

**Canadian Workers Most in Need of Labour Standards Protection:  
A Review of the Nature and Extent of Vulnerability  
In the Canadian Labour Market and Federal Jurisdiction**

by

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**Executive Summary**

A key question, from a policy viewpoint, is whether or not existing labour legislation, especially labour standards legislation, ameliorates economic vulnerability amongst the least well off in the labour market? The review of the extant evidence on the extent of economic vulnerability, together with the evidence provided for the federal jurisdiction, generated the following key results:

- Over time, the proportion of individuals in low income has remained in the range of 12-14%;
- Approximately 20-24% of workers earn less than \$10.00 per hour;
- Low wages tend to be associated with workers who are young, female, of low educational attainment, recent immigrants, and visible minorities; other characteristics such as being a lone mother or having a disability also tend to be associated with low wages;
- Low wages are also associated with a low incidence of receiving many common benefits; the result is that low wages and benefits are associated with low compensation;
- Low income persistence is evident; almost two-thirds of low income persons remain in low income for more than one year and one-quarter for five years; the same characteristics that are associated with a high risk of low income are associated with a high risk of remaining in low income over time.
- The main factor affecting transitions out of low income is an increase in earnings; other important factors include changes in family arrangements and transfer payment and social security.
- Nonstandard employment is associated with economic vulnerability; while not all nonstandard workers are vulnerable, whether one considers employees or the self-employed, economic vulnerability increases as job stability (proxied by part-year or part-time) decreases; nonstandard employment is also associated with lower incidence of benefits;

Among workers in the federal jurisdiction,

- The profile of workers differs from that of workers in the rest of Canada; there is a lower proportion female; relative to the rest of Canada, the age and tenure distributions of federal jurisdiction workforce is skewed toward the higher years.
- Low pay (wages) is far less common in the federal jurisdiction than in the rest of Canada; and a higher proportion of federal jurisdiction employees have various common benefits;
- With regard to hours of work and hours and work arrangements:
  - A larger proportion of federal jurisdiction employees work a standard workweek.
  - In addition, federal jurisdiction employees tend to work a substantial number of both paid and unpaid hours of overtime.
  - The proportion of workers regularly working weekdays and the proportion working flexible hours is high and is also much larger in the federal jurisdiction relative to the rest of Canada.

The paper utilizes the profile of vulnerable workers, based upon characteristics such as employment status, demographic characteristics, and job characteristics, to characterize vulnerable workers in the federal jurisdiction and identify areas in which labour standards may have a role. In addition, the analysis considered the extent to which labour standards are likely to reach (or not) vulnerable workers. Is there a role for labour standards? The research results suggest that there are several potential roles:

- Setting a federal minimum wage rate of \$10.00 in 2002 would have raised the wages of 2% of individual wage earners to a level that would be at around the level of the poverty line. Raising the minimum wage may, however, be a relatively blunt tool because many individuals in the labour market who would be affected by the increase in minimum wage belong to relatively well-off families.
- Relatively few workers are expected to benefit from increasing access to benefits; although it would certainly stand to reduce the economic vulnerability of low paid workers whose access is currently limited, it could also result in negative employment consequences.
- Employees in the federal jurisdiction tend to work a substantial number of *unpaid* hours of overtime; ensuring that overtime is paid through labour standards (enforcement) is likely a viable policy option.
- The assumption of independence of self-employed workers likely does not hold for many of the self-employed, especially those who work on a contract basis. This suggests the policy option of extending labour standards to them as “deemed employees.”

## 1. Introduction: Economic Vulnerability

There has been ongoing concern in Canada over the persistence of a fairly high overall poverty rate and the observation that a significant proportion of the working poor remain in low pay for prolonged periods of time.<sup>1</sup> Low paid work has always been a feature of the Canadian labour market. But, in addition to some jobs offering low wages, over the past several decades, significant shifts in work arrangements, such as hours and schedules of work, and changes in employment arrangements, exemplified by the dramatic rise of non-standard employment, have heightened economic insecurity.

These changes, combined with the vulnerability of many groups of workers in the labour market (e.g., those with low education or visible minorities or lone parents) have generated concerns that the extent and/or degree of *economic vulnerability* may be growing in some segments of the labour force. This poses a direct challenge to conventional policies aimed at alleviating the negative economic and social conditions of workers who are low paid and at risk in the labour market. It also presents an equity challenge in terms of ensuring economic opportunity exists for low paid workers as well as for those who have stable jobs and characteristics, such as higher education, that are associated with strong economic prospects over time.

Consequently, characterizing the nature and extent of economic vulnerability is not straightforward because vulnerability may take on many dimensions and occur in various circumstances.<sup>2</sup> Since vulnerability is a multi-dimensional concept, different dimensions may apply to employees with quite different employment contexts. For example, a highly paid contract worker may be at high risk of layoff (i.e., no or low job security), whereas a low paid worker may have a long term employment relationship that is relatively secure because of seniority rights. Some forms of vulnerability, such as low wages or poor working conditions, have a direct economic dimension. Other forms of vulnerability arise in a more general social context, such as discrimination; but discrimination also has a significant economic dimension.

Concern over undesirable labour market outcomes (low wages, long hours, unsafe working conditions) originated with the mass-production, industrial economy of the late 1800s and most of the 1900s. In the industrial period, these aspects of work were the main dimensions by which economic vulnerability were defined for purposes of labour policy. In the period of the early twentieth century, labour policy took the form of enacting labour standards in areas related to wages, hours of work, and the use of child labour. Health and safety standards are another area in which standards quickly evolved.

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<sup>1</sup> See Osberg and Xu (1999) and Osberg (2000) on poverty rates, Finnie and Sweetman (2003) on poverty dynamics and Picot, Morissette and Myles (2003) on the intensity of low income.

<sup>2</sup> See the extensive discussion in Saunders (2005) and Chaykowski (2005).

Among these areas of work, the steady enhancement of health and safety standards has remained somewhat contentious. But health and safety regulations generally have significant positive productivity feedback effects that (may more than) balance the costs associated with increasing workplace safety, rehabilitation, and so forth. For example, these regulations are associated with greater safety; hence, lower direct costs associated with lost time or training of replacement workers; and higher productivity. Regulating hours of work by instituting maximum daily or weekly hours and overtime rates of pay was seen as improving both safety as well as workers' quality of life. At least in the post World War II period, rising productivity and real wages, arguably, provided a basis for hours and overtime standards. More recently, moves to relax the hours regulations (e.g., in Ontario) were linked to the argument that firms needed increased flexibility in order to meet rising competitive pressures.

It has been generally recognized that wages or working conditions may exist that are so inadequate that the worker can neither sustain a basic standard of living nor work without a substantial risk to their health. Consequently, historically and over time, there has been a diverse set of policies aimed at alleviating the worst consequences of low pay and poor working conditions. These policies were originally primarily aimed at regulating workplace and labour market outcomes. More recently, however, a range of proactive policies that provides support and incentives for improved outcomes has supplemented regulatory policies.

The issue of workers' economic vulnerability, broadly characterized, has been the centre of recent policy analysis because of its apparent *persistence*, the complex *nature* (i.e., the characteristics and dimensions) of economic vulnerability, and the challenges it poses to conventional labour policies aimed at alleviating the disadvantages associated with poor economic status.<sup>3</sup> The purpose of this review is to contribute to a better understanding of which workers, especially among those in the federal jurisdiction, are relatively more likely to be in need of protection through government labour standards, by virtue of their vulnerability in the labour market. A second purpose is to shed some light on what conditions or factors labour standards policy might target if it is to successfully contribute to increasing the economic well being of vulnerable workers.

In this review I confine myself to *economic* vulnerability, especially low wages. But I also consider access to benefits as well as other related employment conditions, such as hours.<sup>4</sup> Finally, I consider the implications of changing employment arrangements, especially the rise in non-standard work, for economic vulnerability.

In the second section, I describe the approach that I adopt in this review to defining economic vulnerability. This provides a basis for the subsequent review of the evidence on the nature and extent of economic vulnerability in Canada and, more specifically, among workers in the federal jurisdiction. Section three provides the review and analysis of economic vulnerability in Canada. This includes a profile of the incidence of low pay over time, the incidence of low pay across key worker characteristics (such as age and

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<sup>3</sup> See Chaykowski (2005); Saunders (2005); and Vallée (2005).

<sup>4</sup> I therefore follow Chaykowski (2005).

sex), and the availability of benefits among low paid workers. I then assess the evidence regarding the extent of upward economic mobility of low paid workers. Finally, I consider, in some depth, the nature and role of non-standard work in economic vulnerability.

The fourth section analyses economic vulnerability in the federal jurisdiction. This section provides fresh evidence on the extent of low pay based on analysis using Statistics Canada's *Workplace and Employee Survey*. This section begins with a brief profile of workers in the private sector of the federal jurisdiction. The analysis focuses on the wages and benefits, hours, overtime and work schedules of workers in the federal jurisdiction compared to non-federal jurisdiction employees.

The fifth section focuses on policy considerations related to providing protection to vulnerable workers, especially those in the federal jurisdiction. The section begins with a look at some of the main policy-relevant empirical findings. The policy analysis then concentrates on policy options and the role for labour standards in relation to wages, benefits, hours and hours arrangements, and work arrangements (i.e., non-standard employment). A major focus is on the potential for increasing the minimum wage to alleviate the incidence of low paid work. The concluding section also provides a summary of the main empirical findings and policy conclusions.

## 2. Defining Vulnerability in the Canadian Labour Market and Federal Jurisdiction

There is no singular definition of vulnerability in the Canadian labour market. In contrast, most studies of vulnerability recognize the multi-dimensionality of the concept. The approach taken in this review is to focus on “economic” vulnerability. Even so, there are several dimensions to economic vulnerability, as well. The rationale for focusing on the economic dimension is that labour standards, generally, address workers’ economic and employment experience in the labour market. A further focus, in this analysis, is on low pay, defined as wages and benefits, and on work employment arrangements, which encompass such dimensions as hours, overtime, and nonstandard work.

While there is no generally accepted definition of a “low wage,” one recent study of workers’ low pay, as one dimension of economic vulnerability, defines low pay as being wages around \$10.00/ hour (see Saunders 2005).<sup>5</sup> As Saunders (2005:5) explains, the rationale for this cutoff is that it corresponds to the Statistics Canada LICO for a full-time worker:

“If converted to annual income at full-time hours, this corresponds approximately to the before tax low income cut-off (LICO) for a single, unattached person in a large urban area.”

The first justification, then, for considering wages less than \$10.00 as being low is that it is in the range of the wage associated with the Low Income Cutoff used by Statistics Canada, which is typically used as an approximation of the poverty line.<sup>6</sup> Using \$10.00/hour as an upper bound of low wages is also reasonable on other grounds. For

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<sup>5</sup> Saunders (2005) essentially follows Maxwell (2002) and Chung (2004) in this approach.

<sup>6</sup> Statistics Canada defines the LICO in relative terms:

“A family unit is considered “low income” when its income is below the cutoff for its family size and its community. A LICO is an income threshold below which a family will likely devote a larger share of its income to the necessities of food, shelter and clothing than an average family would.”

While the LICO is not generally considered a “poverty line,” it is generally considered at least a good approximation to a poverty line, and a good indicator of low pay. This use of the LICO is adopted in this paper as a measure of low pay – following the tradition of Dooley (1994), Morissette and Drolet (2000), Morissette and Zhang (2001), and Picot and Myles (2005).

For a thorough discussion of the concept of poverty, and of how to measure it, see Osberg (2000). Osberg (2000: 848) explains that one of the fundamental issues in conceptualizing and measuring poverty is whether one should define a poverty line in absolute terms (i.e., by defining some basic level of necessities) versus in relative terms (i.e., defined in relation to, for example, median, or average, income levels). Osberg (2000:849) notes that the LICO is defined in terms of “...its link to the percentage of income spent on necessities...”

I further explore the relationship between the minimum wage and the LICO in section 5 below, in my discussion of basic living standards, low income and policy responses based on minimum wages.

example, although higher than current minimum wages in Canadian jurisdictions, it is only *marginally* higher than the range of current provincial minimum wages.<sup>7</sup> It is normally acknowledged that wages around the government-mandated minimum wage may also meet the definition of a basic “living wage” – although the link between a “minimum wage” and a “living wage” is probably more so an historical one.<sup>8</sup>

As a consequence of these considerations, I, too, utilize \$10.00/hour as a significant point of reference for considering low wage levels. This break point is not uniformly accepted, and some published sources utilize alternative wage cutoffs in analyzing the wage distribution of workers.

A second area in which vulnerability may arise is in relation to work arrangements and hours. For example, workers may be required to work for longer hours with overtime, even in circumstances where they would prefer to decline the additional hours. Further, workers may be required or under pressure to work longer hours but they may not be paid at all or, if paid, they may not receive overtime pay rates for these additional hours of work. In these types of circumstances, workers with few or no labour market alternatives may be considered vulnerable.

Nonstandard employment includes part-time, temporary or self-employed work. These classes of workers may also work part-year. In the case of nonstandard workers, their economic vulnerability may arise from low pay, poor benefits, and job instability. While not all non-standard workers are employed under these conditions, where they do they would be considered likely to be vulnerable. Self-employed workers also have a further dimension of vulnerability in that they are typically not covered under most standards legislation.

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<sup>7</sup> Currently, minimum wages range from a low of about \$6.25 in Newfoundland, to \$7.45 in Ontario and \$8.00 in British Columbia, to highs of \$8.25 Northwest Territories and \$8.50 in Nunavut. For many provinces, these rates are scheduled to increase over the next two years. For example, in Ontario, the minimum wage is scheduled to increase to \$7.75 in February 2006 and then to \$8.00 in February 2007.

<sup>8</sup> Brennan (2000:62) points out, for example, that the earliest minimum wage orders, which applied to women, “...were based on the estimated cost of living for a single woman.” Of course, while wages below the minimum wage are not allowed, some workers may, nonetheless, be paid less than the legislated minimum.

### **3. The General Characteristics of Vulnerable Workers in the Canadian Labour Market**

#### **3.1 Focus of the Analysis**

This section considers the existing qualitative and empirical research evidence with regard to the labour market characteristics of vulnerable workers including their:

- Demographic characteristics (e.g., age, sex); and
- Job and employment characteristics [e.g., wages; hours; employment status (i.e., full-time regular employee versus non-standard form of employment); and benefits].

One main purpose, then, is to identify which workers are likely to be most vulnerable and in need of labour standards protection. That is, the review identifies some of the main characteristics associated with worker vulnerability.

There have been a variety of recent studies aimed at investigating two related issues regarding the economic status of workers at the low end of the earnings distribution. The first concerns the incidence of low paid employment.<sup>9</sup> The second concerns whether or not (or the extent to which) workers who are low paid improve their economic status over time. That is, do low paid workers experience upward economic mobility out of low paid employment into higher paying jobs?<sup>10</sup>

In what follows, I profile low paid workers in Canada. I begin by focusing on the incidence of low pay and how low pay has changed over time. I focus on the incidence of workers earning less than roughly than \$10.0 per hour as an indicator of the incidence of low paid work. I then consider several key characteristics of low paid workers, including their demographic characteristics (sex and age), employment status. Since wages are one component of earnings, I also examine their access to benefits. I then consider the evidence regarding workers' mobility out of low paid work.

One of the most important labour market developments of the past several decades has been the increase in nonstandard employment, including part-time, contract, temporary, and term employment. Many of these forms of employment can be less stable and of shorter term than regular, full-time jobs, and are therefore often referred to as being "precarious".<sup>11</sup> Nonstandard employment relationships are an important dimension of economic vulnerability.<sup>12</sup> Nonstandard work is, therefore, considered central to understanding economic vulnerability.

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<sup>9</sup> See Chaykowski (2005); Saunders (2005); Morrissette and Picot 2005).

<sup>10</sup> See Morrissette and Picot (2005) and Janz (2004).

<sup>11</sup> See Vosko et al (2003).

<sup>12</sup> See Chaykowski (2005).

An important component of the nonstandard labour force consists of the self-employed. While self-employment is sometimes associated with entrepreneurs, many of the self-employed are essentially contractors. The economic profile of the self-employed is varied, but there is some evidence that many have a number of the key characteristics typically associated with economic vulnerability. Therefore, while most of the analysis of vulnerability focuses on low paid work of *employees*, I also consider the issue of self-employment and vulnerability.

### 3.2 Low Pay and Low Paid Workers

#### *Low Income and Earnings, Low Wages, and Incidence Over Time*

There is evidence, based on a variety of general surveys that point to a significant degree of low paid work in Canada. Using a definition of low income based on the LICO, Picot and Myles (2005) report that over the period 1980-2002, the low income rate ranged from a low of about 10% to a high of about 14%.<sup>13</sup> This is broadly consistent with the results obtained by Morissette and Zhang (2001) who find that the proportion of individuals in low income was in the range of 12-14% over the period from 1993-1998.<sup>14</sup> Similarly, Census data for 2000 indicates that about 17% of employees working at least 30 hours per week and for a full year earned less than \$20,000.<sup>15</sup> Although taken for different years and different pay measures (i.e., after tax and transfer income versus labour market earnings), these data suggest that low pay (whether one considers earnings or income) is both a significant and ongoing feature of the labour market.<sup>16</sup>

Both low earnings and low *wages* have been systematically analyzed in the empirical research literature. Findings on the incidence and extent of low wages are thoroughly reviewed by Saunders (2005:13), who concludes:

“... that low-paid work (below \$10 per hour in 2001 dollars) among fulltime workers is particularly high for: women; young people; the less-educated; recent immigrants, especially those who are from visible minorities; lone mothers; unattached individuals; and persons with a disability.”

In their recent analyses of low wages in Canada, Morissette and Johnson (2005) analyze the incidence of workers across the wage distribution, defined by wage ranges. Their analysis makes use of three major surveys, including the *Survey of Work History* of 1981, the *Survey of Union Membership* of 1984, the *Labour Market Activity Survey* of 1986-1990, and the *Labour Force Survey* of 1997-2004. At the low end of the wage distribution, they consider the proportion of workers earning less than \$8.00/hour and the proportion of workers earning between \$8.00-9.99/hour.<sup>17</sup>

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<sup>13</sup> Note that Picot and Myles (2005) focus on *families* and utilize the LICO for net income (i.e., income *after taxes* and *after transfer payments*).

<sup>14</sup> Note that Morissette and Zhang (2001) examine the population aged 16 years and older. This would include those who are 65 and older. Their analysis utilizes the LICO to determine low income and makes use of the *Survey of Labour and Income Dynamics*.

<sup>15</sup> Source: Statistics Canada. 2001 Census: Analysis Series. *Earnings of Canadians; Making a Living in the New Economy*. Cat. No. 96F0030XIE2001013 (March) pp. 27-28.

<sup>16</sup> Note that these findings relate to either earnings or income, both of which are a function of the wage rate and hours worked.

<sup>17</sup> Wages are denominated in 2001 dollars.

Considering all workers in Canada, Morissette and Johnson (2005) find that the proportion earning wages less than \$10.00 per hour have remained in the range of roughly 20-24% over the past two decades.<sup>18</sup> Refer to Figure 1. As expected, a slightly larger proportion of workers earned less than \$8.00 than the proportion earning between \$8.00 and \$10.00. The proportion of workers earning wages in these ranges cycles over time; there is a slight downward trend in the proportion earning less than \$8.00 and slight increase in the proportion earning \$8.00 - \$10.00.

#### *Incidence of Low Pay by Sex*

The proportion of workers earning low pay has a pronounced gender dimension, although the nature of this feature has changed over time (see Figure 2). Whether one considers the proportion of workers earning less than \$8.00 or the proportion earning between \$8.00 and \$10.00, the proportion female that is low wage is substantially and consistently larger over time. However, as Figure 2 illustrates, the proportion female earning less than \$8.00 trended downward over the period of the late 1980s through the late 1990s before levelling off.

Among those earning less than \$8.00, the ratio of the percentage female to percentage male has trended downward over the entire period, from roughly 2.1 in the early 1980s to only 1.8 by 2004. In contrast, among those earning between \$8.00 and \$10.00, the ratio of the percentage female to percentage male has decreased much more significantly over the 1980s and 1990s, from around 1.9 in the early 1980s to 1.3 by 2004. (See Figure 3.)

#### *Incidence of Low Pay by Age*

The incidence of low pay by age declines with age up to the oldest usual working-age category (those aged 55-64 years), at which time it increases again. Refer to Figure 4. Not surprisingly, the age group with the highest incidence of low pay is youths (those aged 17-24) at over 60 percent – compared to roughly 20% for among workers aged 25-34, for example. As workers enter their middle 20s and beyond, the incidence of low pay changes relatively little until they approach the oldest usual working age years (ages 55-64).

A significant difference in the incidence of low pay between males and females was discussed above. These differences in incidence by sex also exist by age. For each age group, the incidence of low pay among females exceeds that for males (see Figure 4).

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<sup>18</sup> These percentages are in the same range as the results derived from Statistics Canada's *Workplace and Employee Survey* for 1999, which shows that around 30% of employees earned less than \$12.00 per hour.<sup>18</sup>

### *Low Pay and Benefits*

Among various common benefits, including pensions, insurance, supplemental medical plans, and dental plans, the proportion of workers with such nonwage benefits decreases with lower wages (see Figure 5 for incidence based on the WES). In 1999, around 60% of workers earning less than \$12.00 received no nonwage benefits. Results based on data for the *Survey of Labour and Income Dynamics* is consistent with this finding; in 2001, only about 12% of workers earning less than \$10.00 had insurance or retirement benefits (see Figure 6).

### *Low Pay and Employment Arrangements*

In general, there is a distribution of wage rates across workers, for any given type of work arrangement. For example, among workers employed full-time, there is a distribution of wages ranging from the level of roughly the minimum wage up to very high levels (especially when one considers the hourly pay equivalent of salaried workers). One major issue is whether or not certain employment arrangements are associated with low wages?

While extensive information on wage rates by employment arrangement is not generally available, some recent evidence comparing full-time to part-time jobs suggests that part-time jobs are associated with a substantially lower wage rate. In 2004, among employees aged 17 to 64, the average wage (median wage) of part-time workers was only \$12.47 (\$9.29) compared to \$18.31 (\$16.56) among employees holding full-time jobs.<sup>19</sup> Moreover, between 1981 and 2004, the median wage of employees in full-time jobs increased by 4.8% but decreased by 14.5% among employees in part-time jobs.<sup>20</sup> These data clearly suggest that part-time work is associated with lower rates of pay and that the pay level of part-time workers has deteriorated relative to full-time workers.

Studies examining differences in pay that consider the role of work arrangements tend to focus on either earnings, or income. In Section 3.4 below, I take up the issue of nonstandard employment and economic vulnerability, focusing on measures of earnings and income.

### *Economic Vulnerability: Low Pay, Benefits and Compensation*

Jobs that offer low pay are generally associated with two compensation disadvantages. First, low wage jobs are often associated with “bad jobs” – jobs that may offer low wages but also poor working conditions, little job security, few opportunities for training, and few benefits.<sup>21</sup> Second, since many benefits are tied to wages, poor benefits are often

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<sup>19</sup> See Morissette and Picot (2005: 21, Table 2). Note that these are hourly wages in 2001 dollars.

<sup>20</sup> See Morissette and Picot (2005: 21, Table 2). Between 1997 and 2004, median wages among full-time workers increased by 2.1% and among part-time employees decreased by 4.6%.

<sup>21</sup> For Canadian evidence on the “good jobs” “bad jobs” dichotomy see Economic Council of Canada (1990) and Betcherman et al (1994).

associated with low wage jobs. The findings of low incidence of nonwage benefits among low wage workers are therefore consistent with these explanations and with previous research on benefits.

### 3.3 Low Pay and Workers' Upward Economic Mobility

Workers are, at any point in time, distributed across wage or earnings levels. Over time, their earnings may grow or decline, depending upon their labour market experience (e.g., promotions to higher paying jobs) as well as other factors that affect their capacity to earn (e.g., hours constraints; health). One key issue is whether or not the relative economic position of workers tends to change; that is, whether there is upward or downward economic mobility. This issue is especially important in the context of low-paid employment.

Workers (and families) who experience prolonged or permanent low earnings may be more likely as well to have the next generation experience the same poor economic status.<sup>22</sup> Persons who are unable to improve their economic conditions may, therefore, experience a “poverty trap.”

In Canada, evidence for the 1990s suggests that there is a significant degree of persistence in low income among individuals (unattached) as well as families.<sup>23</sup> Morissette and Zhang (2001:12) find that of those who first experienced low income in 1994, around 30% remained in low income after 3 years and roughly 14% for five or more years.<sup>24</sup> Based on a different sample and analysis, Corak et al (2002) analyze the movements of workers into and out of low income over the period 1993 to the late 1990s. They find the overall incidence of low market income (net income) to be in the order of roughly 13% (3%) – compared, for example, to 10% (5.4%) in the US.<sup>25</sup> Among those entering low income in Canada (in 1993), 62% remained poor after one year, and around 24% remained low income over the five year period.<sup>26</sup>

Characteristics found to be associated with a relatively lower likelihood of moving out of low income include being female, young, having a disability, having low levels of educational attainment, being a visible minority or being a recent immigrant.<sup>27</sup> The make-up of the family unit also matters; unattached individuals and lone parents are more

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<sup>22</sup> See Corak (1998).

<sup>23</sup> See Finnie and Sweetman (2003), Morissette and Zhang (2001), and Corak et al (2002). Janz (2004), using the LICO as a measure of low income and imposing a minimum 10% increase in weekly earnings as a (higher) benchmark for determining upward economic mobility, finds that between 1996 and 2001 roughly one-half remained in low income.

<sup>24</sup> Note again that Morissette and Zhang (2001) examine the population aged 16 years and older. Similarly, Morissette and Drolet (2000), who also use the *Survey of Labour and Income Dynamics*, find that around 30% of persons entering low income in 1994 remain low income after 3 years.

<sup>25</sup> Corak et al (2002: Table 2b). Some of the difference in these measures and results is likely due to transfer payments.

<sup>26</sup> Corak et al (2002: Table 6). Note that the analysis covers the entire population (i.e., children, individuals in the labour force, as well as older persons) and measures of income accounts for household income such that it is “...an estimate of potential income for each household member under the assumption of equal sharing” (Corak et al 2002:5).

<sup>27</sup> See Janz (2004); Hatfield (2004); Morissette and Zhang (2001); Morissette and Drolet (2000).

likely to experience low income.<sup>28</sup> It is important to note, however, that while workers with these characteristics are associated with a greater likelihood of experiencing low income, some (e.g., workers with disabilities or lone parents) comprise a comparatively small percentage of all low income individuals primarily because their share of the population is also small.<sup>29</sup> The prevalence of low pay among some specific socio-demographic groups suggests that policy targeting may be an option; on the other hand, the problem of low pay actually cuts across population characteristics.

Recent research has provided some insight into what underlying *factors* matter in moving people out of low income. Corak et al (2002) found that the main factor accounting for movement out of low income was an increase in the labour income of the family head (37.6%); other important factors included an increase in the partner's labour income (7.9%), and transfer payments and social security (13.4%), while various changes in family arrangements or status (e.g., marriage, combining households) accounted collectively for 34.3%.<sup>30</sup>

These results suggest that improvements in pay, either through labour market earnings or through government transfers matter, as do changes in family circumstances. Increases in either wages and benefits or their hours of work may increase workers' labour market earnings. Increased wages may be attained either by obtaining a higher paying job or through government intervention, such as minimum wages. Changes in hours may also require changing jobs. Many jobs that are associated with nonstandard employment are associated with shorter hours. Changes in hours may therefore require moving to a job that has more "standard" work arrangements. In the following section, I turn to the role of nonstandard employment in determining economic vulnerability.

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<sup>28</sup> See Hatfield (2004); Morissette and Zhang (2001); Morissette and Drolet (2000).

<sup>29</sup> See Morissette and Zhang (2001:12).

<sup>30</sup> Refer to Corak et al (2002: Table 8)

### 3.4 Economic Vulnerability and Nonstandard Employment

#### *The Rise of Nonstandard Employment in Canada*

Nonstandard work, which can take the form of part-time, contract, and temporary work as well as self-employment, now corresponds to around one-third of the workforce.<sup>31</sup> As noted in the previous section, the incidence of low pay may be associated with some types of nonstandard work arrangements. For example, nonstandard jobs that are associated with low wages (and limited benefits), or with few hours, can result in low pay.

In addition, temporary work, or contract employment among the self-employed, may be precarious insofar as the workers bear a high level of employment risk as they move from job to job. Particularly low pay or a sufficiently high degree of employment risk along other employment dimensions (e.g., hours) may create a degree of economic vulnerability – taken together, these characteristics are even more likely to result in economic vulnerability.

Nonstandard employment has been increasing both in terms of employment levels and as a proportion of all workers in the labour force. From the period of 1989 through the 2002, while regular full-time employment decreased from around 67% to 63%, most forms of nonstandard employment increased.<sup>32</sup> Part-time employment increased, over the period 1976-2004, from about 1.2 million workers in 1976 to just under 3 million in 2004; over this period, the proportion of the labour force comprised of part-time workers increased significantly from 11.6% to 17.2%.<sup>33</sup> Another growing segment of the nonstandard workforce is the self-employed. Whereas in 1976 the self-employed constituted 11.4% of the labour force (at 1.2 million workers), by 2004 they accounted for 14.5% (at 2.5 million workers).<sup>34</sup>

Thus there has been a significant increase in non-standard employment, in absolute terms and as a proportion of the labour force over the long run. But part-time employment, for example, as a proportion of the labour force, essentially levelled off in the range of about 17% after 1993.<sup>35</sup> Regardless of whether or not the share of non-standard employment continues resumes its increase, it now constitutes a quite sizable proportion of the labour force.

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<sup>31</sup> See Chaykowski (2005).

<sup>32</sup> See Vosko, Zukewich and Cranford (2003: 20, Table 1.)

<sup>33</sup> Source: Statistics Canada. 2005. *Canadian Economic Observer*. (July) Catalogue No. 11-210-XPB, Vol. 19. (Ottawa: Minister of Industry). Table 8.

<sup>34</sup> Source: Statistics Canada. 2005. *Canadian Economic Observer*. (July) Catalogue No. 11-210-XPB, Vol. 19. (Ottawa: Minister of Industry). Table 8.

<sup>35</sup> Source: Statistics Canada. 2005. *Canadian Economic Observer*. (July) Catalogue No. 11-210-XPB, Vol. 19. (Ottawa: Minister of Industry). Table 8.

One of the main features of nonstandard employment is that it has a significant gender element. Many forms of nonstandard employment are disproportionately female. Chaykowski (2005:11) notes:

Females comprise the overwhelming majority of part-time workers (at about 70 percent) and, while they now comprise only about one-third of all self-employed workers, the proportion of females among the self-employed has steadily increased over the past three decades ... while women occupy about 40 percent of full-time *temporary* jobs, they take up roughly 60 percent of part-time temporary jobs. The sex dimension of nonstandard employment is important given an overall economic context in which women experience lower average earnings in the labour market.

Other characteristics associated with low pay are also important in relation to the incidence of nonstandard work. For example, the proportion of workers employed part-time is also higher among the young; and part-time work is more prevalent in small firms (those employing less than 20) and in very large firms (those employing 500 or more).<sup>36</sup>

The main reasons for the rise of nonstandard employment relate to both the supply and demand sides of the labour market. On the supply side, the increased labour force participation rates of women, shifts in family structures and responsibilities, and changes in the allocation of time within households, have increased preferences for flexible or alternative work arrangements. On the demand side, the main factors include firms' objectives of increasing organizational flexibility and reducing costs. Increased organizational flexibility requires flexible workforces.<sup>37</sup> In addition, nonstandard workers may be associated with lower wages, but also fewer benefit costs; firms may also avoid training costs and payroll taxes by hiring non-standard workers.

#### *Evidence on the Nonstandard Employment and Economic Vulnerability*

Unlike straight wage rates, earnings accounts for how many hours workers are employed and, in this way, provides a broader dimension of workers' economic well-being. For example, Census data for 2000 indicates that about 17% of employees working at least 30 hours per week and for a full year earned less than \$20,000. The distribution of earnings in Canada has been the subject of considerable research, as researchers have considered such issues as the extent of earnings inequality in Canada. Specific issues that have been

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<sup>36</sup> See Source: Statistics Canada. 2001. *Workplace and Employee Survey Compendium*. 1999 Data. Catalogue No. 71-585-XIE. Table 12.

<sup>37</sup> For example, firms may desire the flexibility to call workers in to work during periods of (unexpected) increased demand for their products or services; or to hire and utilize workers in a very limited basis in order to only marginally increase production.

considered include whether the “rich are getting richer and the poor poorer” or whether or not the middle class is “hollowing out” over time.<sup>38</sup>

In his analysis of economic vulnerability, Chaykowski (2005) focuses on the extent of low earnings among workers employed full-time relative to those in nonstandard employment arrangements; that is, those working part-time as well as full- and part-year. He also examines the extent of economic vulnerability among the self-employed. Making use of the *Survey of Labour and Income Dynamics* for 2000, he examines person’s earnings below the poverty line, which is approximated by the Statistics Canada Low Income Cutoff (LICO). He utilizes two measures of the extent of economic vulnerability: first, the proportion of workers whose earnings is below the poverty line (the *breadth* of low earnings); and second, the extent to which workers’ earnings are below the poverty line (which he refers to as the *depth* of poverty).

Chaykowski’s (2005: 51-52) findings underscore the importance of work arrangements as a determinant of economic vulnerability, in addition to the impacts of specific demographic and employment characteristics:

- “• The proportion of all individuals with some paid employment in 2000, that had low earnings (below-LICO) was 34 percent. On average, the low-earnings group fell 18 percent below the LICO threshold.
- The self-employed experience a much greater incidence of low earnings than do employees. For example, the proportion of full-year, full-time (FYFT), self-employed workers with low earnings was 42 percent, compared to 11 percent for FYFT employees.
- The incidence and extent of low earnings is greater among those employed part-time (compared to full-time);
- Workers with limited job stability (i.e., part-time part-year workers) have substantially higher incidence and extent of low earnings;
- ...
- Low earnings are much more prevalent among women (16 percent for FYFT employees) than men (7 percent).
- As one would expect, the incidence of low earnings is relatively high for young workers (aged 16-24). For FYFT employees in this age group, the rate is 38 percent.
- Education matters. About 18 percent of FYFT employees who did not graduate from high school had low earnings in 2000. For those with a university degree, the figure is only 4 percent.
- A much smaller proportion of unionized workers experience low earnings and, on average, the low-earnings group falls less far below the LICO threshold.”

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<sup>38</sup> There is an extensive and growing body of research in Canada on these and related issues. Refer to McWatters and Beach (1990) and Myles, Picot and Wannell (1988).

Further results regarding the breadth and depth of worker vulnerability are presented in Table 1 for private sector workers in 2000.<sup>39</sup> The analysis considers individuals (in Panel A) and economic families (in Panel B), separately. The results are presented for different degrees of job stability (including full- and part-time and full- and part-year jobs) and alternative types of employment arrangements (employees versus the self employed).<sup>40</sup> The different categories of job stability reflect differing hours of work. In addition, the analysis captures differences in vulnerability between workers holding regular full-time full-year employment versus those in non-standard employment arrangements (i.e., part-time; self-employment).

In addition, three measures of pay are examined, including “earnings,” a more inclusive measure of “market income” and “before-tax total income.”<sup>41</sup> For each of earnings, market income and before-tax total income, the results for both vulnerability measures are presented; the top number is the headcount ratio (breadth of vulnerability) and the poverty gap (depth of vulnerability) is reported.<sup>42</sup> For example, considering the earnings of individuals who are employees, and who work full-time and full-year, the headcount ratio is 0.12982 and the poverty gap is 0.04446. (Refer to the two entries that are highlighted in Table 1.)

Several results emerge from this analysis. Overall, comparing individuals to economic families, as one would expect, being a member of an economic family is generally associated with lower breadth and depth of vulnerability – for different degrees of job stability, across income measures, and when one considers either employees or the self-employed. Importantly, the measure of income also matters to the extent of differences in vulnerability; for a given category of job stability (e.g., full-year but part-time) the degree of vulnerability decreases as the measure of income broadens. This result is expected, especially when all income sources are considered, because government transfers are aimed at ameliorating the extent of low income.

If we focus on individuals, then for either employees or the self-employed, and for all alternative measures of income, the breadth and depth of vulnerability increases as job stability decreases (from full-year and full-time to part-year and part-time).

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<sup>39</sup> The analysis made use of the *Survey of Labour and Income Dynamics* for 2000.

<sup>40</sup> Note that some workers may be employees for some portion of the year but also have earnings derived from self-employment.

<sup>41</sup> Earnings includes wages and salaries, including commissions and overtime, but excludes self-employment income; market income includes all sources of labour market income, including private retirement, investment and self-employed income, but excludes all government transfer payments; and total income is the most inclusive income measure, that includes all sources of income including government transfers.

<sup>42</sup> The *breadth* of low earnings (economic vulnerability) is the proportion of workers whose earnings are below the poverty line whereas the *depth* of poverty is the extent to which workers' earnings are below the poverty line. These measures will reflect both pay rates as well as hours of work; the analysis does not allow for an estimate of how much vulnerability is due to low pay versus low hours.

Finally, again considering individuals, comparing employees to the self-employed, then: among full-time full-year workers, the self-employed generally experience a much greater degree of vulnerability than the employed; but as the degree of job instability changes, this difference changes; so that for workers in the least stable jobs (part-year and part-time) self-employed workers are actually less vulnerable.

Taken together, these results underline the importance of the association between nonstandard employment and low earnings/income. But low pay is also associated with low overall levels of economic well-being among nonstandard workers because they also appear to be less likely to receive a range of basic benefits. Evidence for 1998 shows, for example, that among female part-time workers, the proportion of males with benefits coverage was generally in the range of 19-24%; for male part-time workers, only about 14-21% had common benefits such as life or disability insurance or dental care or an employer-based pension plan.<sup>43</sup> In contrast, generally, one-half to one-third of full-time workers had common benefits. Benefits coverage amongst the self-employed, at typically just over one-third, is generally higher than among part-time workers, but roughly 40% of the self-employed that have benefit coverage obtain that coverage through their spouse.<sup>44</sup>

### *The Special Case of the Self-Employed*

The self-employed are, as documented above, a sizeable and important component of nonstandard employment in Canada. Moreover, the self-employed are distributed across Canadian industries (see Figure 7). In 2000, roughly 6% of all self-employed workers were in transportation and warehousing, 5% were in finance, insurance and real estate – industries that are partly within the federal jurisdiction. In addition, a large proportion of the self-employed are professional and technical workers, who are typically employed in a variety of industries. The self-employed are, therefore, of relevance to labour policy issues in the federal jurisdiction.

While not all nonstandard workers are vulnerable, and many are employed at high pay levels, self-employment is associated with economic vulnerability. This vulnerability arises because their employment is precarious or their earnings are low (or both).<sup>45</sup>

Self-employed workers do constitute something of a special category of worker insofar as they generally fall outside of the scope of most labour market legislation, including labour standards, precisely because they are not “employees.” Two important issues are whether or not the magnitude of self-employment has become sufficiently large, and the

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<sup>43</sup> The benefits considered included life/disability insurance, supplemental medical, dental care, and employer based pension plan; see Comfort, Johnson and Wallace (2003: Table 1.3, 1.4 and 1.6).

<sup>44</sup> Source: Delage (2002: Tables F1, F2, F4, F5, F7).

<sup>45</sup> The situation of the self-employed in the labor market is further complicated by the fact that many of the self-employed may hold other employment. For such workers, we would expect, all else being equal, that they would experience less economic vulnerability.

nature of how many of the self-employed work has evolved (e.g., in relation to firms as contract workers), that some labour standards ought to be extended to them.<sup>46</sup>

In the context of this policy issue, it is important to consider the various arrangements under which the self-employed actually work. A majority of the self-employed workers may be defined as independent entrepreneurs (i.e., those who do not employ other workers are termed “own-account self-employed”); this group represented about 55-60% of the self-employed in Canada.<sup>47</sup> Therefore, the remainder of self-employed workers (approximately 40-45%) employ at least one other worker for some period of time.

Many self-employed workers have some form of contractual relationship with “clients” (e.g., former employers). In practical terms, the self-employed may contract with a client to deliver a product or service, using his or her own equipment, over some fixed period of time.

Another of the important characteristics of self-employed work is that they tend to perform their work in a wide variety of settings. For example, while some self-employed workers who perform contract work may perform the work at home, others may work at the workplace of the employer, or even in the offices of several employers if they are engaged in multiple contracts. In 2002, just less than 30% of all self-employed workers worked at home; just over 40% worked outside the home, while around 25% worked in the offices of one or more clients.<sup>48</sup> Furthermore, roughly two-thirds of the self-employed who have worked on a contract basis have done so without a written contract.

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<sup>46</sup> This is neither inconsistent with, nor exclusive of, a principled rationale for considering the extension of labour standards to the self-employed.

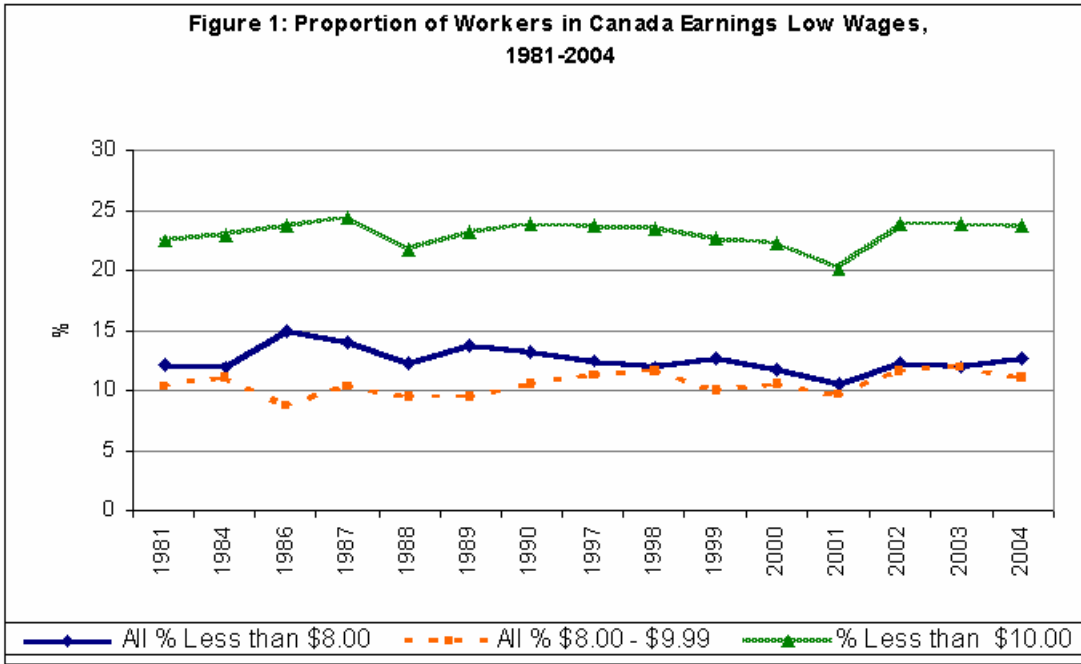
<sup>47</sup> Source: Delage (2002:12).

<sup>48</sup> Source: Delage (2002) Table B6.

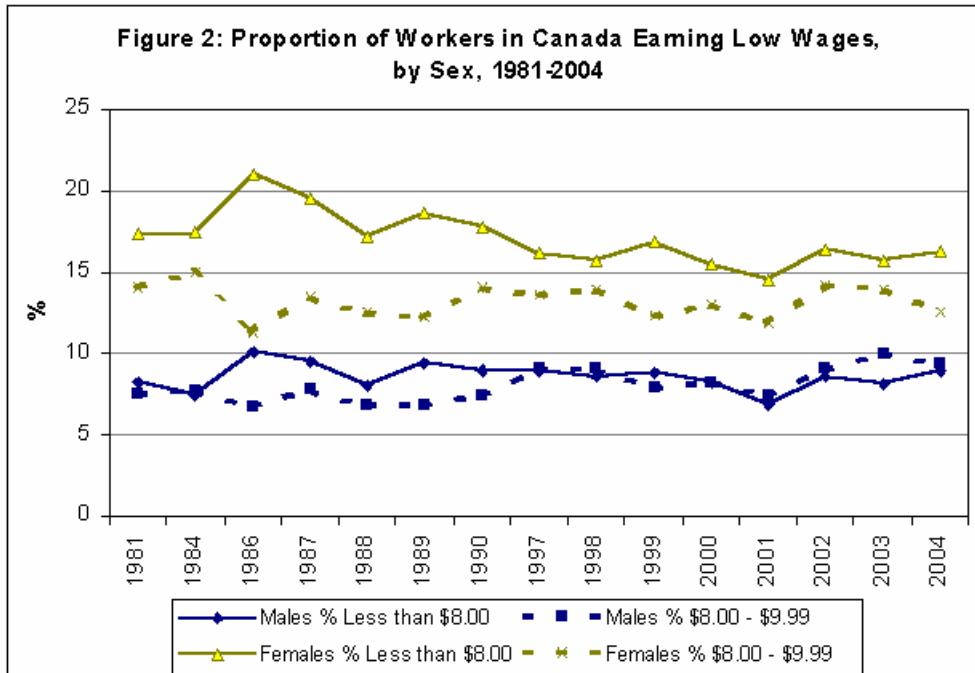
**Table 1: Vulnerability by Job Stability and Type of Employment: Private Sector  
SLID 2000**

Vulnerability Measure By Type of Employment	Job Stability				
	Full-Year Full-Time	Full-Year Part-Time	Part-Year Full-Time	Part-Year Part-Time	Part & Full Year & Time
<b>Panel A: INDIVIDUAL</b>					
Earnings:					
Employee	0.12982	0.75399	0.54324	0.93100	0.64406
	0.04446	0.39852	0.27419	0.68675	0.33430
Self-Employed	0.42089	0.71370	0.62522	0.83067	0.65304
	0.25257	0.49572	0.42776	0.65866	0.44847
Market Income:					
Employee	0.12262	0.71687	0.52215	0.91710	0.62395
	0.04061	0.36569	0.25810	0.66123	0.31781
Self-Employed	0.37588	0.61118	0.59924	0.72342	0.58502
	0.20580	0.36784	0.39216	0.52719	0.37451
Before-Tax Total Income:					
Employee	0.09463	0.65891	0.42958	0.88470	0.53565
	0.02882	0.31366	0.19208	0.57879	0.24811
Self-Employed	0.34313	0.54519	0.54739	0.64803	0.49921
	0.17713	0.29456	0.32012	0.39594	0.28849
<b>Panel B: ECONOMIC FAMILY</b>					
Earnings:					
Employee	0.08375	0.23968	0.26514	0.30297	0.27770
	0.02824	0.11357	0.11635	0.17531	0.13142
Self-Employed	0.26528	0.37886	0.36246	0.46301	0.36723
	0.13974	0.22295	0.24370	0.32711	0.22446
Market Income:					
Employee	0.07251	0.19084	0.23714	0.25959	0.25253
	0.02346	0.08226	0.10148	0.14348	0.11508
Self-Employed	0.21414	0.26418	0.34503	0.37006	0.33806
	0.10266	0.12358	0.22431	0.20395	0.17656
Before-Tax Total Income:					
Employee	0.04053	0.12124	0.15734	0.17271	0.17098
	0.01182	0.03893	0.04879	0.07147	0.06268
Self-Employed	0.16077	0.18036	0.28216	0.26206	0.22897
	0.06386	0.06719	0.12462	0.11333	0.10174
POPULATION SHARE					
Employee	0.42554	0.06489	0.04967	0.05191	0.11009
Self-Employed	0.08933	0.01692	0.00366	0.00288	0.00527

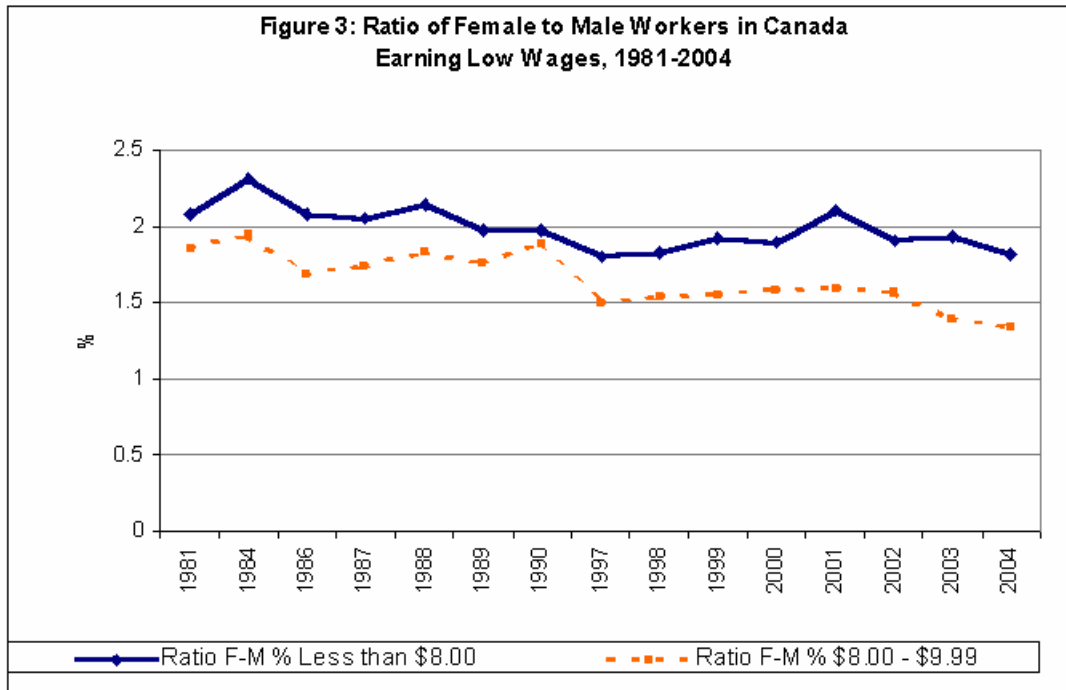
Source: Author's calculations, *Survey of Labour and Income Dynamics*, 2000



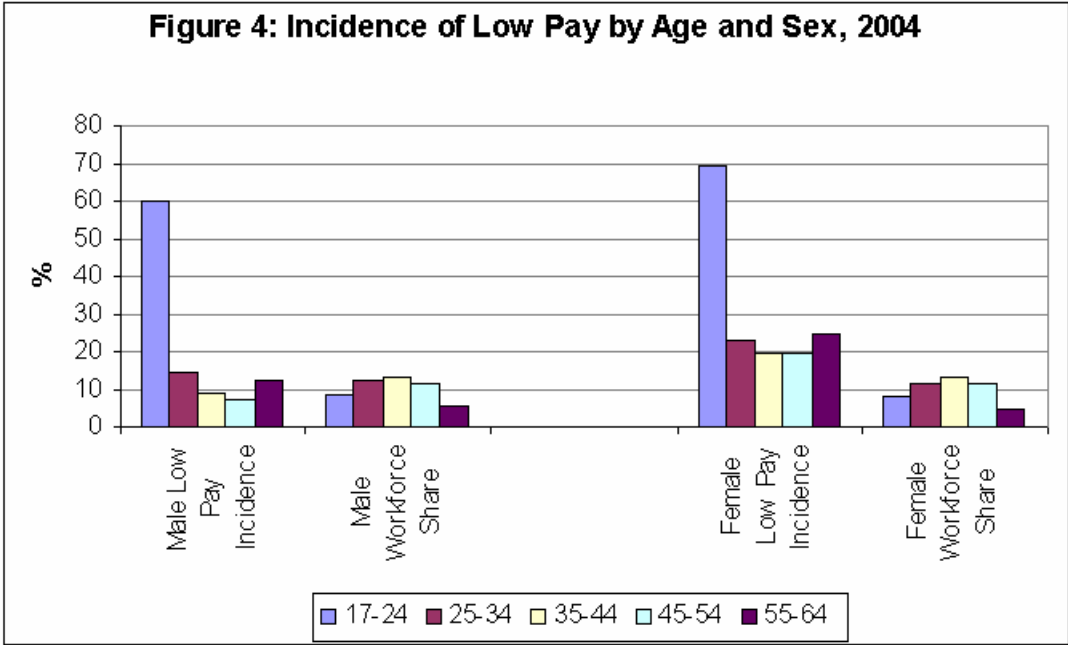
Source: Morissette and Johnson (2005), All Workers from Table 2; Based on Survey of Work History of 1981; Survey of Union Membership of 1984; Labour Market Activity Survey of 1986-1990; Labour Force Survey of 1997-2004. Based on 2001 dollars. Low pay is defined as less than \$10/hr.



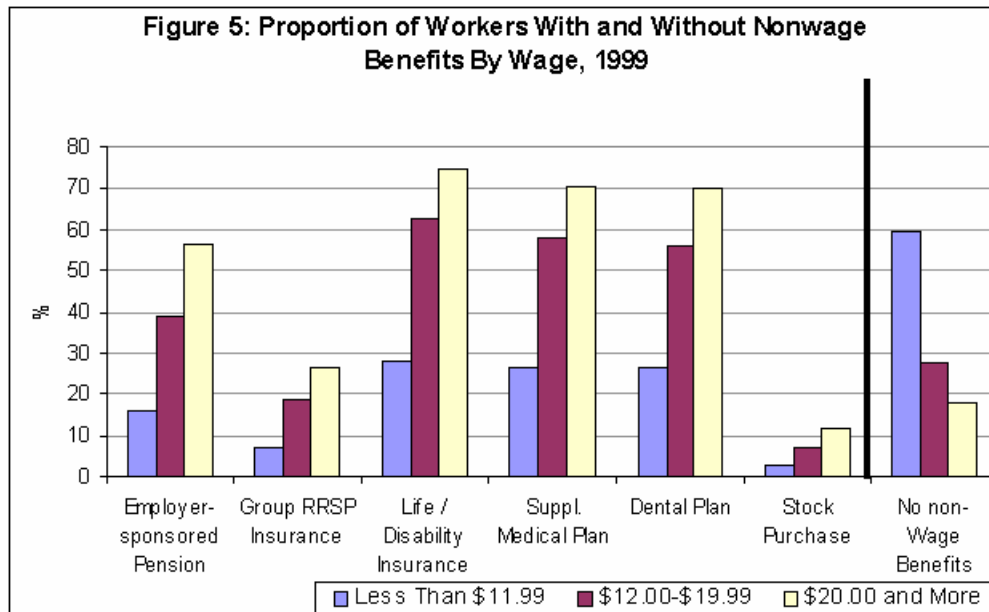
Source: Monisette and Johnson (2005), Males from Appendix 2, Table 1; Females from Appendix 2, Table 2. Based on Survey of Work History of 1981; Survey of Union Membership of 1984; Labour Market Activity Survey of 1986-1990; Labour Force Survey of 1997-2004. Based on 2001 dollars. Low pay is defined as less than \$10/hr.



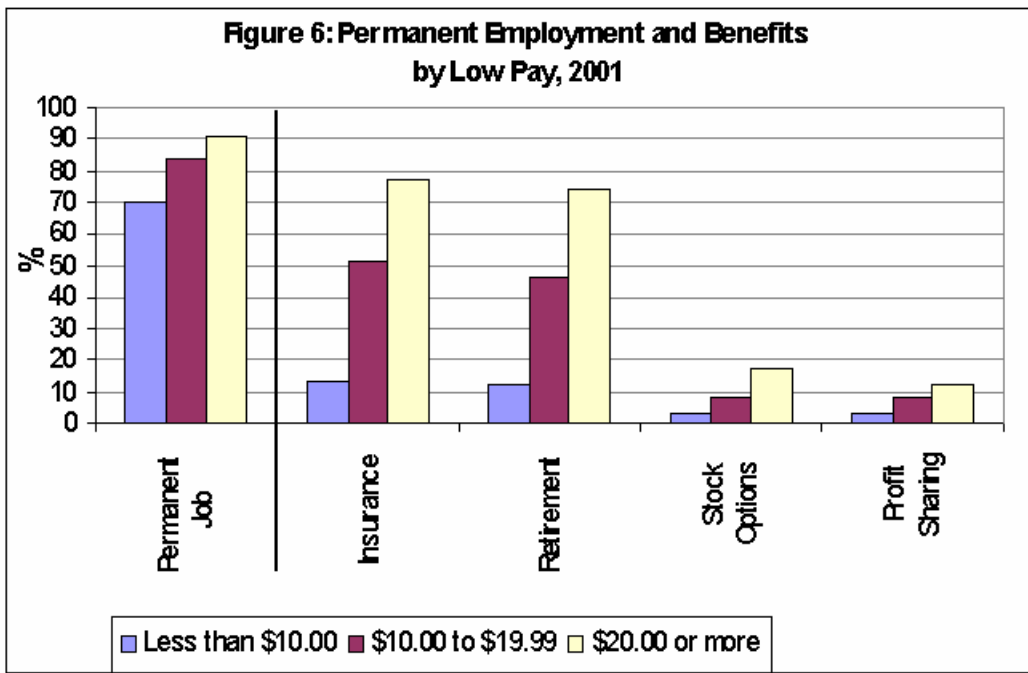
Source: Morissette and Johnson (2005), Males from Appendix 2, Table 1; Females from Appendix 2, Table 2. Based on Survey of Work History of 1981; Survey of Union Membership of 1984; Labour Market Activity Survey of 1986-1990; Labour Force Survey of 1997-2004. Based on 2001 dollars. Low pay is defined as less than \$10/hr.



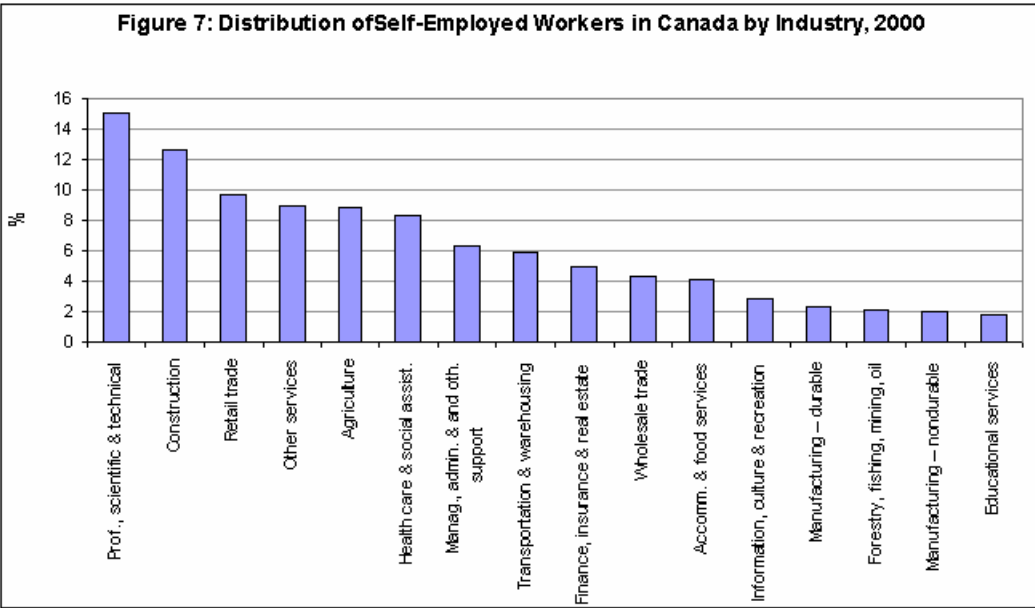
Source: Morissette and Johnson (2005), from Appendix 3, Table 1; Females from Appendix 2, Table 2. Based on Labour Market Activity Survey of 1986; Labour Force Survey of 2004. Low pay is defined as less than \$10/hr.



Source: Statistics Canada. (2001) Workplace and Employee Survey Compendium, 1999 Data, Catalogue No. 71-585-XIE, Table 15.



Source: Marshall (2003), Table 2, p. 8. Based on Survey of Labour and Income Dynamics, 2000.



Source: Benoit Delage. 2002. Results From the Survey of Self-Employment in Canada. Human Resources Development Canada. Cat. No. RH64-11/2001E. (January).

## 4. Vulnerable Workers in the Federal Jurisdiction

### 4.1 Scope and Basis of the Analysis

This section provides a selected profile of workers in the federal jurisdiction. Along with the above detailed analysis of workers' economic vulnerability in the broader labour market, the profile of federal jurisdiction workers permits some assessment of the extent of vulnerability in the federal jurisdiction.

The descriptive analysis compares the characteristics of workers in the federal jurisdiction with those in the non-federal jurisdiction industries. The analysis makes use of the *Workplace and Employee Survey* (WES), administered by Statistics Canada, for the year 2002. The WES is an establishment level survey that includes detailed information about employees, including characteristics relating to demographics, pay, a variety of benefits, work arrangements, workplace human resource practices and activities such as training.

The WES also includes establishment characteristics such as industry. This permits a comparison of low pay between workers in the federal versus nonfederal jurisdictions. The analysis focuses, however, on industries included under the federal jurisdiction, including:

- uranium mining
- air transport
- rail transport
- water transport
- road transport
- pipelines
- postal services
- broadcasting
- telecommunications
- banking

Note that, for purposes of this analysis, the federal public service is excluded from the definition of the federal jurisdiction, since they are excluded from the labour standards under the *Canada Labour Code*, Part III.<sup>49</sup> In addition, self-employed workers are

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<sup>49</sup> Including the federal public service in the federal jurisdiction would also be expected to bias upward the estimate of the proportion of high paid workers. There is evidence, for example, that there is a public service-private sector pay differential in favour of public service workers. Refer to Gunderson, Hyatt and Riddell (2000) for empirical evidence on the public service wage advantage (in relation to the private sector) that they estimate to be in the range of 9 percent.

excluded from the WES and, therefore, from the analysis. In general, self-employed workers are, in any event, excluded from such labour standards as minimum wage laws.<sup>50</sup>

In this section, I first provide a brief profile of federal jurisdiction workers. I then consider the compensation of workers in the federal jurisdiction, including wages and the availability of common benefits. This is followed by a discussion of usual hours of work, overtime pay, and scheduling arrangements.

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<sup>50</sup> Given these sample restrictions, the useable sample of workers for the federal jurisdiction is approximately 380,000 workers. This sample is much smaller than the total number of workers that actually work in the federal jurisdiction. The exclusion of self-employed workers in federal jurisdiction industries likely accounts for roughly 300,000 workers. In addition, the exclusion of workers from federal government and related activities is expected to account for about 250,000 workers. Exclusions from the WES, including the self-employed, as well as the exclusions of government employees, while appropriate, reduce the usable sample size significantly.

In addition, I expect that the definition of federal jurisdiction, for purposes of this analysis, is done with error. Even accounting for the sample restrictions noted above, it is likely that the definition of federal jurisdiction excludes many other workers who are, actually, in the federal jurisdiction but who are not captured by the definition of industry used; while there may also be error if some workers included in the definition actually belong outside the federal jurisdiction. Based on the sample size it is likely that the primary measurement error is in excluding too many workers. In any event, *a priori*, the direction of any resulting measurement bias is uncertain.

## **4.2 Profile of Employees in the Federal Jurisdiction**

Employees in the federal jurisdiction are roughly equally divided between the transportation and pipeline industries, broadcasting and telecommunications, and banking. The postal services and uranium mining industries comprise much smaller segments of the jurisdiction (refer to Appendix Table 1).

The demographic profile of employees in the federal jurisdiction differs somewhat from that of employees in the other jurisdictions, taken together (“rest of Canada”). (Refer to Table 2.) The percentage of the workforce that is female is considerably smaller in the federal jurisdiction (at around 46%) compared to the rest of Canada (51%).

There are also differences in the age and tenure distributions. The proportion of young workers (those aged less than 25 years) is only 5% in the federal jurisdiction compared to 10% in the rest of Canada; roughly the same proportion are in the middle age grouping of 25-44 years (at just over 50% of workers); but whereas around 32% of workers in the federal jurisdiction are aged 45-54 years, roughly 25% are in this age category in the rest of Canada; and a similar proportion (around 11%) are aged 55-64 years.

In the federal jurisdiction, the age demographic is therefore somewhat skewed towards more senior workers; this is reflected in the differences in average tenure levels at about 12 years in the federal jurisdiction and compared to 9 years in the rest of Canada. The differences between the federal jurisdiction and the rest of Canada in tenure are most marked at the lowest and highest ends of the tenure distribution. In the federal jurisdiction, only 2.5% of workers have less than 1 year of tenure (compared to 5.5% in the rest of Canada). At the other end of the tenure distribution, 44.6% in the federal jurisdiction have tenure levels of greater than 10 years, compared to 36.3% in the rest of Canada.

Education differences are also evident. In the federal jurisdiction around 87.5% of workers graduated with a high school diploma compared to 84.2% in the rest of Canada.

### 4.3 Wages and Benefits in the Federal Jurisdiction

In this section of the analysis I consider the wages of employees in the federal jurisdiction, compared to other employees. In particular, I focus on the incidence of low wages. I do not, however, utilize a single wage cutoff to define low wage.

Instead, I examine the wage distribution at the low end of the distribution and consider several wage categories. But I follow Saunders (2005) insofar as I use \$10.00 as something of an *upper bound* of the low wage end of the distribution. Whereas Morissette and Johnson (2005), for example, consider those earning less than \$8.00 and those earning \$8.00-\$9.99, I consider those earning less than \$9.00 and those earning \$9.00-9.99 because of data limitations. It is worthwhile re-emphasizing, therefore, that there is no single, established definition of “low wage.”

The wage distribution of workers in the federal jurisdiction is skewed towards the higher wage levels, compared to the wage distribution among workers in the rest of Canada. There are two likely reasons for this. First, the federal jurisdiction industries are generally viewed as relatively “high wage.” They exclude such “low wage” industries as agriculture or much of the retail industry, as examples. Second, wages are generally positively associated with work experience or tenure. The high average tenure levels amongst federal jurisdiction employees are, therefore, expected to be associated with higher wages.

But for purposes of considering labour standards and low pay, we need to focus on the lower end of the wage distribution. The wage distribution for the federal and nonfederal jurisdictions is presented in Figure 8. In fact, whereas only about 0.43% of federal jurisdiction employees are paid less than \$9.00 per hour, almost 11% are paid below \$9.00 in the rest of Canada. Similarly, only 1.7% of federal jurisdiction workers are paid in the range of \$9.00-9.99 compared to 3.8% in the non-federal jurisdiction. Thus low pay is relatively far less common in the federal jurisdiction than in the rest of Canada.

We expect the availability of benefits to be positively associated with wage levels. The proportion of employees for which various common benefits are available is presented in Figure 9. As expected, for each type of benefit, a higher proportion of federal jurisdiction employees receive various benefits.

Taken together, then, a larger proportion of employees in the federal jurisdiction have high wages and access to various benefits. I also expect the generosity of benefits, when available, to be positively associated with wage levels. This positive association arises because many benefits are calculated in relation to the wage level of the employee.

#### 4.4 Hours, Overtime and Work Schedules

In this section I consider workers' hours of work, the average amount of overtime worked per week, and various characteristics of their hours arrangements and work arrangements. In each case I compare workers in the federal jurisdiction to those in the rest of Canada.

The distribution of workers by usual weekly hours of work, for 2002, is provided in Figure 10. A larger proportion of workers in the federal jurisdiction usually work 35-40 hours per week or more than 40 hours per week. Employment for 35 or more hours per week would correspond to workers who are employed on a regular, full-time basis. In contrast, a smaller proportion of federal jurisdiction employees work among each category of shorter usual work- week (i.e., for those usually working less than 15 hours, 15-29 hours or 30-34 hours per week, respectively).

Average overtime hours worked per week among all classifications of workers are presented in Figure 11 for 2002. Workers in the federal jurisdiction, on average, work 1.4 hours of paid overtime compared to 1.1 hours among workers in the rest of Canada. In addition, federal jurisdiction employees tend to work an average of 2.4 hours of unpaid overtime per week compared to only 1.8 hours among workers in the rest of Canada. Employees working, for example, for 48 weeks per year would work in the range of about 115 hours of unpaid overtime in the federal jurisdiction compared to roughly 86 hours in the combined nonfederal jurisdictions.

If one considers nonmanagerial workers, then workers in the federal jurisdiction, on average, work 1.6 hours of paid overtime compared to 1.2 hours among workers in the rest of Canada.<sup>51</sup> Refer to Figure 12. In addition, federal jurisdiction employees tend to work an average of 1.9 hours of unpaid overtime per week compared to only 1.4 hours among workers in the rest of Canada. Thus a nonmanagerial employee working for 48 weeks per year would work in the range of about 91 hours of unpaid overtime in the federal jurisdiction compared to roughly 67 hours in the combined nonfederal jurisdictions. While the reasons for this difference are not apparent, the magnitude of the unpaid overtime hours suggests that enforcement of overtime pay is an area that should be addressed.

Increased flexibility in the workplace is often manifested through flexible work time arrangements.<sup>52</sup> For full-time workers, this could take the form of flexible hours arrangements each day or days worked in the week. Hours arrangements throughout the economy appear to be overwhelmingly oriented toward working at least 6 hours/day.

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<sup>51</sup> The difference between the estimates in Figures 11 and 12 is the exclusion of managerial employees in Figure 12. Note that the nonmanagerial employees remaining in the sample may still include employees who might be considered "excluded employees" for purposes, for example, of collective bargaining.

<sup>52</sup> Workplace flexibility could also be attained, for example, through the use of flexible job descriptions and responsibilities, flexible job assignments, job or work sharing or flexibility in the organization of workers (e.g., teams).

(See Panel A of Table 3.) There does appear to be a significant degree of flexibility in work arrangements. While the majority of federal jurisdiction employees (about 82%) work “Monday-to-Friday,” around 40% regularly work flexible hours and 80% work between 6AM and 6PM (see Panel B of Table 3). These results, taken together, suggest the availability of some flexibility in the start and end times of workdays.

**Table 2:**  
**Demographic Characteristics of Employees in the Federal Jurisdiction, 2002**

	Federal Jurisdiction	Non-Federal Jurisdiction
<i>Sex Distribution</i>		
Percentage Male	54.4	49.3
Percentage Female	45.6	50.7
<i>Age Characteristics</i>		
Average Age	41.8	40.5
Percentage Aged < 25	5.0	10.1
Percentage Aged 25-44	51.1	52.8
Percentage Aged 45-54	31.8	24.6
Percentage Aged 55-64	10.7	11.2
Percentage Aged 65 +	1.5	1.3
<i>Education</i>		
Percentage Graduated HS	87.5	84.2

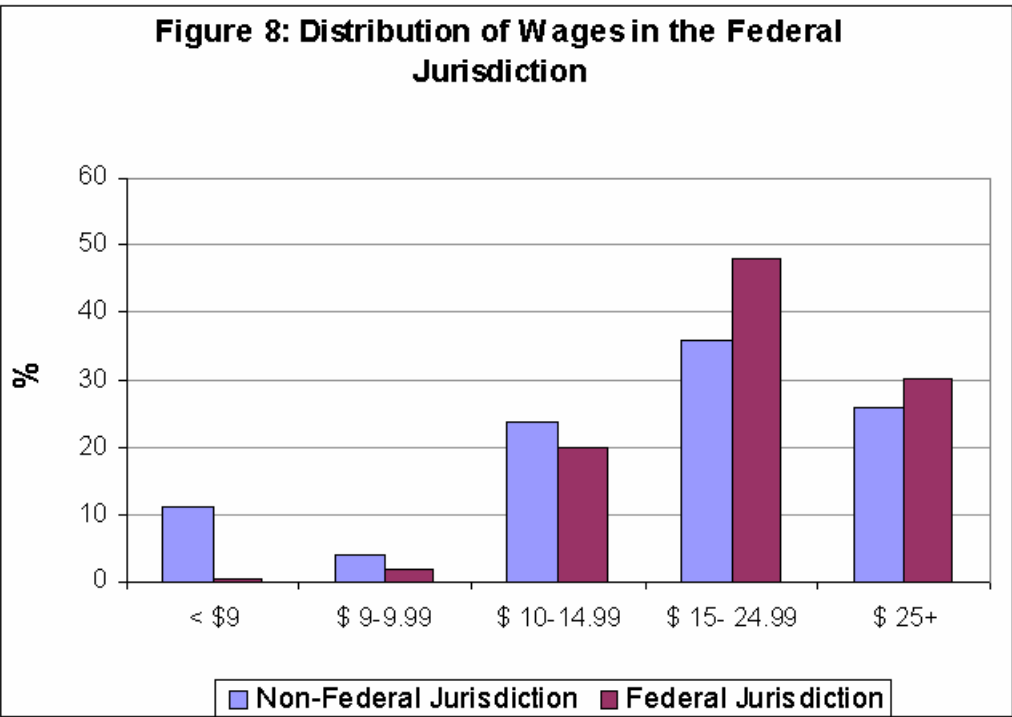
*Source:* Authors calculations, *Workplace and Employee Survey*, 2002

**Table 3:**  
**Work Schedules of Employees in the Federal Jurisdiction, 2002**

	Percentage of Workers in the Federal Jurisdiction	Percentage of Workers in the Non-Federal Jurisdiction
<b>Panel A: Hours Arrangements</b>		
Regularly Work At Least 6 Hours/Day	93.8	89.0
Reduced Workweek (by arrangement with employer)	6.7	8.1
<b>Panel B: Work Arrangements</b>		
Regularly Work Monday to Friday	82.3	70.7
Regularly Work Flexible Hours	41.0	36.4
Usually Work Between 6AM – 6PM	80.0	79.0
Usually work same hours of the day <sup>(a)</sup>	63.7	71.7
Usually work on a rotating shift schedule <sup>(b)</sup>	46.8	49.0

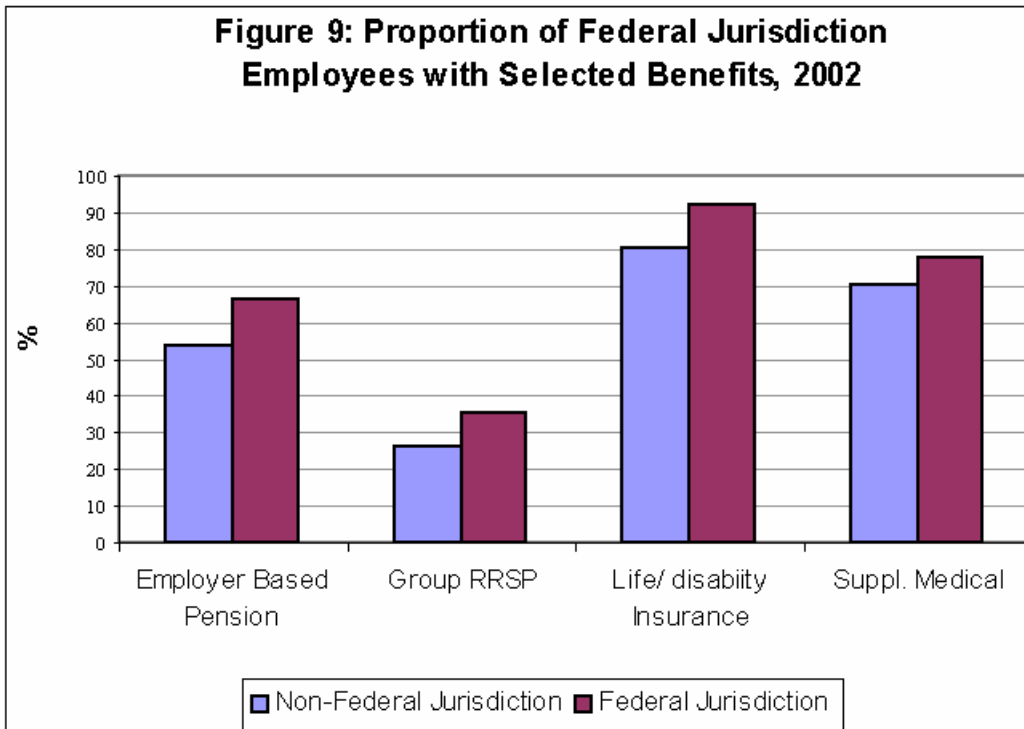
Source: Authors calculations, *Workplace and Employee Survey*, 2002

- a. Among those employees who are not working Monday to Friday, not working at least 6 hours/day, and not working between 6AM-6PM.
- b. Among those employees not working the same hours or the same days (or both).



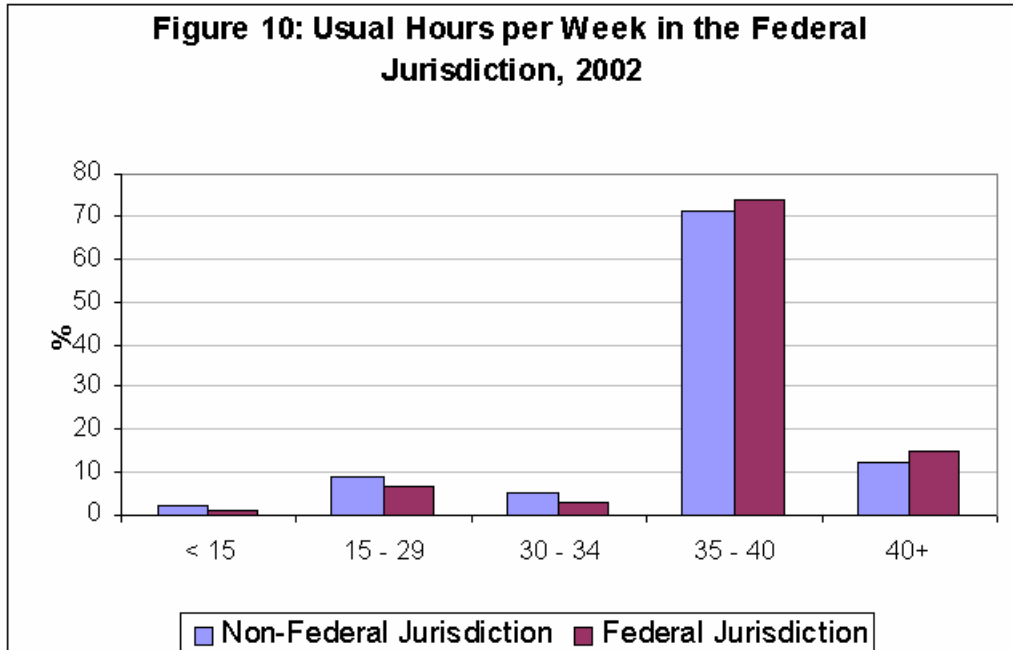
Source: Author's calculations, Workplace and Employee Survey, 2002.

**Figure 9: Proportion of Federal Jurisdiction Employees with Selected Benefits, 2002**

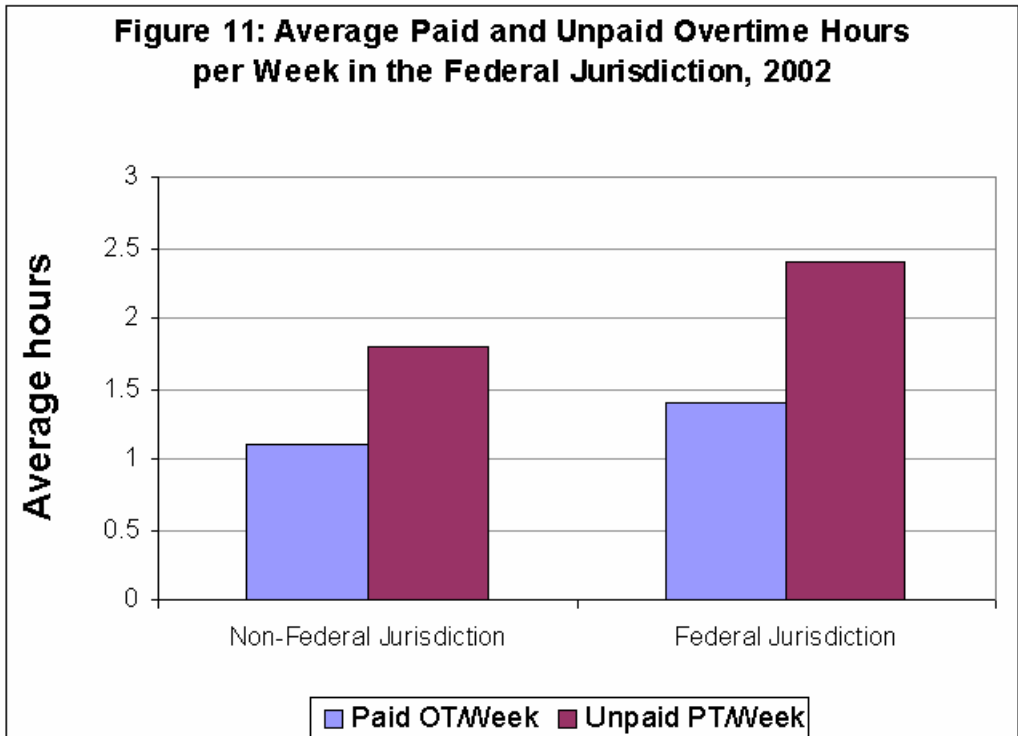


Source: Author's calculations, Workplace and Employee Survey, 2002.

**Figure 10: Usual Hours per Week in the Federal Jurisdiction, 2002**

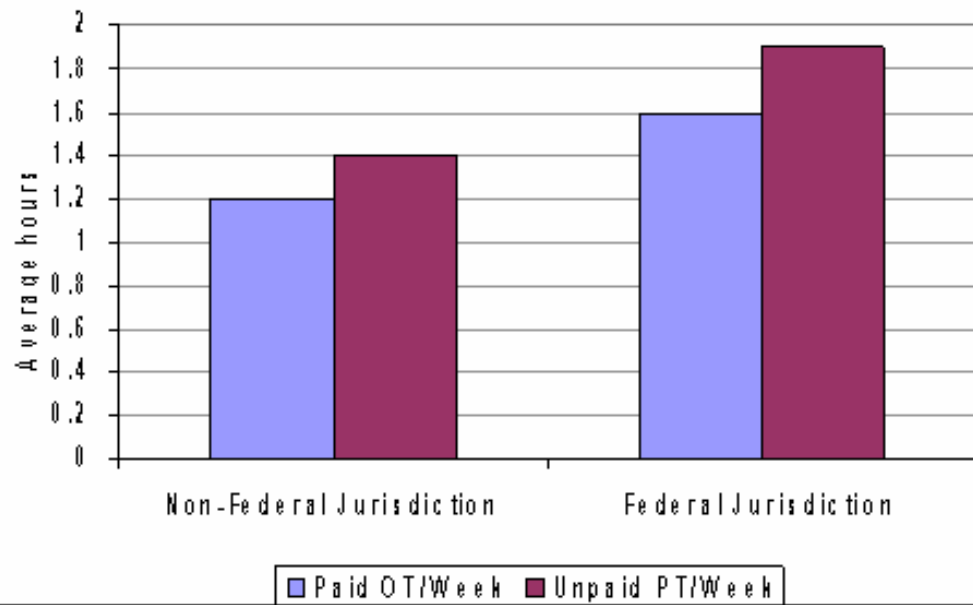


*Source:* Author's calculations, Workplace and Employee Survey, 2002.



Source: Author's calculations, Workplace and Employee Survey, 2002.

Figure 12: Average Paid and Unpaid Overtime Hours per Week in the Federal Jurisdiction, Among NonManagers, 2002



## **5. Policy Approaches to Providing Protection to Vulnerable Workers**

### **5.1 Scan of the Main Policy Relevant Results**

The majority of the extant research evidence regarding economic vulnerability, especially low pay, relates to the broader labour force. The review of research findings regarding low pay and vulnerability was therefore supplemented by a separate analysis that focused on the federal jurisdiction. Several policy relevant empirical regularities emerge from these two sets of evidence:

*(i) Low Pay:*

While the extent of economic vulnerability in the federal jurisdiction is less than that which is present in the labour market generally, it does exist. In addition to low receiving low pay, a smaller proportion of low paid workers tend to receive benefits. The result is lower compensation.

*(ii) Mobility Out of Low Pay:*

Given the persistence of economic vulnerability over time in the general economy, and that a core of low paid workers remain in low income for several years, it is reasonable to expect similar problems to exist among the low paid (economically vulnerable) in the federal jurisdiction. A key finding for mobility is that increased earnings is a key factor supporting movement out of low pay; this factor is also expected to be a determinant of workers ability to move out of low pay in the federal jurisdiction.

*(iii) Economic Vulnerability and Worker Characteristics:*

In the general labour market, the incidence of economic vulnerability tends to be higher among workers with characteristics that are otherwise often associated with economic disadvantage in the labour market – such as lone mothers, youths, visible minorities, recent immigrants and workers with disabilities. Federal jurisdiction workers with these characteristics are also expected to experience a greater incidence of economic vulnerability.

*(iv) Work Arrangements:*

Work arrangements tend to matter a great deal in terms of the extent of economic vulnerability. In general, nonstandard employment is associated with a higher degree of economic vulnerability than regular full-time employment. This outcome is driven by the combination of the tendency of much of nonstandard work to be low paid and to offer few hours.

## 5.2 Policy Options for Alleviating Economic Vulnerability

What are the policy options for addressing low pay? In his examination of potential policy alternatives for improving the outcomes of low paid workers, Saunders (2005:7-27) identifies three broad categories of policy: first, policies that directly impact wages or earnings, including minimum wages and income supplements; second, policies that enhance access to benefits; and third, policies aimed at improving the financial and human assets. These options span a wide range of policy ground and programs, including training, to employment insurance, minimum wages, income supplements, and childcare programs, among others. There are separate lines of research on the potential benefits and drawbacks of various policies and programs in each of these areas.

One approach would be to target workers with the characteristics that tend to be associated with economic vulnerability (e.g., low pay). For example, the research findings suggest that policies aimed at improving the labour market *prospects* of low paid workers may reduce economic vulnerability. Since the incidence of low pay is high among those with low education, or youths, targeted training programs would be one option. Another would be increasing access to formal education. Yet another option would be targeting day care access to lone parents.

The policy problem is that it would likely be difficult, in practice, to target these groups of workers. The problem is compounded by the fact that workers with these characteristics tend to make up a relatively small percentage of the economically vulnerable. Since vulnerability is a phenomenon that cuts across population characteristics, targeting on the basis of demographics, for example, is likely to yield limited results in terms of alleviating the broader problem of low pay and it may suffer from problems of feasibility. Instead, the extant research regarding the characteristics of low paid workers and the factors that support mobility out of low paid work suggests that a *combination* of policy instruments are likely to be required to alleviate economic vulnerability.

In his survey of the merits and demerits of various policy options within these three broad areas, Saunders (2005:28) suggests a mix of specific policies, among which he includes higher minimum wages, income supplements, provision for some form of universal drug and dental care plan, affordable childcare, affordable housing, enhanced access to EI, programs that enhance training opportunities. This approach of providing a mix follows from the research pointing to an array of factors that give rise to vulnerability. But given this complexity, there appears to be no evidence regarding what mix might be most effective. Further, for many policies, there is no insight into what thresholds of provision (e.g., the level of drug and dental insurance) are required in order to produce the desired decrease in economic vulnerability.

An alternative approach is to target the labour market or workplace *outcomes* that are the objective of the broader policy to change. This is the traditional role for labour standards. But the *precise* role for labour standards depends upon the *intersection* of the relevant factors affecting economic vulnerability and the labour standards levers or options that

are available. The results of the research review and empirical analysis suggest several areas in which standards may have some role. These relate to several aspects of employment that affect economic vulnerability: wages and benefits; hours; and work arrangements. In the following sections, I therefore consider the potential role for labour standards in addressing economic vulnerability in the areas of wages and benefits, hours arrangements, and work arrangements.

### 5.3 Policy Options for Wages and Benefits: A Role for Labour Standards

#### *Wages and Economic Vulnerability*

With regard to alleviating economic vulnerability, one policy approach is to raise the wages of workers who are low wage. Minimum wage laws represent one of the key standards imposed by governments. When implemented, they basically truncate the low end of the wage distribution at the point of the minimum wage and force employers who would otherwise offer a wage lower than the mandated minimum to pay the higher wage. The use of minimum wage laws dates back to early in the last century and has been a feature of labour standards legislation across Canadian jurisdictions.

Minimum wage laws have essentially been viewed as a means of improving the economic well being of the least well-off workers.<sup>53</sup> One rationale is akin to the notion of ensuring that workers are paid a wage that corresponds, if only loosely, to that which represents a “living wage” – although the notion of supporting “living wages” assumes that the minimum wage is insufficient to keep a worker out of poverty.<sup>54</sup> An equity argument in favour of minimum wage laws is that they eliminate exploitative low wages in markets where workers do not have any ability to negotiate higher wages.

The use of minimum wages as a policy instrument has remained particularly controversial. On the one hand, the persistence of low wages over time (e.g., in an occupation) simply suggests, according to standard economic theory, that the market-clearing wage is low. Forcing wages above the market clearing level, by means of a legislated minimum wage, would, therefore, serve to create unemployment, all else being equal.<sup>55</sup> There remains considerable debate, and some alternative evidence, on the employment impacts of minimum wages.<sup>56</sup> Some (at least implicit) acknowledgment of a potential negative employment impact led to the development of laws that can

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<sup>53</sup> See the discussion in Brennan (2000: 62) on the evolution of minimum wage and other standards in Canada.

<sup>54</sup> Saunders (2005:12-14) provides a review of “living wage” approaches to enhancing economic well-being. The notion is that a living wage will be one which corresponds to an annual income level that is above the poverty line for a full-time worker. The “living wage” is generally taken to be *greater than* the prevailing minimum wage.

<sup>55</sup> For a more detailed theoretical exposition of the employment effects of minimum wage law see Ehrenberg, Smith and Chaykowski (2004: 115-118).

<sup>56</sup> For some of the original Canadian evidence suggesting negative effects on employment, see Schaafsma and Walsh (1983) and Swidinsky (1980). Many of the studies of employment effects focus on youth; for Canadian evidence see Baker, Benjamin and Stanger (1999) and for international evidence see Abowd, Kramerz, Lemieux and Margolis (1999).

See Card and Krueger (1995), Neumark and Wascher (2000) and Card and Krueger (2000) for evidence from the United States that essentially called into question standard predicted effects of negative employment impacts of rising minimum wages and extended the debate over minimum wage effects.

incorporate tiered minimum wage schedules (e.g., for adults versus students, or the disabled).

### *Minimum Wages as a Means of Improving Economic Welfare*

Using the minimum wage to improve economic well-being raises two issues. The first issue is whether raising the minimum wage will allow workers to achieve something close to a “living wage” (i.e., one that is above the “poverty line”). The second issue is the reach of the instrument – that is, what proportion of low wage workers are likely to be affected by increasing the minimum wage?

The basic question about whether the minimum wage can represent a “living wage” can be explored in relation to the Statistics Canada Low Income Cutoff (LICO). Minimum wages are set differently across provinces because they correspond to the labour market conditions, rural or urban cost of living, and other characteristics of provincial economies that affect living standards. For a given wage, a person’s hours of work will determine their gross income, and the LICO typically accounts for this fact. On the other hand, for a given LICO (corresponding to a given region, family size, etc.), and assuming a standard weekly and yearly hours of work, one can ask what would be the corresponding wage. If this wage is proximal to the existing minimum wage schedule, then raising the minimum wage by a sufficient amount would achieve this wage.

The hourly wage estimates corresponding to the LICO for 2002, for rural regions as well as urban areas of different sizes, and for two alternative assumptions about full-time weekly hours, are presented in Table 4. The raw LICO value is presented in row one. The hourly wage corresponding to the LICO for different regions and urban sizes, by weekly hours, is presented in rows two and three. Notice that the LICO tends to increase from rural to urban and with urban size; consequently so, too, does the corresponding wage. Also, the wage is higher in the case with lower normal weekly hours (36 hours) compared to the case of a 40 hour workweek.

As noted previously, the LICO is not designed to represent a “poverty line,” although it is typically used as a reasonable approximation for one in Canada. The wages presented in Table 4 range from \$6.40 to \$10.29, depending upon weekly hours and rural-urban characteristics. In 2002, minimum wages across Canada ranged from a low of about \$6.25 in Newfoundland, to \$7.45 in Ontario, to highs of \$8.25 in the Northwest Territories and \$8.50 in Nunavut. Therefore, in 2002, minimum wages were in the vicinity of, but somewhat lower than, the hourly wages corresponding to the LICO for full-time individuals. With regard to the first issue, raising the minimum wage would allow workers to achieve something *close* to a wage that is at or above the “poverty line”; but the minimum wage would have to be increased to ensure that they actually were at or above the poverty line.

The second issue is what proportion of low wage workers would be affected by increasing the minimum wage to a level at which they are likely to be at a “living wage.”

In order to approximate this, we can consider the upper bound of the wages corresponding to the LICO, of \$10.00. It is then useful to ask what proportion of workers would fall below this cutoff. The results for the federal jurisdiction employees, compared to workers in the rest of Canada, are presented in Table 5.

For 2002, roughly 15% of workers fell below \$10.00 in all non-federal jurisdiction industries, compared to about only 2% for the federal jurisdiction (refer to Panel A of Table 5). That is, setting a federal minimum wage rate of \$10.00 in 2002 would have raised the wages of 2% of individual wage earners to a level that would be at around the level of the poverty line. Alternatively, if the minimum wage set at only \$9.00, then only about 0.4% of federal jurisdiction wage earners would be affected and \$9.00 remains below the conservative estimate of \$10.00 required in order that an individual worker may achieve the poverty line.

This assessment of the possible proportion of workers affected by raising the minimum wages applies to individuals, independent of their family status. The evidence for Canada and the U.S. suggests, however, that raising the minimum wage with a view to alleviating poverty is a somewhat blunt tool, in that only a small proportion of all those affected by raising the minimum wage belong to low income families – recent Canadian estimates for Ontario suggest that while about one quarter of those affected would be in low-income families whereas about one-third would be in high-income families.<sup>57</sup>

### *Low-Paid Workers and Benefits*

Another potential role for labour standards policy is in addressing benefits gaps among low-paid workers. Low wages are typically associated with a low incidence of receiving many common benefits. Saunders (2005) suggests that a lack of benefits in key areas such as dental, drugs, access to affordable child care, or pensions, can contribute to economic vulnerability.

One approach to ensuring minimum levels of provision of certain key benefits is to mandate that they be provided by employers. For nonstandard workers, for example, these benefits could be prorated according to the extent of their involvement in (attachment to) the labour market. Mandated provision of benefits would also have to be designed in conjunction with any increase in minimum wages, since an increase in either benefits or wages would increase *compensation* levels. Another issue is whether or not the provision of benefits would be targeted according to workers' wage levels, for example, or whether some benefits are deemed essential and should be mandated regardless of a worker's wage.<sup>58</sup>

The problem with mandating benefits is that this increases the compensation levels of the low wage workers and could result in negative employment consequences. Saunders

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<sup>57</sup> See Beach and Shannon (1995). American evidence is also consistent with this result (see Burkhauser, Couch, and Wittenburg 1996).

<sup>58</sup> See Vallée (2005) for a model that suggests the universal provision of benefits.

(2005:21) suggests that universal plans provided by government would essentially reduce the burden on employers. Whether or not increased compensation costs would result in negative employment consequences is not apparent *a priori*, and is essentially an empirical issue. It could, for example, depend on the issue of how such benefits and programs would be funded. These considerations suggest that the application of minimum standards to the provision of benefits would have to be applied with caution.

In the federal jurisdiction, a much smaller proportion of workers do not have various common benefits, relative to workers in the non-federal jurisdiction industries. Just as in the case of wages, I expect relatively few workers to benefit from increasing access to benefits; although it would certainly stand to reduce the economic vulnerability of low paid workers whose access is currently limited. The value of introducing standards with respect to benefits depends on the net effects on workers of the considerations identified above, evaluated in conjunction with the expected limited scope of impact.

#### **5.4 Policy Options for Hours and Hours Arrangements: A Role for Labour Standards**

One of the major changes in organizations and workplaces over the past several decades has been the increased emphasis on flexibility. Increased flexibility has encompassed how organizations are structured and function, work organization, the conduct of work, and the structure of employment relationships.

In the federal jurisdiction, a larger proportion of employees work a standard workweek, relative to others in nonfederal jurisdiction industries. But the proportion of employees working flexible hours is also higher. Flexibility in daily hours, for example, may have two aspects. The first is flexibility that is required by employers in order to achieve greater operational efficiencies (the demand side). From the employee viewpoint (the supply side), flexibility in one's choice of hours (e.g., daily start and end times) can support enhanced work-life balance.

The survey data do not permit one to determine whether the observed flexibility in the hours worked is driven from the demand versus the supply side, or both. From the worker perspective, the concern is that there is a mismatch in which employees feel obligated to work flexible hours despite it imposing costs or acting as a constraint. One could, therefore, contemplate standards in such aspects as notice, for example; or limits on the extent of involuntary flexible hours that are required of employees.

One of the most striking results regarding hours of work and hours and work arrangements in the federal jurisdiction concerns overtime hours and pay. Federal jurisdiction employees tend to work a substantial number of paid hours of overtime. One issue for workers is whether overtime hours are voluntary; another is the potential impact on work-life balance.

But, in addition, employees in the federal jurisdiction also tend to work a substantial number of *unpaid* hours of overtime. Ensuring that overtime is paid (or time off in lieu of overtime is provided) is plainly an issue in the federal jurisdiction. Addressing this issue through labour standards (enforcement) is clearly one policy option.

## 5.5 Policy Options for Work and Employment Arrangements: A Role for Labour Standards

Work and employment relationships appear to be a key determinant of economic vulnerability. Various forms of nonstandard work are associated with low pay as well as low benefits, as well as irregular work arrangements. Labour standards related to pay would likely increase their economic well-being but the potential for negative employment consequences would need to be evaluated.

Both the wages and hours issues and approaches to standards that are outlined above could be applied, for example, in the cases of part-time (full-year or part-year) or temporary workers. Among the different categories of nonstandard employees, however, the situation of the self-employed, in particular, needs to be distinguished.

The case of self-employment is important because, on the one hand, being self-employed can be associated with economic vulnerability, and it is also the case that the self-employed fall outside the scope of core labour standards.<sup>59</sup> The challenge is that the self-employed generally do not have spatial attachment to any one workplace outside of their own home; nor do a large proportion of them have formal contracts.

Yet it is, generally, this idea of spatial attachment to a specific workplace that is a defining characteristic of regular employment arrangements and which permits the application of most employment standards under current policy models. While working at home, the self-employed assume risks on their own account. If they perform work at one or more client locations, they still remain outside the scope of the rules and regulations pertaining to regular employees at those work locations.

There appears to be no systematic evidence about the terms and working conditions of employment of the self-employed. But the profile of their work arrangements suggests that labour standards or protections would be difficult to apply, if only because the self-employed tend to be associated with multiple workplaces either at a point in time or over time.

Vallée (2005) suggests a potentially different policy approach may be required, including an option such as extending the legal definition of the employment relationship and an employee in such a way that captures a larger segment of nonstandard workers than do current definitions, or moving toward more universal provision of some benefits. The first approach would simply extend standards to larger proportion of the workforce (and would target nonstandard workers). The second approach would not be targeted and would therefore be justified on the basis of essentiality or that is a basic right.

Extending the legal definition of an employee is likely a viable approach. Among the self-employed who contract with “employers,” the assumption is that there is a dimension of independence that results in an arms-length relationship: the client is not a regular

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<sup>59</sup> See Vallée (2005) on the self-employed and labour standards.

employer, and therefore assumes no responsibilities beyond the terms of the temporary contract. This exclusion of responsibilities typically includes the provision of benefits, or the maintenance of working conditions, or the provision of any forms of job rights. These types of “employer responsibilities” are, however, commonly associated with a formal regular employer-employee relationship. If the assumption of independence does not hold, and the self-employed worker can be characterize as a “deemed employee,” for example, then the further assumption that the exclusion of employer responsibility is also called into question. This suggests the policy option of extending the applicability of labour standards to deemed employees.

**Table 4:  
2002 LICO Before Tax (1 Person)**

	Rural	Urban			
		< 30,000	30,000 to 99,999	100,000 to 499,999	500,000+
<i>LICO</i>	<b>13,311</b>	<b>15,267</b>	<b>16,407</b>	<b>16,521</b>	<b>19,261</b>
<i>LICO Correspondence to Hourly Wage</i>					
40 hours/wk (2080 yrly)	<b>6.40</b>	<b>7.34</b>	<b>7.89</b>	<b>7.94</b>	<b>9.26</b>
36 hours/wk (1872 yrly)	<b>7.11</b>	<b>8.15</b>	<b>8.76</b>	<b>8.83</b>	<b>10.29</b>

*Source:* Statistics Canada Low Income Cut-offs. Hourly wages are calculated based on annual wage estimates for a standard 40 hour/week and 36 hour/week.

**Table 5:**  
**Distribution of Workers Earning Low Wages in the Federal Jurisdiction by Industry, 2002**

	<b>% Less Than \$10.00/hr</b>	<b>% Greater Than \$10.00/hr</b>
<b>Panel A: Federal vs. Non-federal Jurisdictions:</b>		
All Non-Federal Jurisdiction Industries	14.67	85.33
All Federal Jurisdiction Industries	2.13	97.87
<b>Panel B: Federal Jurisdiction Industries:</b>		
Uranium Mining	0	100
Transportation & Pipeline	5.81	94.19
Postal Services	(a)	(a)
Broadcasting & Telecomm.	0.89	99.11
Banking	0	100

Source: Author's calculations, *Workplace and Employee Survey*, 2002.

Note: (a). Suppressed because of at least one low cell count.

**Appendix Table 1:  
Employment Distribution in the Federal Jurisdiction, WES  
Analysis, 2002**

Federal Jurisdiction		
<b>Industry</b>	<b>Frequency</b>	<b>Percent</b>
Uranium Mining	2,747	0.72
Transport & Pipeline	124,693	32.69
Postal Services	23,421	6.14
Broadcasting & Telecomm.	109,823	28.80
Banking	120,709	31.65
Total	381,393	100

*Source: Author's calculations, Workplace and Employee Survey, 2002.*

## 8. Selected References and Works Consulted

Abowd, J., F. Kramarz, T. Lemieux, and D. Margolis, (1999) "Minimum Wages and Youth Employment in France and the United States," in *Youth Employment and Joblessness in Advanced Countries*, ed. David G. Blanchflower and Richard B. Freeman (Chicago: University of Chicago Press), 427–472;

Adams, R., G. Betcherman and B. Bilson. eds. (1995) *Good Jobs, Bad Jobs, No Jobs: Tough Choices for Canadian Labour Law*. Toronto: CD Howe Institute.

Addison, J. and M. Blackburn, (1999) "Minimum Wages and Poverty," *Industrial and Labor Relations Review* 52, no. 3 (April): 393–409.

Altonji, J. and J. R. Spletzer. (1991) "Worker Characteristics, Job Characteristics, and the Receipt of On-the-Job Training." *Industrial and Labor Relations Review*. 45 (October): 58–79.

Appelbaum, E. and R. Batt. (1994) *The New American Workplace*. Ithaca, NY: ILR Press.

Baker, M., D. Benjamin and S. Stanger, (1999) "The Highs and Lows of the Minimum Wage Effect: A Time Series Cross-Section Study of Canadian Law," *Journal of Labor Economics*, 17, no.2.

Baldwin, John and Desmond Beckstead. (2003) "*Knowledge Workers in Canada's Economy*," 1971-2001." Statistics Canada Cat. No. 11-624-MIE Research Paper No. 004.

Baldwin, J., R. Jarmin and J. Tang. (2002) "*The Trend Toward Smaller Producers in Manufacturing: A Canada-U.S. Comparison*." Statistics Canada Catalogue no. 11F00027MIE.

Baldwin, John and Desmond Beckstead. "Knowledge workers in Canada's economy, 1971-2001." Statistics Canada Cat. No. 11-624-MIE research Paper No. 004

Basu, K. (1999) "Child Labor: Cause, Consequence, and Cure, with Remarks on International Labor Standards," *Journal of Economic Literature*, Vol.37, No. 3, p.1083-1119.

Becker, G. (1971) *The Economics of Discrimination*. 2d ed. Chicago: University of Chicago Press.

Befort, Stephen F. (2003) "Revisiting the Black Hole of Workplace Regulation: a Historical and Comparative Perspective of Contingent Work." 24:1, *Berkeley Journal of Employment and Labor*, pp153-178.

Bélanger, Jacques. (2002) "From Human Capital to Organizational Learning." *Canadian Public Policy /Analyse de politiques*, XXVIII no. 1, March 2002, pp. 143-148.

Betcherman, G., and R. Chaykowski. (1996) *The Changing Workplace: Challenges for Public Policy*. Research Paper R-96-13E. Ottawa: Human Resources Development Canada.

Betcherman, G., K. McMullen, N. Leckie, and C. Caron. (1994) *The Canadian Workplace in Transition*. Kingston, ON: IRC Press, Industrial Relations Centre, Queen's University.

Blau, F. and L. Kahn. (2000) "Gender Differences in Pay." *Journal of Economic Perspectives*, 14, no. 4 (Fall): pp 75–99.

Brennan, G. (2000) "Minimum Wages and Working Time During the Last Century." *Workplace Gazette*, Vol.3, No.4 (Winter): 61-73.

Burkhauser, R., K. Couch, and D. Wittenburg, (1996) "'Who Gets What' from Minimum Wage Hikes: A Re-Estimation of Card and Krueger's Distributional Analysis in *Myth and Measurement: The New Economics of the Minimum Wage*" *Industrial and Labor Relations Review* 49, no. 3 (April): 547–552.

Cappelli, P., L. Bassi, H. Katz, D. Knoke, P. Osterman, and M. Useem. (1997). *Change at Work*. New York: Oxford University Press. pp. 15-23.

Card, David, and Alan B. Krueger. (1995) *Myth and Measurement: The New Economics of the Minimum Wage*. Princeton: N.J.: Princeton University Press.

Card, D. and Alan B. Krueger, (2000) "Minimum Wages and Employment: A Case Study of the Fast-Food Industry in New Jersey and Pennsylvania: Reply," *American Economic Review* 90, no. 5 (December): 1362–1420.

Carré, Françoise, Marianne A. Ferber, Lonnie Golder et Stephen A. Herzenberg. (2000) *Nonstandard Work: The Nature and Challenges of Changing Employment Arrangements*, Industrial Relations Research Association (IRRA) Series, 2000, 426 pages.

Chaykowski, R. 2005. Non-standard Work and Economic Vulnerability: Defining Vulnerability in the Labour Market Series – No|2, Work Network. Ottawa: Canadian Policy Research Networks (March).

Chaykowski, R. (2002) "Globalization and the Modernization of Canadian Labour Policy." *Canadian Public Policy*. Vol. 28, No. 1 (March) pp. 81-91.

Chaykowski, R., ed. (2001) *Globalization and the Canadian Economy: The Implications for Labour Markets, Society and the State*. Kingston, ON: School of Policy Studies, Queen's University.

Chaykowski, R. (2004) "Implications of the Changing Structure of the Economy, Labour Market, and Workplace for Canadian Labour Policy: The Case of Pay Equity." *Saskatchewan Law Review*. Vol. 67, No. 2, pp. 459-488.

Chaykowski, R. (2005) "Restoring Balance: the Future of Canadian Labour Relations Policy and Employee Workplace Rights and Freedoms." mimeo.

Chaykowski, R. and G. Slotsve. (2002) "Earnings Inequality and Unions In Canada." (with George Slotsve). *British Journal of Industrial Relations*. Vol. 40, No. 3, (September). pp 493-520.

Chaykowski, R. and M. Gunderson. (2002) "North American Labour Policy Under a Transformed Economic and Workplace Environment." In Murray, G., J. Belanger, A. Giles, and P-A Lapointe, eds., *Work and Employment Relations in the High-Performance Workplace*. London: Continuum. pp. 181- 211.

Chaykowski, R. and M. Gunderson. (2001) "The Implications of Globalization for Labour and Labour Markets." In R. Chaykowski, ed. *Globalization and the Canadian Economy: The Implications for Labour Markets, Society, and the State*. Kingston, ON: School of Policy Studies, Queen's University. pp. 27-60.

Chung, L. (2004) "Low-Paid Workers: How Many Live in Low-Income Families?" *Perspectives on Labour and Income*, 16(4), 23-32.

Coase, R. H. (1992) "The Institutional Structure of Production." *American Economic Review*. Vol.82, Issue 4. pp. 713-719.

Coase, R. H. (1937) "The Nature of the Firm." *Economica*. Vol. 4, No.16 pp. 386-405.

Cobble, Dorothy Sue, and Leah F. Vosko (2000) "Historical Perspectives on Representing Nonstandard Workers," In F. Carré, M. A. Ferber, L. Golder and S.A. Herzenberg, *Nonstandard Work. The Nature and Challenges of Changing Employment Arrangements*, Industrial Relations Research Association (IRRA) Series, pp. 291-312.

Comfort, Derrick, Karen Johnson, and David Wallace. (2003) *Part-time Work and Family-Friendly Practices in Canadian Workplaces*. Statistics Canada and Human Resources Development Canada. Cat. No. 71-584-MIE. The Evolving Workplace Series, No. 6 (June).

Commission for Labor Cooperation. (2003) *North American Labor Markets: Main Changes Since NAFTA*. Washington, DC: Secretariat of the Commission for Labor Cooperation.

Corak, M, W-H Chen, A. Demanti and D. Batten. (2002) "'Social Cohesion' and the Dynamics of Income in Four Countries." Paper prepared for the Fifth international German Socio-Economic Panel Conference. Berlin. (July 2002)

Corak, M. (1998) "How to Get Ahead in Life: Some Correlates of Intergenerational Income Mobility in Canada." *Labour Markets, Social Institutions and the Future of Canada's Children*. 65-89. Cat. No. 89-553-XPB. Ottawa: Statistics Canada and Human Resources development Canada.

Courchene, T. (2001) *A State of Minds: Toward a Human Capital Future for Canadians*. Montreal: Institute for Research on Public Policy.

Courchene, T. (2001) "Social Dimensions of the New Global Order." In R. Chaykowski, ed., *Globalization and the Canadian Economy: The Implications for Labour Markets, Society, and the State*. Kingston, ON: School of Policy Studies, Queen's University, at 61-104.

Courchene, T. (2002) "Human Capital in an Information Era." *Canadian Public Policy*. Vol. 28, pp. 73.

Cranford, Cynthia and Leah F. Vosko and Nancy Zukewich. (2003) "Precarious Employment in the Canadian Labour Market: A Statistical Portrait." *Just Labour*. Vol. 3 (Fall) pp. 6-22.

Cranford, Cynthia J., Leah F. Vosko et Nancy Zukewich. (2003) "The Gender of Precarious Employment in Canada", 58:3 *Relations industrielles*, 454-482.

Danziger, Sheldon, and Peter Gottschalk. (1986) "Work, Poverty, and the Working Poor: A Multifaceted Problem." *Monthly Labor Review*, 109(9), (September), pp. 17-21.

Delage, Benoit. (2002) *Results from the Survey of Self-Employment in Canada*. Human Resources Development Canada, Applied Research Branch, Cat. No. RH64-11/2001E (January).

Drolet, M. (2001) "The Persistent Gap: New Evidence on the Canadian Gender Wage Gap," Statistics Canada 11F0019MPE No. 157 (January).

Duxbury, L. and C. Higgins. (2001) "Work-Life Balance in the New Millennium: Where Are We? Where Do We Go? Discussion. Paper No. W|12. (October) Ottawa: Canadian Policy Research Networks.

Economic Council of Canada. (1990) *Good Jobs, Bad Jobs: Employment in the Service Economy*. Ottawa: Supply and Services Canada.

Edwards, Paul, Monder Ram and John Black. (2003) "*The Impact Of Employment Legislation On Small Firms: A Case Study Analysis*." Industrial Relations Research Unit,

Warwick Business School Employment Research series no. 20. Department of Trade and Industry. (September)

Ehrenberg, R. Smith and R. Chaykowski. (2003) *Modern Labour Economics: Theory and Public Policy*. First Canadian Edition. Toronto: Pearson Addison-Wesley.

Ehrenberg, R. (1994) *Labor Markets and Integrating National Economies*. Washington DC: Brookings.

Farber, H., and B. Western. (2001) "Accounting for the Decline of Unions in the Private Sector, 1973-1998." *Journal of Labor Research*. 22(3) (Summer) pp. 459-85.

Farber, Henry. (1999) "Alternative and Part-Time Employment Arrangements as a Response to Job Loss." *Journal of Labor Economics*. Vol. 17, No.4. (October) pp. S142-S169.

Finnie, R. and A. Sweetman. (2003) Poverty Dynamics: Empirical Evidence for Canada,' *Canadian Journal of Economics*. Vol.36, No.2 (May).

Fudge, Judy. (2003) "Labour Protection For Self-Employed Workers." *Just Labour*. Vol. 3 (Fall) pp. 36- 45.

Fudge, Judy and Eric Tucker. (2001) *Labour Before the Law: the Regulation of Workers' Collective Action in Canada, 1900-1948*. Oxford University Press, 398 pages.

Fudge, Judy and Leah F. Vosko. (2001) "Gender, Segmentation and the Standard Employment Relationship in Canadian Labour Law, Legislation and Policy." 22, *Economic and Industrial Democracy*.pp. 271-310.

Fudge, Judy, Eric Tucker and Leah F. Vosko. (2003) "Employee or Independent Contractor? Charting the Legal Significance of the Distinction in Canada." 10:2, *Canadian Journal of Labour and Employment Law*. pp. 193-230.

Fudge, Judy and Leah F. Vosko. (2003) "Gendered Paradoxes and the Rise of Contingent Work: Towards a Transformative Feminist Political Economy of the Labour Market." In W. Clement and L.F. Vosko, eds., *Changing Canada: Political Economy as Transformation*, Montréal and Kingston, McGill-Queen's University Press, pp. 183-213.

Fudge, Judy, Eric Tucker, and Leah Vosko. (2002) "*The Legal Concept of Employment: Marginalizing Workers.*" Paper Prepared for the Law Commission of Canada. (October 25).

George, P. and P. Kuhn. (1994) "The Size and Structure of Native-White Wage Differentials in Canada." *Canadian Journal of Economics* 27, no. 1 (February): pp. 20-42.

Godard, John. (2003) . “Labour Unions, Workplace Rights and Canadian Public Policy.” *Canadian Public Policy*, Vol. 24, No. 4, pp. 449-467.

Gunderson, M. (1998) *Women and the Canadian Labour Market: Transition Towards the Future*.  
Statistics Canada Catalogue no. 96-321-MPE No.2.

Gunderson, M., A. Sharpe and S. Wald. (2000) “Youth Unemployment in Canada, 1976-1998.” *Canadian Public Policy*, 26, Special 1. pp. S85–S100.

Gunderson, M. and W. C. Riddell. (2000) “The Changing Nature of Work: Implications for Public Policy.” In F. St.-Hilaire and W. C. Riddell, eds., *Adapting Public Policy to a Labour Market in Transition*. Montreal: IRPP, pp. 1-37.

Gunderson, M., D. Hyatt and C. Riddell. (2000) “Pay Differences between the Government and Private Sectors: Labour Force Survey and Census Estimates.” CPRN Discussion Paper No. W/10 (February) Ottawa: Canadian Policy Research Networks.

Hatfield, M. (2004) “Vulnerability to Persistent low Income.” *Horizons*. Vol. 7, No. 2 (December).

Heisz, Andrew and Sébastien LaRochelle-Côté. “*Working hours in Canada and the United States*.” Catalogue no. 11F0019MIE. Analytical Studies Branch Research Paper No. 209. Ottawa: Statistics Canada

Janz, T. (2004) “Low-Paid Employment and ‘Moving Up’, 1996-2001.” Income Research Paper Series. Catalogue no. 75F0002MIE2004003. Ottawa: Statistics Canada.

Jenson, Jane. (2004) *Catching Up To Reality: Building the Case for a New Social Model*. CPRN Research Report F|35. Ottawa: Canadian Policy Research Networks. Accessible at [www.cprn.org](http://www.cprn.org).

Jovanovic, B. (1979) “Job Matching and the Theory of Turnover.” *Journal of Political Economy*, 87 (October) pp. 972–990.

Kalleberg, Arne and Barbara F. Reskin and Ken Hudson. (2000) “Bad Jobs In America: Standard and Nonstandard Employment Relations and Job Q...” *American Sociological Review*. Vol. 65, No. 2; (April) pp. 256-278.

Kalleberg, Arne. (2000) “Nonstandard employment relations: Part-time, temporary and contract work.” *Annual Review of Sociology*. Vol. 26, pp. 341-365.

Kaufman, B. and D. Taras, eds., (2000) *Nonunion Employee Representation: History, Contemporary Practice, and Policy*. Armonk, NY: M.E. Sharpe.

- Kaufman, B. and D. Taras. (2000) "Non-union Employee Representation: Findings and Conclusions." In B. Kaufman and D. Taras, eds., *Non-union Employee Representation: History, Contemporary Practice, and Policy*. Armonk: New York: ME Sharpe, pp. 527-557.
- Kochan, Thomas. (2002). "An Employment Policy Agenda for Working Families." MIT Workplace Center #WPC0003 (February).
- Kochan, T, H. Katz and R. McKersie. (1986) *The Transformation of American Industrial Relations*. New York: Basic Books.
- Krahn, H. (1995) "Non-standard Work on the Rise." *Perspectives on Labour and Income*. Statistics Canada Catalogue no. 75-001-XPE. (Winter) pp. 35-42.
- Langille, Brian. (2002) "Labour Policy in Canada—New Platform, New Paradigm" *Canadian Public Policy*. Vol. 28, No. 1 (March) pp.133-142.
- Lautsch, Brenda. (2003) "The Influence of Regular Work Systems on Compensation for Contingent Workers." *Industrial Relations*. Vol. 42, No. 4 565-588.
- Lavoie M. and R. Roy. (1998) "Employment in the Knowledge-Based Economy: A Growth Accounting Exercise for Canada," HRDC Applied Research Branch Research paper R-98-8E (June).
- Lin, Zhengxi, Janice Yates and Garnett Picot. (1999) "Rising Self-Employment in the Midst of High Unemployment: An Empirical Analysis of Recent Developments in Canada." Statistics Canada Catalogue no. 11F0019MPE. Paper No. 133 (March).
- Lin, Zhengxi and Garnett Picot and Janice Yates. (1999) "The Entry and Exit Dynamics of Self-Employment in Canada." Statistics Canada Cat. No. 11F0019MPE. Research Paper No. 134 (March).
- Lipset, S. and N. Meltz. (2004) *The Paradox of American Unionism: Why Americans Like Unions More Than Canadians Do but Join Much Less*. Ithaca: Cornell University Press
- Lipset, S. and N. Meltz. (2000) "Estimates of Nonunion Employee Representation." In Kaufman and Taras, eds., *Nonunion Employee Representation: History, Contemporary Practice, and Policy*. Armonk, NY: M.E. Sharpe.
- Lombard, Karen. (2001) "Female self-employment and demand for flexible, nonstandard work schedules." *Economic Inquiry*. Vol. 39, No. 2, (April) pp. 214-237.
- Lowe, Graham S. (2002) "Employment Relationships as the Centrepiece of a New Labour Policy

Paradigm”, *Canadian Public Policy / Analyse de politiques*, XXVIII no. 1, (March) pp. 93-104.

Macpherson, Elizabeth. (1999) “Collective Bargaining for Independent Contractors: Is the Status of the Artist Act a Model for other Industrial Sectors.” 7, *Canadian Labour and Employment Law Journal*, pp. 355-589.

Manser, Marilyn and Garnett Picot. (1999) “The role of self-employment in U.S. and Canadian job growth.” *Monthly Labor Review*. (April) pp.10-25.

Manser, M. and G. Picot. (1999) “The Role Of Self-Employment In Job Creation In Canada And The United States.” *Canadian Economic Observer*. Statistics Canada Catalogue no. 11-010-XPB. (March) pp. 3.1-3.17.

Marshall, K. (2003) “Benefits of the Job,” *Perspectives on Labour and Income*, 4 (5), 5-12.

Marshall, K. (2001) “Part-time by Choice.” *Perspectives on Labour and Income*. (Spring) Statistics Canada Catalogue No. 75-001-XPE.

Maxwell, Judith. (2002) *Smart Social Policy – Making Work Pay*. Ottawa: Canadian Policy Research Networks.

Martin, G. and V. Kats. (2003) “Families and Work in Transition in 12 Countries, 1980-2001,” *Monthly Labor Review*. (September) pp. 3-31.

Massé, P., R. Roy and Y. Gingras. (1998) “*The Changing Skill Structure of Employment in Canada*.” HRDC Applied Research Branch Research Paper R-99-7E.

McWatters, C. and C. Beach. (1990) “Factors Behind the Changes in Canada's Family Income Distribution and the Share of the Middle Class,” *Relations Industrielles/Industrial Relations*, Vol. 45, No.1, pp. 118–135.

Morissette, René. (2002) “On the edge: Financially vulnerable families.” *Canadian Social Trends*. (Winter) pp. 13-17.

Morissette, René and Anick Johnson. (2005) “Are Good Jobs Disappearing in Canada?” Analytical Studies Branch Research Paper No. 239. Ottawa: Statistics Canada.

Morissette, R and Picot, G.( 2005) “Low-paid Work and Economically Vulnerable Families over the Last Two Decades.” Analytical Studies Branch Research Paper, Statistics Canada.

Morissette, René and Xuelin Zhang. (2001) “Experiencing low income for several years.” *Perspectives on Labour and Income*. Statistics Canada Catalogue no. 75-001-XPE. (March) pp. 5-15.

- Morissette, René and Marie Drolet. (2000) “*To What Extent Are Canadians Exposed to Low-Income?*” Statistics Canada. Catalogue no. 11F0019MPE, No. 146 (April).
- Myles, John. (2000) “Incomes of Seniors.” *Perspectives on Labour and Income*. Statistics Canada Catalogue no. 75-001-XPE. (Winter) pp. 23-32.
- Myles, J., G. Picot and T. Wannell. (1988) “The Changing Wage Distribution of Jobs, 1981–1986,” *Canadian Economic Observer*, Vol. 1, No.11. Ottawa, Ontario: Minister of Supply and Services: pp. 4.1–4.33.
- Neumark, D. and W. Wascher, (2000) “Minimum Wages and Employment: A Case Study of the Fast-Food Industry in New Jersey and Pennsylvania: Comment,” *American Economic Review* 90, no. 5 (December): 1362–1420.
- Noreau, N. (2000) “Longitudinal Aspect of Involuntary Part-time Employment,” Statistics Canada. Catalogue no. 75F0002MIE-00003. (April).
- Osberg, L. (2000) “Poverty Levels in Canada and the United States: Measurement, Trends, and Implications,” *Canadian Journal of Economics*, (November): 847–877.
- Osberg, L. and Xu, K. (1999) “Poverty Intensity: How Well Do Canadian Provinces Compare?” *Canadian Public Policy*, 25, no.2.
- Panitch, L. , and D. Swartz. (1984) “From Free Collective Bargaining to Permanent Exceptionalism: The Economic Crisis and the Transformation of Industrial Relations in Canada”. In M. Thompson and G. Swimmer, eds., *Conflict or Compromise: The Future of Public Sector Industrial Relations*. Montreal: Institute for Research on Public Policy. pp.407-435.
- Picot, G., R. Morissette, J. Myles. (2003) “*Low-Income Intensity During the 1990s: The Role of Economic Growth, Employment Earnings and Social Transfers.*” Statistics Canada, Business and Labour Market Analysis Division, Catalogue no. 11F0019MIE No. 172.
- Polivka, Anne. (1996) “Contingent and Alternative Work Arrangements Defined.” *Monthly Labor Review*. Vol. 119, no.10 (October) pp. 3-9.
- Polivka, Anne and Thomas Nardone. (1989) “On the Definition of ‘Contingent Work’” *Monthly Labor Review*. Vol. 112 no.12 (December) pp. 9-16.
- Powell, Walter W. (2001) “The Capitalist Firm in the Twenty-First Century: Emerging Patterns in Western Enterprise.” In P. Dimaggio, ed, *The Twenty-First Century Firm. Changing Economic Organization in International Perspective*, Princeton and Oxford: Princeton University Press, pp. 33-68.

Reder, M. (1994) "On Labor's Bargaining Disadvantage." In C. Kerr and P. Staudohar, eds., *Labor Economics and Industrial Relations*, Cambridge, MA: Harvard. pp 237-256.

Riddell, W.C. (1993) "Unionization in Canada and the United States: A Tale of Two Countries," in D. Card and R. Freeman, eds., *Small Differences That Matter: Labour Markets and Income Maintenance in Canada and the United States*. Chicago: University of Chicago Press.

Rittich, Kerry. "*Vulnerability at Work: Legal and Policy Issues in the New Economy.*" Report for the Law Commission of Canada.

Rittich, Kerry. "*Vulnerability at Work: Legal and Policy Issues in the New Economy.*" Report for the Law Commission of Canada.

Roberts, A., (2001) "Altered States: Public Sector Restructuring and Governmental Capacity," in R. Chaykowski, ed., *Globalization and the Canadian Economy: The Implications for Labour Markets, Society, and the State*. Kingston, ON: School of Policy Studies, Queen's University. pp. 105-130.

Rose, J. and G. Chaison. (1991) "Continental Divide: The Direction and Fate of North American Unions." In D. Sockell, D. Lewin and D. Lipsky, eds., *Advances in Industrial and Labor Relations*, Vol. 5. Greenwich, CT: JAI Press Inc. pp.169–205.

Saunders, Ron. (2003) *Defining Vulnerability in the Labour Market*, Research Paper W|21 (November), Ottawa: Canadian Policy Research Networks.

Schaafsma, J. and W. Walsh, (1983). "Employment and Labour Supply Effects of the Minimum Wage: Some Pooled Time-Series Estimates from Canadian Provincial Data," *Canadian Journal of Economics*, 16, no.1.

Sen, A. and J.E. Foster (1997) *On Economic Inequality*, Second edition, Oxford: Clarendon Press.

Shapiro, I. (1999) *Democratic Justice*. New Haven: Yale University Press.

Shannon, M. and C. Beach, "Distributional Employment Effects of Ontario Minimum-Wage Proposals: A Microdata Approach," *Canadian Public Policy*, 21, no.3 (1995): 284-303.

Singh, S. (2001) "Supplements and Complements to the Current Employee Representation System in the United States," *Employee Responsibilities and Rights Journal*. Vol. 13, No. 2 (June) pp. 107-124.

Smith, Adam. (1994) *An Inquiry Into the Nature and Consequences of the Wealth of Nations*. New York: Modern Library. (1 st edition 1776).

Statistics Canada. 2005. *Canadian Economic Observer*. (July) Catalogue No. 11-210-XPB, Vol. 19. (Ottawa: Minister of Industry).

Statistics Canada. (2003) *Education, Employment and Income of Adults with and Without Disabilities – Tables*.

Statistics Canada. (2003) 2001 Participation and Activity Limitation Survey. Catalogue no. 89-587-XIE (September)

Statistics Canada. (2002) *A Profile of Disability in Canada, 2001*. Catalogue no. 89-577-XIE. (December)

Statistics Canada. (2000) *Longitudinal Aspect of Involuntary Part-Time Employment*. Catalogue no. 75F0002MIE – 00003(April)

Statistics Canada. *Workplace and Employee Survey: Compendium. 1999 Data*. Catalogue no. 71-585-XIE.

Swidinsky, R. (1980) “Minimum Wages and Teenage Unemployment,” *Canadian Journal of Economics*, 13, no.1.

Swimmer, G. (1995) “Collective Bargaining in the Federal Public Service of Canada: The Last Twenty Years.” In G. Swimmer and M. Thompson, eds., *Public Sector Collective Bargaining In Canada*. Kingston, ON: Queen's University IRC Press. pp. 368-407.

Taras, Daphne G., (2002) “Alternative Forms of Employee Representation and Labour Policy.”, In *Canadian Public Policy / Analyse de politiques*, 28 no. 1, (March) pp.105-116.

Trudeau, Gilles. (2002) “Changing Employment Relationships and the Unintentional Evolution of Canadian Labour Relations Policy.” in *Canadian Public Policy / Analyse de politiques*, 28 no. 1, (March) pp. 149-152.

UK Department of Trade and Industry. (2002) *Discussion Document on Employment Status in Relation to Statutory Employment Rights*. (July) URN 02/1058. Department of Trade and Industry.

Visser, J. (2003) “Unions and Unionism around the World.” In J. Addison and C. Schnabel, eds., *International Handbook of Trade Unions*, Northampton, MA: Edward Elgar. pp. 366-413.

Vosko, Leah F. (2000) “Promising ‘Flexibility’ and Delivering Precariousness: The Shape of the

Contemporary Employment Relationship”, in L.F. Vosko (ed.), *Temporary Work: The Gendered Rise of a Precarious Employment Relationship*, Toronto, University of Toronto Press, pp.157-199.

Vosko, Leah F. (1997) “Legitimizing the Triangular Employment Relationship: Emerging International Labour Standard from a Comparative Perspective.” 19, *Comparative Labour Law and Policy Journal* 43- 47.

Vosko, Leah F. (1998) “Regulating Precariousness?: The Temporary Employment Relationship Under the NAFTA and the EC Treaty.” 53:1, *Relations Industrielles*. pp. 123-153.

Vosko, Leah, Nancy Zukewich and Cynthia Cranford. (2003) “Precarious jobs: A new typology of employment.” *Perspectives on Labour and Income*. Statistics Canada Catalogue no. 75-001-XPE. (October) pp. 16-26.

Weil, D. (2002) “Regulating Noncompliance to Labor Standards: New Tools for an Old Problem.” *Challenge*, Vol.45, No.1, pp. 47-74.

Weiler, P. (1983) “Promises to Keep: Securing Workers’ Rights to Self-Organization Under the NLRA.” *Harvard Law Review*. Vol. 36, No. 8, pp.1769-1827.

Wiens-Tuers, Barbara and Elizabeth Hill. (2002) “How Did We Get Here From There? Movement Into Temporary Employment.” *Journal of Economic Issues*. Vol. 36, No.2, (June) pp. 303-311.

Williams, C. (2004) “The Sandwich Generation.” *Perspectives on Labour and Income*. Statistics Canada Catalogue no. 75-001-XPE. (September) p.5

Williams, C. (2003) “Sources of Workplace Stress,” *Perspectives on Labour and Income*. Statistics Canada Catalogue no. 75-001-XPE. (June) p.5

Zhang, X. (2002) “Wage Progression of Less Skilled Workers in Canada: Evidence from the SLID (1993-1998).” Statistics Canada Catalogue no. 11F0019MIE. Research Paper No. 194. (December)

Zeytinoglu, I. and J. Muteshi. (2000) “Gender, Race and Class Dimensions of Nonstandard Work.” 55(1), *Relations industrielles*. pp. 133-167.

Zeytinoglu, I. (2001) “Social Justice for Workers in Non-Standard Employment Forms and Contracts.” In R.P. Chaykowski, ed., *Globalization and the Canadian Economy: The Implications for Labour Markets, Society and the State*. Kingston: School of Policy Studies, Queen’s University. pp. 218- 228.