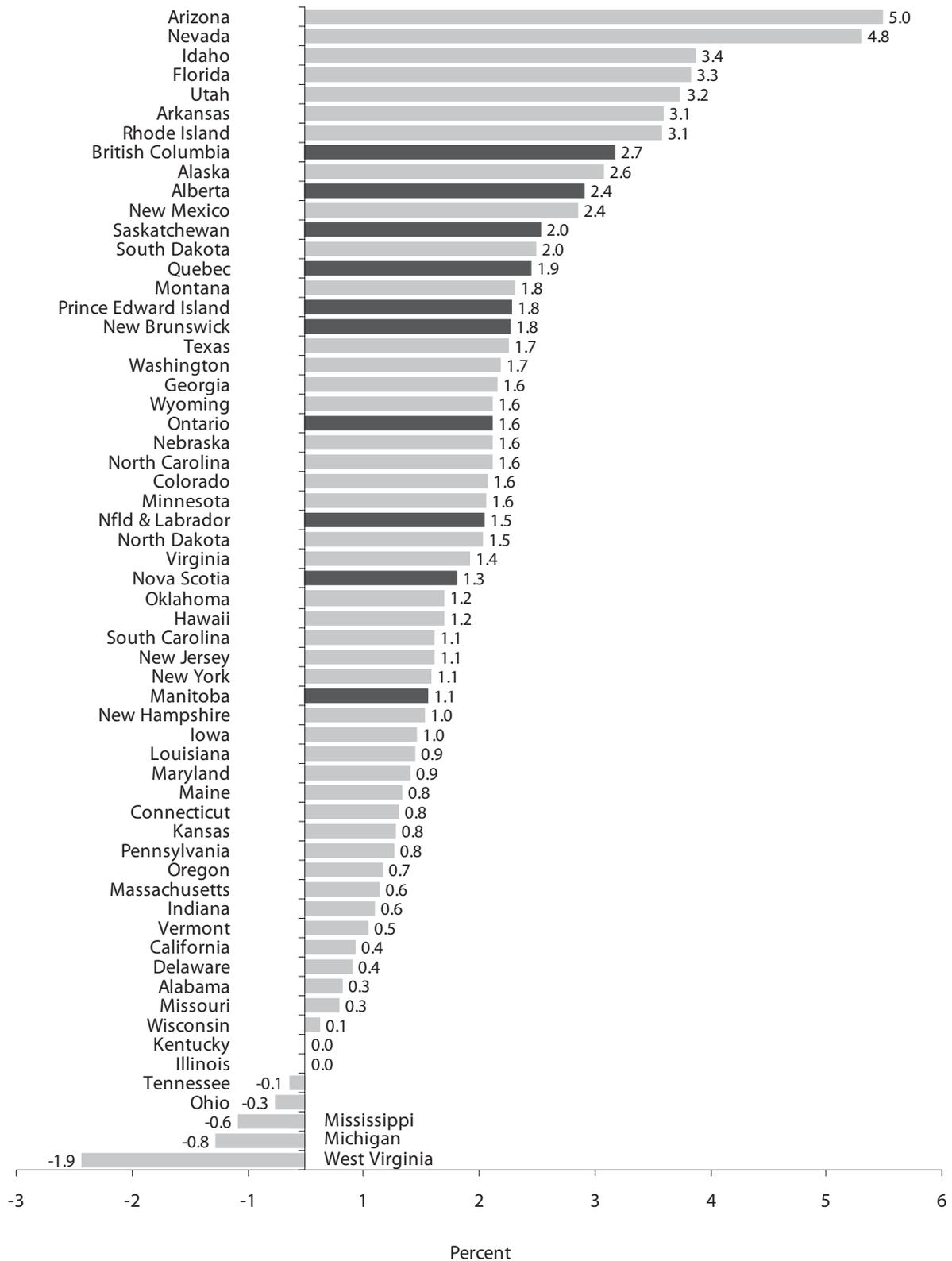
Indicator 2: Average private-sector employment growth

An important aspect is missing from the first indicator of labour market performance: the nature of employment growth. How is employment growth divided between the public and private sectors? Strong employment growth that is largely fuelled by the public sector can have harmful economic consequences. (For further discussion, see Clemens *et al.*, 2003. Also see the public sector employment discussion in the labour market characteristics and regulation section of this study.)

6 There is a small difference between the Canadian and American definition of “employable”: Canada tabulates employment data for those over the age of 15 while the United States uses a threshold of 16 years of age.

7 Manitoba and Newfoundland and Labrador appear to have the same score but different rankings because the scores were rounded to one decimal place.

Indicator 2: Average Private Sector Employment Growth, 2002-2006



Sources: Statistics Canada, 2007a, *Labour Force Historical Review, 2006*; U.S. Department of Labor, Bureau of Labor Statistics (2007b), *Geographic Profile of Employment and Unemployment*; calculations by authors.

The second indicator of labour market performance measures the average growth in private sector employment for each jurisdiction over the five years from 2002 to 2006⁸; growth is defined as new full-time and part-time private sector employment.⁹

Observations

Arizona and Nevada, the top-ranking jurisdictions, had average private sector employment growth of 5.0 and 4.8 percent over the last five years.¹⁰ US states dominated the top of the rankings with eight states in the top 10 (Arizona, Nevada, Idaho, Florida, Utah, Arkansas, Rhode Island, and Alaska).¹¹

The top-ranked Canadian province was British Columbia, which ranked 8th, with average private sector employment growth of 2.7 percent followed by Alberta at 2.4 percent. Saskatchewan performed well, narrowly missing the top 10 with a ranking of 12th and an average private sector employment growth rate of 2.0 percent.

The bottom-ranked Canadian province was Manitoba at 1.1 percent, ranking 36th overall. The remaining six Canadian provinces had average growth rates ranging between 1.3 percent and 1.9 percent.

The bottom 10 jurisdictions were five Southern states (Alabama, Kentucky, Tennessee, Mississippi, and West Virginia) and five Midwest states (Missouri, Wisconsin, Illinois, Ohio, and Michigan). West Virginia received the worst score. Its private employment decreased 1.9 percent on average in the period.

In all, five US states recorded a decrease in average private-sector employment on average over the last five years: Tennessee, Ohio, Mississippi, Michigan, and West Virginia.

One noteworthy observation 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. Several jurisdictions were in the process of altering the size of their public sector during the period analyzed. There is, therefore, a stark contrast between the two indicators for those jurisdictions. For example, Rhode Island's average total employment growth was 1.0 percent but its private sector employment growth was 3.1 percent, indicating a large reduction in the state's public sector employment. Similarly, Arkansas recorded average total employment growth of 1.6 percent while averaging 3.1 percent private sector employment growth, again indicating a large decline in the public sector. West Virginia shows the opposite: a decline in private sector employment growth on average

8 Actual US state data for 2006 were not available. The figures for just 2006 were forecast using historical data. See Appendix A: Methodology for details.

9 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.

10 Arizona and Nevada experienced extraordinary growth rates in some years, but have consistently recorded higher than average growth rates in other years between 2002 and 2006.

11 The average growth rates in Idaho and Alaska were largely driven by extraordinary growth rates in 2005.

coupled with much higher positive average total employment growth, indicating an expansion in the public sector.

Indicator 3: Average unemployment rates

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 (2002-2006) average percentage of citizens actively seeking work who were unable to secure employment.

Some of the recorded differences between the Canadian provinces and the US states are due to the differences in the two countries' employment insurance programs.¹² In general, Canada has a more generous employment insurance program than the United States, because it 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.¹³

Observations

Hawaii recorded the lowest average unemployment rate for the last five years at 3.2 percent. All jurisdictions that ranked in the top 10 (all US states), had average unemployment rates of 4.0 percent or less.

Alberta was the highest-ranking Canadian province at 14th overall with an average unemployment of 4.5 percent. Manitoba was the only other Canadian province to rank in the top half of all jurisdictions (24th overall).¹⁴

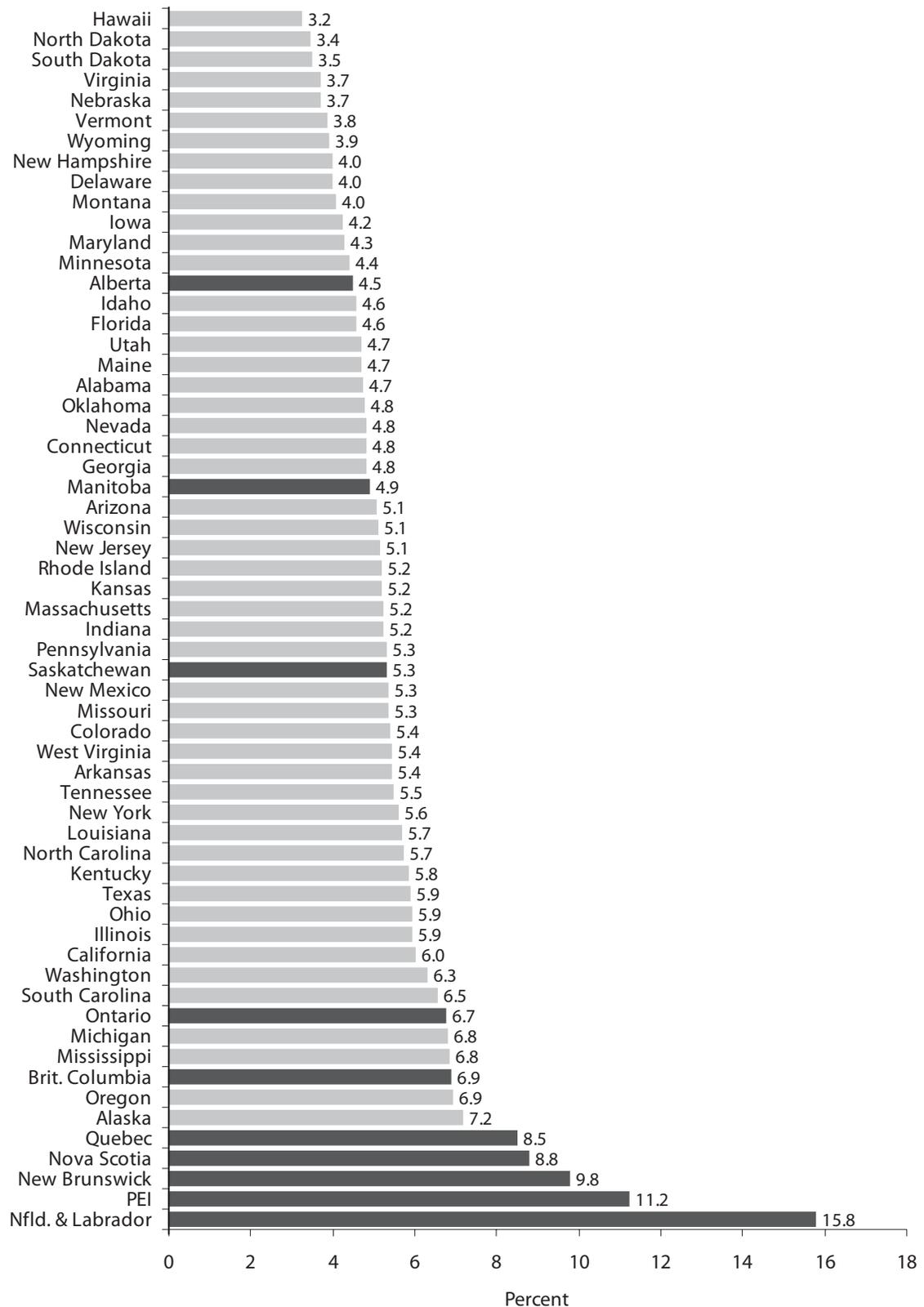
Newfoundland and Labrador ranked last, with an average unemployment rate of 15.8 percent over the last five years. Newfoundland and Labrador's average unemployment rate is over three times higher than that of the top-ranked Canadian provinces Alberta and Manitoba, and almost five times higher than that of top-ranked Hawaii.

Further evidence of Canada's poor performance on this indicator is that the bottom five jurisdictions are all Canadian provinces: Quebec, Nova Scotia, New Brunswick, Prince Ed-

12 For more information on the two countries' Unemployment Insurance systems, see, for Canada, <http://www.hrsdc.gc.ca/en/ei/types/special.shtml> and, for the United States, <http://www.dol.gov/dol/topic/unemployment-insurance/index.htm>.

13 In addition, the Canadian federal government made changes to the Employment Insurance system in 2000 that benefit workers in Atlantic Canada. An interesting case study done by Kuhn and Riddell (2006) presented the long-term effects of generous unemployment insurance in New Brunswick and Maine. See Riddell *et al.*, 2006, for a summary of this technical study.

14 Low unemployment rates in jurisdictions like Manitoba (24th) and Saskatchewan (33rd) may be the result of the out-migration of their working-age population. Manitoba and Saskatchewan had two of the highest rates of working-age out-migration in Canada from 2002 to 2006, 1.6 and 2.8 percent of their populations respectively. If a significant portion of their working age population is leaving, then their unemployment rate will appear to be improved as unemployment is measured as the number of people looking for work compared to the total labour force. See the discussion on migration in Appendix B for more detail.

Indicator 3: Average Unemployment Rates, 2002-2006

Sources: Statistics Canada, 2007b, *Provincial Economic Accounts*; U.S. Department of Labor, Bureau of Labor Statistics, 2007a, *Historical State Labor Force Data*; calculations by authors.

ward Island, and Newfoundland and Labrador. Two other provinces, Ontario and British Columbia, also fared poorly, ranking 50th and 53rd, respectively.

One of the facts that emerged from the bottom of the rankings is how high average unemployment rates are in Atlantic Canada. Nova Scotia, New Brunswick, Prince Edward Island, and Newfoundland and Labrador recorded average unemployment rates of 8.8, 9.8, 11.2, and a startling 15.8 percent, respectively, over the last five years. These averages diverge significantly from the average for the top 20 jurisdictions (4.1%) or even the Canadian average (7.1%).

There is a stark contrast between the bordering northeastern US states, almost all of which are in the top 20 ranked jurisdictions, and the Canadian Atlantic provinces. The northeastern US states generally maintained low average unemployment rates, while the bordering Canadian Atlantic provinces had high average unemployment rates, relegating them to the bottom of the unemployment rate rankings.

Indicator 4: Average duration of unemployment

The fourth indicator of labour market performance is an adjunct to the previous measure, average unemployment rates. It is intended 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 the labour force experiencing unemployment for 27 weeks or longer in the period 2002 to 2006.¹⁵

Observations

Alberta ranked first with the lowest percentage of its unemployed (7.7%) experiencing unemployment in excess of 27 weeks. The second-ranked jurisdiction was Prince Edward Island with 9.2 percent of its unemployed experiencing unemployment in excess of 27 weeks.¹⁶ The top-ranked US state, Idaho, ranked 3rd overall with an average rate of 9.9 percent.

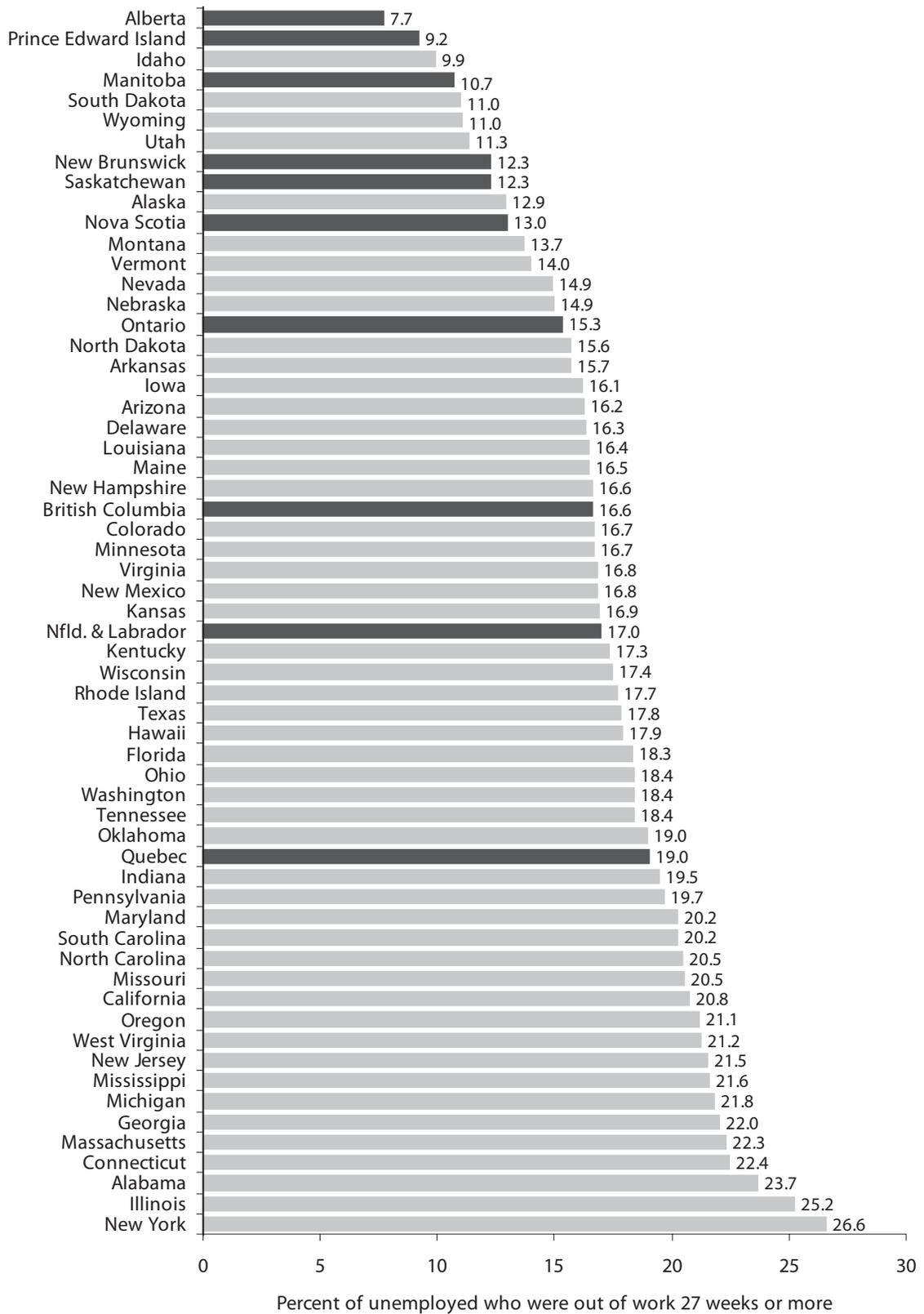
Overall, Canadian jurisdictions performed better on the duration of unemployment than on unemployment rates, having five provinces in the top 10 ranked jurisdictions. Nova Scotia narrowly missed the top 10, ranking 11th with 13.0 percent of its unemployed remaining so in excess of 27 weeks. Only two provinces, Newfoundland and Labrador and Quebec, ranked in the lower half with rates of 17.0 and 19.0 percent, respectively.

New York attained the dubious distinction of being last; 26.6 percent of its unemployed remained unemployed for more than 27 weeks. Worse still for the US, the bottom 18 jurisdictions were all US states. The five industrial belt states (Wisconsin, Ohio, Indiana, Michigan,

15 Actual US state data for 2006 were not available. The figures for just 2006 were forecast using historical data; see Appendix A: Methodology for details.

16 Prince Edward Island has the second highest unemployment rate, yet the second lowest duration of unemployment. This could be explained by seasonal workers, such as those in the fishing industry, being unemployed for a significant portion of the year, but not more than the 27-week threshold of this measure. More detailed analysis is required.

Indicator 4: Average Duration of Unemployment, 2002-2006



Sources: Statistics Canada, 2007a, *Labour Force Historical Review 2006*; US Department of Labor, Bureau of Labor Statistics, 2007b, *Geographic Profile of Employment and Unemployment*; calculations by authors.

and Illinois) ranked in the bottom half as did six northeastern states (Rhode Island, Pennsylvania, New Jersey, Massachusetts, Connecticut, and New York).

Indicator 5: Average GDP per worker (labour productivity)

The ultimate goal of a well-functioning labour market is high and growing labour productivity,¹⁷ which in turn translates into higher wages and salaries for workers. The final indicator of labour-market performance measures the average total value of goods and services (GDP) per worker over the last five years (2002-2006).¹⁸

Observations

Delaware ranked first out of the 60 jurisdictions with average GDP per worker totalling \$135,310.¹⁹ Alberta was the top-ranked Canadian province at 4th place, with average GDP per worker of \$120,398.

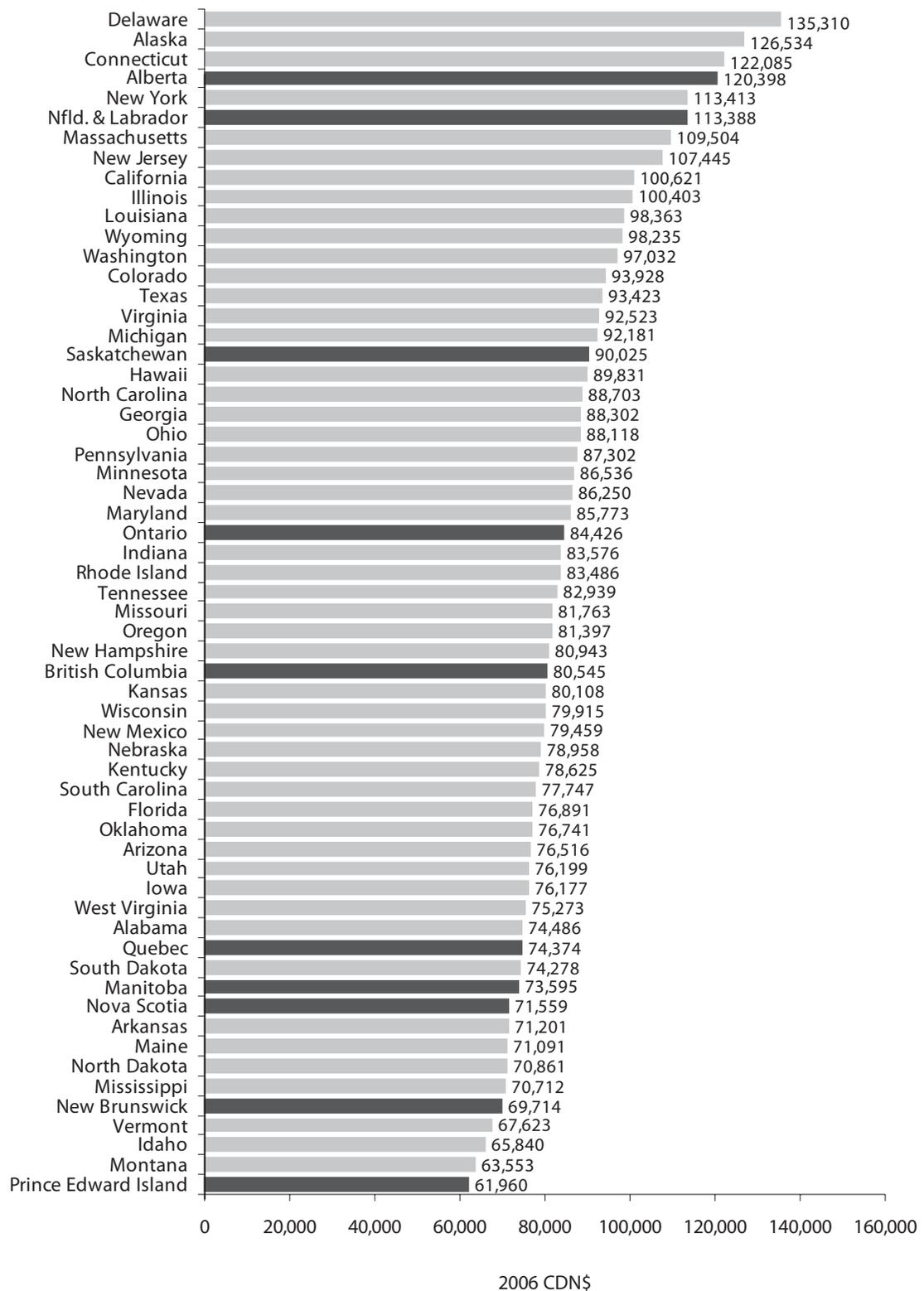
The northeastern US states performed well on this indicator, having four states (Connecticut, New York, Massachusetts, and New Jersey) ranking in the top 10 jurisdictions. Texas and Louisiana aside, the southern US states generally had poorer performance (i.e., have lower productivity) than the other US states.

Prince Edward Island ranked last among the 60 jurisdictions with GDP per worker of \$61,960, less than half that of top-ranked Delaware. Four of the 11 jurisdictions at the bottom of the rankings were Canadian: Manitoba, Nova Scotia, New Brunswick, and Prince Edward Island. Another two provinces, British Columbia (34th) and Quebec (48th), ranked in the lower half of all jurisdictions. Overall, US states outperformed Canadian provinces in terms of GDP per worker.

17 Figures are presented in 2006 Canadian dollars.

18 A more accurate measure of labour productivity is GDP divided by the total number of hours worked by all employees and self-employed individuals in each jurisdiction. Unfortunately, the number of hours worked is not currently available by US state (but is available by Canadian province). Research shows that on a national level, Canada trails the US in terms of this measure. See Veldhuis and Clemens, 2006.

19 Purchasing Power Parity (PPP), a unique conversion rate calculated by Statistics Canada (see Statistics Canada, 2007d) to account for price differences between Canada and the United States, was used to convert US dollars to Canadian dollars.

Indicator 5: Average GDP per Worker, 2002-2006

Sources: Statistics Canada, 2007b, *Provincial Economic Accounts*; Statistics Canada, 2007d, *Purchasing Power Parities and Real Expenditures, United States and Canada, 1992-2005* 13-604-MIE, no. 53 (February); US Department of Commerce, Bureau of Economic Analysis (2007), *Gross State Product*; US Department of Labor, Bureau of Labor Statistics, 2007a, *Historical State Labor Force Data*; calculations by authors.

Labour Market Characteristics and Regulation

The second section of this study identifies and measures key characteristics and regulations that affect labour market performance in each of the 60 jurisdictions: average public sector employment as a percent of total employment, average minimum wage as a percent of per-capita GDP, average unionized employment as a percent of total employment, and an empirical comparison of labour relations laws. There is substantial evidence, as we show in this section, that each of these characteristics influences the performance of labour markets. It is not surprising, therefore, to find jurisdictions with unfavourable labour market characteristics and regulations that also experience poor labour market performance.

Characteristic 1: Public sector employment

The split between private and public sector employment²⁰ 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 (for a discussion of these differences, see Clemens and Esmail, 2002a, 2002b; and Clemens *et al.*, 2003). The following brief discussion outlines some of the important differences between the two sectors.

One key difference between the public and private sector is in their objectives. In a critical study published in the prestigious *Journal of Economic Literature*, professors Megginson and Netter found that a key difference between the two sectors is that governments are preoccupied with fulfilling social goals and objectives rather than pursuing economic or business objectives (Megginson and Netter, 2001). In the former situation, political pressures often lead to resources going to projects that are not in the best interest of most workers.

In addition, Megginson and Netter found that government businesses tend to develop with less capital and thus are more labour intensive than their private sector counterparts. Ehrlich *et al.* (1994) also found evidence that government entities tend to develop with less capital, which, in turn, leads to lower productivity.²¹ Lower labour productivity is of particular concern as research shows that public sector employees tend to be paid a wage premium

20 Public sector employment is specifically measured as the total number of government employees plus employees of government business enterprises (GBEs). Data for US states excluding GBE employment is not available.

21 Ehrlich *et al.* (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 percent and reduce the rate of unit cost by 1.7 to 1.9 percent. (Total Factor Productivity (TFP) refers to the aggregate efficiency with which people and capital are combined in the output of the economy.) In addition, Jones and Mygind (2002) found that, in Estonia, private ownership is 13 to 22 percent more efficient than state ownership. Hernandez de Cos *et al.* (2004) found, using data for Spanish manufacturing firms from 1983 to 1996, that public ownership has a negative impact on efficiency and that competition has a positive impact on a firm's performance. Similarly, Boubakri *et al.* (2004) found that privatization increases productivity, efficiency, and output in former state-owned firms in Asia.

compared with their private sector counterparts (for further discussion, see Borjas, 2002; Bender, 2003; Edwards, 2006; and Treasury Board of Canada, 2007).

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 pressure 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.

Another difference between the two sectors is budget constraints, which Harvard economist Jonas 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 go bankrupt, whereas budget constraints in the private sector are “hard” since losses lead to a decrease in capital and ultimately to bankruptcy. The real risks of failure and bankruptcy force the private sector to react to consumers’ demands and preferences and to allocate capital efficiently to maximize returns. The public sector, with its softer budget and no risk of bankruptcy, faces no such competitive pressure.

Research shows that a larger public sector leads to poorer labour market outcomes and, more broadly, to poorer economic performance. For example, Gylfason *et al.* (2001) found during the period from 1972 to 1992 that across 34 countries, investment (a key driver of productivity) and economic growth were inversely related to the size of the state enterprise sector (measured by government employment as a share of total employment). More recently, a study by Yann Algan and his colleagues (2002) measured the impact of public sector employment on unemployment in 17 OECD countries from 1960-2000. The authors found that, on average, the creation of 100 public sector jobs may have eliminated about 150 private sector jobs and increased by about 33 the number of unemployed workers. They also found evidence that public sector employment decreased labour market participation.²²

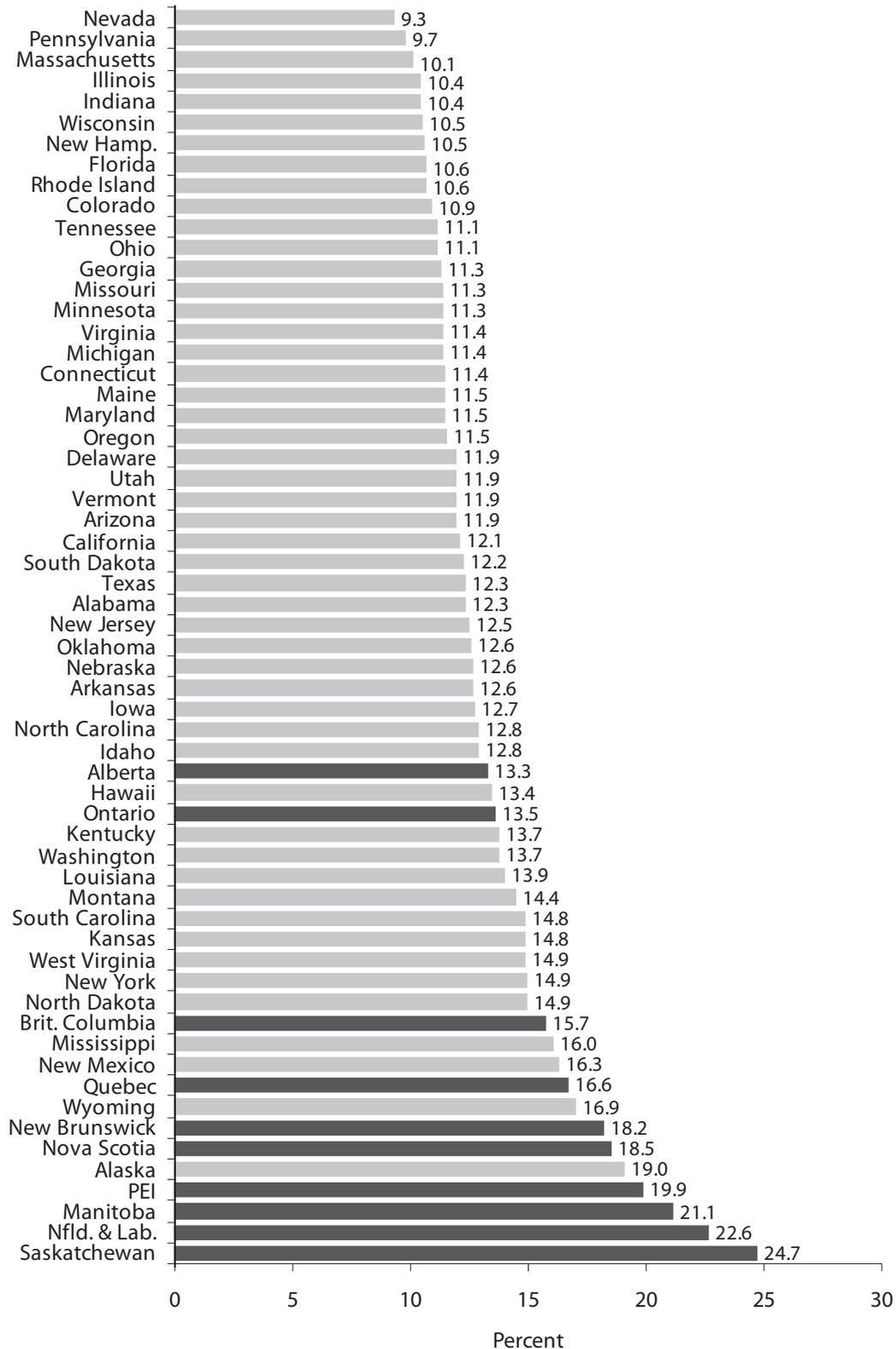
Characteristic 1 is a measure of the ratio between total employment in each province or state and public sector employment, both directly in government as well as in government business enterprises. Note that this study uses two separate measures: the first excludes federal employees (including government business enterprises at the federal level) while the second includes them. The reason for the two measures is that provincial and state governments have little, if any, control over the location of federal employees, but the presence of such employees, and thus of the larger public sector in the jurisdiction, will influence the performance of the labour market.

Observations

On the first measure, which excludes federal employees and only counts public sector employment at the provincial/state level (table 1a), Nevada, at 9.3 percent, tops the list of Canadian

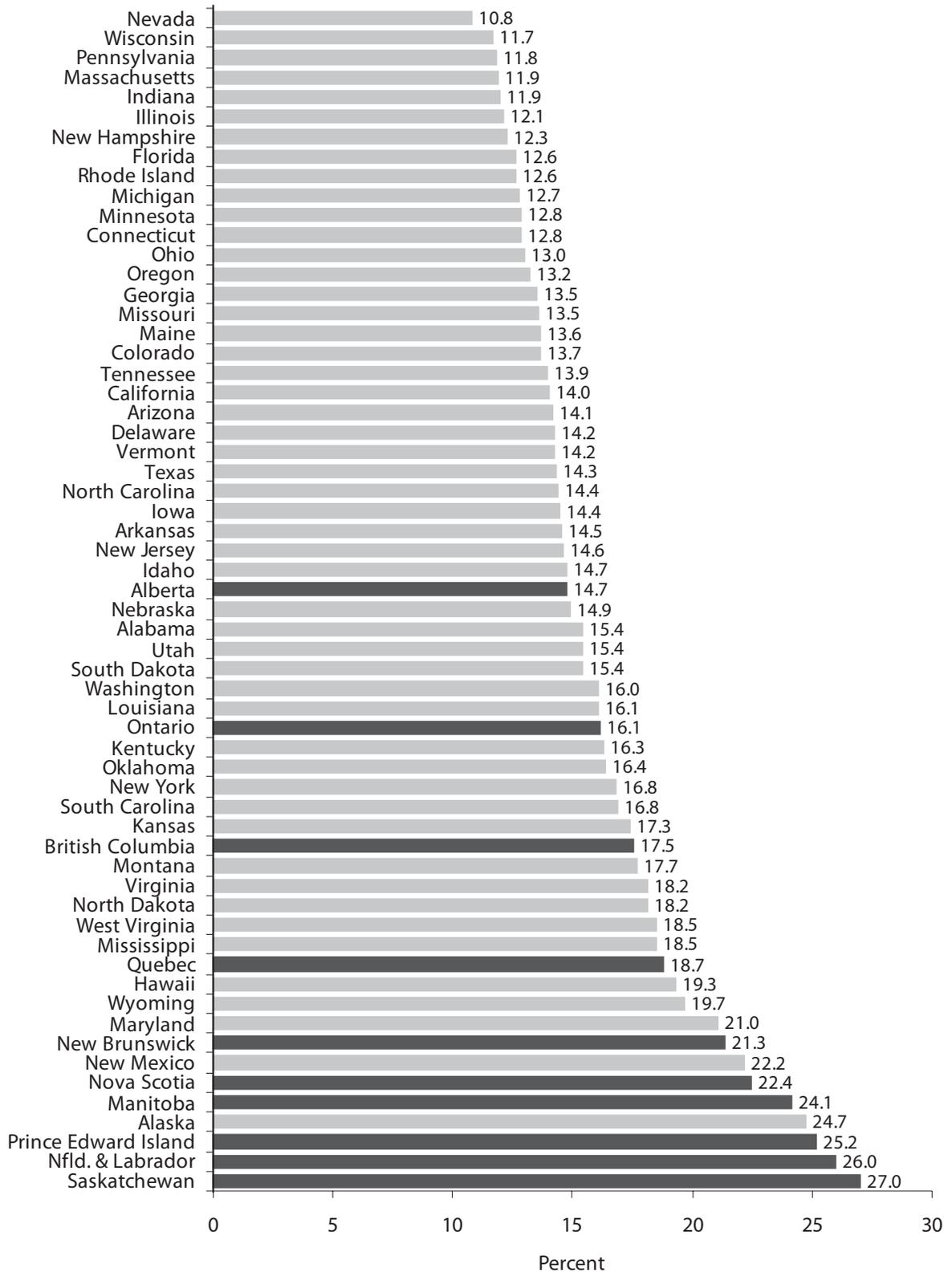
22 Demekas and Kontolemis (2000) concur. They find that Greece’s dramatic increase in public sector employment in the 1970s and 1980s was strongly associated with higher rates of unemployment. Hörner *et al.*, 2004, find similar results for Europe.

Characteristic 1a: Average Provincial/State and Local Government Employment as a Percentage of Total Employment, 2002-2006



Sources: Statistics Canada, 2007c, Public Institutions Division, Financial Management System; US Department of Labor, Bureau of Labor Statistics, 2007b, *Geographic Profile of Employment and Unemployment*; calculations by authors.

Characteristic 1b: Average Federal, Provincial/State and Local Government Employment as a Percentage of Total Employment, 2002-2006



Sources: Statistics Canada, 2007c, Public Institutions Division, Financial Management System; US Department of Labor, Bureau of Labor Statistics, 2007b, *Geographic Profile of Employment and Unemployment*; calculations by authors.

provinces and US states with the lowest percentage of its employment in the public sector. Rounding out the top 10 rankings are four northeastern states (Pennsylvania, Massachusetts, New Hampshire, and Rhode Island), three industrial belt states (Illinois, Indiana, and Wisconsin), and Florida and Colorado.

Alberta was the highest ranked Canadian province; it ranked 37th with 13.3 percent of its total employment represented by the public sector. Ontario followed Alberta closely at 39th position with 13.5 percent of its employment in the public sector. Saskatchewan occupied the last position, with public sector employment representing 24.7 percent of its total employment, more than double the rate of top-ranked Nevada.

Seven of the bottom 10 jurisdictions are Canadian provinces: Quebec, New Brunswick, Nova Scotia, Prince Edward Island, Manitoba, Newfoundland and Labrador, and Saskatchewan. British Columbia ranked 49th, narrowly missing a position among the bottom 10 jurisdictions.

Inclusion of federal employees does not, generally, influence the rankings to any great extent, although there are some interesting changes when they are added (table 1b). Nevada retains the top position with the lowest level of employment represented by the public sector, 10.8 percent. There is only one change to the list of jurisdictions on both the top 10 and bottom 10 rankings after the inclusion of federal employees, although the rankings for several jurisdictions change.

With the inclusion of federal employees, Alberta remains the top-ranked Canadian province but moves up to the 30th position overall with 14.7 percent of its employment in the public sector. Ontario remains the second-ranked Canadian province but only moves up two positions to 37th overall with 16.1 percent of its employment in the public sector. Six of the bottom 10 positions are occupied by Canadian provinces: Quebec ranks 49th, narrowly missing the bottom 10. Prince Edward Island, Newfoundland and Labrador, and Saskatchewan occupy the bottom three positions; in each of these provinces the public sector constitutes over one quarter of their employment.

Characteristic 2: Minimum wages

High minimum wages reduce employment opportunities for young and unskilled workers²³ and do not necessarily raise the incomes of the poor (see LeRoy, 2006). In addition, high minimum wages restrict the ability of employers and employees to negotiate mutually beneficial contracts. In particular, minimum-wage legislation hampers low-skilled workers and new entrants from negotiating for employment they might otherwise accept. (For a more thorough discussion see Law, 1998, and Palda, 2000.)

A large body of empirical research documents the adverse effects of high and increasing minimum wages, such as the reduction in employment. David Neumark and William Wascher (2006) reviewed more than 90 studies covering 15 countries over the past 15 years and concluded that the vast majority of the studies, particularly the most credible ones, consistently

23 Many jurisdictions differentiate between minimum wages for younger, unskilled workers and minimum wages for older, more skilled workers.

showed minimum wage increases have undesirable effects on employment, particularly for younger workers.

Increases in the minimum wage have other unpleasant economic impacts. Empirical studies show that when minimum wages rise, employers offer fewer fringe benefits and reduce on-the-job training.²⁴ In other words, an increase in income from higher minimum wages may be offset by reductions in other types of income such as benefits and training. As a result, there could be no net increase in overall compensation—and living standards—from an increase in the minimum wage.

Furthermore, high minimum wage rates are associated with higher school dropout rates, as the increase in the minimum wage induces teenage workers to leave school in search of employment.²⁵ For example, Chaplin *et al.* (2003) concluded that higher minimum wages were related to reduced school enrolment among teenagers, particularly among students making the transition from grade 9 to grade 10.

Another factor concerning minimum wages that is often overlooked is the age of those who generally receive such wages. According to Statistics Canada, 63 percent of minimum wage workers in Canada are between the ages of 15 and 24, and of these, 84 percent live at home with their parents. The “typical” minimum wage worker is, therefore, a young person living at home with his or her parents.²⁶

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 (Law, 1998). Professor Morley Gunderson warned the Ontario government of this in a recent report on the effects of increasing the minimum wage in that province: “Minimum wages are, at best, an exceedingly blunt instrument for curbing poverty and the evidence suggests they essentially have no effect on reducing overall poverty” (Gunderson, 2007; p. iii).

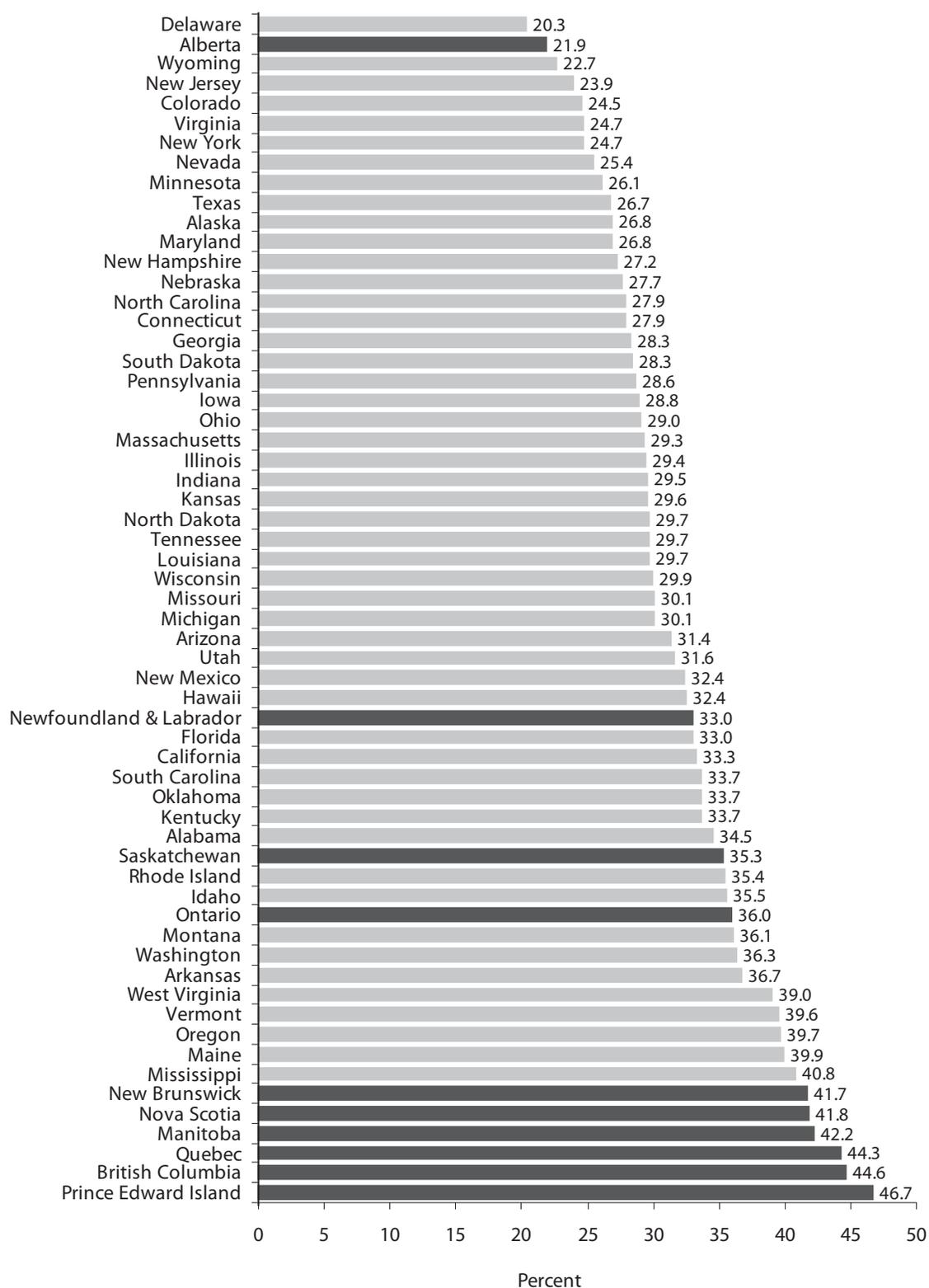
Furthermore, those earning the minimum wage tend to work for that wage for only a short time. A study by William Even and David Macpherson (2004), for example, found that in the United States between 1998 and 2002, wage growth was 10.4 percent for employees earning minimum wage and only 1.7 percent for those earning above minimum wage. They also found that from 1979 to 2003, two thirds of minimum wage workers received a wage increase that raised their earnings above the minimum wage within one year.

24 Neumark and Wascher (2001) specifically found that “for young workers in their early 20s, the estimated effects indicate elasticity 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” (p. 591).

25 Most minimum wage workers are low-skilled workers. In 2003, over 40 percent of all minimum wage workers were high-school dropouts. Less than 7 percent of minimum wage workers had a university degree (Sussman and Tabi, 2004).

26 An earlier Statistics Canada study found that in 2003, almost two-thirds of all minimum wage earners were between the ages of 15 and 24. Almost 90 percent of these young people lived at home with their parents or another relative (Sussman and Tabi, 2004).

Characteristic 2: Average Minimum Wage as a Percent of GDP per Capita, 2002-2006



Sources: Government of Canada, Human Resources and Social Development Canada, 2007a, *Minimum Wages for Canadian Adult Workers Since 1965*; Statistics Canada, 2007b, *Provincial Economic Accounts*; US Department of Labor, Employment Standards Administration Wage and Hour Division, 2007, *State Labor Offices*; US Department of Commerce, Bureau of Economic Analysis, 2007, *Gross State Product*; calculations by authors.

Average minimum wage as a percentage of GDP is obtained by calculating the annual income earned by someone working at the minimum wage 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).²⁷ 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. In other words, comparing minimum wage income to the average income (GDP per capita) provides a relative measure of how high minimum wages are compared among jurisdictions. 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 first; its minimum wage constitutes 20.3 percent of average per-capita GDP in the state. In other words, a citizen of Delaware earning the minimum wage could earn a little over one-fifth of the average per-capita GDP (income) of the state. Alberta ranks second with a minimum wage of 21.9 percent of the province's average per-capita GDP. The remaining jurisdictions in the top 10 were all US states.

Prince Edward Island held the last position, ranking 60th out of 60 Canadian provinces and US states. Prince Edwards Island's minimum wage represented 46.7 percent of the province's average per-capita GDP. Worse still for Canada, six of the bottom 10 jurisdictions were Canadian: New Brunswick, Nova Scotia, Manitoba, Quebec, British Columbia, and Prince Edward Island. Saskatchewan and Ontario ranked 43rd and 46th.

Characteristic 3: Unionization

Another important structural attribute of labour markets is unionization.²⁸ Unionization has been demonstrated to impede labour market flexibility, a key factor of performance.²⁹ For example, a study by Elisabetta Magnani and David Prentice (2006) in the *Industrial and Labor Relations Review* found that unionization impedes labour market flexibility by restricting the ability of employers to adjust inputs of their business to changing market conditions.

Unionization has also been shown 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, employment creation, and profitability than non-unionized firms (Becker and Olsen, 1989; Maki and Meredith, 1986; Long, 1993; Addison and Wagner,

27 The nominal values of minimum wages in Canada in 2007 ranged from a low of \$7.00 in Alberta and Newfoundland and Labrador to a high of \$8.00 in British Columbia, Manitoba, Ontario, and Quebec. The nominal values of minimum wages in the United States ranged from a low of zero in several states, which essentially means the federal rate of US\$5.15 was applied, to a high of US\$7.93 in Washington.

28 Note that self-employment is excluded.

29 As defined in this study's introduction, labour market flexibility refers to the ease with which workers and employers alike are able to adjust their efforts given changes in the marketplace.

1993; Laporta and Jenkins, 1996; Hirsch, 1997; Maki, 1983; Freeman and Kleiner, 1999; Vedder and Gallaway, 2002b; Menezes-Filho, 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, and reduce investment in physical capital and research and development; they also lower employment growth.³⁰ Hirsch described the wage premium as a tax on capital, which effectively lowered the net rate of return on investment.

A large body of research focuses on unions and investment, a critical factor in increasing labour productivity and ultimately workers' wages. For example, Betts *et al.* (2001), using data from 1968 to 1986 for 13 Canadian industries, found that unionization rates had an adverse impact on research and development spending. Specifically, they found that in an industry that moves from having less unionization (25th percentile) to more (75th percentile), research and development spending is predicted to fall by about 40 percent. Connolly *et al.* (1986) also found that unionization reduces returns and thus spending on research and development. 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.

In a large review of the scholarly research, Aidt *et al.* (2002) corroborated the findings of other studies. The authors 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, the researchers 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.

Empirical research also indicates that high rates of unionization are associated with poorer labour market performance (Rama, 2003). Similarly, Vedder and Gallaway (2002b) found that unemployment and the ratio of employment to population have been adversely affected by unions. They also noted that while it is true that some individual workers have benefited from unions, the aggregate impact of unions is strongly negative. It is clear that unions in general reduce labour market flexibility and 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.

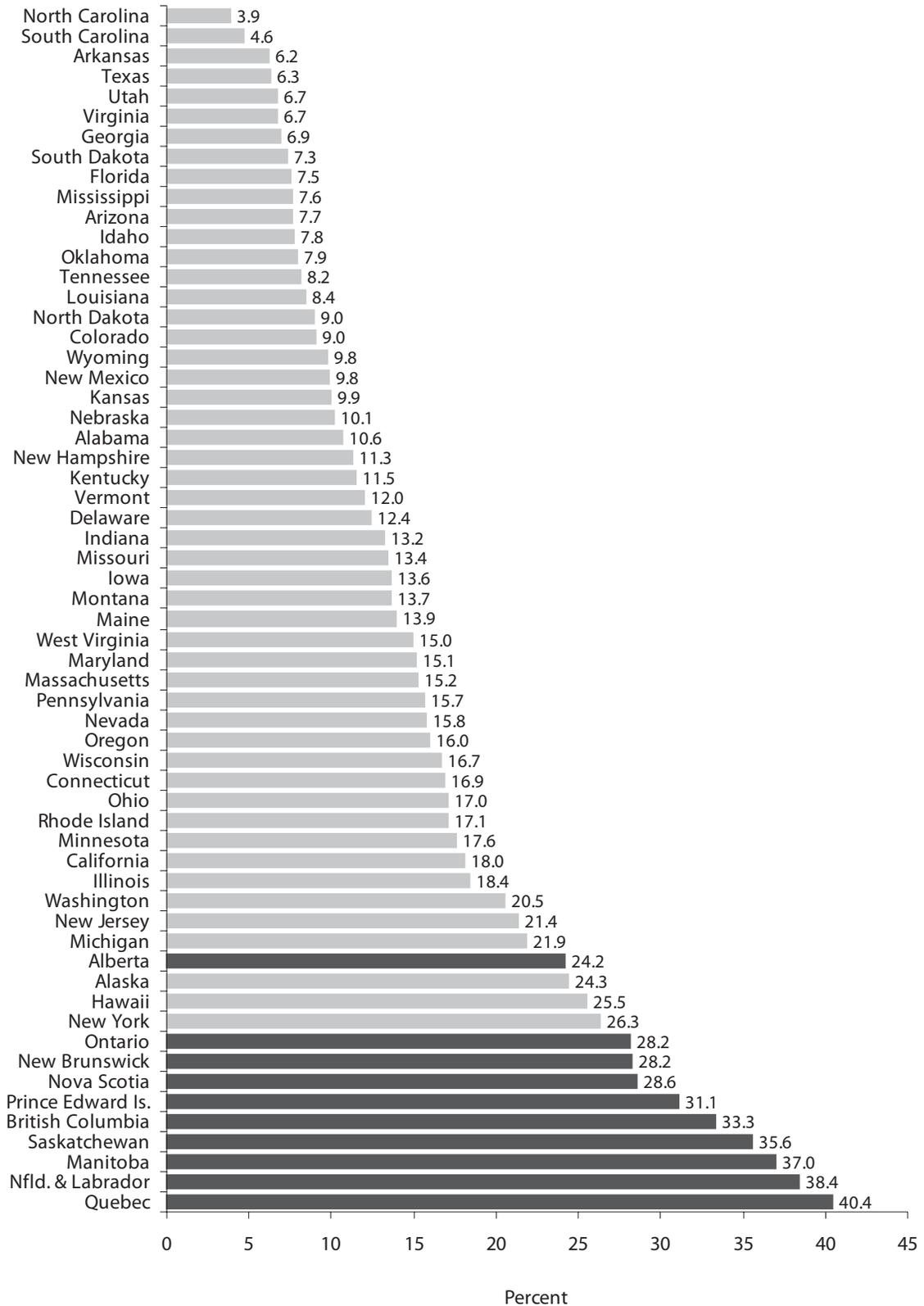
This labour market characteristic measures the percentage of total employment represented by unionized employment, on average, over the five years from 2002 to 2006.

Observations

North Carolina maintains the lowest ratio of unionized workers to total employment; 3.9 percent of its employed workers are unionized. South Carolina ranks a close 2nd, with 4.6 percent of its employment unionized.

30 In fact, some studies have concluded that unionization negatively affects productivity (Clark, 1984; Hirsch, 1991a).

Characteristic 3: Average Unionized Employment as a Percent of Total Employment, 2002-2006



Sources: Statistics Canada, 2007a, *Labour Force Historical Review 2006*; Barry T. Hirsch and David A. Macpherson, 2007, *Unionstats.com.: Union Membership and Coverage Database from the Current Population Survey*; calculations by authors.

The top-ranked Canadian province is Alberta at 48th with 24.2 percent of its employment unionized. Alberta's performance is better than only three US states: Alaska, Hawaii, and New York. Canadian provinces occupy ranks 52nd to 60th — the bottom nine positions. Quebec is in last place: 40.4 percent of its employment is unionized.

Southern US states occupied eight of the top 10 rankings: North Carolina, South Carolina, Arkansas, Texas, Virginia, Georgia, Florida, and Mississippi.

The Right-to-Work states—those that permit workers to choose whether or not to join and financially support a union—are at the top of the rankings, occupying 10 of the top 10 rankings and 17 of the top 20 rankings.³¹

Part of the explanation for the Canadian provinces' poor showing is contained in the first 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.³² For example, in 2006, 18.9 percent of the private sector in Canada was unionized while 74.8 percent of the public sector was unionized.³³ In contrast, in the US, 8.1 percent of the private sector was unionized while 40.1 percent of the public sector was unionized. 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.³⁴

Another important explanation for the difference between Canadian and US unionization rates is that closed-shop unions are allowed in all Canadian provinces but in no US states. Closed-shop unionism refers to collective bargaining agreements that require workers to join a union or bargaining agent and pay full union dues as a condition of employment (see "Characteristic 5: the Index of Labour Relations Laws" for further information). In other words, individuals wishing to work at a unionized company in Canadian provinces can be required to join the union and pay full union dues. A number of studies have suggested that the differences in the choice afforded workers in the two countries accounts for some of the observed differences in unionization (see Clemens *et al.*, 2005).

31 Right-to-Work (RTW) refers to labour legislation that essentially precludes mandatory union membership and mandatory payment of union dues. 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.

32 Public sector unions tend to be structured with different rules and thus behave differently from their private sector counterparts. For further information, see Christensen, 1980.

33 Private sector unionization ranged from a low of 9.4 percent in Prince Edward Island to a high of 27.0 percent in Quebec in 2006. For the same year, public sector unionization ranged from a low of 68.7 percent in Alberta to 82.1 percent in Quebec.

34 Canada's overall unionization rate in 2006 was 31.7 percent compared to 13.1 percent in the United States. For the same year, the size of the public sector (measured as public sector employment as a percentage of total employment) was 22.6 percent in Canada and 11.2 percent in the US. See Clemens *et al.*, 2005 for a discussion of the factors explaining the differences in unionization between the two countries.

Characteristic 4: Labour relations laws

The final characteristic of labour markets is the extent to which labour relations laws facilitate balance in the labour relations environment and more broadly enhance labour market flexibility. This indicator is based on The Fraser Institute's larger study, *An Empirical Examination of Labour Relations Laws in Canada and the United States* (Godin *et al.*, 2006). This measure is intricately related to the previous measure, since the extent of labour market flexibility facilitated by labour relations laws is highly correlated with unionization levels.

The extent to which labour relations laws facilitate balance and flexibility is crucial in providing an environment that encourages productive economic activity. Labour relations laws biased in favour of one group at the expense of another, or which are overly prescriptive, inhibit the proper functioning of a labour market and thus reduce its performance. Empirical research indicates that rigid labour relations laws increase unemployment and reduce participation rates of the young and elderly (see Bierhanzl and Gwartney, 1998; Bertola *et al.*, 2002; Salvanes, 1997). Labour relations laws have also been shown to affect investment. For example, one study by Morris Kleiner and Hwikwon Ham (2002), using data from 20 OECD countries from 1985 to 1995 and all US states from 1990 to 1999, found that more prescriptive labour relations laws are associated with lower levels of foreign direct investment and slower economic growth for US states.

This indicator evaluates labour relations laws in the private sector for the 10 Canadian provinces and 50 US states based on whether or not they encourage flexibility and choice by balancing the needs of both employers and employees. Labour relations laws are grouped into three areas: certification and decertification, union security, and regulation of unionized firms.

This section also presents the Index of Labour Relations Laws, a composite measure of labour relations laws for each Canadian province and US state. The overall index is based on the scores for each of the three areas of labour relations laws and provides a general assessment of a jurisdiction's approach to worker-employer relations. It represents a measure of each jurisdiction's overall labour relations policy. Jurisdictions with labour relations laws that facilitate a greater degree of labour market flexibility receive higher scores while jurisdictions with more restrictive approaches receive lower scores.

Note that a score of 10 does not necessarily indicate an optimal set of labour relations laws, but rather is a relative measure of the degree to which labour relations legislation helps flexibility across 10 Canadian provinces and 50 US states.

There are stark differences in jurisdictional authority over the regulation of labour relations among employers, unions, and employees between Canada and the United States. In Canada, regulation and enforcement of labour relations are largely decentralized; each province maintains its own set of labour relations laws. In the United States, on the other hand, private sector labour relations laws are almost entirely centralized, regulated through federal law and enforced under federal authority by the National Labor Relations Board (NLRB).

Since US labour relations laws are largely federal, the only difference among US states with respect to labour relations laws is whether or not a state maintains worker choice laws, otherwise known as Right-to-Work laws. The 22 Right-to-Work states have the highest score (9.2 out of 10) among the 10 Canadian provinces and 50 US states, indicating that they create a la-

Characteristic 4: Index of Labour Relations Laws, 2006

	Index of Labour Relations Laws	Rank
British Columbia	3.2	55
Alberta	6.0	51
Saskatchewan	2.3	58
Manitoba	2.7	57
Ontario	3.8	52
Quebec	1.2	60
New Brunswick	3.0	56
Nova Scotia	3.5	54
Prince Edward Island	2.2	59
Newfoundland and Labrador	3.8	52
Right-to-Work States	9.2	tied for 1st place
Non Right-to-Work States	7.5	tied for 23rd place

Source: Godin *et al.*, 2006.

bour relations environment with the most flexibility among all the jurisdictions. The remaining 28 US states tied for the 23rd position with an overall score of 7.5.

The Canadian provinces occupied the bottom ten positions (51st to 60th). The only province with a passing score (higher than 5) was Alberta, which had an overall score of 6.0. Quebec (with a score of 1.2) maintains the most rigid set of labour relations laws of any jurisdiction in Canada and the United States, followed closely by Prince Edward Island (2.2).

Below are a brief description and overview of the results for each of the areas covered by the Index of Labour Relations Laws (also summarized in table 1). (For a thorough analysis of the results for each of the areas covered by the Index of Labour Relations Laws, see Godin *et al.*, 2006.)

1. Certification and decertification

Certification and decertification refers to the processes through which a union acquires and loses its power to be the exclusive bargaining agent for a group of employees. To determine how well a jurisdiction balanced the needs of workers and employers, this study examined a number of aspects of certification and decertification, including the use of mandatory secret ballot elections, balanced voting thresholds, and remedial certification (see table 1).

2. Union security

Union security refers to regulations governing union membership and the payment of union dues by covered workers. Specifically, union security relates to whether or not provisions regarding mandatory union membership and dues payment can be included in a collective agreement. These provisions vary from restrictive, where every worker must be a union mem-

Table 1: Areas Covered by the Index of Labour Relations Laws, 2006

	Certification/Decertification			Union security			Regulation of Unionized Firms					
	Is secret ballot required for certification?	Is secret ballot required for decertification?	Is remedial certification allowed?	Certification Decertification differential, percentage points	Is mandatory union membership prohibited?	Are mandatory union dues allowed?	Successor Rights: Is the existing collective agreement binding?	Is mandatory notice required for introduction of technological change?	Advanced notice of technological change	Is immediate arbitration the only option?	Are temporary replacement workers allowed?	Is third-party picketing allowed?
British Columbia	Yes	Yes	Yes	0	No	Yes	Yes	Yes	60 days	Yes	No	No
Alberta	Yes	Yes	No	0	No	Yes	Yes	No	n/a	No	Yes	No
Saskatchewan	No	Yes	No	25	No	Yes	Yes	Yes	90 days	Yes	Yes	Yes
Manitoba	No	Yes	Yes	10	No	Yes	Yes	Yes	90 days	No	Yes	Yes
Ontario	Yes	Yes	Yes	0	No	Yes	Yes	No	n/a	Yes	Yes	Yes
Quebec	No	No	No	15	No	Yes	Yes	Yes	not specified	Yes	No	Yes
New Brunswick	No	Yes	Yes	0	No	Yes	Yes	Yes	not specified	No	Yes	Yes
Nova Scotia	Yes	Yes	Yes	10	No	Yes	Yes	No	n/a	No	No	Yes
Prince Edward Island	No	No	Yes	0	No	Yes	Yes	No	n/a	Yes	Yes	Yes
Newfoundland and Labrador	Yes	Yes	Yes	0	No	Yes	Yes	No	n/a	No	No	Yes
Right-to-Work States	Yes	Yes	Yes	0	Yes	No	No	No	n/a	No	Yes	No
Non Right-to-Work States	Yes	Yes	Yes	0	Yes	Yes	No	No	n/a	No	Yes	No

Source: Godin *et al.*, 2006.

ber and pay full dues as a condition of employment, to flexible, where employees have the choice of becoming a union member and do not have to pay union dues.

The results for this measure of labour relations laws indicate that there are three distinct groups of jurisdictions (table 1). The first group are American Right-to-Work states, in which workers are permitted to choose whether or not to join a union and pay union dues. The second group are the American states without Right-to-Work legislation. Workers in these states are permitted to choose whether or not to join a union but must remit at least a portion of union dues to cover costs associated with negotiating and maintaining the collective agreement. The final group, the one that scores poorly on this measure, are the Canadian provinces. All 10 Canadian provinces, in one way or another, permit clauses in collective agreements that make union membership mandatory and require payment of dues in full.

3. Regulation of unionized firms

The regulation of unionized firms examines components of labour relations laws that come into effect once a firm is unionized, such as successor rights, provisions for technological changes, arbitration of disputes, replacement workers, and third-party picketing.

Successor rights

Successor rights provisions determine whether and how collective bargaining agreements survive the transfer from one employer (owner) to another.³⁵ Successor rights are important to investment because they may deter potential investors from purchasing a business if an existing collective agreement (which they had no part in negotiating) prevents them from reorganizing the business to improve its performance. That is, if a business or portion of a business is struggling, stringent successor laws will impede its reorganization and the reallocation of its capital. Consequently, workers will not be provided with capital to improve their productivity and business performance will continue to suffer.

Technological change provisions

Technological change provisions in labour relations laws require that the employer give notice of technological investment and change to the union (and in some provinces to the minister of labour). These provisions are a barrier to technological change and could have serious and adverse effects on productivity.

Arbitration of disputes

An important component of labour market flexibility is how disputes regarding a collective agreement, its meaning, application, and alleged violations are resolved when both parties cannot or no longer wish to negotiate a solution. Laws that force parties into immediate binding arbitration, without allowing voluntary efforts such as mediation or conciliation, may not only impose costs on both parties (for the arbitrator's fee and time from work) but may also create hostility between management and the union.

35 A transfer means the sale, consolidation, or otherwise disposal of a business.

Replacement workers

In the event of a legal strike or lockout, an employer may wish to hire replacement workers. Employers can then continue partial business operations, maintaining market share, and secure investor confidence while addressing reasons for the strike.

Third-party picketing

Third-party (or second-site) picketing refers to the ability of unions to picket and, therefore, disrupt the operations of enterprises not covered by the collective agreement.

Conclusion

Canadian provinces generally lag their US counterparts in the level of flexibility afforded to workers with respect to labour relations laws. Such flexibility has been proven to provide great benefits to citizens not just in the United States, but around the world. Canadian provinces would be well advised to pursue balanced and less prescriptive labour laws in order to promote greater labour market flexibility.

Other areas of concern

In addition to labour relations laws, all of the Canadian provinces and US states have a number of other labour regulations including employment standards, occupational licensing, workers' compensation, and many others. Similar to labour relations laws, research shows these also have an impact on labour market performance by helping to explain the degree of labour market flexibility.³⁶ Below are just a few Canadian examples of other aspects of labour regulation that decrease labour market flexibility and thus performance. Unfortunately, there is currently a dearth of empirical measurement of these factors, which prevents sound comparisons between Canada and the US.

1. Employment Standards Acts

The employment standard acts from the various provincial governments are another component of labour law. The acts cover such areas as mandatory overtime pay and exemptions from minimum wages. The following summarizes two of the core features of provincial employment labour standards laws and codes.

36 For example, a recent study for the World Bank by Giorgio Calcagnini and Germana Giobini (2006) found that stringent employment protection legislation (EPL)—making it costly to hire and fire workers—is associated with lower levels of investment in European countries. The authors conclude: “we find that current EPL has a negative impact on current investment” (p. 35). See also the Organization for Economic Cooperation and Development’s study *OECD Employment Outlook* for a discussion of how employment protection legislation and other aspects of labour market regulation compare among the 30 OECD countries (OECD, 2006a; 2006b).

Overtime requirements

All 10 provinces have some measure in their employment standards acts requiring overtime pay.³⁷ The four western provinces, British Columbia, Alberta, Saskatchewan, and Manitoba, have requirements for overtime pay based on both the number of hours worked within a day as well as within a week. The remaining six provinces prescribe mandatory overtime payments based on a certain number of hours worked in a week.

British Columbia, Saskatchewan, Manitoba, Quebec, and Newfoundland and Labrador maintain the lowest weekly threshold for the number of hours worked that are required for an employee to receive overtime pay: 40 hours. In addition, British Columbia is the only province to impose a tiered system of overtime pay. In that province, an employee who works in excess of 8 hours a day is to earn 1.5 times the normal pay for the extra hours. Should the employee work in excess of 12 hours a day, he or she requires twice the regular pay for that extra time. Nova Scotia and Prince Edward Island have the highest number of hours in a week required to trigger overtime pay: 48.

Minimum wage exemptions

Another important aspect of the various provincial employment standards acts is the minimum wage exemptions they provide. Several provinces such as Saskatchewan, New Brunswick, and Newfoundland and Labrador offer few or no exemptions from the minimum wage for certain types of employment. Alberta, on the other hand, provides no fewer than seven job classification exemptions, including farm and ranch employees, students, and instructors and counselors at non-profit educational or recreational camps. Ontario, 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: inexperienced employees.

2. Occupational Licensing

Occupational licensing regulation affects labour market performance by potentially impeding worker mobility.³⁸ Occupational licensing refers to entry requirements needed to hold job titles or practice in such professions as medicine, law, accounting, and engineering. Occupational licensing regulations extend to numerous professional trades such as millwrights, pipe-fitters and welders. The key to labour market flexibility is to ensure occupational licensing is easily transferable across jurisdictions. When occupational licenses are easily transferable, it increases the ability of workers to find jobs that provide them with the greatest return by allowing them to work interprovincially. It also allows employers to search for qualified people from a larger pool of workers.

37 See Jolls (2007) for a discussion of the theory and a review of empirical research on overtime requirements and other labour standards.

38 Pashigian (1979) found that "occupational licensing has had a quantitatively large effect in reducing the interstate mobility of professionals" (p. 24).

While there has been some movement towards mutual recognition of trades and professional occupations across the provinces, it is far from the case that workers can move freely around the country (see Knox and Karabegović, forthcoming). In 1995, the Canada-wide Agreement on Internal Trade (AIT) made several professional occupations and 65 trades accepted across Canadian provinces. However, workers in those fields are still subject to examinations in their destination province.

The most significant change to increase labour market flexibility is the Trade, Investment, and Labour Mobility Agreement (TILMA) between British Columbia and Alberta, which came into effect on April 1, 2007. The list of mutually recognized occupations and trades (ones that do not require any further examination or regulation to practice in either province) is now 85.³⁹ TILMA will likely have a beneficial impact on worker mobility between Alberta and British Columbia and could help initiate strong labour market performance in the years to come.

39 There are an additional 133 occupations and trades for which certifications to practice are required in one of the two provinces. Employees moving from the province where certification is not available to the province in which certification is required have to obtain certification from the appropriate provincial authority (Government of British Columbia, 2007).

Appendix A: Methodology

For those wanting more detail, a technical discussion of the methodology is included here.

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:

- Average total employment growth (2002-2006)
- Average private-sector employment growth (2002-2006)
- Average unemployment rates (2002-2006)
- Average duration of unemployment (2002-2006)
- Average productivity (2002-2006)

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 an 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 transfer 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.

For details explaining how the Index of Labour Relations Laws is computed, see Godin *et al.* (2006).

US employment and duration of unemployment calculations

Official data for public employment, private employment, and duration of unemployment are available for US states up to and including 2005. To match with this data with data for the Canadian provinces, which is available up to and including 2006, estimations were made for US states for 2006 only in order to provide comparable data among jurisdictions.

The five-year average growth rate between 2001 and 2005 was used to generate 2006 estimates for total private and public employment.

To calculate 2006 figures for state and local employment, this study's authors used the five-year average of state and local employment as a percentage of total public employment. These data were then multiplied by the total public employment estimates for 2006.

Data for 2006 for the duration of unemployment is available at a national level for the US but not the state level.⁴⁰ In order to estimate state-level data for 2006, the growth rate of the national average from 1997 to 2005 was used to estimate the growth rate at the state level for 2006.

40 The US duration of unemployment data is calculated by the Bureau of Labor Statistics of the US Department of Labor. The original source of the data for these calculations comes from the Current Population Survey (CPS) produced by the US Census Bureau. The CPS consists of about 60,000 households nationwide. While this sample size is adequate for producing reliable estimates at the national level, the state sub-samples are generally not large enough to yield reliable estimates. For this reason, it is possible to produce a US national estimate but not state-level estimates.

Appendix B: Other Important Factors

This appendix presents information on two other indicators of labour market performance that are not included in the Index of Labour Market Performance due to compatibility issues: migration and time lost due to work stoppages. Migration is not comparable across Canadian provinces and US states because the data is collected differently. Canadian data is collected on a calendar-year basis while US data is collected on a July-to-July basis. Time lost due to work stoppages is not comparable because US data does not include enough detail to make accurate conclusions. US data only records time lost due to work stoppages involving 1,000 or more workers while Canadian sources record these data for 500 or more workers. Despite the compatibility issues migration and work stoppages are important indicators of labour market performance. Each is discussed below.

Migration

Although not specifically included in the Index of Labour Market Performance, the flow of workers into and out of jurisdictions is an important indicator of the performance of labour markets specifically, and of economic performance generally. A key explanation for these flows is the existence or lack of labour opportunities that exist in the worker's home province or state. For example, using data from 1982 to 1995, Finnie (1999) found that inter-provincial migration is generally "the route to better labour market opportunities for men, particularly for those coming from the lower income provinces and moving to higher income ones, and [is] especially the case in younger men" (p. 259). Thus, the net addition or subtraction of workers can be an important indicator of larger economic successes or challenges.

The following section presents information on the net flow of citizens, excluding immigration, from one Canadian province to another and from one US state to another and compares these flows with the labour market performance of the jurisdictions. The data in this section come from census information from both countries. Unfortunately, Canadian and US data are not directly comparable because Canadian data are collected on a calendar-year basis (January to December) while US data are collected on a July-to-July basis. In addition, Canadian data provide greater detail, including the flow of citizens by age. This is an important measure of migration as those who are of working age (18 to 64) are typically those who move for better job opportunities. For these reasons, data for Canadian provinces and US states are presented separately in tables below.

The measure used, net migration, refers to the difference between the number of people migrating out of a particular jurisdiction compared with the number of people migrating into the same jurisdiction. Net migration is normally presented as a percentage of the base year's population. The tables give working-age net migration figures for Canadian provinces, whereas they present total net migration figures for US states. The figures throughout this section refer exclusively to domestic migration; foreign migration is excluded.

Table B1 contains working age migration data for the Canadian provinces for the five years from 2002 to 2006.

**Table B1: Net Interprovincial Migration and Net Migration Rates
by Province, Working Age Population (18-64), 2002-2006^{1,2}**

	Number	Percentage of Population
Newfoundland and Labrador	-14,161	-2.8%
Prince Edward Island	-464	-0.3%
Nova Scotia	-6,401	-0.7%
New Brunswick	-8,089	-1.1%
Quebec	-11,771	-0.2%
Ontario	-24,755	-0.2%
Manitoba	-19,013	-1.6%
Saskatchewan	-27,748	-2.8%
Alberta	101,929	3.0%
British Columbia	11,827	0.3%

Notes

¹Net interprovincial migration is defined as the difference between the number of incoming and outgoing migrants. A negative value for net migration is indicative of net out-migration, meaning that more migrants left an area than entered it. Positive values reflect net in-migration to an area.

²Net migration rates were calculated as a rate based on 2006's population in a given jurisdiction.

Sources: Statistics Canada (2007b), *Provincial Economic Accounts*; calculations by authors.

Alberta recorded both the highest positive number of net migrants and the highest percentage of net migration of working-age people from 2002 to 2006: 101,929 people or 3.1 percent of Alberta's population. Alberta was well ahead of the second-ranked province—and only other province to have positive net migration—British Columbia, which recorded a net inflow of 11,827 people, 0.3 percent of British Columbia's population. Saskatchewan and Ontario recorded the highest negative net migration, with 27,748 and 24,755 people leaving those provinces, respectively. Newfoundland and Labrador and Saskatchewan, followed by Manitoba, recorded the highest negative net migration as a percentage of their populations, with rates of -2.8, -2.8 and, -1.6 percent, respectively.

In Canada, the net movement of working-age people between provinces seems to be positively associated with the results of the Index of Labour Market Performance. Alberta ranked the highest among the Canadian provinces in the Index of Labour Market Performance, with a score of 8.3 (out of a possible 10). British Columbia ranked third among Canadian provinces with a score of 5.9. Newfoundland and Labrador and Manitoba, which recorded two of the highest rates of negative out migration, also recorded two of the lowest scores and ranks among the provinces on the Index of Labour Market Performance.

One interesting insight from combining the information in table 1 and the results from labour market performance indicators is that a high rate of net out-migration can actually improve a jurisdiction's score and ranking in the Index of Labour Market Performance. For example, Manitoba recorded the third worst net migration rate for the period from 2002 to 2006, with 1.6 percent of its working age population (19,013) leaving the province. The outflow of its working age population results in an unemployment rate that is lower than it would otherwise

have been, which improves the province's overall score in the Index of Labour Market Performance.

The data for US states (table B2) buttresses the findings discussed above; jurisdictions with strong labour markets (and with strong economies in general), tend to attract migrants. The opposite also holds.⁴¹ For example, Nevada and Arizona rank first and second in terms of positive net migration rates. Nevada attracted 257,526 net migrants in the period from 2002 to 2006, or 10.3 percent of its population. Arizona welcomed 471,877 migrants over the same period, representing 7.7 percent of its population. Both states performed well in the Index of Labour Market Performance: Nevada ranking second and Arizona ranking third. On the other hand, New York and Massachusetts recorded two of the worst net migration rates in the US, with 5.4 and 4.1 percent of their residents leaving each state between 2002 and 2006. These states also performed poorly in the Index of Labour Market Performance, receiving scores of 4.5 (43rd) and 4.3 (47th).

One area of the US deserves special attention. Table B2 shows there has been a significant amount of inter-state migration in southern US states, particularly the large recent out-migration of people from Louisiana to neighbouring states. This movement is most likely the result of the devastation caused by Hurricane Katrina. While Louisiana has experienced a consistent outflow of people from 2002 to 2006, out-migration dramatically increased in 2006. From 2002 to 2005, the rate of out-migration was -0.4, -0.2, -0.2, and -0.3 percent; in 2006, it was -5.6 percent, or 241,201 people. As might be expected, neighbouring states South Carolina, Tennessee, Georgia, Florida, and Alabama all experienced positive rates of inter-state migration. Not surprisingly, Louisiana recorded a significant decrease in both total employment growth and private employment growth from 2005 to 2006. It also experienced a decrease in the unemployment rate from 2005 to 2006, although given the high rate of out-migration, this indicates that many of the people leaving were working age (which would have a positive impact on the unemployment rate).

The relationship of migration to labour market performance, and in particular to the Index of Labour Market Performance, requires more detailed statistical analysis. That said, the preliminary results outlined above, particularly the working-age migration numbers from Canada, indicate some positive relationship between the two measures. Additional information about the demographics of workers moving into and out of jurisdictions, as well as more detailed economic data, are required to make a more definitive statement about the relationship between the movement of the working-age population and labour market performance. However, preliminary data confirm the economic intuition that the working-age population appears to pursue labour opportunities by leaving jurisdictions with poorly performing labour markets for areas with better performing labour markets.

41 While working-age population figures are not available for US states, note that the majority of citizens are within the working age population (18-64). For the US in total, working-age population as a percent of total population is 62.9 percent (US Census Bureau, 2007).

Table B2: Net Domestic Migration (number) and Net Migration Rates (%) by State, 2002-2006^{1,2}

	Number	Percentage of Population		Number	Percentage of Population
Alabama	50,498	1.1%	New Hampshire	26,452	2.0%
Alaska	1,104	0.2%	New Jersey	-245,618	-2.8%
Arizona	471,877	7.7%	New Mexico	32,486	1.7%
Arkansas	52,903	1.9%	New York	-1,044,476	-5.4%
California	-886,484	-2.4%	North Carolina	296,968	3.4%
Colorado	31,811	0.7%	North Dakota	-12,430	-2.0%
Connecticut	-45,697	-1.3%	Ohio	-193,204	-1.7%
Delaware	29,114	3.4%	Oklahoma	6,993	0.2%
Florida	1,036,937	5.7%	Oregon	93,891	2.5%
Georgia	310,798	3.3%	Pennsylvania	-937	0.0%
Hawaii	-251	0.0%	Rhode Island	-20,962	-2.0%
Idaho	74,212	5.1%	South Carolina	149,447	3.5%
Illinois	-387,441	-3.0%	South Dakota	2,236	0.3%
Indiana	-10,650	-0.2%	Tennessee	145,153	2.4%
Iowa	-26,926	-0.9%	Texas	395,455	1.7%
Kansas	-49,721	-1.8%	Utah	-5,913	-0.2%
Kentucky	44,086	1.0%	Vermont	1,397	0.2%
Louisiana	-291,385	-6.8%	Virginia	106,162	1.4%
Maine	27,823	2.1%	Washington	111,325	1.7%
Maryland	-23,222	-0.4%	West Virginia	19,132	1.1%
Massachusetts	-263,391	-4.1%	Wisconsin	5,618	0.1%
Michigan	-214,249	-2.1%	Wyoming	7,370	1.4%
Minnesota	-36,597	-0.7%			
Mississippi	-17,371	-0.6%	Notes:		
Missouri	35,519	0.6%	¹ This data is collected from July to July.		
Montana	24,658	2.6%	² A negative value for net migration is indicative of net out-migration, meaning that more migrants left an area than entered it. Positive values reflect net in-migration to an area. Net migration rates were calculated as a rate based on 2006's population in a given jurisdiction.		
Nebraska	-21,651	-1.2%			
Nevada	257,526	10.3%	Source: US Census Bureau (2007), <i>National Population Estimates—Characteristics</i> ; calculations by authors.		

Work days lost due to labour disputes

Labour disputes⁴² are an indicator of labour market performance as they help to explain differences in employment opportunities for workers. Labour disputes adversely affect employment opportunities by decreasing investment and business activity.⁴³ They also discourage investment and negatively affect business activity because labour disputes can cause profits and market share to decline. Investment and business activity are critical to workers as they have a positive effect on high and growing wages and ultimately living standards.

Research shows that the primary way in which labour disputes discourage investment and business activity is by lowering the value of firms. In other words, research shows labour disputes tend to reduce the rate of return to potential investors. A study by Robert Hanrahan and colleagues (1997) in the *Review of Financial Economics* examined the impact of labour disputes on the expected profitability of Canadian firms listed on the Toronto Stock Exchange. The authors found that disputes during collective bargaining decreased returns by 4.5 percent.⁴⁴ Moreover, the main findings suggest that the longer the dispute, the greater the harmful impact on returns.

There is similar evidence from the United States. A study in *Industrial Relations* by Jonathan Kramer and Thomas Hyclak (2002) examined the stock market reaction to labour disputes in US manufacturing industries from January 1982 to July 1999. They found negative effects of strikes on the cumulative stock market returns on firms involved in those strikes. Specifically, firms involved in strikes saw their returns decrease in a range from -0.7 to -0.8 percent.⁴⁵

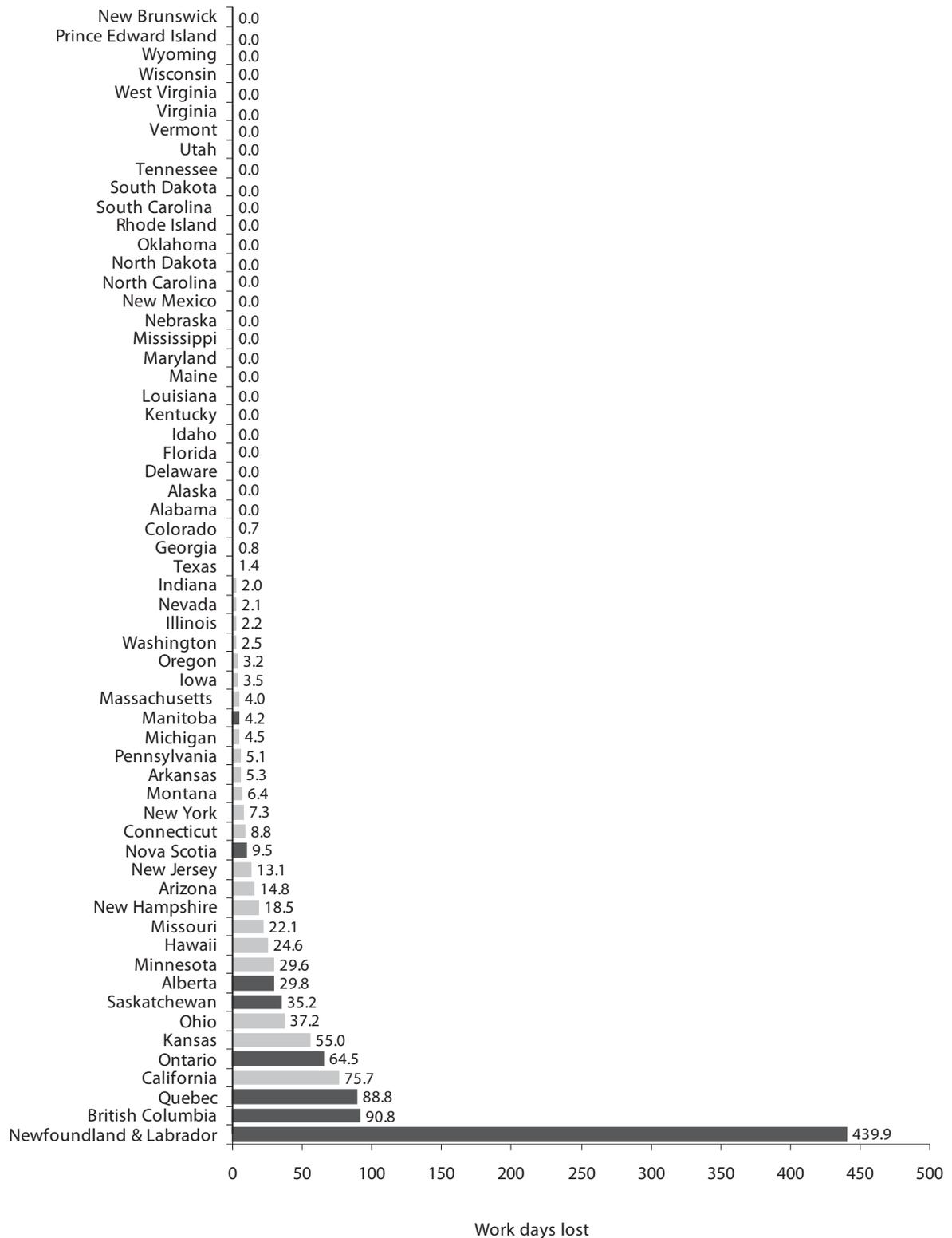
Lower rates of return due to labour disputes have been shown to discourage investors. A study by Morris Keiner and Hwikwon Ham (2002) examines the impact of national levels of unionization, strike levels, public policies toward labour, and the structure of collective bargaining within a nation on a country's foreign direct investment (FDI). Examining 20 OECD nations from 1985 through 1995 and all US states from 1990 to 1999, the authors found that strikes indeed had a direct effect on FDI. Specifically, jurisdictions with more days lost due to strikes per 1,000 employees per year are associated with lower levels of FDI.

42 Labour disputes include strikes and lock-outs. In a strike, employees cease working in order to compel the employer to accept certain working conditions. In a lock-out on the other hand, an employer closes the place of employment, suspends work, or refuses to continue to employ a number of his employees in order to compel workers to accept certain employment conditions (Craig, 1990).

43 Several factors explain why some jurisdictions have more labour disputes than others. See Gunderson and Melino (1990), Gunderson *et al.* (1989), and Cramton *et al.* (1999).

44 Becker and Olson found similar results in 1986. The authors used data for 1962 to 1982 and found that strikes substantially affected shareholder equity. Specifically, the average strike involving 1,000 or more workers resulted in a 4.1 percent drop in shareholder equity.

45 But strikes do not only affect the value of struck firms; they also could affect the value of third-party firms. For instance, Persons (1995) uses stock market data for the years 1965 to 1990 to estimate the effects of strikes against US automobile producers on the stock value of their steel suppliers. Persons found that steel suppliers experienced returns ranging from -1.6 to -2.5 percent upon announcements of automobile strikes.

Figure B1: Average Work-Days Lost due to Labour Disputes per 1,000 Employees (2002-2006)

Sources: Government of Canada, Human Resources and Social Development Canada, 2007b, *Work stoppages by province from 1980 to 2006*; Statistics Canada, 2007a, *Labour Force Historical Review 2006*; US Department of Labor, Bureau of Labor Statistics, 2007a, *Historical State Labor Force Data*; US Department of Labor, Bureau of Labor Statistics, 2007c, *Collective Bargaining Agreements (CBA) program*; calculations by authors.

More recently, a study by Paroma Sanyal and Nidhiya Menon (2005), using data on investment and business activity (defined as the place where an employer chooses to conduct business) from India for 1997 to 1999, found jurisdictions that suffer frequent labour disputes have less investment and less business activity than jurisdictions with fewer work stoppages.

Observations

There are 27 jurisdictions, including 2 Canadian provinces (New Brunswick and Prince Edward Island), that are tied for the first among all 60 jurisdictions with zero average work days lost per 1,000 workers (figure B1). (This measure only captures days lost from labour disputes involving 1,000 or more workers. The fact that some of the smaller jurisdictions have few businesses with 1,000 or more workers may help explain, at least in part, why they record few work days lost.)⁴⁶

The bottom-ranked jurisdiction was Newfoundland and Labrador, with an average of 439.9 work days lost per 1,000 workers⁴⁷ This was far worse than the second-last ranked jurisdiction, British Columbia, which recorded an average of 90.8 work days lost per 1,000 workers.

Canadian provinces tend to have a higher average number of work days lost from labour disputes than US states. Six of the bottom 10 jurisdictions are Canadian provinces: Alberta, Saskatchewan, Ontario, Quebec, British Columbia, and Newfoundland and Labrador. Manitoba (38th) and Nova Scotia (45th) rank in the bottom half of all jurisdictions.

Within the United States, Right-to-Work states tend to rank higher than any other group of jurisdictions. Of the 22 RTW states, 17 are in the top half of all jurisdictions; 15 of those recorded an average of no person-days lost from 2002 to 2006.⁴⁸

46 According to Statistics Canada (2007e), Prince Edward Island had only 5 firms with 1,000 or more workers in 2004. New Brunswick had 21 such firms. In comparison, Ontario had 494 of these firms.

47 In 2004, Newfoundland and Labrador had only 23 firms with 1,000 or more employees. It has a serious problem compared to the other jurisdictions in terms of the number of large firms relative to how many work stoppages occurred. The inclusion of work stoppages from all firms may only serve to exacerbate this difference.

48 The differences in work stoppages may be driven by the public sector, which has a much higher rate of unionization. In order to evaluate this issue, more detailed data was used to compare work days lost in the public sector with those in the private sector. The breakdown of work stoppages in the private and public sector is only available for the Canadian provinces. For Canada, the average number of work days lost due to labour disputes from 2002 to 2006 in the public sector ranged from 6.3 in Manitoba to 1,239.5 in Newfoundland and Labrador. (As mentioned, Prince Edward Island and New Brunswick recorded zero average work days lost per 1,000 workers.) In contrast, the number of work days lost in the private sector is substantially lower. For instance, Manitoba registers an average of 4.5 working days lost; while Newfoundland and Labrador loses an average of 179.5 work days due to labour disputes. Prince Edward Island, Nova Scotia, and New Brunswick had no labour disputes in the private sector between 2002 and 2006. These results show that among Canadian provinces, work days lost are higher in the public than in the private sector.

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