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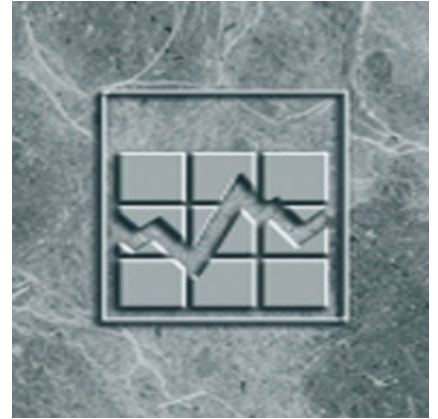
# Low-paid employment and moving up: A closer look at full-time, full-year workers

1996-2001

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**Low-paid employment and moving up:  
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## Highlights

Men who worked full time in low paying jobs for all of 1996 were almost three times more likely than women with similar employment to move into higher paying jobs by 2001. Men had a 73% chance of moving up to a higher paying job compared to 28% for women. While women were only slightly more likely than men to be employed in low paying jobs in 1996, by 2001 they were considerably more likely to be still earning low wages.

This study, which uses data from the Survey of Labour and Income Dynamics, profiles Canadian workers who experienced low pay.

This analysis covers full-time employees who worked the entire year in order to define a homogeneous study population. It updates a previous study that also included part-time workers and workers who were employed for only part of the year. In the previous study, the difference between men and women in the likelihood of moving out of low paid work was not as pronounced.

Individuals with hourly wages of less than \$10.95 at the end of 1996 were flagged as low-paid workers. A low paid worker in 1996 was said to have moved up if hourly wages by 2001 were at least \$13.26. This level is approximately 10% greater than the threshold for Statistics Canada's 2001 low-income cut-off for a family of two living in an urban area of at least half a million people.

Not surprisingly, employees under 25 (both men and women) were more likely to move up than those between 25 and 44. These younger workers are finishing their education and starting their careers. Having pre-school children in 1996 was also a predictor of moving into higher paid work for employees of any age.

As would be expected, those with more education had a lower probability of experiencing low pay. But if they did, they had a higher probability of moving up. University degree holders had an 81% chance of moving up compared to a 46% chance of moving up for those with high school or less. Having a university degree removed any difference between the sexes in the probability of experiencing low pay. Data limitations did not permit a separate analysis of moving up for men and women.

Those working in occupations related to services were less likely than those with clerical jobs to move out of their low paying jobs. Services occupations include food and beverage services, protective services, childcare and home support workers, and those in travel, accommodation or recreation.

Industrial sectors offering the best chance for moving up included the goods producing sector; business, professional and scientific services; and the public service. Medium-to-large, unionized firms were best.

Given these job characteristics would it benefit workers to switch jobs? The study showed that simply changing jobs, even moving from a non-unionized workplace to a unionized one,

did not increase the likelihood of “upward mobility”. However, there is evidence that moving to a larger firm increased the likelihood of moving out of low pay.

This study updates two previous Statistics Canada studies titled “Moving out of low-paid work, 1996 to 2001” released in the *Daily* on March 26, 2004 and “The upward mobility of low-paid Canadians, 1993 to 1995” released in the *Daily* on June 17, 1998.

## 1. Introduction

According to “The Changing Profile of Canada’s Labour Force” based on data from the 2001 Census of Population, one of the three key factors shaping the nation’s workforce between 1991 and 2001 has been the “demand for skills in the face of advancing technologies”. Of the 15.6 million people in the labour force in 2001, more than 2.5 million were in highly skilled occupations that normally required university education. This was a 33% increase from 1991; triple the rate of growth for the labour force as a whole. (Statistics Canada. 2003b).

Another important characteristic of the labour force between 1991 and 2001 was the continuing increase in the participation of women. The number of women in the labour force grew at twice the pace of men between 1991 and 2001, increasing 13.8% to 7.3 million. (The number of men increased by 6.0% to 8.3 million.) Women accounted for fully two-thirds, or 884,400, of the overall 1.3 million gain in the labour force during the 1990s. As a result, their share of the labour force increased to 46.7% from 45.0% in 1991. (Statistics Canada. 2003b).

Women are continuing to make advances in the work force in terms of factors that have the potential to increase their earnings and status relative to men. For example, they have increasingly been entering traditionally male-dominated fields and are continuing to increase their education level, skill level, and job experience relative to men (Drolet, 1999).

Despite these advances, a gender earnings gap remains that research has not been able to explain. The fact that women continue to make about 84% to 89% of what men make even after controlling for many important variables, remains an important topic of investigation (Drolet, 1999).

What does all this mean for low wage workers? Have changes in the work force made some workers, especially women, more vulnerable to being trapped in low paid work?

Previous research investigating low paid work and upward mobility found that some sex differences in pay may be partly explained by individual characteristics such as age and education or by job characteristics such as industry and occupation (Drolet & Morissette, 1998; Janz, 2004). These studies used data from the Survey of Labour and Income Dynamics (SLID) to investigate the low weekly wages of workers - both part-time and full-time. This article also uses SLID data from 1996 and 2001. However, it is different from previous studies in that it focuses on full-time, full-years workers and uses hourly wage rates.

Why focus only on full-time, full-years workers? One limitation of including both full-time and part-time workers is that people may be working part-time for different reasons. Presumably, policy implications would differ for those who choose to work part-time versus those who feel obliged to accept part-time work.

Another limitation related to the inclusion of part-time workers is the link between sex differences and part-time work. In the Janz (2004) study, most part-time workers were women (87%). Other research has found that married women are more likely to work part-time as compared with married men, which may be partly explained by the difficulty of balancing



family and career (Drolet, 2001). This study is not intended to provide a global view of all low wage earners because of the focus on full-time, full-years workers.

Why use hourly wages? A second methodological issue in the Drolet and Morissette (1998) and Janz (2004) studies was that the measure of low pay involved low weekly wages. If researchers are to explore sex differences in pay, hourly wage rates tend to be a much better measure because of the problematic assumption that weekly wages reflect similar hours worked by both men and women (Drolet, 1999).

The current study examines sex differences among full-year, full-time employees who had low hourly wages in their main job in 1996, and determines whether these same individuals remained in low paying jobs in 2001.

## 2. Data Source and Sample

The Survey of Labour and Income Dynamics (SLID) was used to investigate the research questions posed in this article. This longitudinal household survey provides the opportunity to explore wages including information on the transitions and durations of low-paid work over time. A major advantage of using a longitudinal survey such as SLID (as compared with a cross-sectional survey), is that we can gain a better understanding of the dynamics of low-paid work (i.e., we can identify those who do and do not move up).

The first panel in SLID was introduced in January 1993, and respondents were followed for six years. Data collection for a second six-year panel of respondents began in 1996 and these respondents were followed until 2001 (Statistics Canada, 2003a). Only the data from this second panel were used in this study.

The target population for SLID is all Canadians except those in the Yukon, Nunavut or Northwest Territories, residents of institutions (unless under six months), persons living on Indian Reserves, and full-time members of the Canadian Armed Forces living in barracks. Each panel has a sample of approximately 15,000 households (approximately 31,000 adults age 16 and over).

### **Definition of target population in the current study**

Two groups were examined in this article. In both groups, only the person's *main* job (the job with the most hours in the year) was considered.

#### ***Group 1 (Workers)***

First, a profile of full-time, full-years workers was documented. The sample was restricted to include:

- longitudinal respondents (Panel 2), who replied to the survey in both 1996 and 2001,
- those who reported their major activity to be working full-year, full-time (worked every week of the year and more than 130 hours per month) at a job or business in both 1996 and 2001 (i.e., this excludes retired people and those who were going to school full-time and/or whose main activity was flagged as being a student); and
- respondents aged 16-50 years old in 1996 (21-55 years old in 2001).

Paid workers who did not report wages and hours (in their main job) in both 1996 and 2001; and those who were on leave the entire year were excluded from the sample. Also excluded were those who were employed in agriculture, fishing or trapping industries, or who were self-employed in 1996 or 2001.

#### ***Group 2 (Low Paid Workers)***

Second, to examine the upward mobility of low-paid workers an additional selection criterion was added to those listed above. That is, respondents had to be defined as having low hourly wages (see *Definitions*) in 1996 to be included in this sample.

### 3. Methodology

#### 3.1 Definitions

**Full-year, full-time (FYFT):** Full-year and part-year are determined according to the annual labour force status. A person had to be employed in every week of the year to be considered full-year. Full-time and part-time are determined according to the monthly hours worked at all jobs. A person had to be working more than 130 hours per month to be considered full-time

To identify FYFT workers, the variable “scsum28” was used and it refers to the *annual* labour force status of the worker, combining all jobs worked. Next the worker’s main job (job with the most hours) was selected. This is the general approach used by researchers to identify FYFT workers. Note that a worker’s annual labour status could be FYFT, while his/her main job could be part-time. Also workers who worked full-time but did not work the full year are excluded.

**Wage:** is the hourly wage for a paid worker’s job at the end of the reference year or end of the job if it ended during the reference year. The amount includes tips, bonuses and commissions.

**Low-paid work or low hourly wages:** This is based on the before-tax Low Income Cutoff (LICO) for a family of two people living in an urban area of at least half a million people. The rationale for using this LICO, according to Morissette and Bérubé (1996), was that in 1995, they found that 20% of male workers aged 25-54 earned less than \$21,073 per year. This amount approximated the 1993 before-tax LICO for a family of two people living in an urban area of at least half a million people, which was \$20,603. Thus, this particular LICO threshold (i.e., for a family of two living in an urban area) was selected because it reflects approximately the same dollar amount as what “low paid” (bottom 20%) men were actually earning.

Of note is the fact that *Income in Canada* (Catalogue no. 75-202) recommends using *after-tax* LICOs in publications because they account for income taxes and transfers - two methods of income redistribution. However, the rationale for using a *before-tax* cutoff in this study is that we are examining paid income and the before-tax cutoff is a better reflection of what workers are being paid.

To compute the “low paid work” threshold, the appropriate LICO (for 1996 it was \$21,414) was divided by 52.14 (weeks/year) = \$410.70 dollars/week. The computation for low hourly wages was \$410.70 / 37.5 hours per week = \$10.95/ hour. Individuals with hourly wages less than \$10.95 were flagged as low-paid workers.

A rationale could be provided for using either 37.5 or 40 hours per week. For example, when exploring the average hours per week worked in December (the variable of interest in this study), there were peaks in the distribution at both 37.5 and 40 hours. Second, when examining sex differences in the average hours worked per week, women’s average was closer to 37.5, while men’s was closer to 40. Third, when examining the average hours per week in the various industries, three were closer to 37.5 hours per week (business/ professional/ science, public services and distributive services), while three were closer to 40 hours per week

(consumer services, manufacturing and goods producing). Because this study focuses on low paid workers it may be better to use 37.5 hours per week, which slightly overestimates how much money people are making. This means that only those who are “really” low paid will be included in the low paid sample and those who are borderline will not be considered low paid.

**Moving Up:** An individual was identified as moving up if wages were at least 10% above the appropriate LICO threshold for 2001 (\$23,551) based on method described in “low paid work or low hourly wages” above; otherwise the person was coded as not having moved up. The reason for exploring the probability of moving up over a 5-year time span (a full panel of respondents), was to allow workers to have the maximum probability of moving up.

To compute the hourly threshold, the appropriate 2001 LICO threshold of \$23,551 was divided by 52.14 weeks/year and 37.5 hours per week. The result is \$12.05/ hour. Therefore, in this study, individuals had to be making more than  $\$12.05 \times 1.10 = \$13.26$  per hour in 2001 to be flagged as having moved up. The 10% “buffer zone” was used to avoid including those who only made marginal transitions out of low-paid work. It is important to note that the LICOs are CPI updated and were based on the same 1992 base year, which “standardizes” the thresholds, allowing them to be compared over time. Thus, the moving-up threshold adjusts for inflation.

**Industries:** The industry codes in SLID describe the employer and are based on the North American Industrial Classification System (NAICS 1997). Within each industry category, jobs with various pay levels are represented. This variable was grouped into 6 categories for the purposes of this study:

*Goods producing* - forestry, mining, oil and gas, and construction

*Distributive services* - utilities, trade, transportation and warehousing, information, culture and recreation, and public administration

*Business, Professional & Science services* - finance, insurance, real estate and leasing, professional (e.g., lawyers, accountants), scientific and technical services (e.g., computer systems design)

*Consumer services* - management, administrative and other support; accommodation and food services; and other services

*Public services* - educational services, health care and social assistance, public administration

*Manufacturing* - manufacturing industries (e.g., food, clothing and other manufactured products)

**Occupations:** The occupation grouping is based on the respondent’s job at the end of the reference year. The major groups were defined in the Standard Occupational Classification System (SOC 1981). Within each occupation category, jobs with various pay levels are represented. Five occupations were used for the purposes of this study:

*Professionals, managers, scientists* - management and other professions; natural sciences, engineering and mathematics; social sciences; teaching and related occupations; medicine and health; and art, culture, recreation and sport

*Clerical* - Clerical and related occupations (e.g., clerks, stenographers, bookkeeping, data processing and material recording, reception, information, mail and supervisors)

*Sales* - Sales specialists (e.g., wholesale, retail, technical, insurance, real estate), retail salespersons, cashiers, supervisors

*Services* - Food and beverage service (e.g., chefs, cooks), protective services, childcare workers, home support workers, occupations in travel and accommodation or recreation and sport

*Manual labour* - factory workers; supervisors; food, beverage and textile processors; skilled crafts and trades; mining and quarrying; product fabricating; assembling and repairing occupations; construction trades occupations; transport equipment operating; material handling and related occupations

#### **Transition Variables:**

*Employer Change* - worker had a different main job in 2001 than in 1996.

*Union Status Change* - identifies workers who were not covered by a collective agreement, nor were they employed in a unionized organization in 1996, but by 2001 they were either covered by a collective agreement or they moved to a unionized organization.

*Firm Size Change* - identifies workers who were in a small firm (less than 20 people) in 1996, but by 2001 either they moved to a large firm (500 or more people), or their organization grew to have 500 or more workers.

### 3.2 Logistic regression models

Logistic regression estimates the probability that a particular outcome will occur as a function of several explanatory variables.

In the first regression model the outcome concerns whether the individual experienced low hourly wages in 1996. In the second set of regression models the outcome concerned whether those who were low paid in 1996 moved out of low paid work by 2001.

Although the outcome is a function of several predictor variables, we can compare the probability of a particular outcome between individuals who are identical in every way except one. For example, a comparison of the probability of who is more likely to be low paid can be made between men and women of the same age, education level, presence of preschool children, region of residence, occupation, industry, firm size and union status. In this way the relationship between each explanatory variable and the outcome can be explored while holding all the other variables constant. A Wald chi-square statistic is computed for each explanatory variable to determine whether a change in the variable is associated with a significant increase or decrease in the probability of the outcome.

Three separate low pay regression models were computed; one for both sexes, one for males and one for females (see Table 1). All included controls for:

- (i) **worker characteristics** measured in 1996, including: age, education, interaction variable for family composition and sex, presence of preschool children, and region
- (ii) **job characteristics** measured in 1996, including: occupation, industry, firm size and union status. The variable “years of work experience” was not included as a control variable in these models because age and years of work experience were significantly correlated  $r = .60$ ,  $p < .0001$  (using normalized weights) especially for men.

Considering the workers who moved out of jobs with low hourly wages between 1996 and 2001, it was statistically not feasible to compute multivariate logistic regression models separately for men and women because of the small sample size. Therefore, the next regression model regarding upward mobility (see Table 2) included controls for the above variables as well as:

- (iii) **transition variables** including: employer change, union-status change (from non-unionized in 1996 to unionized by 2001), and firm-size change, from small (<20 workers) in 1996 to large (500+ workers) by 2001.

Bootstrap weights were used to take into account the complex design of the survey and the probabilities computed in Tables 1 and 2 were calculated conditional on the mean values of the explanatory variables.

## 4. Results

### **In 1996, Canadian workers had a 14% probability of being low paid and approximately half were likely to move out of low pay 5 years later**

Canadians who worked full-time, full-year had a 14% probability of being employed with low hourly wages, less than \$10.95 per hour, in December 1996. (Table 1) Those in these low paying jobs had a 53% chance of moving up by 2001. To move up, a worker had to be making more than \$13.26 per hour. (Table 2)

As compared with past research (Janz, 2004), workers in the current study which excludes part-time workers were approximately half as likely to experience low pay (14% versus 26%). However, the likelihood of moving up was similar in both studies (53% in current study and 47% in previous study).

### **Women were more likely to be low paid and less likely to move up relative to low paid men**

In both the Janz (2004) study and the current study, women were significantly more likely to be low paid and less likely to experience upward mobility. However, excluding part-time workers seemed to decrease the differences between men and women in terms of low pay. That is, in past research (Janz, 2004), men experienced a 19% probability of low pay while women experienced a 34% probability (a 15 percentage point difference). In the current study, however, men experienced a 12% probability of low pay while women experienced a 19% probability (a 7 percentage point difference). A closer look at the patterns in the findings will illuminate these sex differences.

Despite this decrease in sex differences, men were still more than twice as likely to move up relative to females (73% versus 28% in the current study, and 72% versus 32% in the previous study). These sex differences remained even though a number of important variables were held constant such as: age, education, occupation, and industry. Note that the small sample size made it impossible to run separate moving up models for men and women. (See 3.2 Logistic regression models.)

### **The youngest workers were most likely to experience upward mobility**

The youngest workers aged 16 to 24 had the highest probability of low pay. (Table 1) This is most likely due to their relatively lower levels of work experience and job tenure. The probability of all young workers being low paid was approximately 50%. For slightly older workers aged 25 to 34, the probability of being low paid was only around 15% - and older workers continued at this level.

In terms of upward mobility, the youngest age group (16 to 24) experienced a higher probability of upward mobility (just under 70%) than those aged 25 to 44. (Table 2). It is not surprising that the youngest workers should experience a high probability of moving up – after all, at this age they are finishing their education and beginning their careers.

## **Education counts**

As would be expected, those with more education had a lower probability of experiencing low pay. But if they did, they had a higher probability of moving up. Those with a university degree had a 8% probability of experiencing low pay compared to a 21% probability for those with high school or less. University degree holders had an 81% chance of moving up compared to a 46% chance of moving up for those with high school or less. Having a university degree removed any differences between the sexes in the probability of experiencing low pay. Data limitations did not permit a separate analysis of moving up for men and women.

## **Men without young children were more likely to be low paid than men with young children**

In general, full-time, full-years workers with preschool children (0 to 5 years old) were significantly less likely to experience low pay (11%) and more likely to experience upward mobility (69%) than those without children. Although one might think that this finding could be partly explained by age because most workers with young children were between ages 25 and 44, it is important to note that the effect remains even though age was controlled for in the model.

Interestingly, the presence of young children had a differential impact on the probability that men and women received low pay. The probability of being low paid was higher for men without preschool children (15%) than it was for men with preschool children (9%). Although the pattern looks similar for women, the presence of young children did not have a significant impact on whether or not they were low paid.

What might explain this difference between the sexes? Perhaps the findings reflect the different primary concerns of men and women with young children. Research has shown that in dual-earner families, on average, men tend to spend more time on paid work while women tend to spend approximately twice as much time on child care (Lynn and Todoroff, 1995). Future research would benefit from investigating whether these different priorities in paid and unpaid labour are related to the differences we see in the low paid status of men and women.

## **Women were more likely to be low paid in services and manual labour occupations**

Women were roughly twice as likely as men to receive low hourly wages when they worked in the occupation categories: “services” and “manual labour” (Chart 1). (Differences between men and women for the other three occupation categories were not significant.) Furthermore, a woman's probability of receiving low pay in manual labour and services occupations was much higher than for any of the other occupation categories (Table 1).

There is another interesting sex difference regarding manual labour and clerical occupations and patterns in low paid work. That is, men in manual labour occupations were not significantly

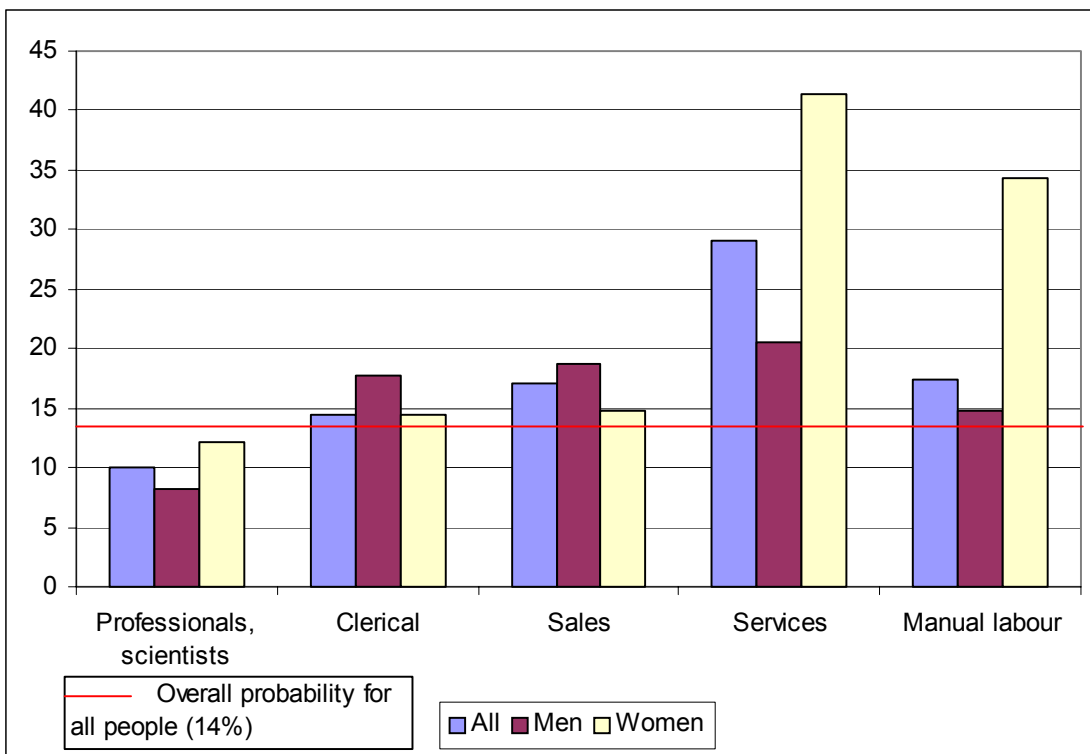


more likely to receive low hourly wages than men in clerical occupations, whereas women were. Thus, from the point of view of hourly wages, it appears much better for women to work in clerical rather than manual labour occupations, whereas it does not make much of a difference for men.

Overall, the best occupations in which to work to avoid low pay were professional, manager or science occupations. When men and women were considered separately, this held true for men. But for women, the probability of being low paid in this occupational group was not significantly different from the probability in clerical occupations. Clerical occupations can include supervisory roles.

The probability of moving up was about 70% for men and women in professional/manager/scientist or clerical occupations, but only about 20% in service occupations.

**Chart 1 Women more likely to experience low pay in manual labour and services occupations**



**The goods producing industrial sector was the best place for men to avoid low pay, while for women it was the business/professional/science services sector**

Workers in general were more likely to experience low hourly wages in manufacturing, distributive services and consumer services industries. Note that all industrial categories include both high and low paid jobs. For men, the goods producing sector stood apart from all the other industrial sectors as the place to avoid low pay - they experienced only a 5% probability of low

pay, about 3 times lower than the average of the probabilities of low pay in other industrial sectors. The pattern was very different for women where, with a 9% probability, the business/professional/science industries stood out as the sector to work in to avoid low pay (Table 1).

Overall, workers in the goods producing, business/professional/science services and public services sectors had the lowest probabilities of receiving low wages. Workers in these three sectors also had the highest probabilities of moving up.

### **Is it better to keep the same job or change jobs?**

The workplaces of those who were low paid and less likely to experience upward mobility tended to be small and non-unionized. Full-time, full-year workers in large organizations were more than twice as likely to experience upward mobility (79%) as those in small companies with less than 20 employees (34%).

Given these job characteristics and the patterns in low pay, would it benefit workers to change jobs? Although changing employers, in general, did not significantly increase upward mobility, specific types of job change were important (Table 2). Changing employers or union status did not significantly contribute to upward mobility. However, moving from a small firm (fewer than 20 employees) in 1996 to a large firm (more than 500 employees) in 2001 was an important predictor of upward mobility.

These findings are very similar to the previous study that included part-time, part-year workers (Janz, 2004). The one difference is that when these part-time workers were included in the sample, low paid workers who moved from a non-unionized to a unionized job were also more likely to experience upward mobility. This type of change was not significant when only full-time, full-years workers were studied.

Since past research on low pay and upward mobility has been mixed in terms of whether or not it is beneficial to change employers and change union status (Drolet & Morissette 1998; Janz, 2004), future research should continue to investigate the topic. Since job change was defined very generally in this model, other definitions of job change were explored to investigate its impact on upward mobility.

A second upward mobility regression was run where those who remained with the same employer were divided into those whose (1) duties changed and (2) duties stayed the same. A third regression was run defining those who remained with the same employer as (1) those who increased their work hours by 5 or more hours per week from 1996 to 2001, and (2) “others”, those whose work hours did not increase by at least 5 hours per week.

In all of these various approaches to defining job change, the results indicated that it did not significantly contribute to the worker’s upward mobility. Since past research has found that job change significantly contributes to upward mobility (Drolet & Morissette 1998), this is an important topic for future investigation. The small sample size in these upward mobility regressions may partly explain the lack of significant findings for the job change variables.

## **Women were least likely to be low paid in Ontario, British Columbia or Quebec, while region made no difference for men**

Like all workers in general, women were more likely to receive low hourly wages if they lived in the Atlantic Provinces rather than Quebec, Ontario or British Columbia. Conversely, for men, region was not significantly related to receiving low hourly wages.

Where workers lived in Canada also influenced their likelihood of moving out of low paid work. (Table 2) The probability of moving up for workers in Ontario and Alberta was 70%, which is significantly more than for workers in Atlantic Canada. Since regional economies, minimum wage legislation and provincial legislation vary considerably from province to province, it is understandable that there are variations in upward mobility among the provinces.

## **5. Summary and conclusion**

The average Canadian who worked full-time had a 14% probability of being employed with low hourly wages in December 1996. Slightly more than half of these workers were likely to move out of their low paying jobs by 2001. In past research (Janz, 2004) and in the current study, women were significantly more likely to be low paid and much less likely to experience upward mobility. This may be partly because women are still much more likely to work part-time than men (Cooke-Reynolds and Zukewich, 2004), and deleting part-time workers reduced some of the variability amongst women. The sex differences that remained were the focus of the current study.

Low-paid women were more likely to be young (16 to 24), with high school education or less, and living in Atlantic Canada. Women experienced a higher likelihood of low pay in services and manual labour occupations relative to clerical occupations. Women who worked in distributive services, in small (less than 20 workers), non-unionized organizations were also more likely to be low paid.

By comparison, low paid men were more likely to be young (16 to 24), with high school education or less living in any region of Canada. Men with pre-school children were less likely to be low paid. Men were significantly less likely to experience low pay in professional/manager/science occupations and the goods producing industry. Low-paid men also tended to work in a non-unionized small firms.

Low paid workers who were most likely to experience upward mobility were younger (16 to 24) males with university degrees and preschool children. They also tended to work as professionals/managers/scientists or in clerical occupations. Such individuals were also more likely to work in the goods producing, business/professional/science, and public services industries in Ontario or Alberta.

Upwardly mobile employees more often worked in unionized companies or medium-sized or large organizations. They were also more likely to move out of low pay if their job changed

from being in a small (less than 20) to a large organization (500+). The patterns in the findings for upward mobility were generally the same as those found in past research (Janz, 2004) with the exception that being in a unionized job was a significant predictor of upward mobility only when part-time workers were included in the study.

Future research on sex differences in low pay and upward mobility would benefit from considering the addition of such variables as: work interruptions, family caregiving responsibilities, major field of study, and issues related to the division of paid and unpaid labour within a household. Potential issues regarding sample size could be addressed by combining different panels of SLID respondents.

## References

Cooke-Reynolds, Melissa, and Nancy Zukewich. 2004. "The feminization of work." *Canadian Social Trends*. Statistics Canada Catalogue no. 11-008.

Drolet, M. 2002. *The "Who, What, When and Where" of Gender Pay Differentials. The Evolving Workplace Series*. Statistics Canada Catalogue no. 71-584-MIE, no. 4.

Drolet, M. 1999. *The Persistent Gap: New Evidence on the Canadian Gender Wage Gap. Analytical Studies Branch Research Paper Series*. Statistics Canada Catalogue no. 11F0019MIE, no.157.

Drolet, M. & Morissette, R. 1998. *The Upward Mobility of Low Paid Canadians: 1993-1995. Income Research Paper Series*. Statistics Canada Catalogue no. 75F0002MIE1998007.

Janz, Teresa A. 2004. *Low-paid Employment and 'Moving Up.'* *Income Research Paper Series*. Statistics Canada Catalogue no. 75F0002MIE2004003.

Licht, M. H. 1995. Multiple regression and correlation. In L. G. Grimm and P. R. Yarnold (Ed.). *Reading and Understanding Multivariate Statistics* (pp.19-64). Washington, DC: American Psychological Association.

Lynn, Marion and Milana Todoroff. 1995. Women's work and family lives. In Nancy Mandell (Ed.), *Feminist Issues: Race, Class, and Sexuality* (pp. 244-271). Scarborough, ON: Prentice Hall Canada Inc..

Morissette, R. and C. Bérubé (1996) "Longitudinal Aspects of Earnings Inequality in Canada," Research Paper No. 94, Analytical Studies Branch, Statistics Canada.

Sargent, T. C. 2000. "Structural unemployment and technological change in Canada, 1990–1999." *Canadian Public Policy*. 26: S1069–23.

Statistics Canada. 2003a. *Survey of Labour and Income Dynamics – A survey overview*. Statistics Canada Catalogue no. 75F0011XIE. <http://dissemination.statcan.ca/english/IPS/Data/75F0011XIE.htm>.

Statistics Canada. 2003b. *2001 Census: analysis series. The changing profile of Canada's labour force*. Statistics Canada Catalogue no. 96F0030XIE2001009.

Statistics Canada. 2001. *Income in Canada*. Statistics Canada Catalogue no. 75-202-XIE. <http://dissemination.statcan.ca:8083/stcpubs/english/75-202-XIE/0000175-202-XIE.pdf>.

**Table 1 Probability of low hourly wages in 1996**

Characteristics in 1996	Probability (%)		
	Both Sexes	Men	Women
<b>Canadian average</b>	14.2	13.0	15.2
<b>Age</b>			
16-24	51.2	49.6	55.7
25-34	14.7	11.3	20.0
35-44	12.2	12.4	11.3
45-50	14.9	14.0	15.7
<b>Highest level of education</b>			
High school or less	20.5	17.1	23.9
Some post secondary (no degree)	14.0	13.1	15.3
University degree	7.6	7.4	7.0
<b>Sex</b>			
Men	11.8	...	...
Women	18.5	...	...
<b>Children</b>			
Preschool children	10.9	9.1	12.4 <sup>n.s.</sup>
No preschool children	15.5	14.9	16.0
<b>Region</b>			
Atlantic	23.2	17.9	30.4
Quebec	14.8	13.7 <sup>n.s.</sup>	15.0
Ontario	12.2	11.8 <sup>n.s.</sup>	11.9
Manitoba & Saskatchewan	16.9 <sup>n.s.</sup>	14.7 <sup>n.s.</sup>	20.5 <sup>n.s.</sup>
Alberta	16.1 <sup>n.s.</sup>	13.1 <sup>n.s.</sup>	19.7 <sup>n.s.</sup>
British Columbia	12.1	11.8 <sup>n.s.</sup>	13.0
<b>Occupation</b>			
Professionals, managers, scientists	10.1	8.2	12.2 <sup>n.s.</sup>
Clerical	14.4	17.8	14.4
Sales	17.1 <sup>n.s.</sup>	18.7 <sup>n.s.</sup>	14.8 <sup>n.s.</sup>
Services	29.0	20.6 <sup>n.s.</sup>	41.4
Manual labour	17.4 <sup>n.s.</sup>	14.7 <sup>n.s.</sup>	34.4
<b>Industry</b>			
Goods producing	6.5	4.9	19.0 <sup>n.s.</sup>
Distributive services	19.6 <sup>n.s.</sup>	16.2 <sup>n.s.</sup>	24.7
Business, professional, science services	8.7	10.0 <sup>n.s.</sup>	9.1
Consumer services	15.8	13.8	15.9
Public services	10.7	10.1 <sup>n.s.</sup>	12.7 <sup>n.s.</sup>
Manufacturing	19.8 <sup>n.s.</sup>	16.6 <sup>n.s.</sup>	20.3 <sup>n.s.</sup>
<b>Firm size</b>			
Less than 20 workers	19.7	17.2	23.5
20-99	15.5	16.6 <sup>n.s.</sup>	12.7
100-499	11.2	9.8	12.8
500+	11.5	9.8	13.6
<b>Union Status</b>			
Unionized	10.6	9.7	11.0
Non-unionized	18.3	16.8	19.8
<b>Weighted Sample ('000,000)</b>	2.6	1.6	1
<b>Unweighted Sample</b>	3,010	1,748	1,262

**Notes**

1. Shading indicates the reference group for the logistic regression.
2. "n.s." = not significantly different from reference person.
3. An interaction variable between family type and sex was calculated in an earlier model but was not significant and was therefore not included in the final model.

**Table 2 Probability of upward mobility between 1996 and 2001**

Characteristics in 1996	Probability (%)
<b>Canadian average</b>	53.2
<b>Age</b>	
16-24	68.6
25-34	47.7
35-44	47.1
45-50	62.6 <sup>n.s.</sup>
<b>Highest level of education</b>	
High school or less	45.6
Some post secondary education	55.9 <sup>n.s.</sup>
University degree	80.5
<b>Sex</b>	
Men	73.4
Women	27.5
<b>Children</b>	
Preschool children	68.6
No preschool children	49.4
<b>Region</b>	
Atlantic	45.2
Quebec	34.9 <sup>n.s.</sup>
Ontario	68.6
Manitoba & Saskatchewan	47.0 <sup>n.s.</sup>
Alberta	70.3
British Columbia	50.5 <sup>n.s.</sup>
<b>Occupation</b>	
Professionals, managers, scientists	77.3 <sup>n.s.</sup>
Clerical	71.4
Sales	42.2
Services	20.4
Manual labour	37.8
<b>Industry</b>	
Goods producing	84.0
Distributive services	49.6 <sup>n.s.</sup>
Business, professional, science services	71.4
Consumer services	36.4
Public services	67.8
Manufacturing	49.5 <sup>n.s.</sup>
<b>Firm size</b>	
Less than 20 workers	34.0
20-99	53.6
100-499	66.4
500+	79.0
<b>Union Status</b>	
Unionized	68.3
Non-unionized	45.7

Continued on next page...

Table 2 continued ...

Transition Variables (changed between 1996 and 2001)	
	Probability (%)
<b>Employer Change</b>	
Yes - Person had a different main job in 2001	21.6
No - Person had the same main job in 1996 and 2001.	53.6 <sup>n.s.</sup>
<b>Union Status Change</b>	
Non-unionized in 1996 and unionized in 2001	70.4
Other	52.2 <sup>n.s.</sup>
<b>Firm Size Change</b>	
Worked in a small firm (<20) in 1996 and a large firm (500+) in 2001	77.6
Other	50.5
<b>Weighted Sample</b>	500,000
<b>Unweighted Sample</b>	596

**Notes**

1. Shading indicates the reference group for the logistic regression.
2. "n.s." = not significantly different from reference person.