

Labour Relations Laws in Canada and the United States

An Empirical Comparison (2014 Edition)

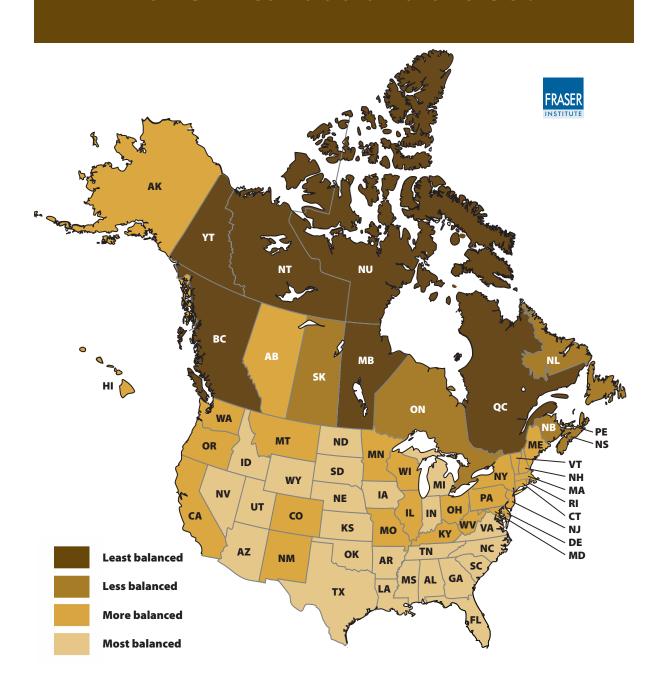
by Hugh MacIntyre and Charles Lammam



Contents

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Summary / iii
              Introduction / 1
Component 1 Organizing a Union / 6
Component 2 Union Security / 16
Component 3 Regulation of Unionized Firms / 21
              Index of Labour Relations Laws / 29
              Unionization Rates and Labour Relations Laws / 32
              Conclusion / 35
  Appendix 1 Unionization Rate by Sub-national Jurisdiction / 36
  Appendix 2 Other Important Aspects of Labour Relations Laws / 38
  Appendix 3 Methodology / 41
              References / 43
                    About the Authors / 56
                    Acknowledgments / 57
                    Publishing Information / 58
                    Supporting the Fraser Institute / 59
                    Purpose, Funding, and Independence / 60
                    About the Fraser Institute / 61
                    Editorial Advisory Board / 62
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How balanced are labour relations laws in Canada and the US?



Summary

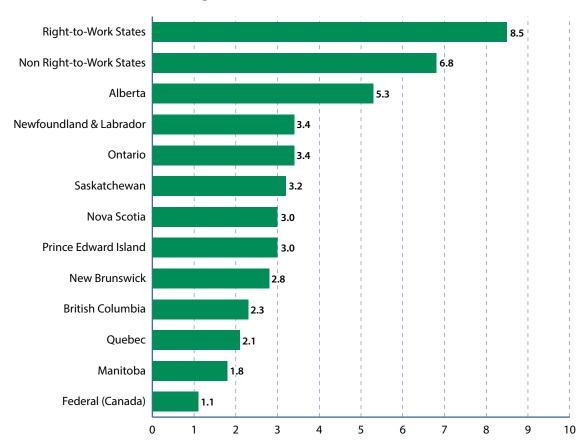
This study measures the extent to which labour relations laws bring flexibility to the labour market while balancing the interests of employers, employees, and unions. Labour market flexibility allows employees to change jobs (or industries) more easily in search of better compensation or working conditions and employers to change the mix of capital and labour to respond to market changes. Empirical evidence from around the world indicates that jurisdictions with flexible labour markets have more productive labour markets (higher job creation rates, lower unemployment, and higher incomes), which produce a higher standard of living.

Balanced labour laws are crucial in creating and maintaining an environment that encourages productive economic activity. Labour relations laws inhibit the proper functioning of a labour market and thus reduce its performance when they favour one group over another or are overly prescriptive through the imposition of resolutions to labour disputes rather than fostering negotiation among employers, employees, and unions.

Through the Index of Labour Relations Laws, this publication provides an empirical assessment of labour relations laws in the private sector for the 10 Canadian provinces, the Canadian federal jurisdiction, and the 50 US states. In all, 11 indicators grouped into three components make up the overall index. The three components are: (1) Organizing a Union; (2) Union Security, and; (3) Regulation of Unionized Firms.

Index of Labour Relations Laws

The overall results suggest four groups of jurisdictions. First are the 24 US Right-to-Work (RTW) states, which have the most balanced and least prescriptive labour relations laws and receive a score of 8.5 out of 10.0 (Exsum figure 1, table 9). The remaining 26 US states, which are not RTW states, make up the second group of jurisdictions (all scoring 6.8 out of 10.0). RTW states differ from non-RTW states in that mandatory union dues for employees in a unionized work space are not allowed.



Exsum figure 1: Index of Labour Relations Laws

Alberta, which received a score of 5.3, falls into a third category as it scored well ahead of other Canadian jurisdictions though it fell short of competing with US states. Alberta scores lower than US jurisdictions because of a number of provisions that are generally common within Canada, such as binding those who purchase a unionized firm to a collective contract that they did not negotiate (successor rights) and allowing mandatory union membership and dues (union security).

The remaining nine Canadian provinces and the Canadian federal government score between 1.1 and 3.4. The federal government (1.1) and Manitoba (1.8) had the most rigid and biased labour relations laws. Ontario and Newfoundland & Labrador tied with the highest score in this group (3.4), which is half the score of non-RTW US states (6.8).

Components of the Index of Labour Relations Laws

Component 1 Organizing a Union

"Organizing a union" refers to the processes through which a union acquires and loses the right to be the exclusive bargaining agent for a group of employees. Alberta ranks first, receiving a score of 10.0 out of 10.0 for its well-balanced set of regulations regarding union organization. Saskatchewan and all the US states tied for second place with a score of 7.5 out of 10.0. Ontario, Quebec, New Brunswick, and Newfoundland & Labrador received a score of 6.3. The remaining four provinces (British Columbia, Manitoba, Nova Scotia, and Prince Edward Island) received a score of 5.0 or less, indicating rules that are more biased towards union organizers. The federal government received the lowest score of 1.3.

Component 2 Union Security

"Union security" refers to regulations governing union membership and the payment of union dues by workers covered by a collective agreement. These regulations set out whether provisions regarding mandatory union membership and dues payment can be included in a collective agreement. The results suggest three groups of jurisdictions in Canada and the United States. The first group comprises US RTW states (scoring 10.0 out of 10.0). RTW states permit individual workers to choose whether or not to join a union and pay any union dues.

The second group comprises US states without RTW laws (scoring 5.0 out of 10.0). Here workers are permitted to choose whether or not to join a union but are required to pay at least a portion of union dues to cover costs associated with negotiating and maintaining the collective agreement.

The final group consists of all the Canadian provinces and the Canadian federal government, which do not provide workers with a choice regarding union membership or payment of dues.

Component 3 Regulation of Unionized Firms

The third component examines several provisions of labour relations laws that come into effect once a firm is unionized, including, among others, the regulation of replacement workers during a strike. The results indicate that the US states and, to a lesser degree, Alberta impose relatively balanced requirements on firms once they are unionized. The remaining nine Canadian provinces as well as the federal government, on the other hand, tend to impose biased and prescriptive regulations on unionized firms.

All US states received a score of 8.0 out of 10.0. Alberta received the second-highest score of 6.0. Four Canadian provinces (Ontario, Nova Scotia, Prince Edward Island, Newfoundland & Labrador) received a score of 4.0 and four provinces (British Columbia, Saskatchewan, Manitoba, New Brunswick,)

as well as the federal government received a score of 2.0. Quebec was the only jurisdiction that received a score of 0.0.

Conclusion

US states tend to have balanced labour relations laws focused on providing workers and employers with choice and flexibility while Canadian jurisdictions generally maintain much more biased and prescriptive labour relations laws. More flexibility has shown to be of great benefit to people around the world. In order to promote greater labour market flexibility, Canadian provinces would be well advised to pursue balanced and less prescriptive labour laws.

Introduction

Labour relations laws regulate the interactions among unionized workers, their collective representatives (unions), and employers. In addition, these laws control the process through which unions gain and lose the right to represent workers in collective bargaining. While the private and public sectors are both covered by labour relations laws, jurisdictions in Canada and the United States usually have separate legislation for each sector.

In 2013, labour relations laws directly covered about 4.7 million workers in Canada—31.2% of total public and private employment—and about 16 million workers in the United States—12.4% of total public and private employment (Statistics Canada, 2014; Hirsch and Macpherson, 2014; calculations by authors). In both countries, unionization rates in the private sector are much lower than those in the public sector. In 2013, Canada's unionization rate in the private sector stood at 17.5% compared to 74.6% in the public sector (table 1). Likewise, the United States' unionization rate in the private sector was 7.5% in 2013 compared to 38.7% in the public sector. Importantly, the effect of labour relations laws extends well beyond unionized workers and firms. Indeed, labour relations laws affect any worker or employer that could be unionized.

Labour relations laws have important consequences, not just for employees and employers in a unionized work space, but also for the wider economy. For instance, labour relations laws affect labour market flexibility, which determines how well labour markets respond to changes in economic conditions.

¹ There are two ways of measuring unionization rates: (1) the percentage of the workforce who are members of a union; and (2) the percentage of the workforce who are covered by collective agreements (union contracts). This paper uses the latter measure because it includes a broader range of workers who are directly affected by union-employer negotiations.

² For a breakdown of unionization rates in each of the 10 provinces and 50 states, see Appendix 1.

³ Union coverage in states that have Right-to-Work (RTW) laws differs from coverage in those that do not. RTW laws allow employees in a unionized work space that are not members of the union to opt out of paying dues to the union. In non-Right-to-Work states, non-union members have to pay at least a portion of the union dues. The percentage of employees covered by unions in RTW states (7.6%) is less than half that in other states (16.3%).

Table 1: Unionization rates (%) in Canada and the United States (2013)

	Canada	United States		es .
		Non-RTW	RTW	Overall
Total Union Rate	31.2	16.3	7.6	12.4
Private Sector Union Rate	17.5	9.7	4.8	7.5
Public Sector Union Rate	74.6	52.3	22.7	38.7

Note 1: Right-to-Work states are jurisdictions that have adopted laws allowing non-union employees in a unionized place of employment to opt-out of union dues. Right-to-Work States include: Alabama, Arizona, Arkansas, Florida, Georgia, Idaho, Indiana, Iowa, Kansas, Louisiana, Michigan, Mississippi, Nebraska, Nevada, North Carolina, North Dakota, Oklahoma, South Carolina, South Dakota, Tennessee, Texas, Utah, Virginia, and Wyoming (Zycher et al., 2013). At the time of writing, Indiana's Right-to-Work law is the subject of a legal challenge under the state's constitution (Carden, 2014, Aug. 22).

Note 2: Indiana and Michigan became Right-to-Work states in 2012 and 2013, respectively. The impact of Right-to-Work laws on these two states is likely small given the short time since legislation was enacted. As a result, the private-sector and total unionization rates in Right-to-Work states are slightly higher than they were in the previous edition, 4.2% and 7.2%, respectively (Karabegović et al., 2009). The last state to enact Right-to-Work laws before 2012 was Oklahoma in 2001 (Zycher et al, 2013).

Note 3: There are two ways of measuring unionization rates: (1) the percentage of the workforce who are members of a union; and (2) the percentage of the workforce covered by collective agreements (union contracts). This publication uses the latter measure because it includes a broader range of workers who are directly affected by union-employer negotiations.

Sources: Statistics Canada, 2014; Hirsch and Macpherson, 2014; calculations by authors.

In technical terms, flexibility permits employees and employers to reallocate resources to maximize productivity. In non-technical terms, flexibility means employees can more easily change jobs, or even industries, in search of better compensation or working conditions. Similarly, flexibility allows employers to change the mix of capital and labour to respond to market changes.

One of the overarching objectives of government in designing labour relations laws should be to establish an environment within which productive economic activities can flourish. Empirical evidence from around the world indicates that jurisdictions with regulations that allow a more flexible labour market enjoy better economic performance. For example, the Organisation for Economic Co-operation and Development (OECD) concluded that jurisdictions with more flexible labour markets had better job-creation records, enjoyed greater benefits from technological change, and experienced faster growing economies (OECD, 1994).

⁴ See Karabegović et al. (2012) for a more in-depth review of the academic literature examining the flexibility of labour markets.

⁵ In 2006, the OECD published a reassessment of the original Jobs Study in which labour market flexibility was again emphasized. The reassessment was published in two papers (OECD, 2006a, 2006b) that again recommended the adoption of policies providing greater flexibility for workers and employers, including flexible work-time arrangements and a greater degree of wage flexibility to enhance performance.

Another important study, in the *Quarterly Journal of Economics*, concluded that increased regulation of the labour market is associated with lower labour-force participation and higher unemployment (Botero et al., 2004; see also, Bierhanzl and Gwartney, 1998). Di Tella and MacCulloch (2005), using data for 21 OECD countries for the period from 1984 to 1990, concluded that increased flexibility of the labour market had a positive impact upon both the employment rate and the rate of participation in the labour force. A more recent study found that, after an economic crisis, increased unemployment persisted for a shorter period of time in countries with a flexible labour market (Bernal-Verdugo et al, 2012). Alonso et al. (2004) found that income and capital (investment) per worker depended positively on the flexibility of the labour market.

Labour laws can also inhibit the proper and efficient functioning of the labour market when they favour one group over another, prevent innovation and flexibility, or are overly prescriptive—when they impose a resolution to labour disputes rather than fostering negotiation between employers and employees. Besley and Burgess (2004) studied labour market regulation in India from 1958 to 1992 and found that jurisdictions that legislated labour relations in a manner that favoured employees and unions at the expense of employers experienced lower output, employment, investment, and productivity, and increased urban poverty. Workers and, indeed, all citizens in jurisdictions with flexible labour markets enjoy the benefits of a stronger and more productive labour market (higher rates of job creation and lower unemployment) and a generally stronger economy.

This study empirically quantifies differences between Canadian and American private-sector labour relations laws with the goal of evaluating the extent to which labour relations laws achieve balance and flexibility in the labour market. To this end, key features of private-sector labour relations laws in 2014 have been collected for Canadian and American federal governments as well as provincial and state governments. Although not every aspect of labour relations laws are included, each aspect that is included has an important influence on the flexibility and balance of the overall labour relations environment. The key features that are included were given scores

⁶ The methodology used by Besley and Burgess (2004) has faced some criticism including concerns about the classification of specific legislation as being favourable or unfavourable to employees and unions (Bhattacharjea, 2006). A more recent study (Ahsan and Pagés, 2008) modified the methodology used by Besley and Burgess, incorporating some of the concerns, but the authors found similar results, that increased labour regulations are associated with negative economic outcomes .

⁷ This is the fourth edition of this study. First edition: Karabegović et al., 2004a; second edition: Godin et al., 2006; third edition: Karabegović et al., 2009.

⁸ Examples of other important aspects of labour relations laws can be found in Appendix 2. These other aspects are not currently included because it is difficult to develop objective measures for them or because there is insufficient empirical evidence about what the optimal provision might be.

out of 10 and used as indicators for the Index of Labour Relations Laws. A higher score on the index means greater flexibility or less bias towards favouring unions over employers.

Organization of this study

The next three sections outline the three components that make up the Index of Labour Relations Laws: (1) Organizing a Union, (2) Union Security, (3) Regulation of Unionized Firms. Each of these sections discusses the indicators that are used and provides a sub-index for each component. ¹⁰ Table 2 shows what indicators are used within each component. The fourth section presents the overall index with the scores and ranks of each jurisdiction and a fifth gives a basic statistical analysis of the relationship between labour relations laws and unionization rates. This is a first step towards a broader analysis aimed at gaining a deeper statistical understanding of what drives unionization rates amongst Canadian provinces and US states. The final section provides a short conclusion summarizing the study.

Jurisdictional differences

Prior to presenting the index and its components, it is important to note that there is a marked difference between the two countries in terms of the level of government responsible for the regulation of labour relations. In Canada, the regulation and enforcement of labour relations laws is largely decentralized to the provinces. Each province has its own set of labour relations laws for both the private and public sectors and these laws are independent of those in other provinces and the federal law. Approximately 800,000 Canadian workers (5.3%) are employed in federally regulated industries such as interprovincial transportation, banking, broadcasting, telecommunications (Canada Industrial Relations Board, 2014). Workers in the Canadian territories are also covered under federal labour relations laws.¹¹

The United States, on the other hand, has a highly centralized system of federal private-sector labour relations laws, which are enforced by the

⁹ For details on scoring and methodology, see Appendix 3.

¹⁰ The laws that are used for indicators are those that apply most broadly across private-sector industries. Some jurisdictions have laws that apply exclusively to specific industries. For example, in Ontario the union certification process in most industries requires a secret-ballot vote but unions for construction workers can be certified without a vote.

¹¹ Federal labour relations laws are enforced by the Canada Industrial Relations Board. (CIRB); for more information, see http://www.cirb-ccri.gc.ca.

Component 1: Organizing a union

1a: Mandatory secret ballot for certification

1b: No remedial certifications

1c: Equal thresholds for certification and decertification applications

1d: Terms of first contract can be freely negotiated

Component 2: Union security

2a: Mandatory union membership not allowed

2b: Mandatory union dues not allowed

Component 3: Regulation of unionized firm

3a: Successor companies free to negotiate own agreement

3b: No mandatory advanced notice of technological change

3c: No mandatory arbitration for grievances

3d: Replacement workers during strikes allowed

3e: Bans on second site picketing during strike

Note: See Appendix 3 for the methodology of how each indicator is scored. Each indicator is weighted equally within each component, and each component is weighted equally for the overall index.

National Labor Relations Board (NLRB).¹² State governments can expand on federal employment laws but state laws pertaining specifically to private-sector union relations are generally pre-empted by the federal National Labor Relations Act (NLRA). In particular, state laws are pre-empted if they regulate activities that are forbidden or protected by the NLRA (this is known as the Garmon Doctrine or Garmon Pre-emption). This leaves little scope for differences between states; however, the NLRA does allow states to enact Right-to-Work laws (section 14(b)).¹³

¹² Information on the United States National Labor Relations Board (NLRB) is available at http://www.nlrb.gov/. The NLRB's jurisdiction extends generally to all employers with a minimum involvement in interstate commerce (\$50,000 to \$1 million, depending on the industry), other than airlines, rail-roads, agriculture, and government. See http://www.nlrb.gov/rights-we-protect/jurisdictional-standards.

¹³ For an overview of public-sector labour relations laws in Canada and the United States, see Karabegović et al., 2004a.

Component 1: Organizing a Union

The first component of the Index of Labour Relations Laws measures regulations on organizing a union. The indicators used for this component relate to rules for unions gaining and losing the right to represent workers collectively (often these are referred to as union certification and decertification). There are four indicators: (1) the use of secret ballot votes in the certification process; (2) the option for labour relations boards to certify a union remedially in response to an employer conducting unfair labour practices; (3) differences in minimum thresholds for support to apply for certification and decertification; and (4) the option of the labour relations board to either settle the terms of the first contract after certification or force the parties into binding arbitration. This section first discusses the rules for certification and decertification and related indicators and then the provisions for the first contract.

Certification

Certification refers to the process through which a union acquires the right to be an exclusive bargaining agent for a group of employees. ¹⁴ There are a number of important aspects of certification, including the minimum threshold of support required for a certification application, the use of mandatory secret ballot elections, and remedial certification (table 3).

14 It is important to note that certification and decertification have a far greater impact on Canadian workers than on workers in United States. Canada, unlike the United States, permits mandatory union membership in collective agreements and allows membership to be included as a condition of employment. In addition, all Canadian workers covered by a collective agreement are required to pay full union dues even if they are not members of the union. In the United States, on the other hand, federal law allows workers the choice of whether or not to give financial support to union activities unrelated to representation. In addition, 24 US states have extended the federal provision by prohibiting any forced payment of dues regardless of its nature. Overall, certification has a substantially greater impact on labour market balance and flexibility in Canadian jurisdictions than in US states. See the section on union security below for a more detailed discussion of mandatory membership and dues payment regulations.

Table 3: Regulations for union certification

	Is union membership required for application?	Threshold required for application (%)	Is vote by secret ballot required for certification?	Threshold required for vote to pass	Threshold for automatic certification	Is remedial certification allowed?
British Columbia	Yes	45	Yes	50%+1	n/a	Yes
Alberta	No	40	Yes	50%+1	n/a	No
Saskatchewan	Yes	45	Yes	50%+1	n/a	No
Manitoba	Yes	40	No	50%+1	65%+1	Yes
Ontario	Yes	40	Yes	50%+1	n/a	Yes
Quebec	Yes	35	No	50%+1	50%+1	No
New Brunswick	Yes	40	No	50%+1	60%+1	Yes
Nova Scotia	Yes	40	Yes	50%+1	n/a	Yes
Prince Edward Island	Yes	50%+1	No	50%+1	50%+1	Yes
Newfoundland & Labrador	Yes	40	Yes	50%+1	n/a	Yes
Federal (Canada)	Yes	35	No	50%+1	50%+1	Yes
All US states	No	30	Yes	50%+1	n/a	Yes

Note 1: The recent enactment of the Saskatchewan Employment Law made union membership a requirement for certification application.

Note 2: Threshold for automatic certification is the threshold required to certify a union without a vote.

Note 3: In Newfoundland & Labrador, a union must have at least 50%+1 of the potential bargaining unit sign union cards in order to apply to the Labour Relations Board. However, if the Board, after the bargaining unit has been finalized, determines that the union has the support of only 40% of the bargaining unit, it will still conduct a vote.

Note 4: In 2005, Ontario removed the requirement for secret ballot votes in the construction sector. If 55% of workers in a unit indicate support with signed union cards, the union will be certified without a secret ballot vote.

Note 5: In 2012, Newfoundland & Labrador removed the requirement for a secret-ballot vote. This requirement was reinstated in 2014.

Note 6: In New Brunswick, if a union has membership cards for more than 60% of the unit, the workplace will be unionized and there will be no vote. If a union has membership cards between 50% and 60% of the unit, the workplace may be unionized without a vote at the discretion of the Labour Relations Board.

Note 7: In Prince Edward Island, the Labour Relations Board will certify if it is satisfied that a majority of employees in the unit support the application for certification. The Labour Relation Board does, however, have the discretion to call a vote if the Board believes it necessary.

Sources: Federal (Canada): Canada Labour Code, 1985; British Columbia: Labour Relations Code, 1996; Alberta: Labour Relations Code, 2000; Saskatchewan, The Saskatchewan Employment Act, 2013; Manitoba: The Labour Relations Act, 1987; Ontario: Labour Relations Act, 1995; Quebec: Labour Code, 1977; New Brunswick: Industrial Relations Act, 1973; Nova Scotia: Trade Union Act, 1989; Prince Edward Island: Labour Act, 1988; Newfoundland & Labrador: Labour Relations Act, 1990; B-22: An Act to Amend the Labour Relations Act; US states: National Labor Relations Act 1935; National Labor Relations Board, 2014; various personal correspondence and case law, see References for details.

Application for certification

For a union to submit an application for certification to a Labour Relations Board, which oversees and enforces a jurisdiction's labour relations laws, it must have written support from a prescribed percentage of workers. That is, unions need to obtain a certain level of support from affected workers in order to apply to become their representative. Nine of the 10 Canadian provinces as well as Canadian federal law require workers to complete union membership cards, while the province of Alberta requires written petitions or membership cards. In the United States, written petitions, individual letters, or membership cards can all be used as support for an application (table 3). In Canada, the threshold for indications of support ranges from a low of 35% of workers in a bargaining unit in Quebec or under federal jurisdiction to 50%+1 in Prince Edward Island. For all US states, the threshold is 30% (table 3).

Secret-ballot vote versus automatic certification

Another important aspect of the certification process, and an indicator in the Index of Labour Relations Laws, is the means by which a union is certified to be the representative of workers. In most jurisdictions in Canada and the United States, a secret-ballot vote is required to certify or approve a union. All 50 US states as well as six Canadian provinces (British Columbia, Alberta, Saskatchewan, Ontario, Nova Scotia, and Newfoundland & Labrador) require a mandatory secret-ballot vote to certify a union (table 3). The remaining four provinces (Manitoba, Quebec, New Brunswick, and Prince Edward Island) and Canadian federal law allow unions to be certified automatically, without a secret-ballot vote, if the initial indication of support for certification among workers exceeds some threshold—that is, if a union can show that a certain percentage of workers have signed union membership cards. The threshold for automatic certification varies from more than 50% in Quebec, Prince Edward Island, and under federal law to 65% in Manitoba (table 3).

The presence of automatic certification in labour relations laws has a strong effect upon balance in the labour market since workers may be subjected to undue pressure from co-workers and union representatives to sign a union card or petition without recourse to an autonomous decision made in private by secret ballot. There is substantial academic evidence that provisions for automatic certification increase unionization rates (Clemens et al., 2005). For instance, Johnson (2002b), examining nine of the Canadian provinces from 1978 to 1996, concluded that mandatory secret-ballot votes reduced union certification success rates by approximately nine percentage points when compared to automatic certification. Similarly, Riddell (2004) investigated the experience of British Columbia between 1978 and 1998. This

¹⁵ In 2005, Ontario removed the requirement for a secret-ballot vote and introduced card-check certification for the construction sector.

is an interesting period since mandatory voting was introduced in 1984, eliminated in 1993, and reintroduced in 2001. Riddell found that union success rates fell by 19 percentage points after mandatory secret-ballot voting was introduced. Furthermore, Slinn (2004) examined Ontario's 1995 policy change from automatic certification to mandatory secret-ballot voting and concluded that there was a highly significant negative effect on the probability of successful certification. Johnson (2004) suggests that 17% to $24\%^{17}$ of the difference between unionization rates in Canada and the United States could be explained by the widespread use of mandatory votes in the United States compared to the less widespread use of such votes in Canada.

More recently, Bartkiw (2008) in the academic journal, *Canadian Public Policy*, found that the Ontario's 2005 removal of a mandatory vote for the construction sector and the introduction of remedial certification for all sectors had already had an impact on the volume of union organizing attempts and their success rates. Specifically, these changes led to an average increase of seven new bargaining units certified per month. This translated into an overall increase in certification success rates of 10.2 percentage points. The study also found that the increase in the number of new bargaining units certified had an effect on the number of workers covered by collective bargaining agreements. The 2005 changes increased the number of workers covered by an average of about 380 per month.

Certification vote

The percentage of ballots cast in favour of certification has to be at least 50%+1 in every Canadian province and all US states in order for the Labour Relations Board to certify a union (table 3).

Remedial certification

Remedial certification refers to situations in which the labour relations board of a jurisdiction automatically and unilaterally approves a union to represent a group of workers. This normally happens only in extreme circumstances, such as when an employer has been deemed to have illegally interfered with a union's campaign in a way that irreparably damages the possibility of a fair vote. In most cases, the labour relations board will only automatically certify a union if, in their opinion, a fair and representative election is not possible.

The labour relations boards in seven Canadian provinces (British Columbia, Manitoba, Ontario, New Brunswick, Nova Scotia, Prince Edward Island, and Newfoundland & Labrador) and the federal Canada Industrial Relations Board

¹⁶ Riddell's previous study (2001), which used 1984–1993 data for British Columbia, similarly concluded that unionization success rates fell by 20% and the number of certification attempts fell by over 50% when mandatory secret-ballot voting was introduced.

17 The equivalent of 3 to 5 percentage points in total unionization rates (Johnson, 2004: 361).

(CIRB) have the power to certify a union automatically in the event an employer has been deemed to have committed an unfair labour practice. The appointment of officials to the Labour Relations Boards in these jurisdictions as well as the level of transparency exhibited by the Boards are, therefore, much more critical given their discretionary power. The remaining three Canadian provinces (Alberta, Saskatchewan, and Quebec) do not permit remedial certification (table 3).

In the United States, the National Labor Relations Board (NLRB) has remedial certification authority but it is the US Supreme Court's position that the National Labor Relations Board has remedial authority only where the unfair labour practices of the employer are so outrageous and pervasive "that there is no reasonable possibility that a free and un-coerced election could be held" (395 US 575). For the overwhelming majority of cases, the NLRB would issue an investigation and precede to normal certification procedures.¹⁹

Decertification

Decertification is the opposite process of certification. It is the process through which a union ceases to be a bargaining agent for a group of workers. Similar to the certification process, workers must gather a prescribed percentage of support for decertification in order for the Labour Relations Board to issue a decertification vote. The level of support required to issue a vote varies from a low of 30% of workers in a bargaining unit in US states to a high of more than a majority in Prince Edward Island and the Canadian federal jurisdiction (table 4).

Secret ballot vote versus automatic decertification

Secret-ballot voting is required to decertify a union in every Canadian province, except Prince Edward Island and Quebec, and in US states. Only Canadian federal labour relations laws as well as the provincial laws in Prince Edward Island and Quebec allow a union to be decertified without a secret-ballot vote (table 4).²⁰ New Brunswick and Manitoba are interesting cases because they do not require a vote for certification, but do require one for decertification.²¹

¹⁸ Past research has shown a general lack of transparency on the part of labour relations boards across Canada and in the United States (Karabegović et al., 2005).

¹⁹ NLRB v. Gissel Packing Co., 395 US 575 (1969) is the primary precedent-setting case.

²⁰ If the Labour Relations Board in Prince Edward Island and Quebec or the CIRB is satisfied after reviewing the application for decertification that a majority of the employees in the unit support decertification, the Board may decertify the union without a secret-ballot vote.

²¹ It is also common for Canadian and American jurisdictions to have rules restricting the time frame in which decertification can take place. Typically, decertification applications are limited to a window of a few months over the course of a collective agreement. In a recent overhaul of its employment laws, the province of Saskatchewan expanded the time window for decertification applications from one month a year (60 to 30 days before the anniversary of a collective agreement) to any time two years after a union has been certified.

Table 4: Regulations for union decertification

	Threshold required for application (%)	Is vote by secret ballot required for decertification?	Threshold required for vote to pass	Threshold for automatic decertification	Certification/ Decertification differential (percentage points)
British Columbia	45	Yes	50%+1	n/a	0
Alberta	40	Yes	50%+1	n/a	0
Saskatchewan	45	Yes	50%+1	n/a	0
Manitoba	50	Yes	50%+1	n/a	10
Ontario	40	Yes	50%+1	n/a	0
Quebec	35	No	50%+1	50%+1	0
New Brunswick	40	Yes	50%+1	n/a	0
Nova Scotia	40	Yes	50%+1	n/a	0
Prince Edward Island	50%+1	No	50%+1	50%+1	0
Newfoundland & Labrador	40	Yes	50%+1	n/a	0
Federal (Canada)	50%+1	No	50%+1	50%+1	15
All US states	30	Yes	50%+1	n/a	0

Note 1: In Prince Edward Island, the Labour Relations Board will decertify if it is satisfied that a majority of employees in the unit support the application for decertification. The Labour Relation Board does, however, have the discretion to call a vote if the Board believes it necessary.

Note 2: The previous edition of this study (Karabegović et al., 2009) reported differences in the certification and decertification thresholds in Quebec and Nova Scotia.

Note 3: In Nova Scotia, there is no legislated threshold for decertification support. Rather, the Labour Relations Board has the discretion to decide how much represents "significant" support. Support of 40% of employees would typically be enough (Sharpe, 2014, personal communication).

Note 4: In Saskatchewan, the Labour Relations Board can decertify a union if it has been inactive for at least three years.

Note 5: In Manitoba, the Labour Relations Board may also consider a decertification application if it is satisfied that employees and/or employer would suffer substantial and irremediable damage or loss if the application is not considered.

Sources: Federal (Canada): Canada Labour Code, 1985; British Columbia: Labour Relations Code, 1996; Alberta: Labour Relations Code, 2000; Saskatchewan, The Saskatchewan Employment Act, 2013; Manitoba: The Labour Relations Act, 1987; Ontario: Labour Relations Act, 1995; Quebec: Labour Code, 1977; New Brunswick: Industrial Relations Act, 1973; Nova Scotia: Trade Union Act, 1989; Prince Edward Island: Labour Act, 1988; Newfoundland & Labrador: Labour Relations Act, 1990; B-22: An Act to Amend the Labour Relations Act; US states: National Labor Relations Act 1935; National Labor Relations Board, 2014; various personal correspondence and case law, see References for details.

Decertification vote

The percentage of ballots cast in favour of decertification has to be at least 50%+1 in every Canadian province and all US states in order for the Labour Relations Board to decertify a union (table 4).

Differences between thresholds for certification and decertification

An important indicator of the degree to which labour relations laws favour one side at the expense of the other is the presence of a difference in requirements for an application for certification or decertification. That is, a jurisdiction that maintains a decertification threshold higher than its certification requirement makes it easier for a union to gain bargaining power than it would for the same union to lose such power. The province of Manitoba and the federal government maintain a lower threshold for certification application than for decertification application (table 4). The remaining Canadian provinces and all US states have the same thresholds requirements for certification and decertification applications, indicating a more balanced approach to the process of unions gaining and losing the right to represent employees. The difference between the threshold for certification and decertification is an indicator in the Index of Labour Relations Laws.

First contract provisions

First contract provisions refer to what happens in the event unions and employers fail to reach a first collective agreement once the union is certified. It is an important aspect of organizing a union, as failure to reach a collective bargaining agreement effectively makes the certification moot. There are three general approaches to first contract provisions. The first is to allow parties to exhaust voluntary negotiation mechanisms such as conciliation and mediation. The second is to force the parties into binding arbitration after a prescribed period of failed negotiation or to allow one of the parties to force the other into arbitration through an application to the labour relations board. The third, and certainly the most prescriptive approach, is for the Labour Relations Board to settle the impasse by directly imposing provisions of a first agreement.

Three Canadian provinces (Alberta, New Brunswick, and Prince Edward Island) and every US state allow parties to exhaust voluntary negotiation mechanisms such as conciliation (table 5). However, five Canadian provinces (British Columbia, Saskatchewan, Ontario, Quebec, and Nova Scotia) do allow their Labour Relations Boards to force parties into arbitration. Five provincial jurisdictions (British Columbia, Saskatchewan, Manitoba, Nova Scotia, and Newfoundland & Labrador) and the Canadian federal jurisdiction allow the Labour Relations Board to impose first contract provisions. British

Table 5: Provisions for settling the terms of the first contract after union certification

	Can binding arbitration be forced on one or both of the parties?	Can the Labour Relations Board directly impose terms and conditions of a first agreement?	Can the terms of the first agreement be forced on one or both of the parties?
British Columbia	Yes	Yes	Yes
Alberta	No	No	No
Saskatchewan	Yes	Yes	Yes
Manitoba	No	Yes	Yes
Ontario	Yes	No	Yes
Quebec	Yes	No	Yes
New Brunswick	No	No	No
Nova Scotia	Yes	Yes	Yes
Prince Edward Island	No	No	No
Newfoundland & Labrador	No	Yes	Yes
Federal (Canada)	No	Yes	Yes
All US states	No	No	No

Note 1: The previous edition of this study (Karabegović et al., 2009) reported that the British Columbia and Nova Scotia Labour Relations Boards cannot directly impose terms of the first agreement.

Note 2: In British Columbia, if the contract is not settled within 20 days of a mediator being appointed, then the mediator can recommend that either an arbitrator or the Labour Relations Board settle the terms of the contract. A mediator can be requested by either party. In practice, however, the mediator rarely recommends that the Board settle the terms (Pocklington, 2014, personal communication).

Note 3: In Saskatchewan, the Labour Relations Board has the choice between forced arbitration and direct settlement.

Note 4: In Nova Scotia, at the request of either party, the Labour Board can appoint an arbitrator. Seven days after the arbitrator's appointment, either party may request that the terms be settled by the Labour Board.

Sources: Federal (Canada): Canada Labour Code, 1985; British Columbia: Labour Relations Code, 1996; Alberta: Labour Relations Code, 2000; Saskatchewan, The Saskatchewan Employment Act, 2013; Manitoba: The Labour Relations Act, 1987; Ontario: Labour Relations Act, 1995; Quebec: Labour Code, 1977; New Brunswick: Industrial Relations Act, 1973; Nova Scotia: Trade Union Act, 1989; Prince Edward Island: Labour Act, 1988; Newfoundland & Labrador: Labour Relations Act, 1990; B-22: An Act to Amend the Labour Relations Act; US states: National Labor Relations Act 1935; National Labor Relations Board, 2014; various personal correspondence and case law, see References for details.

Columbia, Saskatchewan, and Nova Scotia allow the Labour Relations Board to choose between forced arbitration and direct settlement (table 5). That is, these eight jurisdictions give their respective labour boards the power to force parties into arbitration or directly impose elements of a first contract.

Observations on the total scores for Component 1: Organizing a Union

Table 6 presents the scores and rankings by jurisdiction for the component "Organizing a Union". The component score is an average of all the indicators. Alberta ranks first, receiving a score of 10.0 out of 10.0 for its well-balanced set of regulations regarding union organization. Saskatchewan and all the US states tied for second place with a score of 7.5 out of 10.0. Another four provinces (Ontario, Quebec, New Brunswick, and Newfoundland & Labrador) received a score of 6.3. The remaining five Canadian jurisdictions (British Columbia, Manitoba, Nova Scotia, Prince Edward Island, and the federal government) received a score of 5.0 or less, suggesting that rules are more biased towards union organizers in these jurisdictions. Of note, the federal government received the lowest score of 1.3 (**table 6**, **figure 1**).

22 See Appendix 3 for details on how the scores were computed.

Table 6: Organizing a Union, scores and ranks

	Score	Rank (out of 61)		Score	Rank (out of 61)
British Columbia	5.0	57	New Brunswick	6.3	53
Alberta	10.0	1	Nova Scotia	5.0	57
Saskatchewan	7.5	2	Prince Edward Island	5.0	57
Manitoba	3.3	60	Newfoundland & Labrador	6.3	53
Ontario	6.3	53	Federal (Canada)	1.3	61
Quebec	6.3	53	All US states	7.5	2

Note: For details on scoring, see table 2 and Appendix 3.

Sources: Federal (Canada): Canada Labour Code, 1985; British Columbia: Labour Relations Code, 1996; Alberta: Labour Relations Code, 2000; Saskatchewan, The Saskatchewan Employment Act, 2013; Manitoba: The Labour Relations Act, 1987; Ontario: Labour Relations Act, 1995; Quebec: Labour Code, 1977; New Brunswick: Industrial Relations Act, 1973; Nova Scotia: Trade Union Act, 1989; Prince Edward Island: Labour Act, 1988; Newfoundland & Labrador: Labour Relations Act, 1990; B-22: An Act to Amend the Labour Relations Act; US states: National Labor Relations Act 1935; National Labor Relations Board, 2014; various personal correspondence and case law, see References for details. Calculations by authors

Alberta 10.0 All U.S. states 7.5 Saskatchewan 7.5 **New Brunswick** 6.3 Newfoundland & Labrador 6.3 Ontario 6.3 Quebec 6.3 British Columbia 5.0 Nova Scotia 5.0 Prince Edward Island 5.0 Manitoba 3.3 Federal (Canada) 1.3 2 0 5 8 9 10 Source: Table 6.

Figure 1: Scores for Component 1—Organizing a Union

Component 2: Union Security

Union Security refers to regulations governing union membership and the payment of union dues by workers covered under a collective agreement. These regulations set out whether or not provisions regarding mandatory union membership and dues payment can be included in a collective agreement. The provisions vary from restrictive, where all workers must be members of a union and pay full dues as a condition of employment, to flexible, where employees have the choice of becoming union members and do not have to pay any union dues. Regulations that allow mandatory union membership and mandatory union dues are the two indicators used for the "union security" component.

Allowing workers choice in the matter of union membership and payment of union dues increases the flexibility of the labour market in two ways. First, it makes unions more responsive to the demands of employees since members and dues are no longer guaranteed. Second, it ensures competition among unions for the right to represent workers. Differences in union security laws have a major impact on unionization rates. Scholars such as Daphne Gottlieb Taras and Allen Ponak (2001) have concluded that the difference in how Canadian and American labour relations laws address union security is one of the fundamental explanations for the divergence between the unionization rates of the two countries.²²

In all Canadian jurisdictions, mandatory union membership is permitted in collective agreements and can be included as a condition of employment. In addition, all workers covered by a collective agreement can be required to pay full union dues even if they are not members of the union.²³ The combination of allowing mandatory membership conditions and the remittance of full union dues results in a strong pro-union bias in Canadian labour relations laws (table 7).

²² For a summary of this research, see Clemens et al., 2005.

²³ In a landmark arbitration case, Justice Ivan Rand of the Supreme Court of Canada imposed an "agency shop," referred to as the Rand Formula, on the Ford Motor Company in Windsor, Ontario, in 1946 (Rand, 1958). An agency shop is where there are mandatory dues payments as condition of employment, regardless of union membership status. The Rand Formula is widely used in Canada.

In the United States, on the other hand, the National Labor Relations Act (NLRA) and complementary rules makes two conditions explicit: (1) a union-security provision in a collective agreement cannot require that applicants for employment be members of the union in order to be hired; and (2) such an agreement cannot require employees to join or maintain membership in the union in order to retain their jobs. That is, the US federal law prohibits union membership clauses as a condition of employment (table 7).²⁴ In addition, the federal laws in the United States allow workers the choice of whether or not to give financial support to activities of their union such as lobbying and political support that are unrelated to representation. That is, workers in the United States can either pay full union dues or, if they choose, only pay the portion of dues directly related to representation costs such as bargaining and maintaining the collective agreement (NLRB, 1997).²⁵

In addition, there is a provision within the federal NLRA that allows states to enact Right-to-Work legislation and to date 24 states have done so.²⁶ Right-to-Work laws, which could be more accurately described as workerchoice laws, allows workers to opt out of paying any union dues instead of the partial opt-out available in non-Right-to-Work states. That is, workers in the 24 Right-to-Work states can not only choose whether or not to be a member of a union but also have full discretion with respect to the payment of union dues.

There is extensive research examining the economic effects of Rightto-Work laws. Comprehensive reviews of the literature find there are benefits such as higher employment and economic growth for states that enact Rightto-Work laws (Collins, 2012; Zycher et al., 2013). Specifically, research shows that annual economic growth is approximately 0.8% higher in Right-to-Work

²⁴ While section 7 and 8(a)(3) of the NLRA states that "union membership" may be required for employment, subsequent case law has clarified what exactly a union "member" is so that, in effect, mandatory union membership is not allowed. For further explanation, see Karabegović et al., 2004a.

²⁵ Note that in Canadian provinces unionized workers have no legal precedent or legislation supporting their preference to refrain from union spending they do not agree with. That is, in addition to representation costs, unions are free to spend workers' dues on political activism or any other myriad of activities workers may or may not agree with. The lack of choice for workers is exacerbated by weak requirements for financial disclosure by unions; see Palacios et al., 2006 for more information.

²⁶ Right-to-Work States include Alabama, Arizona, Arkansas, Florida, Georgia, Idaho, Indiana, Iowa, Kansas, Louisiana, Michigan, Mississippi, Nebraska, Nevada, North Carolina, North Dakota, Oklahoma, South Carolina, South Dakota, Tennessee, Texas, Utah, Virginia, and Wyoming. At the time of writing, a Right-to-Work amendment is being debated by the Missouri General Assembly and Indiana's Right-to-Work law is the subject of a legal challenge under the state's constitution (Carden, 2014, Aug. 22).

states than in non-Right-to-Work states (Zycher et al, 2013).²⁷ Right-to-Work laws can also encourage manufacturing companies to establish factories within a jurisdiction (Holmes, 1998). These findings have important implications for the competitiveness of jurisdictions, particularly those that do not have Right-to-Work laws. For instance, Ontario, traditionally the manufacturing centre of Canada, does not have Right-to-Work laws but is located near two states, Michigan and Indiana, that recently enacted Right-to-Work laws.²⁸ The existence of nearby Right-to-Work states could undermine the competiveness of Ontario's economy (Zycher et al, 2013).

Observations on the total scores for Component 2: Union Security

Table 7 presents the indicators for the "union security" component as well as the scores and rankings by jurisdiction. The component score is an average of the two indicators. The results for this area of labour relations laws indicate that there are three distinct groups of jurisdictions in Canada and the United States. In 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 any union dues. Right-to-Work states received a score of 10.0 out of 10.0 on the union security component (table 7). This group offers workers the greatest choice and flexibility with respect to unionization.

In the second group are US states without Right-to-Work legislation. These states scored 5.0 out of 10.0 on union security clauses as workers are permitted to choose whether or not to join a union but are required to pay at least a portion of union dues to cover costs associated with negotiating and maintaining the collective agreement.

The final group consists of the Canadian provinces and federal government. All of the Canadian jurisdictions allow unions to impose mandatory union membership and full dues payment as conditions of employment and, as a result, received a score of 0.0 for union security (figure 2).

²⁷ A recent study has also shown that Right-to-Work states enjoy net migration from non-Right-to-Work states and that enacting Right-to-Work laws improves income growth (Vedder and Robe, 2014). For other studies on the economic impact of Right-to-Work laws, see Vedder, 2011; Kersey, 2007; and Reed, 2003.

^{28.} At the time of writing, Indiana's Right-to-Work law is the subject of a legal challenge under the state's constitution (Carden, 2014, Aug. 22).

Table 7: Regulations for union security, scores and ranks

	Is mandatory union membership allowed?	Are mandatory union dues allowed?	Score	Rank (out of 61)
British Columbia	Yes	Yes	0.0	51
Alberta	Yes	Yes	0.0	51
Saskatchewan	Yes	Yes	0.0	51
Manitoba	Yes	Yes	0.0	51
Ontario	Yes	Yes	0.0	51
Quebec	Yes	Yes	0.0	51
New Brunswick	Yes	Yes	0.0	51
Nova Scotia	Yes	Yes	0.0	51
Prince Edward Island	Yes	Yes	0.0	51
Newfoundland & Labrador	Yes	Yes	0.0	51
Federal (Canada)	Yes	Yes	0.0	51
Right-to-Work States	No	No	10.0	1
Non Right-to-Work States	No	Yes	5.0	25

Note 1: For details on scoring, see table 2 and Appendix 3.

Note 2: Right-to-Work States include: Alabama, Arizona, Arkansas, Florida, Georgia, Idaho, Indiana, Iowa, Kansas, Louisiana, Michigan, Mississippi, Nebraska, Nevada, North Carolina, North Dakota, Oklahoma, South Carolina, South Dakota, Tennessee, Texas, Utah, Virginia, and Wyoming (Zycher et al., 2013). At the time of writing, Indiana's Right-to-Work law is the subject of a legal challenge under the state's constitution (Carden, 2014, Aug. 22).

Note 3: In non-Right-to-Work States, partial union dues are allowed at the request of employees. Partial union dues cover the union's costs relating to representation of employees during collective bargaining, contract administration, and grievance adjustment.

Note 4: The 24 Right-to-Work states are tied for 1st.

Note 5: The 26 non-Right-to-Work states are tied for 25th place.

Sources: Federal (Canada): Canada Labour Code, 1985; British Columbia: Labour Relations Code, 1996; Alberta: Labour Relations Code, 2000; Saskatchewan, The Saskatchewan Employment Act, 2013; Manitoba: The Labour Relations Act, 1987; Ontario: Labour Relations Act, 1995; Quebec: Labour Code, 1977; New Brunswick: Industrial Relations Act, 1973; Nova Scotia: Trade Union Act, 1989; Prince Edward Island: Labour Act, 1988; Newfoundland & Labrador: Labour Relations Act, 1990; B-22: An Act to Amend the Labour Relations Act; US states: National Labor Relations Act 1935; National Labor Relations Board, 2014; various personal correspondence and case law, see References for details. Calculations by authors

Right-to-Work States 10.0 Non Right-to-Work States 5.0 British Columbia 0.0 Alberta 0.0 Saskatchewan 0.0 Manitoba 0.0 Ontario 0.0 Quebec 0.0 **New Brunswick** 0.0 Nova Scotia 0.0 Prince Edward Island Newfoundland & Labrador 0.0 Federal (Canada) 0.0 0 3 7 9 10 Source: Table 7.

Figure 2: Scores for Component 2—Union Security

Component 3: Regulation of Unionized Firms

The final aspect of labour relations laws included in the index, "regulation of unionized firms," captures labour relations laws and regulations that influence the employer-union relationship once a union has been certified as the representative of employees. Like all regulations, these impose costs on affected firms and can have an impact on their performance. This could be particularly true in sectors of the economy where there is a mix of both unionized and non-unionized firms since non-unionized firms, unaffected by the regulations, may gain a competitive cost advantage.

This section examines and presents the following five indicators: (1) successor rights (the status of collective agreements when a unionized business is sold or transferred); (2) whether or not businesses are required to notify a union if it intends to invest in technological change; (3) whether or not businesses and unions are forced into arbitration to resolve disputes; (4) whether or not replacement workers are permitted during a strike; and (5) if workers on strike are allowed to picket at third-party sites.

Successor rights

In technical terms, provisions for successor rights determine whether, and how, collective bargaining agreements survive the sale, transfer, consolidation, or other disposal of a business. This is an important aspect of labour relations laws and, to a larger extent, the process of capital reallocation. If a business or portion of a business is rendered uneconomical as the result of changes in the market, reductions in competitiveness, or other reasons, stringent successor laws will impede the reorganization of the business and the efficient reallocation of its capital.

Legislation in every Canadian province as well as the federal laws make an existing collective agreement binding upon a new employer when a business, in whole or in part, is sold, transferred, leased, merged, or otherwise disposed of (table 8).²⁹ In other words, a purchasing employer (owner) is bound

²⁹ In Quebec, if only a portion of a firm is transferred, the existing collective agreement may or may not be binding. It depends on how much of its operations are being transferred.

by a contract (existing collective agreement) that it had no part in negotiating. There is little variance in the treatment of successor rights among Canadian provinces. Some provinces provide the Labour Relations Boards with discretion in certain circumstances but the general direction of the laws in all provinces is towards protecting the collective bargaining agreement before and after a change in ownership. Conversely, it is rare in the United States for a purchaser to be responsible for the incumbent collective bargaining agreement (table 8). However, a successor employer may be bound to recognize and bargain with the incumbent union.³⁰

Technological change

Labour relations laws include provisions governing technological change by requiring a notice of technological investment and change to be sent by an employer to the union (and, in some provinces, to the Minister of Labour). These provisions determine whether an employer must notify a union and the length of notice required and, in addition, allow the union to object to the investment or negotiate how the change will affect the terms of employment. This process could slow down the adoption of technological advances.³¹

A barrier to technological change can have serious and adverse effects on productivity and, thus, ultimately on workers' wages.³² The productivity of workers is in part dependent upon the capital (machinery and equipment) available to them. Since wages are ultimately determined by the productivity of workers, anything that affects productivity will eventually affect wages. Thus, if less capital is available to workers in the form of plants, machinery, equipment, and new technologies, the future wages and benefits of workers could be adversely affected.

Five Canadian provinces (British Columbia, Saskatchewan, Manitoba, Quebec, and New Brunswick) and the Canadian federal government require notice be sent to a union in advance of proposed technological investment if it might affect either the collective agreement or employment (table 8). It

³⁰ The requirement to recognize and bargain with the incumbent union largely depends on the percentage of the new work force that is made up of rehires from the previous employer.

³¹ Chintrakarn and Chen (2011) found evidence that high unionization rates are associated with slower adoption of new technology. However, the authors did not consider the influence that the labour relations laws may have had and attributed the cause of the relationship between unionization and slow adoption of new technology to unions increasing operating costs.

³² Empirical analyses based on cross-country comparisons tend to confirm that the employment record has been better in those countries where the pace of structural change, technological specialization, investment rates, and productivity gains have been high (OECD, 1994). See also: Veldhuis and Clemens, 2005.

further permits the union to force renegotiation, but the exact scope of this power differs across jurisdictions. Similarly, in the United States, employers of a unionized workforce are required to enter negotiations with the union if the technological change affects key terms of employment, such as the number of hours of work. There is no formal requirement for employers in the remaining five Canadian provinces to inform unions of technological change (table 8).

Arbitration of disputes

Although most collective bargaining agreements have provisions (usually called a grievance procedure) for resolving disputes about the meaning and application of the agreement or about alleged violations, it is important to recognize how disputes are resolved when both parties cannot, or no longer wish, to negotiate. Generally, there are three stages to resolving a labour dispute. The first is conciliation, whereby disputing parties meet separately with a third party to facilitate negotiation. The second is mediation, where parties meet face-to-face in the presence of a third party but any final decision is not legally binding. The third is arbitration, which is characterized by face-to-face negotiations among all parties and a final, legally binding, decision by a third-party arbitrator.

It is generally seen as beneficial to exhaust voluntary alternatives such as mediation before relying on final and binding mechanisms such as arbitration. Proceeding immediately to binding arbitration without taking prior steps may not only result in increased costs (such as lawyers' fees) for both parties but it may also create hostility between them. A stronger commitment to voluntary negotiation may increase the odds that both parties will be satisfied with the agreement and greater balance and flexibility in the labour relations environment is achieved if parties are free to prolong the dispute until it is in the best interests of all parties to enter voluntarily into a process of final and binding resolution (that is, arbitration).

All Canadian jurisdictions require that every collective bargaining agreement include a mechanism for the final and binding settlement of a grievance (that is, arbitration). No Canadian jurisdiction allows parties to exhaust non-binding mechanisms and only enter arbitration when all parties voluntarily choose to do so (table 8). This is an important aspect of Canadian labour relations laws since it means that most disputes in these jurisdictions will likely be resolved by binding arbitration.

In the United States, arbitration is voluntary and US legislation does not force the parties to include clauses stipulating binding arbitration in their labour agreements (table 8). The National Labor Relations Board (NLRB) works in conjunction with the independent Federal Mediation and Conciliation Service and, depending on the significance of the dispute, with the American Arbitration Association and state arbitration services to resolve disputes.

Table 8: Regulation of unionized firms, scores and ranks

	Successor Rights: Is the existing collective agreement binding?	Is mandatory notice required for introduction of technological change?	Advanced notice of technological change
British Columbia	Yes	Yes	60 days
Alberta	Yes	No	n/a
Saskatchewan	Yes	Yes	90 days
Manitoba	Yes	Yes	90 days
Ontario	Yes	No	n/a
Quebec	Yes	Yes	not specified
New Brunswick	Yes	Yes	not specified
Nova Scotia	Yes	No	n/a
Prince Edward Island	Yes	No	n/a
Newfoundland & Labrador	Yes	No	n/a
Federal (Canada)	Yes	Yes	120 days
All US states	No	Yes	not specified

Note 1: In Quebec, if only a portion of a firm is transferred, the existing collective agreement may or may not be binding.

Note 2: In the United States, an employer who purchases or otherwise acquires the operations of another employer is rarely obligated by a pre-existing collective agreement. There are circumstances where the new employer is bound by the existing collective agreement but the mere fact that the new employer is doing the same work in the same place with the same employees as his predecessor does not mean that he is bound by the existing collective agreement. Rather, it depends upon the new employer inheriting other liabilities and contracts of its predecessor. However, a new employer may be obligated to recognize and bargain with the union depending on the percentage of the new work force that is made up of rehires from the previous employer.

Note 3: Technological changes can refer to changes in procedures or operations as well as advances in what is normally referred to as technology.

Note 4: The previous edition of this study (Karabegović et al., 2009) reported that there was no requirement in the United States to inform union representatives of a coming technological change.

Note 5: If an employer in the United States is introducing a technological change that would likely affect the terms of employment (such as the number of hours of work), the National Labor Relations Board would interpret this to fall under Section 8(a)5 of the *National Labor Relations Act*, and the employer would be required to inform the union of the change and enter into negotiations about how this would affect terms of employment (Harvey, 2014, personal communication).

Note 6: "Grievance" refers to disputes about the collective bargaining agreement, its meaning, application, or alleged violation.

Note 7: The previous edition of this study (Karabegović et al., 2009) reported that Newfoundland & Labrador had a ban on replacement workers.

Note 8: Ontario, New Brunswick, Nova Scotia, and Newfoundland & Labrador have nothing in their legislation that either prohibits or allows the hiring of replacement workers during a legal strike or lockout. In all three provinces, this was interpreted to mean that replacement workers are allowed since they are not prohibited in the legislation. This interpretation was confirmed through communications with the appropriate officials at the Labour Relations Boards.

Must every collective bargaining agreement include a mechanism for the final and binding settlemen of a grievance (i.e. arbitration)?	workers allowed?	Is third-party picketing allowed?	Score	Rank (out of 61)
Yes	No	No	2.0	56.0
Yes	Yes	No	6.0	51.0
Yes	Yes	Yes	2.0	56.0
Yes	Yes	Yes	2.0	56.0
Yes	Yes	Yes	4.0	52.0
Yes	No	Yes	0.0	61.0
Yes	Yes	Yes	2.0	56.0
Yes	Yes	Yes	4.0	52.0
Yes	Yes	Yes	4.0	52.0
Yes	Yes	Yes	4.0	52.0
Yes	Yes	Yes	2.0	56.0
No	Yes	No	8.0	1.0

Note 9: Canada's Labour Code specifies that an employer cannot hire replacement workers for the demonstrated purpose of undermining the union's capacity to negotiate.

Note 10: In British Columbia, third-party picketing of an "ally" business is allowed. An "ally" business is a business that is found to be assisting the employer by doing work done by the employees on strike or lockout.

Note 11: In the Canadian jurisdictions where third-party picketing is allowed, legislation neither explicitly prohibits nor allows third-party picketing. Still, due to a 2002 Supreme Court decision, third-party picketing is allowed in these jurisdictions, provided it does not constitute criminal or tortuous (causing accidental or unintentional harm) activity. See R.W.D.S.U., Local 558 v. Pepsi-Cola Canada Beverages (West) Ltd. [2002] 1 S.C.R. 156, 8 S.C.C.

Note 12: In general, third-party picketing is prohibited in all US states. The exceptions are as follows: (1) workers may picket a secondary "ally" employer where it is performing the work that would have been done by the striking employees; (2) consumer picketing, where picketers dissuade the public from patronizing retail establishments rather than dissuading employees from working, provided that the union's case is closely confined to the primary dispute and that the secondary employer can easily substitute for another employer's goods/services; (3) secondary boycotts allowed in construction and textile industry; (4) informational picketing allowed if the sole object of the picketing is to inform the public even if such picketing interferes with deliveries or pickups.

Note 13: All US states are tied for first place.

Note 14: For details on scoring, see table 2 and Appendix 3.

Sources: Federal (Canada): Canada Labour Code, 1985; British Columbia: Labour Relations Code, 1996; Alberta: Labour Relations Code, 2000; Saskatchewan, The Saskatchewan Employment Act, 2013; Manitoba: The Labour Relations Act, 1987; Ontario: Labour Relations Act, 1995; Quebec: Labour Code, 1977; New Brunswick: Industrial Relations Act, 1973; Nova Scotia: Trade Union Act, 1989; Prince Edward Island: Labour Act, 1988; Newfoundland & Labrador: Labour Relations Act, 1990; B-22: An Act to Amend the Labour Relations Act; US states: National Labor Relations Act 1935; National Labor Relations Board, 2014; various personal correspondence and case law, see References for details. Calculations by authors

Replacement workers

In the event of a legal strike by workers or lockout by an employer, a firm may wish to hire replacement workers in order to continue at least partial operations while addressing reasons for the dispute. Several researchers have concluded that bans on the use of replacement workers can have significant economic impacts. For instance, Cramton et al. (1999) studied private-sector contract negotiations in Canadian provinces from 1967 to 1993 and found that negotiation costs were significantly higher in provinces that prohibited employers from using replacement workers. This was partly due to their findings that the duration of strikes was, on average, two weeks longer compared to jurisdictions without bans on replacement workers, leading to an estimated increase in the cost of strikes of \$1.9 million per contract negotiation (1993 dollars).

Two recent studies that looked at Canada over the period of 1978 to 2008 confirmed that bans on replacement workers increases the duration of strikes (Dachis and Hebdon, 2010; Campolieti et al., 2014). The authors also found that in jurisdictions with bans there was a 1.8% or 3.6% decrease in the average wage settlement, meaning that bans on replacement workers can actually decrease the wages of unionized workers. The authors of both studies speculated that the reduction in wages could be attributed to a reduction in investment that can result from the increased bargaining power of unions. This is supported by another study that looked at provincial investment from 1967 to 1999 and found that the net investment rate (new investment minus depreciation) was 0.746 percentage points lower when a province had banned the use of replacement workers during strikes (Budd and Wang, 2004). The authors also found to the use of replacement workers during strikes (Budd and Wang, 2004).

A previous study by Budd (2000) examined the statistics of employment and bargaining units for Canadian provinces from 1966 to 1994 and concluded that bans on replacement workers have adverse consequences on employment. Budd found that provinces that prohibit the hiring of replacement workers tend to have a lower employment-to-population ratio and a drastically reduced number of employees in the bargaining unit over time.

Four Canadian provinces (Alberta, Saskatchewan, Manitoba, and Prince Edward Island) as well as the federal government have legislation allowing replacement workers during legal strikes and lockouts (table 8). These five jurisdictions also stipulate that striking or locked-out workers have the right

³³ Cramton et al. (1999) and other older studies found that wage settlements were higher in jurisdiction with bans on the use of replacement workers. Campolieti et al. (2014) explained that the difference between their results and the older studies could be due to the differences in the time period being studied. The authors argue that since replacement bans were adopted toward the end of the period under consideration by older studies, the effect on investment had not had time to have a discernible impact.

³⁴ Caballero et al. (2004) found that job security protection in labour laws prevented, or at least impeded, the Schumpeterian process of "creative destruction" or re-allocation of capital.

to immediate reinstatement once the dispute has been resolved. Two provinces, British Columbia and Quebec, specifically prohibit the use of replacement workers. The remaining four Canadian provinces do not have legislation allowing or prohibiting the use of replacement workers. In the absence of specific legislation, replacement workers are generally allowed in these jurisdictions (table 8).35

The National Labor Relations Act in the United States allows replacement workers (table 8). Employees who strike for a lawful reason fall into two classes: economic strikers and strikers against unfair labour practices. While both classes continue as employees (that is, they cannot be discharged), economic strikers may be permanently displaced whereas those striking against unfair labour practices may be only temporarily replaced. However, upon resolution of the dispute, the employer must place economic strikers who wish to return to work on a preferential hiring list and offer to reinstate them when any job for which they are qualified becomes available.36

Third-party picketing

The final indicator for the "regulation of unionized firms" component is thirdparty (or second-site) picketing, which is the ability (or inability) of striking workers and their union to picket and disrupt the operations of enterprises not covered by the collective agreement. For example, striking workers might engage in third-party picketing of suppliers to, or retailers of, the firm that is a party to the collective agreement. The ability to disrupt the operations of third parties means that the union and workers have the ability to affect not only the employer covered by the collective agreement but also any other company doing business with the primary firm and pressure from these third parties may force the employer to settle a strike instead of addressing the reasons for the strike.

Only two Canadian provinces, British Columbia and Alberta, specifically prohibit third-party picketing. The remaining eight provinces and the federal government do not address third-party picketing and, therefore, regulation is achieved through court precedent. A decision in 2002 by the Supreme Court of Canada (R.W.D.S.U., Local 558 v. Pepsi-Cola Canada Beverages (West) Ltd.) instituted a right for employees to picket third parties (table 8).

For the overwhelming majority of cases in the United States, thirdparty picketing is prohibited; however, some loopholes exist in the current case law. The overall direction, however, of the labour relations law and case law is to prohibit involving third parties as much as possible (table 8).

³⁵ In the four jurisdictions that do not have legislation specifically allowing or prohibiting the use of replacement workers, confirmation that replacement workers are allowed was obtained through personal communication with Labour Relations Boards' officers.

³⁶ For a detailed discussion of replacement workers in United States and Canada, see Singh and Jain, 2001 and Cramton et al., 1999.

Observations on the total scores for Component 3: Regulation of Unionized Firms

All US states received a score of 8.0 out of 10.0, indicating a relatively high degree of balance and flexibility in the labour relations laws dealing with firms once they are unionized. Alberta received the second-highest score of 6.0. Four Canadian provinces (Ontario, Nova Scotia, Prince Edward Island, and Newfoundland & Labrador) received a score of 4.0 and four provinces (British Columbia, Saskatchewan, Manitoba, and New Brunswick) as well as the federal government received a score of 2.0. Quebec was the only jurisdiction that received a score of 0.0 (table 8, figure 3).³⁷

The results from the analysis of regulation on unionized firms indicate that the US states and, to a lesser degree, Alberta impose relatively balanced requirements on firms once they are unionized. The remaining nine Canadian provinces as well as the federal government, on the other hand, tend to impose upon unionized firms regulations that are biased and prescriptive.

37 See the Appendix 3 for details on how the scores were computed.

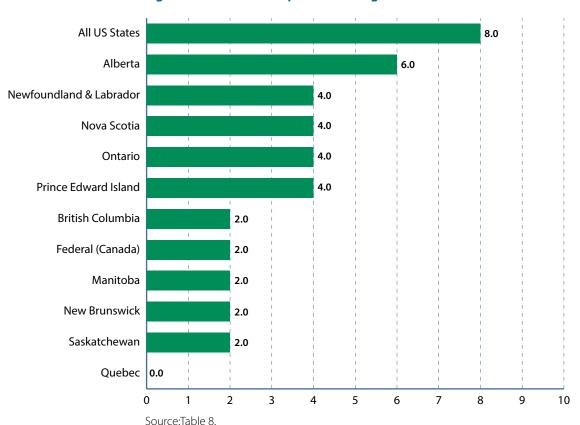


Figure 3: Scores for Component 3—Regulation of Unionized Firms

Index of Labour Relations Laws

The Index of Labour Relations Laws provides an overall measure of the level of balance and promotion of labour market flexibility in the various jurisdictions' labour relations laws. It is a composite measure of the three components analyzed and discussed previously: (1) Organizing a Union; (2) Union Security; and (3) Regulation of Unionized Firms.

The 24 US Right-to-Work (RTW) states have the most balanced and least prescriptive labour relations laws amongst the 61 jurisdictions (10 Canadian provinces, the Canadian federal government, and 50 US states). Each received a score of 8.5 out of 10.0. Recall that these states have taken advantage of the power given by federal legislation to make paying union dues voluntary. This is the only difference between RTW states and non-RTW states in the United States. The remaining 26 US states were tied for the 25th position with an overall score of 6.8.

Canadian jurisdictions fared poorly overall. The Canadian provinces and the federal government occupied positions 51 to 61. The highest scoring Canadian jurisdiction, and the only one with a score above 5.0, is Alberta with an overall score of 5.3. The next highest are Ontario and Newfoundland & Labrador, tied at a score of 3.4. The Canadian federal government (score 1.1) and Manitoba (score 1.8) have the most rigid and biased labour relations laws. The other provinces range from 2.1 (Quebec) to 3.2 (Saskatchewan). Overall, the trend is quite clear: US states tend to have balanced labour relations laws focused on providing workers and employers with choice and flexibility. Canadians jurisdictions, on the other hand, generally have much more biased and prescriptive labour relations laws (table 9, figure 4).

Table 9: Index of Labour Relations Laws (scores out of 10; ranks out of 61)

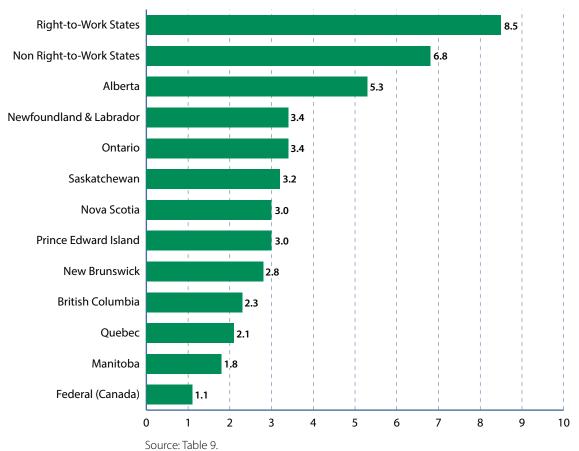
	Index of Labour Relations Laws		Organizing a Union		Union Security		Regulation of Unionized Firms	
	Score	Rank	Score	Rank	Score	Rank	Score	Rank
British Columbia	2.3	58	5.0	57	0	51	2.0	56
Alberta	5.3	51	10.0	1	0	51	6.0	51
Saskatchewan	3.2	54	7.5	2	0	51	2.0	56
Manitoba	1.8	60	3.3	60	0	51	2.0	56
Ontario	3.4	52	6.3	53	0	51	4.0	52
Quebec	2.1	59	6.3	53	0	51	0.0	61
New Brunswick	2.8	57	6.3	53	0	51	2.0	56
Nova Scotia	3.0	55	5.0	57	0	51	4.0	52
Prince Edward Island	3.0	55	5.0	57	0	51	4.0	52
Newfoundland & Labrador	3.4	52	6.3	53	0	51	4.0	52
Federal (Canada)	1.1	61	1.3	61	0	51	2.0	56
US Right-to-Work States	8.5	1	7.5	2	10	1	8.0	1
US Non Right-to-Work States	6.8	25	7.5	2	5	25	8.0	1

Note 1: Right-to-Work States include: Alabama, Arizona, Arkansas, Florida, Georgia, Idaho, Indiana, Iowa, Kansas, Louisiana, Michigan, Mississippi, Nebraska, Nevada, North Carolina, North Dakota, Oklahoma, South Carolina, South Dakota, Tennessee, Texas, Utah, Virginia, and Wyoming (Zycher et al., 2013). At the time of writing, Indiana's Right-to-Work law is the subject of a legal challenge under the state's constitution (Carden, 2014, Aug. 22).

Note 2: For details of scoring, see table 1 and Appendix 3.

Sources: Federal (Canada): Canada Labour Code, 1985; British Columbia: Labour Relations Code, 1996; Alberta: Labour Relations Code, 2000; Saskatchewan, The Saskatchewan Employment Act, 2013; Manitoba: The Labour Relations Act, 1987; Ontario: Labour Relations Act, 1995; Quebec: Labour Code, 1977; New Brunswick: Industrial Relations Act, 1973; Nova Scotia: Trade Union Act, 1989; Prince Edward Island: Labour Act, 1988; Newfoundland & Labrador: Labour Relations Act, 1990; B-22: An Act to Amend the Labour Relations Act; US states: National Labor Relations Act 1935; National Labor Relations Board, 2014; various personal correspondence and case law, see References for details.

Figure 4: Index of Labour Relations Laws



Unionization Rates and Labour Relations Laws

This section presents a basic, preliminary, statistical analysis of the relationship between labour relations laws and unionization rates. We begin with a simple analysis of the relationship between a jurisdiction's unionization rate and its scores on certain provisions of labour relations laws. In order to determine the relationship between labour relations laws and 2013 unionization rates (the most recent year for which data are available), correlations are used. A correlation is a statistical measure of the relationship between two indicators. The value of a correlation can range from -1.0 to +1.0. A negative correlation means that the two indicators are negatively related; that is, they move in opposite directions. A negative correlation (between 0 and -1.0) between labour relations laws and unionization rates indicates that a high score for certain indicator is associated with lower unionization rates. For example, a negative coefficient for mandatory union membership means that jurisdictions with such a rule have a tendency towards higher unionization rates. Alternatively, a positive correlation would show a tendency for a lower unionization rate. The strength of a correlation is determined by how close the value is to 1.0 or -1.0: a negative correlation of -0.83, for example, is stronger than one of -0.29.

It is critical to note that, even if the indicator and unionization rate are correlated, it does not mean that one causes the other. A higher level of statistical analysis is needed to determine causation. As a first step, however, correlations do provide some interesting insights into how labour relations laws relate to unionization rates.

Correlations were calculated to determine the simple statistical relationship between private-sector and total unionization rates in Canadian provinces and US states and the scores for six indicators of labour relations laws (where higher scores indicate higher levels of labour-market flexibility): (1) automatic certification and decertification (that is, no secret-ballot vote); (2) certification and decertification application differential; (3) remedial certification, (4) first contract provisions; (5) mandatory dues payment; (6) mandatory union membership (table 10). These aspects of labour relations laws

Table 10: Statistical Analysis of Selected Provisions of Labour Relations Laws and Unionization Rates

	Private Union Coverage Rates	Total Union Coverage Rates
Automatic certification	-0.56	-0.66
Remedial certification	0.43	0.42
Automatic decertification	-0.35	-0.43
Certification-decertification differential	-0.25	-0.29
Allowing mandatory union membership	-0.70	-0.83
Allowing mandatory union dues	-0.54	-0.60
First contract provisions	-0.63	-0.67

Note 1: There are two ways of measuring unionization rates: (1) the percentage of the workforce that are members of a union; and (2) the percentage of the workforce that are covered by collective agreements (union contracts). This paper uses the latter measure because it includes a broader range of workers who are directly affected by union-employer negotiations.

Note 2: All of the correlation coefficients are statistically significant at 1% level, except for the correlation coefficient between the private-sector unionization rate and the differential between certification and decertification application thresholds, which is significant at a 5% level.

Note 3: Michigan and Indiana became Right-to-Work states in 2012 and 2013, respectively, so that they have only recently stopped allowing mandatory union dues. As a result, the impact of these changes on unionization rates have likely been small, given the short time since they were enacted. This could influence the outcome of this analysis, possibly understating the association between unionization rates and jurisdictions that allow mandatory dues. In the previous edition of this study (Karabegović et al., 2009), the correlation was -0.67 for total unionization rates and -0.63 for private-sector unionization rates.

Note 4: In 2012, Newfoundland & Labrador removed the requirement for a secret-ballot vote to certify a union. However, this requirement was reinstated in 2014. Since the unionization rates come from the year 2013, Newfoundland & Labrador is scored as if it had automatic certification for the purpose of this analysis.

Note 5: Scores for each indicator range from zero to 10, where a higher value indicates a more flexible labour market. For details on how the scores were computed, see table 1 and Appendix 3.

Sources: Tables 1, 3–6; calculations by authors.

were chosen because they all apply to organizing a union (that is, to how a union gains and loses the right to represent workers) and to union security clauses. Jurisdictions that received lower scores for these indicators in the Index of Labour Relations Laws are expected to have higher rates of unionization. Other provisions of labour relations laws covered in this study regulate the interactions between firms, unions, and workers once a business has been unionized and thus we should not expect to find a correlation between these provisions and unionization rates.

Interestingly, the aspect of labour relations laws that shows the strongest relationship with unionization rates is the presence of mandatory union

membership. The analysis indicates a negative correlation between total (and private) unionization rates and the ability of unions to impose mandatory union membership of -0.83 (-0.70).

Another aspect of labour relations laws that is correlated with unionization rates is mandatory dues payment: the simple correlation for the total unionization rate indicates a -0.60 relationship between mandatory payment of union dues and unionization rates (-0.54 for the private-sector unionization rate). This means that in jurisdictions where mandatory union dues are not permitted, there tends to be lower unionization rate. This is particularly interesting since the two aspects of labour relations laws related to union security shows two of the strongest relationships (negative) with unionization rates.

In addition, the correlation between first contract provisions and total unionization is -0.67 (-0.63 for the private-sector unionization rate). This suggests that providing a labour relations board with the power and discretion to help establish a first collective agreement may have an impact on unionization rates.

While the correlations for the other variables analyzed were not as strong, in most cases the relationships (positive versus negative) with unionization rates were still in line with expectations. For instance, the correlation between automatic certification and unionization is -0.66 (-0.56 for the private-sector unionization rate), which indicates that requiring a secret-ballot vote for certification is associated with lower unionization rates. Along the same lines, the presence of a certification-decertification application differential was associated with lower unionization rates (table 10).

The correlation with remedial certification is the only aspect of labour relations laws whose correlation was different from what was expected. That is, the correlation between remedial certification and unionization was positive, meaning that unionization rates tend to be higher in jurisdictions that do not allow their labour relations boards to grant remedial certification. Correlation coefficients should be used with caution since they are unable to capture other indicators that have an impact on unionization rates. To do this, one needs do a proper empirical analysis.

Overall, the correlation estimates provided results that are in line with expectations based on previous empirical research and intuitions about the relationship between certain aspects of labour relations laws and unionization rates. However, a more thorough empirical test is needed in order to determine whether causal relationships exist between these aspects of labour relations laws and unionization rates.

³⁸ A jurisdiction receives a score of 10 if the legislation does not allow unions to require mandatory dues payment as condition of employment. For further details on the methodology, see the Appendix 3.

Conclusion

This study evaluates the extent to which labour relations laws promote flexibility in the labour market while balancing the needs of employers, employees, and unions. Labour relations laws hinder the proper functioning of a labour market and thus reduce its performance when they favour one group over another or are overly prescriptive. The functioning of labour markets is encumbered by the imposition of a resolution to labour disputes rather than fostering negotiation between employers and employees. Empirical evidence from around the world indicates that jurisdictions with flexible labour markets enjoy higher rates of job creation, greater benefits from technological change, and higher rates of economic growth.

This study measures the labour relations laws in the private sector for the 10 Canadian provinces, the Canadian federal jurisdiction, and the 50 US states. The overall results suggest four groups of jurisdictions. Among the 61 jurisdictions—10 Canadian provinces, the Canadian federal government, and 50 US states—the 24 US Right-to-Work states maintain the most balanced and least prescriptive labour relations laws. The remaining 26 US states were tied for the 25th position.

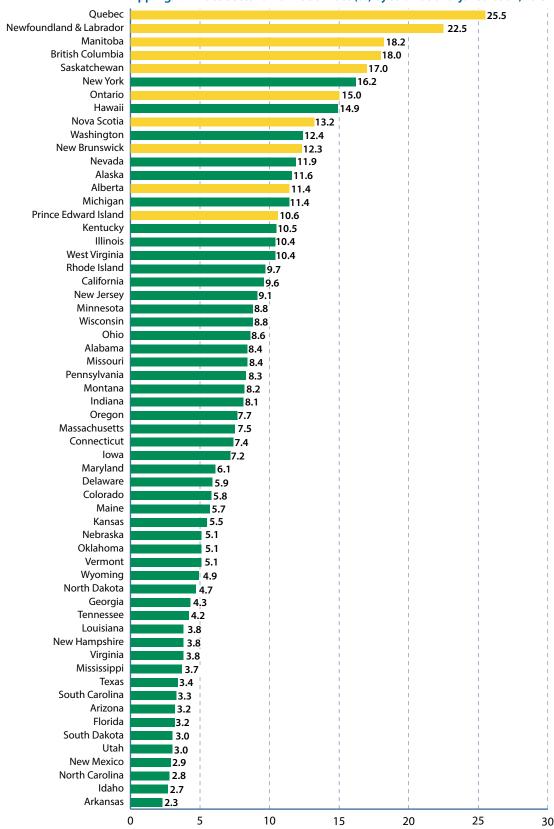
Alberta falls into a third category as it scored well ahead of other Canadian jurisdictions though it fell short of competing with US states. Finally, there are the remaining nine Canadian provinces and the Canadian federal government. The federal government and Manitoba had the most rigid and biased labour relations laws. The highest score in this third group belonged to Ontario and Newfoundland & Labrador (3.4) but this is half the score received by non-Right-to-Work states.

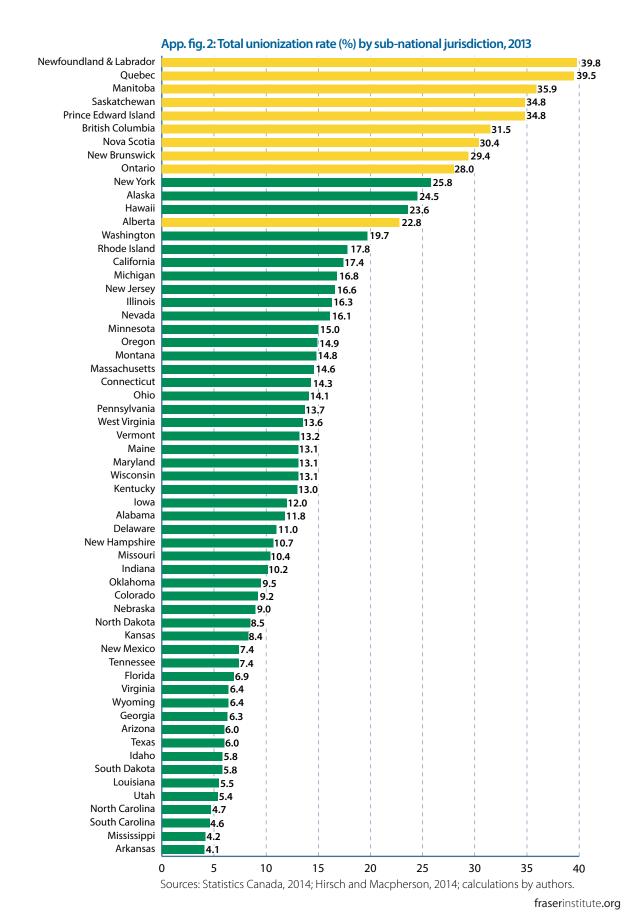
The study also analyzes the relationship between labour relations laws and unionization rates using basic correlation statistics. The aspect of labour relations laws that showed strongest negative relationship with unionization rates is mandatory union membership. This means that jurisdictions where mandatory union membership is not permitted tend to have lower unionization rates.

Overall, this study finds that the labour relations laws in the Canadian provinces are much less balanced and flexible than their US counterparts. Empirical evidence shows that labour market flexibility is of great benefit to the economy and thus to the people living within a jurisdiction. In order to promote greater flexibility in the labour market, Canadian provinces would be well advised to pursue balanced and less prescriptive labour laws.

Appendix 1 Unionization Rate by Sub-national Jurisdiction

App. fig. 1: Private-sector unionization rate (%) by sub-national jurisdiction, 2013





Appendix 2 Other Important Aspects of Labour Relations Laws

In addition to the labour relations provisions discussed above, there are a number of other important aspects of labour relations laws that affect the balance and flexibility of the labour relations environment. These other aspects are not currently included in the Index of Labour Relations Laws, either because it is difficult to develop objective measures for them or because there is insufficient empirical evidence about what the optimal provision might be. This appendix briefly discusses four additional features of labour relations laws: (1) the definition of a bargaining unit, (2) the timing of certification votes, (3) the mechanism for certification votes, and (4) the balance of information during unionization drives.

Definition of a bargaining unit

An important factor in the unionization process is the definition of a bargaining unit. The bargaining unit can vary considerably, from a small group of workers with similar job functions to entire firms. The ability to define the bargaining unit varies from restrictive, where a Labour Relations Board has considerable discretion in deciding who is in the bargaining unit, to flexible, where the definition of the bargaining unit is strictly a matter of open negotiation between union and employer. While the definition of a bargaining unit affects the number of unionized workers and thus the unionization rate, it also has an impact on the structure of collective bargaining. Where there is flexibility in determining the bargaining unit, employers could have multiple collective bargaining agreements rather than one comprehensive contract. Moreover, the definition of a bargaining unit is closely linked to successor rights, as the ability of an employer to reorganize an uncompetitive business is significantly affected by the size, structure, and number of contracts inherited upon purchase.

There are three important questions worth exploring in future research. (1) How is the appropriate bargaining unit determined? (2) Does the Labour Relations Board have discretion over the definition of a bargaining unit? (3) Are professionals or any other occupations excluded?

Voting mechanism

Once a vote for certification (or decertification) has been authorized by a Labour Relations Board, there are several ways to determine if the vote was successful. One way is to base it on a simple majority (50%+1) of those casting valid votes. For example, if there are 100 workers in a bargaining unit but only 50 show up to vote, then only 26 votes in favour of the union are needed to certify the union. Currently, seven Canadian provinces (Alberta, Saskatchewan, Manitoba, Ontario, New Brunswick, Nova Scotia, and Prince Edward Island) and the US states compute the outcome of the vote using this method. Alternatively, the outcome of a vote could be based on a majority of

votes cast in the bargaining unit. For instance, if there are 100 workers in a bargaining unit, there must at least be 51 workers who vote in favour of the union in order for the unit to become certified. Quebec is the only jurisdiction where this method is used. Lastly, and similar to the first method, the outcome of a vote could be based on a majority (50%+1) of those casting valid votes as long as a certain percentage of workers in a unit cast a vote. The required percentage of workers in the bargaining unit that have to cast a ballot in order for the vote to be valid ranges from 35% in the Canadian federal jurisdiction to 70% in Newfoundland & Labrador. In this case, if there are 100 employees in a unit in Newfoundland & Labrador, at least 70 of them must vote and at least 36 of them must support the union in order for the union to be certified. British Columbia and Saskatchewan also use this method.

One may criticize the first method because it allows a small, active minority to certify or decertify a union for all employees in the bargaining unit. The second method may similarly be criticized for allowing an equally active minority to influence employees so that they fail to participate in the election so the certification or decertification is thwarted. Some provinces have tried to address this imbalance by introducing the third method. One may argue that those workers who do not show up to vote are indifferent about certification. Empirical evidence, however, suggests that this might not be true. Ahlburg (1984) simulated changes in voting rules and found that requiring a majority of a unit to cast votes, as opposed to basing the vote outcome on a majority of votes cast, would lead to a significant reduction in the number of elections won by unions. Determining which voting mechanism achieves the greatest degree of balance and flexibility is subject to debate but it seems reasonable to expect that a majority of workers in a unit cast a ballot, whose preferences will determine the vote outcome (the third method).

Timing of voting

The time between authorization for a vote on certification (or decertification) and the date of the vote itself can have an important impact on voting outcomes. Weiler (1983) explained that, if the time is too short, then employers and unions may not have adequate time to voice their concerns to workers regarding unionization. On the other hand, if the time is too long, then employers and unions may have too much time to voice their opinion and run into the danger of committing an unfair labour practice and over-stepping their boundaries. While some research has shown that union certification is less likely if the vote is delayed, it is uncertain if this is because of the delays themselves or because of what caused the delays, such as litigation (Riddell, 2010). Furthermore, it is unclear what the optimal time frame would be. It may be that the five days allowed in Ontario is too short while the 42 days allowed in the United States is too long. The optimal length of time between an authorization of a vote and the vote itself would be a fruitful subject of research.

Balance of information

The balance of information is closely related to the timing of voting because one of the main criticisms of a short time between authorization for a vote and the date of the vote itself is the inability of employers to share information about unionization with workers. To have the greatest degree of information and choice afforded to workers, it is important to have balance between the information from unions and employers. To achieve this, there should be no barriers in place for parties to share information with workers. An example of an improvement in the balance of information afforded to workers was Saskatchewan's 2008 change to allow employers to communicate directly with workers, something that was previously prohibited during unionization drives. Balance of information is also served by prescribed penalties for unions or employers that overstep their boundaries and misinform or intimidate workers. All jurisdictions have penalties for such unfair labour practices. It is important that the penalties be equal for unions and employers.

Appendix 3 Methodology

The Index of Labour Relations Laws provides an overall measure of how balanced a jurisdiction's labour relations laws are and to what extent they promote labour market flexibility. The Index is based on the scores of 11 indicators examined in the study. These indicators are grouped into three components of labour relations law: (1) Organizing a Union, (2) Union Security, and (3) Regulation of Unionized Firms. Each indicator is given equal weighting within its component and each component is given equal weighting in the overall index.³⁹

1 Organizing a union

a Mandatory secret-ballot vote

This indicator measures whether a vote by secret ballot for certification and decertification is mandatory. If the legislation requires a mandatory vote by secret ballot for both certification and decertification, a jurisdiction gets a score of 10. If the legislation requires a mandatory vote for one, either certification or decertification, a jurisdiction gets a score of 5; otherwise, it gets a score of zero.

b Remedial certification

If the legislation provides the Labour Relations Board with the power to certify a union without a mandatory vote by secret ballot when an employer commits an unfair labour practice, a jurisdiction gets a score of zero; otherwise, it gets a score of 10.

c Difference between certification and decertification thresholds for application

The value for this indicator is calculated as the difference between an application for decertification threshold and an application for certification threshold. The score for this indicator is calculated as follows:

$$(V_{\text{max}} - V_i) / (V_{\text{max}} - V_{\text{min}}) \times 10$$

The V_i is the actual difference in the thresholds, while V_{min} is set to zero and $V_{\rm max}$ to 15. $V_{\rm max}$ is set at 15 since the largest difference between the decertification and certification thresholds for application among the 61 jurisdictions is 15 percentage points (the Canadian federal government).

d First contract provisions

If the legislation does not allow a Labour Relations Board to either force binding arbitration on one or both parties or directly impose terms and conditions

³⁹ Ideally, each indicator would be weighted according to its impact on the economy. However, there is insufficient evidence in the existing literature on the relative impact of each indicator to allow for such a methodology.

of a first collective agreement, a jurisdiction gets score of 10. If the Board has the power to resolve first contract disputes using both of these mechanisms, a jurisdiction gets a score of zero; if legislation allows one but not the other, a jurisdiction gets a score of 5.

2 Union security

a Mandatory union membership

If the legislation does not prohibit a union and employer from including a clause in their collective agreement that requires membership in a union as a condition of employment, a jurisdiction gets a score of zero; otherwise it gets a score of 10.

b Mandatory union dues

If the legislation requires or allows mandatory payment of dues by those employees who are not members of a union, a jurisdiction gets a score of zero; otherwise it gets a score of 10.

3 Regulation of unionized firms

a Successor rights

If, in general, a new employer is bound by the existing collective agreement, a jurisdiction gets a score of zero; otherwise, it gets a score of 10.

b Technological change

If the legislation requires an employer to inform the union (or in some Canadian jurisdictions, the Minister of Labour) before technological change can take place, a jurisdiction gets a score of zero; otherwise, it gets a score of 10.

c Arbitration of disputes

If the legislation requires every collective bargaining agreement to include a mechanism for final and binding settlement (i.e., arbitration) of a grievance (regarding the application, interpretation, or alleged violation of the existing collective agreement), a jurisdiction gets a score of zero. If the legislation allows parties to exhaust non-binding resolution mechanisms and only enter arbitration voluntarily, it gets a score of 10.

d Replacement workers

If the legislation allows or does not prohibit the hiring of replacement workers by an employer during a legal strike or lockout, a jurisdiction gets a score of 10; otherwise, it gets a score of zero.

e Third-party picketing

If the legislation allows striking employees to picket businesses other than their own employer, a jurisdiction gets a score of zero; otherwise it gets a score of 10.

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About the Authors



Charles Lammam

Charles Lammam is Resident Scholar in Economic Policy at the Fraser Institute. Since joining the Institute, Mr. Lammam has published over 30 comprehensive reports and 150 original commentaries on a wide range of economic policy issues such as taxation, government finances, investment, entrepreneurship, income mobility, labour, pensions, public-private partnerships, and charitable giving. His commentaries have appeared in every major Canadian newspaper including the *National Post, Globe and Mail, Ottawa Citizen, Toronto Sun, Montreal Gazette, Calgary Herald,* and *Vancouver Sun*. Mr. Lammam regularly gives presentations to various groups, comments in print media, and appears on radio and television broadcasts across the country to discuss the Institute's research. He has appeared before committees of the House of Commons as an expert witness. Mr. Lammam holds an MA in public policy and a BA in economics with a minor in business administration from Simon Fraser University.



Hugh MacIntyre

Hugh MacIntyre is a Policy Analyst at the Fraser Institute. He has co-authored numerous studies on topics such as government finances and government performance. His commentaries have appeared in various media outlets including the *National Post* and the American Enterprise Institute's prestigious magazine, *The American*. Mr. MacIntyre holds an M.Sc. in Political Science from the University of Edinburgh and an Honours B.A. from the University of Toronto.

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