



# Pay Differences between the Government and Private Sectors: Labour Force Survey and Census Estimates

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## Executive Summary

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This report fills a gap in existing research on pay differences between government and private sector employees by analyzing in detail the current situation as well as historical trends. The report focuses on what economists refer to as a ‘pay premium’, which essentially refers to an average pay difference between employees in two sectors – government and the private sector – after taking into account a range of factors (other than industry) known to influence pay levels. By examining pay patterns within and between the government and private sectors, this report is intended to inform current discussions about responses to human resource management challenges within government, especially regarding workforce recruitment and retention.

The report provides estimates of government-private sector pay differences based on three large-scale micro data sources: (1) The 1997 Labour Force Survey, (2) the 1996 Census and (3) trends from the 1971, 1981 and 1991 Census public use files. While the Labour Force Survey and the Census are the most complete records of wage data by industry available in Canada, their relative strengths and weaknesses make neither data source entirely ideal for the task of addressing the complexities inherent in understanding the determinants of wage differences between industrial sectors. This report presents the most accurate estimates currently available, although readers should bear in mind the limitations of the data when interpreting the findings.

The 1997 Labour Force Survey (LFS) and the 1996 Census fill a gap in our knowledge by providing relatively current estimates of the public-private sector pay differences. They are complementary data sets in that the LFS has measures like collective agreement coverage, firm size, job tenure, hourly wages and a class-of-worker variable that designates whether the government is an employer. The census has measures of visible minority status, immigrant status, vocational training and language. However, the LFS and Census produce slightly different pay gap estimates, mainly because 1) the LFS results control for collective agreement coverage and 2) in the LFS, the government is identified as a separate employer, while in the Census, the public sector includes some private employers (for example, private schools and private hospitals).

Despite slight differences in the LFS and census estimates, they paint a fairly consistent current picture. The common thread of these results is that governments as employers tend to pay wage premiums whether they are in the public administration sector or in the broader public sector where private employers also exist. That is, government wages on average are estimated to be in the neighbourhood of 9 percent higher than in the private sector, with little difference across the three levels of government. If anything, this government pay ‘premium’ may be slightly lower at the federal

level (8.5 percent) and slightly higher at the provincial level (10 percent), although there is greater uncertainty about the federal premium (ranging from 7 percent in the LFS to 10 percent in the census). However, this overall pay gap masks considerable variation in the public-private pay gap when specific occupational groups are compared.

A combination of factors explains government-private sector pay differences. Notable in this regard are pay equity policies, which narrow the male-female pay differentials in government, and the tendency for governments to pay more than the private sector does for service jobs and less than the private sector wage rates for managers. In other words, the spread between the top and the bottom of the pay scale is less in government than in the private sector, likely a result of political, public and collective bargaining pressures.

In summary, while the evidence clearly shows that government employers pay a wage premium relative to private employers, that premium must be judged in light of the more egalitarian pay practices that seem to prevail in the public sector, especially with respect to women and less skilled workers where the premiums are usually largest. That may reflect political pressures as well as expectations that government should act as a "model employer," at least regarding compensation.

## **Summary of Labour Force Survey Results**

- Across the different elements of the public sector, an overall government pay 'premium' of 7.6% prevails based on 1997 Labour Force Survey estimates, after accounting for the influence of other factors that could influence pay (including workers' characteristics such as age and education, occupation, and union membership). This reflects a stringent definition of the public sector requiring that the individual both be in a public sector industry designation and have a government as an employer, where the latter is defined here as being owned by the government, not just funded or controlled by the government.
- An estimated overall average 'premium' of 7.6% for government employees varies moderately within most subsectors of the public sector, from highs of 11.4% in provincial governments, 10.3% in local governments and 9.2% in transportation and communication, to around 7% in the federal government, education and religious and other organizations, to a low of less than 1% in the health sector.
- In the education and health sectors much of the government pay premium reflects the fact that government employers in these sectors tend to employ personnel in higher paying (and therefore more skilled) occupations.
- The government wage premium was typically about 50% higher (i.e., rising from 7.6% to 11% in the aggregate) when it also reflected the impact of collective bargaining (i.e., the impact of collective bargaining was not controlled for).
- The public sector wage premium is higher for females than for males in all elements of the public sector except for local governments where they are higher for males, and in provincial governments where they are very similar.

- Looking within each sector, occupational skill premiums are considerably smaller in the government sector (including the federal government) compared to the private sector. The pay premium for employees in the managerial/administrative/professional occupations compared to employees in service occupations is only 10% in the government sector compared to 41% in the private sector. Workers in clerical occupations earn 16% more than do workers in service occupations in the private sector, but they earn 9% less than do service workers in the government sector.
- Comparing across the two sectors, the public sector wage premium is very high for service occupations (especially in the three levels of government). Service workers include those in protective services, food and beverage preparation and other service occupations. The public sector wage premium for this group is a result of a large premium for women in service jobs in the government sector compared to the private sector, possibly reflecting the impact of pay equity in those low-status jobs.
- For clerical workers, the public sector pay premiums are modest, tending to be similar to the public sector pay premiums for all occupations, both for males and females.
- For managerial/administrative/ and professional employees the public sector wage premiums are slightly below the average of all occupations in federal and provincial government jobs, and substantially below average in local governments.
- Overall, the tendency to pay less than the private sector is most prominent for managers and especially male managers. This begs the question, however, as to whether the wage premium for male managers in the private sector compared to females and other occupations is justifiable if in fact that premium is a reflection of discrimination rather than of real differences in value. This issue poses a dilemma for governments as employers if they find they are unable to compete with the private sector for the kinds of skills it needs.
- There were large variations in the government wage premiums by gender and level of government, especially for professionals. More research is necessary to establish the reasons for this variation.
- Of particular note is the higher government pay for professionals, and especially male professionals, in the social sciences compared to the natural and physical sciences. The relatively higher pay for social scientists in government may reflect a much closer correspondence between their job requirements and their education than is found in the private sector, where such graduates are more likely to work in a wider range of non-social science jobs.

## **Summary of 1996 Census Results**

- The analysis based on the 1996 census suggests that a government wage premium of about 10 percent exists at the federal level, and about 8.5 percent at the provincial and local levels. The public sector designation in the census uses the industry code designation, making it less precise than the public sector definition available in the Labour Force Survey. Therefore, some employees

will be categorized as being in the public sector even though they work for an organization that is privately owned. To the extent that this is the case, the average wage in those elements of the public sector that also contain some lower wage private sector workers will be biased downwards.

- A negative wage “premium” of 2.5 percent is found for the education sector compared to the whole of the private sector when Census data are used (the Census uses a broad definition of the public sector that includes private organizations not owned by governments). This premium is considerably smaller than the positive premium of 6.9 percent found using the LFS data (which is based on a narrower definition that requires government ownership). The difference between these two is mainly due to the private sector portion of the education sector in the census data, suggesting that private employers in the education sector pay considerably lower wages than do government employers. Again, this confirms the existence of a government pay premium even within a sector like education that has both private and government employers.
- Premiums of almost 12 percent are paid in the often-regulated sectors of transportation/communication and other utilities. Since there are numerous private employers in those sectors, this suggests that they may not be subject to the competitive pressures of conventional private sector employers who operate in a competitive and not regulated environment.

## Summary of Historical Trends

The results from the 1971, 1981 and 1991 census give rise to the following conclusions subject to the data limitations discussed in the analysis:

- Overall, the historical census figures portray a picture of a moderate government pay premium that increased very slightly from 4.6 percent in 1971 to 5.5 percent in 1981, and more substantially to 8.5 percent by 1991. Although the more recent 1996 census figures are not directly comparable, they also suggest that the increasing trend continued into 1996, where the premium was about 9 percent.
- However, limitations of the historical census data make it difficult to determine the degree to which the changes would be influenced by other factors such as collective agreement coverage, firm size, narrowly-defined occupational distributions and increases in the technological intensity and overall skill requirements of government employment. Further, governments underwent a significant change in the composition of employment over this period. Very large numbers of lower-paying clerical positions were eliminated, while the share of employment in the higher-paying professional and managerial jobs increased. Government workforces have also aged more rapidly as a result of a ‘hiring freeze’ over much of this period. As a general rule, earnings rise with age, experience and tenure.

## Questions for Further Research

Clearly there is room for further research in this important area. The above results raise a number of questions that merit further research:

- Why do low-wage clerical workers in the public sector get a small premium while other low-wage groups like service workers get a large public sector pay premium?
- Why do some levels of government appear to pay its male managers a small or even negative premium, while paying its male social scientists a large premium?
- Why are the public sector wage premiums so much larger in the education and especially health sector when there are no controls for differences in the occupational distribution, compared to other elements of the public sector where the results do not change much depending upon whether one controls for the occupational distribution?
- Why does the public sector pay premium appear to have increased since the 1970s, given the public sector restraint pressures that were going on over that period?
- To what extent do the public sector wage premiums reflect political pressures to be a “model employer” and not to emulate private sector compensation practices that could reflect such factors as discrimination and large wage disparities, and what are the consequences of this role?
- How would the analysis be affected by differences in non-wage aspects of compensation including pensions, fringe benefits, job security, bonuses and stock options?