

# Alberta Prosperity Initiative



Comparing Public and Private Compensation in Alberta

by Amela Karabegović and Jason Clemens

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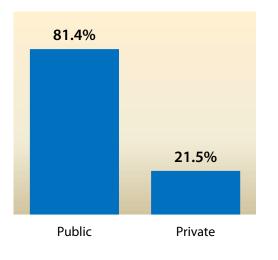
### **Executive summary**

As Alberta's provincial government continues to struggle with both deficits and finding ways to constrain spending, there is heightened interest in how wages and non-wage benefits (total compensation) in the public sector compare with those in the private sector.

While a lack of non-wage benefits data mean that there is insufficient information to make a definitive statement about total compensation between the private and

The data that are available indicate that the public sector enjoys a clear wage premium.

# Figure 1: Percentage of employees covered by a registered pension plan in 2011



public sectors, the data that are available indicate that the public sector enjoys a clear wage premium. There are also strong indications that the public sector has more generous non-wage benefits than the private sector.

### Wage comparison

After controlling for such factors as gender, age, marital status, education, tenure, size of firm, type of job, and industry, public sector workers (including federal, provincial, and local) located in Alberta in April 2011 enjoyed, on average, a 10.3 percent wage premium over their private sector counterparts. When unionization is factored in, the premium is reduced to 7.5 percent.

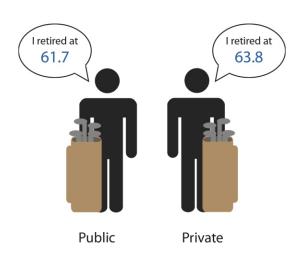
### Non-wage comparison

As of 2011, 81.4 percent of public sector workers in Alberta were covered by a registered pension compared to 21.5 percent of private sector workers (figure 1). In addition, 97.2 percent of the Alberta public sector workers who were covered by a pension enjoyed a defined benefit pension plan (i.e., guaranteeing a certain level of benefits in retirement) compared to 43.5 percent of private sector workers.

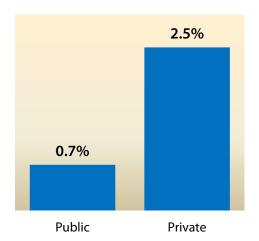
On average, between 2007 and 2011, public sector workers in Alberta retired 2.0 years earlier than private sector workers (figure 2).

Finally, in 2011, job losses were greater in Alberta's private sector than in the public sector: 2.5 percent of private sector workers lost their jobs compared to 0.7 percent of public sector workers (figure 3).

## Figure 2: Average retirement age, 2007–2011



## Figure 3: Job loss as a percentage of employment in 2011



### Introduction

As Alberta's provincial government continues to struggle with deficits and as it tries to constrain spending, there is heightened interest in how wages and non-wage benefits (i.e., total compensation) in the public sector compare with those in the private sector. This study replicates a previously used methodology by which to compare wages in the two sectors. It then compares some available non-wage benefits more generally in an attempt to quantify compensation differences between the province's public and private sectors.

This paper is divided into three distinct sections. The first reviews past research comparing the compensation of the public and private sector workers. The second section presents and explains the wage comparisons between the private and public sectors (broadly defined) in Alberta. It also presents a summary of the methodology employed to compare and calculate differences in wages between the two sectors. Finally, the third section compares three available non-wage benefits, namely, pension coverage, the age of retirement, and layoffs, in order to gauge the generosity of non-wage benefits in the private and public sectors.

### I A Review of Past Research

### **Understanding compensation**

Before reviewing the existing research comparing public and private sector compensation, it is necessary to highlight the different compensation components. The first and most readily understood of these is the wages people earn from their employment.

A second component of compensation is non-wage benefits. This category includes such benefits as retirement programs (including pensions and RRSPs), dental coverage, supplemental health benefits, fitness and related memberships, and the number of weeks of vacation an employee has. These benefits can represent a significant and meaningful portion of an employee's overall compensation.

A particularly important but frequently ignored third aspect of compensation is job security, and the potential difference in job security between the two sectors. The difference could arise from the fact that there is little to no risk of bankruptcy or insolvency in the public sector, at least in most industrialized countries. Public sector entities that encounter financial problems are generally bailed out in one way or another (i.e., they have "soft" budgets), which allows them to continue operating, in contrast to the private sector.<sup>1</sup>

In comparing compensation between the public and private sectors, it is important to include as broad a measure of wages and non-wage benefits as possible. Unfortunately, there are significant data barriers in Canada to measuring both non-wage benefits and job security. Despite that, the goal should be for public sector compensation to broadly reflect private sector compensation for similar and comparable positions. The key is that the *overall* compensation levels should be comparable between the public and private sector workers rather than the individual compensation components.

1 For a general discussion of this phenomenon, see Janos Kornai's 1986 work on what is referred to as "the soft budget constraint" (Kornai, 1986).

# Past research comparing wages in the public and private sectors

A number of studies have empirically quantified wage differences between similar occupations in the private and public sectors.<sup>2</sup> All of the studies summarized in this section, except for one, measure just the wage differences between the public and private sectors due to a lack of sufficient data on non-wage benefits.

In a seminal study, University of Toronto Professor Morley Gunderson (1979) examined wage differences between the public and private sectors using the 1971 Canadian Census data. He found that after controlling for the effect of other determinants of pay, the pure wage premium in Canada's public sector, was 6.2 percent for males and 8.6 percent for females compared to the private sector. Lower wage workers received the largest premium.

Shapiro and Stelcner (1989) extended Gunderson's analysis using the 1981 Canadian Census data. They found that after accounting for factors such as education, training, and work experience, the public sector wage premium was 4.2 percent for males and 12.2 percent for females in 1980.

In a comprehensive follow-up study, Gunderson and two of his colleagues expanded his original analysis by using Census data from 1971, 1981, 1991, and 1996, as well as data from the 1997 *Labour Force Survey* (Gunderson et al., 2000).<sup>3</sup> They found a public sector wage premium of 7.6 percent using the survey data and about 9.0 percent using the 1996 Census data. Overall, Gunderson et al. (2000) found that the findings from the two data sources were quite consistent, suggesting that, on average, those in the public sector received a wage premium of roughly 9 percent compared to similar workers in the private sector.<sup>4,5</sup>

- 3 The major advantage of the Labour Force Survey data is that public sector workers are explicitly identified, whereas they are not in the Census data.
- 4 While the 1996 Census data are not strictly comparable to those from earlier Censuses due to different industry classifications, the wage premium based on the 1996 data is higher than the wage premium from earlier Censuses (4.6 percent in 1971, 5.5 percent in 1981, and 8.5 percent in 1991) suggesting that the premium has potentially increased over the past few decades.
- 5 The Gunderson et al. (2000) estimate of the public sector wage premium in 1971 is different from that found in Gunderson (1979). This is likely due to slightly different specifications used in the 2000 study to make the wage premium estimates comparable across the three Census years (1971, 1981, and 1991). For example, Gunderson et al. (2000) includes those in the military, since those people could not be excluded from the 1991 Census, whereas people in the military are excluded in Gunderson (1979).

<sup>2</sup> Note that male-female wage and union/non-union wage differentials are outside of the scope of this study. For a survey of this literature, see Ehrenberg and Schwarz (1986) and Bender (1998).

Prescott and Wandschneider (1999) examined 1981 and 1990 survey data from Canada's *Survey of Consumer Finances* and found a higher public sector wage premium: 14.3 percent for males and 25.0 percent for females for 1990.<sup>6</sup>

Mueller (2000) examined differences in public sector wage premiums by the level of government (federal, provincial, and local) using Canadian data from 1988 to 1990 from the *Labour Market Activity Survey* (LMAS) and found that the premiums were the highest for federal government employees followed by those in local and provincial governments.<sup>7</sup> Overall, the public sector wage premium was 3.3 percent for males and 11.3 percent for females. At the federal level, the wage premium for public sector workers was 7.8 percent for males and 16.0 percent for females compared to the private sector. At the provincial level, the public sector wage premium was negative 3.5 percent for males and positive 10.9 percent for females. Finally, at the local or municipal level, the public sector wage premium was 5.0 percent for males and 6.6 percent for females over the private sector.

The Canadian Federation of Independent Businesses (CFIB) used 2006 Census data and found that it was not only wages that were higher in the public sector, but non-wage benefits, too. The CFIB found "that government and public sector employees are paid roughly 8 to 17 percent more than similarly employed individuals in the private sector" (Mallett and Wong, 2008:1). However, after "taking into account significantly higher paid [non-wage] benefits and shorter workweeks, the public sector total compensation advantage balloons past 30 percent" (Mallett and Wong, 2008:1).<sup>8</sup>

More recently, Tiagi (2010) examined the public sector wage premium for male and female workers in Canada using data from Statistics Canada's September 2008 *Labour Force Survey*. After controlling for individual differences among workers in the two sectors such as education, marital status, occupation, job tenure, and unionization, the author found that both male and female public sector workers receive a wage premium: 5.4 percent for men and 19.8 percent for women.

There are a few studies that have surveyed the research on public sector wage premiums in Canada. For instance, Bender (1998) completed a comprehensive review of past research on public sector wage premiums for this country and a select group of

<sup>6</sup> The authors found that from 1981 to 1990, the public sector wage premium for males slightly declined while it increased for females.

<sup>7</sup> Mueller (1998) obtained similar results. The author found that public sector wage premiums tend to be higher for federal government employees, females, and low-wage individuals.

<sup>8</sup> Mallett and Wong (2008) found that the public sector wage premium was the highest at the federal level (17.3 percent) followed by the municipal level (11.2 percent) and provincial level (7.9 percent). Once the non-wage benefits are included, the public sector compensation premium increases to 41.7 percent for federal workers, 35.9 percent for municipal workers, and 24.9 percent for provincial workers.

developed and developing nations. He found that the public sector wage premium in Canada was between 5 and 15 percent.

In 2006, James Lahey, an associate secretary at the Treasury Board Secretariat, reviewed the literature on the public sector wage premium in Canada and concluded that the "federal public service wage premium was likely well under 10 percent" (Treasure Board of Canada Secretariat, 2006: 73).

In an update of his study, in 2011 Lahey concluded that the public sector wage premium at the federal level was likely between 8 and 9 percent (Lahey, 2011). He argued that the total compensation premium for federal employees is roughly 15 to 20 percent once the non-wage benefits such as pensions are added.

Similar studies as those completed for Canada have been undertaken in other countries with similar results: the public sector is consistently observed to maintain higher wages and compensation than the private sector.<sup>9</sup> For example, Biggs and Richwine (2011) found that federal workers in the US enjoyed a wage premium of 14 percent. Critically, however, the authors spent considerable time developing estimates for both non-wage benefits and job security. They calculated that the premium enjoyed by the public sector increased to over 60 percent after non-wage benefits and job security were included.

### Explaining the public sector premium

There are a number of potential causes for the compensation premium observed in the public sector. Importantly, two of them yield an understanding of how such a premium might be managed and eliminated over time.

The first consideration is the type of constraint facing private sector wages. University of Toronto Professor Morley Gunderson noted in his seminal study, *Earnings Differentials between the Public and Private Sectors* (1979), that the main difference in the process of determining wages between the public and private sectors was the type of constraint imposed on wages. In the private sector, profits are the main constraint on wages. That is, to maximize profits, businesses set wages in line with workers' productivity so they can attract and retain the workers they require to compete.

In the public sector, on the other hand, Gunderson observed that the "profit constraint [on wages] is replaced by an ultimate political constraint" (1979: 230). That is, wages are determined through political bargaining between governments and

<sup>9</sup> See, for example, Smith (1976 and 1977), Venti (1985), Moore and Raisian (1991), Choudhury (1994), and Ramoni-Perazzi and Bellante (2007). Gregory and Borland (1999) and Ehrenberg and Schwarz (1986) provide prominent reviews of this literature for the US and/or other countries.

employee groups (largely unions). Ultimately, public sector wages "depend on their [i.e., employee groups'] ability to compete with other interest groups over the allocation of the public budget" (1979: 230). In addition, Gunderson explained that the government's ability to tax and borrow enables it to increase wages without having to reduce public services or substitute labour for other inputs such as capital. For these reasons, Gunderson concluded that the political constraint in the public sector on wages may be less binding (effective) than the profit constraint in the private sector.

The second consideration is the environment within which the private and public sectors exist. Most of the public sector operates as a monopoly, which means there is no threat from competition. In other words, individuals cannot choose an alternative provider for government services. This monopoly on service provision means that the unions representing public sector workers can demand a wage premium without fear of competitive pressure or responses from other firms.

In contrast, the private sector is rarely in a monopoly situation; when one does exist, it is normally imposed by the state. Competition and the threat of competition characterize non-monopoly markets. Firms, therefore, have to better balance the need to retain and attract workers with their ability to compete against other firms on price, quality, and cost.

These two environments have distinct effects on unions and the threat of strikes. Since the public sector operates in a monopoly with no competitors, workers can threaten and undertake strikes that disrupt service in the public sector with almost no fear of losing customers or a contract.

In stark contrast, in the private market, both employers and unions have an incentive to settle their differences quickly, especially under the increased competitive pressures from globalization. Unions know that excessive wage demands will make the firm uncompetitive, which will likely result in reduced future employment. Employers, on the other hand, face trade-offs between wage demands and a loss of market share, profitability, etc., that result from a prolonged dispute. Ultimately, the parties usually come up with a compromise acceptable to both.<sup>10</sup>

### Conclusion

The process of determining wages in the public sector is markedly different from that in the private sector. The public sector wage process is largely determined by political factors, while the process in the private sector is largely guided by market forces and

10 For an additional discussion about the differences between the public and private sector, see Christensen (1980), Kornai (1992), and Kornai et al. (2003).

profit constraints. These differences are amplified by the monopoly environment in which the public sector operates versus the competitive environment of the private sector.

The Canadian research examining wage differences between the two sectors over the past three decades consistently indicates a premium for public sector workers. The specific wage premiums vary depending on the data source and timing. What is clear, however, is that a premium exists.

### II Comparing Wages in Alberta's Public and Private Sectors

### Methodology and data sources

This study uses data from the *Labour Force Survey* for April 2011 (Statistics Canada, 2011). The sample for Alberta consists of 5,836 individuals for whom hourly wage rate, age, gender, education, province, marital status, type of work, and other characteristics were available. The analysis covers paid government and private sector employees only (persons 15 years of age and over with employment income); it excludes self-employment, unemployed persons, and persons not in the labour force. The *Labour Force Survey* data breaks down the data by sector (public and private) but unfortunately does not provide data for different levels of government. Therefore, the public sector wage premium in this section pertains to local, provincial, and federal workers located in Alberta.<sup>11</sup> In Alberta, federal government employees represent 7.0 percent of the total public sector (Statistics Canada, 2012e and 2012f). Provincial public sector workers represent 44.7 percent of the total public sector in the province, and local government employees represent the remaining 48.2 percent.<sup>12</sup>

The model used for estimating a public sector wage premium in Alberta is similar to methodology used in Gunderson et al. (2000):

 $w_i \quad P_i \quad x_i \quad i$ 

In the equation,  $w_i$  denotes the (log) hourly wage of individual i, P is the dummy variable denoting sectoral status (P = 1 for the public sector status), x is a vector of control variables such as gender, age, marital status, education, tenure, type of work (permanent or seasonal), size of firm, industry, and  $\eta$  is an error term which includes factors such as unobserved skill or ability, and  $\alpha$  and  $\beta$  are coefficient estimates. In

12 Some public sector employees do not reside or work in Alberta. These workers account for a very small percentage (statistically insignificant) of public sector workers in the province.

<sup>11</sup> Specifically, the *Labour Force Survey* considers the public sector as those working for federal general government (i.e., federal public administration), federal government business enterprises, provincial general government, provincial health and social service institutions, universities, colleges, vocational and trade institutions, provincial government business enterprises, local general government, local school boards, and local government business enterprises. Those in the military armed forces are excluded from the survey.

other words, the model controls for age, gender, marital status, education, tenure, type of work, size of establishment, and industry. Some may argue that age and tenure measure the same thing, i.e., experience. However, tenure in the *Labour Force Survey* only measures the length of time in the person's current job and thus ignores overall experience. The age indicator is needed to capture the individual's cumulative experience over different jobs over time.

Ordinary least squares (OLS) were used to estimate the wage premium in the public sector. Results are shown in table 1 using different control variables.

### Wage comparison results

Table 1 presents the technical results of the wage comparison analysis in Alberta. The second column of the table (Model 1) provides the public sector wage premium calculation without controlling for any factors. In other words, Model 1 represents a calculation that ignores variables like age, experience, education, etc., which we know influence wages. The Model 1 estimate indicates that wages in the public sector, including federal, provincial and local public sector workers located in Alberta are 26.7 percent higher, on average, than in the private sector.

Table 1's third column (Model 2) controls for personal characteristics such as gender, age, marital status, education, tenure, size of establishment, type of job, and industry. Controlling for these factors reduces the public sector wage premium in Alberta to 10.3 percent, on average.<sup>13</sup> It should be noted that Gunderson et al. (2000) also controlled for unionization, and when this variable is included in our model, the premium is further reduced to 7.5 percent.

There are some additional details provided in Table 1. For example, the characteristics shown in boldface in the table are called reference groups, and other indicators in the same category are compared to them. For example, "female" is the reference category for gender. This means that the estimate for the male indicator shows that men, on average, earn 16.1 percent more than women.

"Public sector" in the *Labour Force Survey* covers all levels of government: federal, provincial, and local.

13 The *Labour Force Survey* provides data by occupation and industry. However, public sector wage premium by industry and occupation is not presented in the paper due to small sample sizes.

Casual Work

	Model 1 Coefficient (%)	Model 2 Coefficient (%)		Model 1 Coefficient (%)	Model 2 Coefficient (%)
(Private)			(Full Time)		
Public	26.7***	10.3***	Part Time		-9.2***
(Female)			(Establishment, less than 20 e	mployees)	
Male		16.1***	Establishment, 20-99		6.5***
(Age 15-19)			employees		
Age 20-24		4.1**	Establishment, 100-500		13.4***
Age 25-29		18.0***	employees		
Age 30-34		18.7***	Establishment, more than 500		16.5***
Age 35-39		17.7***	(Agriculture)		
Age 40-44		18.6***	Forestry, Fishing, Mining, Oil and Gas		51.7***
Age 45-49		23.3***	Utilities		45.3***
Age 50-54		25.7***	Construction		42.5***
Age 55-59		20.3***	Manufacturing—durables		30.5***
Age 60-64		16.0***	Manufacturing non-durables		17.6**
Age 65-69		16.0***	Wholesale Trade		28.3***
Age 70 +		4.2	Retail Trade		0.7
(Married)			Transportation and		29.5***
Living in common-law		-0.1	Warehousing		
Widowed		-8.5**	Finance, Insurance, Real Estate		22.9***
Separated		-6.2**	and Leasing		
Divorced		0.7	Professional, Scientific and Technical Services		40.7***
Single, never married		-5.1***			13.8*
(Grade 0-8)			and Other Support		15.0
Some secondary		0.5	Educational Services		28.9***
11 to 13 years of schooling		6.6*	Health Care and Social		24.3***
Some post secondary		6.9	Assistance		
Post secondary certificate		18.9***	Information, Culture and		18.5**
Bachelors degree		28.2***	Recreation		
Masters degree or higher		34.0***	Accommodation and Food Services		-6.5
(Tenure 1-5 months)			Other Services		18.6**
Tenure 6-11 months		4.0**	Public Administration		34.7***
Tenure 1-5 years		8.6***	Constant	3.0***	2.3***
Tenure 6-10 years		16.3***	N	5,836	5,836
Tenure 11-20 years		23.0***		0.04	·
(Permanent Work)			Adjusted R Square		0.47
Seasonal Work		-6.8	Note: Self-employment is not in * = Significant at a 90% level; **		t a 95%
Contract Work		-7.9***	level; *** = Significant at a 99%		
Convol Work		7 2***	robust standard errors		

-7.3\*\*\*

#### Table 1: Public sector wage premium in Alberta, based on Labour Force Survey, April 2011 (Dependent variable: log of hourly wage)

robust standard errors. Sources: Statistics Canada, 2011; calculations by the authors.

### III Comparing Non-Wage Benefits in Alberta's Public and Private Sectors

It is important to emphasize that wages are only a part of total employee compensation, as discussed in the first section. Even though public sector workers in Alberta enjoy a wage premium, this does not tell us whether or not their overall compensation is higher, comparable, or lower to workers in the private sector.

Unfortunately, individual data on non-wage benefits such as pensions, vacation time, health benefits, etc., is not readily available in Canada, which explains the lack of research on this aspect of employee compensation.<sup>14</sup>

However, some aggregated non-wage benefit data can be examined to roughly surmise whether non-wage benefits are lower, comparable, or higher in Alberta's public sector than in its private sector. Three specific components of non-wage benefits are examined: registered pensions, average age of retirement, and job loss. To some degree, the latter is meant to measure job security.

### **Registered pensions**

The pension benefit is the first of the non-wage benefits to consider. It has two important dimensions. The first is the percentage of workers in both sectors covered by a registered pension plan. Table 2 summarizes the pensions data for Canada, and more specifically, Alberta. There is a dramatic difference in pension coverage between the public and private sectors. In 2011, the latest data available at the time of writing, 21.5 percent of private sector workers in Alberta were covered by a pension compared to 81.4 percent of public sector workers.

<sup>14</sup> It is critical that Canada's statistical agency, Statistics Canada, augment its current survey in order to begin collecting and analyzing data on non-wage benefits. In the United States, for example, data on non-wage benefits paid by private sector employers and state and local governments are collected by the Bureau of Labor Statistics (Biggs and Richwine, 2011). Non-wage data includes vacation time, holidays, sick leave, life and health insurance, short- and long-term disability insurance, defined benefits, and defined contribution pension plans (Biggs and Richwine, 2011). For federal employees, the Office of Management and Budget (OMB) and Office of Personnel Management (OPM) provides a similar level of detail on non-wage benefits.

		Canada		Alberta			
	Total (public and private) (b)	Private sector (b)	Public sector	Total (public and private) (b)	Private sector (b)	Public sector	
Total number of members who have:	6,065,751	2,924,786	3,140,965	627,513	341,219	286,294	
<ul> <li>Defined benefit plans</li> </ul>	4,484,011	1,530,035	2,953,976	426,824	148,572	278,252	
<ul> <li>Defined contribution plans</li> </ul>	969,207	817,645	151,562	94,918	(a)	(a)	
- Other pension plans	612,533	577,106	35,427	105,771	(a)	(a)	
Total employment, 2011 (b)	15,746,600	12,183,600	3,563,000	1,935,100	1,583,600	351,500	
% of employees covered by pension plans	38.5	24.0	88.2	32.4	21.5	81.4	
	As a % of t	otal number o	of members	As a % of t	otal number o	f members	
Defined benefit plans	73.9	52.3	94.0	68.0	43.5	97.2	
Defined contribution plans	16.0	28.0	4.8	15.1	n/a	n/a	
Other pension plans	10.1	19.7	1.1	16.9	n/a	n/a	

## Table 2: Registered pension plan (RPP) members, by type of plan and sector, as of January 1, 2011

Notes:

Numbers may not add up to the total due to rounding.

(a) Data suppressed by Statistics Canada.

(b) Total includes workers in the public and private sector as well as self-employed workers in incorporated business (with and without paid help). Self-employed incorporated businesses are included in the private sector because, like their public and private sector counterparts, they are able to have a registered pension plan (RPP).

Sources: Statistics Canada, 2012a, 2012b, 2012c; and calculations by the authors.

Second, for those who have pensions, what type of plan do they have? A defined benefit plan provides workers with a guaranteed benefit in retirement. A defined contribution plan, on the other hand, provides employees with a benefit that is based on their contributions, their employers' contributions, and earnings on the pension savings over time. A defined benefit plan is increasingly scarce in the private sector because of its high costs and risks for the employer. Specifically, in a defined benefit pension plan, the employer bears the financial risk since the employee is guaranteed the benefit. If returns on the pension's investment fund do not match expectations, the employer must increase the contributions to the plan to fully fund the guaranteed benefit. The comparative data presented in table 2 illustrate the increasing scarcity of defined benefit pensions. In 2011, of the workers in Alberta who were covered by a

	Total <sup>a</sup>	Public sector employees	Private sector employees	Difference <sup>c</sup> (in years)
Canada	61.9	60.0	62.4	2.5
Newfoundland & Labrador	60.0	58.2	62.3	4.1
Prince Edward Island	61.8	60.8	62.4 <sup>b</sup>	1.6
Nova Scotia	61.5	60.0	62.0	2.1
New Brunswick	61.3	59.1	63.1	4.0
Quebec	60.4	58.5	61.7	3.2
Ontario	62.1	60.7	62.0	1.3
Manitoba	62.4	60.6	62.6	2.0
Saskatchewan	62.7	60.3	62.7	2.4
Alberta	63.5	61.7	63.8	2.0
British Columbia	63.0	60.7	63.5	2.8

#### Table 3a: Average retirement age, from 2007 to 2011 (in years)

#### Notes:

(a) Total includes workers in the public and private sector, and self-employed individuals (including unpaid family workers).
(b) The retirement age of private sector workers in Prince Edward Island was not provided by Statistics Canada for the year 2011 since the sample was too small to be reliable. For Prince Edward Island, estimates based on a sample of less than 200 are not reported. Therefore, the retirement age for Prince Edward Island is based on four years of data, 2007 to 2010.
(c) Numbers may not add up to the total due to rounding.

Sources: Statistics Canada, 2012d; and calculations by the authors.

#### Table 3b: Median retirement age, from 2007 to 2011 (in years)

	Totalª	Public sector employees	Private sector employees	Difference <sup>c</sup> (in years)
Canada	61.5	59.7	62.6	2.9
Newfoundland & Labrador	59.7	58.2	62.9	4.7
Prince Edward Island	61.3	60.1	63.0 <sup>b</sup>	2.8
Nova Scotia	60.3	59.8	61.5	1.7
New Brunswick	60.8	59.1	64.0	4.9
Quebec	59.9	58.3	61.6	3.3
Ontario	62.1	60.6	62.4	1.8
Manitoba	62.3	60.6	62.9	2.4
Saskatchewan	62.0	60.2	62.3	2.1
Alberta	64.3	63.2	64.3	1.1
British Columbia	62.8	60.0	64.2	4.2

Notes and sources: Same as for Table 3a.

	Number of those who lost a job (in thousands)			Number of those who lost a job as a % of employment			
	Total	Public sector	Private sector	Total	Public sector employees	Private sector employees	Difference (percent- age points)
Canada	445.4	22.1	423.4	3.0	0.6	3.8	3.2
Newfoundland & Labrador	10.4	0.5	10.0	5.1	0.7	7.4	6.6
Prince Edward Island	2.5	0.2	2.3	4.1	0.9	5.8	4.8
Nova Scotia	14.2	0.8	13.3	3.6	0.7	4.8	4.1
New Brunswick	13.4	0.8	12.6	4.3	0.9	5.7	4.7
Quebec	106.8	4.3	102.5	3.1	0.5	4.0	3.5
Ontario	178.2	8.8	169.4	3.1	0.7	3.9	3.2
Manitoba	10.4	1.0	9.5	1.9	0.6	2.5	1.9
Saskatchewan	8.0	0.7	7.3	1.9	0.5	2.5	2.0
Alberta	37.4	2.5	34.9	2.1	0.7	2.5	1.8
British Columbia	64.1	2.5	61.6	3.5	0.6	4.3	3.7

#### Table 4: Job loss, by class of workers for Canada and the provinces, 2011

Notes:

Total job losses cover public and private sector workers only. Self-employed are excluded.

(a) Reasons for losing a job include: company moved, company went out of business, business conditions, and dismissal by employer. Job losses due to an end of temporary, casual, and seasonal work are not included.

(b) Numbers may not add up to the total due to rounding.

Sources: Statistics Canada, 2012a and 2012d; and calculations by the authors.

pension plan, 97.2 percent of those in the public sector enjoyed a defined benefit pension compared to 43.5 percent of those in the private sector.

Clearly, public sector workers in Alberta are much more likely to be in a registered pension plan, and are much more likely to receive a defined benefit pension, than their private sector counterparts.

### Average and median age of retirement

Tables 3a and 3b present information on the average and median age of retirement for all workers—public and private sector—between 2007 and 2011 both for Canada as a whole and for individual provinces.<sup>15</sup>

Regardless of whether the average or median age of retirement is used, public sector workers in Alberta retire at an earlier age than their private sector counterparts (as in fact is the case across the country). Specifically, on average, Alberta's public sector workers retire 2.0 years earlier than do the province's private sector workers. The gap decreases to 1.1 years if the median rather than the average is used.

### Job loss as a proxy for job security

Table 4 presents data on job losses (excluding those from temporary employment) for 2011 for Canada as a whole and the provinces. Table 4 includes job losses from firms moving location, firms that went out of business, changing business conditions, and dismissal. In 2011, 2.5 percent of those employed in the private sector experienced job loss in Alberta. The province was tied with Saskatchewan and Manitoba for the lowest job loss rate in the country. Nonetheless, this rate was much higher than that for the public sector of 0.7 percent. Put differently, between the public and private sectors, Alberta had the smallest gap in job loss rates among the provinces, but the gap was still meaningful.

### Conclusion

While there is insufficient data to calculate or make a definitive statement about non-wage benefits differences between the public and private sectors in Alberta, available data suggest that the public sector enjoys more generous non-wage benefits than the private sector. More specifically, public sector workers in Alberta have higher rates of pension coverage, higher rates of defined benefit pensions, lower ages of retirement, and lower rates of job loss than private sector workers in the province.

<sup>15</sup> Statistics Canada, which provided the data, noted that provincial data should be used with caution due to small sample sizes. Five-year averages were used (2007 to 2011) to try to mitigate the sample size problem.

### **Overall Conclusion**

The empirical analysis of wage data and a survey of available non-wage benefit data for Alberta indicate that public sector workers in the province enjoy higher wages and likely higher non-wage benefits than their private sector counterparts. Specifically, Alberta's public sector workers (i.e., federal, provincial, and local public sector workers) enjoy a 10.3 percent wage premium, on average, compared to private sector workers after adjusting for personal characteristics such as gender, age, marital status, education, tenure, size of establishment, type of job, and industry. When unionization is included in the analysis, the wage premium for the public sector in Alberta declines to 7.5 percent.

Available data for non-wage benefits in Alberta similarly indicates that public sector workers enjoy a premium over private sector workers. For example, 81.4 percent of public sector workers in Alberta were covered by a registered pension compared to 21.5 percent of private sector workers. Of those workers who have a registered pension plan, 97.2 percent of public sector workers were covered by a defined benefit pension compared to 43.5 percent of private sector workers. In addition, on average, public sector workers in Alberta retire 2.0 years earlier than private sector workers. Finally, public sector workers face lower rates of job loss than private sector workers. In 2011, 2.5 percent of private sector workers.

It is clear that public sector workers in Alberta enjoy higher wages—and likely higher non-wage benefits—than comparable workers in the private sector.

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