The Evolution of Pension Coverage of Young and Prime-Aged Workers in Canada

by

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Abstract

In this paper, we assemble data from several household surveys to document how pension coverage of young and older workers has evolved in Canada between the mid-1980s and the mid-1990s.

Our main findings are the following. First, both administrative data from the Pension Plans in Canada (PPIC) database and data from household surveys show an increase in Registered Pension Plan (RPP) coverage for women. In contrast, while PPIC data show a decrease in coverage for men, household surveys indicate no downward trend for males. Second, sample aggregates hide interesting differences within the population. We find that the pension coverage of young workers (aged 25-34) has declined *relative* to prime-aged workers (aged 35-54). Young males have experienced a decline in coverage while RPP coverage has remained fairly stable for prime-aged men. In contrast, pension coverage has remained fairly constant for young women but has risen substantially for prime-aged women.

There are numerous potential factors which might me associated with pension coverage. This paper is able to focus on three : changes in the distribution of employment by industry, changes in the skill level of jobs (as proxied by wages) and changes in union density. Factors which could not be addressed include legislative changes, changes in the distribution of employment by firm size and changes in workers' level of seniority.

Of the factors covered, we find that the decline in union density and employment shifts towards low-coverage industries appear to be the most highly correlated with the decline in RPP coverage of young men. The growth in prime-aged women's coverage appears to be related mainly to their greater propensity to be employed in highly paid jobs, highly skilled jobs, which have a high likelihood of having pension coverage. The decline in the unionization rate of these women partly offsets this trend.

Keywords: Pension plans; Retirement; Young Workers; Job Quality.

I. Introduction

Recent years have witnessed a lively debate about the appropriate reform of the Canada Pension Plan (CPP). The aging of the Canadian workforce and the federal government's willingness to alter the fiscal imbalances which would have resulted from the status quo have led to increases in employers' and workers' contributions to the CPP. As a by-product of this debate, there is a sense that Canadians are increasingly concerned about the standard of living they will enjoy at retirement. Recent changes in the wage structure, which have widened the gap between low and high earners in Canada as well as in many industrialized countries, are likely to have intensified this concern. Anecdotal evidence suggests that some Canadians feel that the best way to prepare for retirement is to rely on their own savings – through registered retirement savings plans (RRSP) or through their employer-sponsored registered pension plan (RPP) - rather than expect substantial government transfers.

Despite the importance of the topic, very little is currently known about the extent to which Canadian workers have experienced changes in RPP coverage over the last decade. So far, the only information available regarding trends in pension coverage in Canada has consisted of administrative data published annually by Statistics Canada. While these aggregate data document trends for men and women and for all provinces, they lack information on important worker and job characteristics (e.g. age, education, seniority, occupation, union status and firm size). As a result, they cannot be used to document trends in RPP coverage among *specific* groups of Canadian workers.

The goal of this paper is to fill this gap. Using a variety of household surveys containing individual-level information both on RPP coverage and on worker/job characteristics, we analyze how pension coverage has evolved over the last decade for full-time men and women of different age groups. To our knowledge, no Canadian study has examined this issue so far.

While several Canadian studies (Beach and Slotsve, 1996: Morissette, Myles and Picot, 1994) have now documented the widening gap between the earnings of young workers and those of older workers over the last two decades, little is known regarding the extent to which this growing gap has been accompanied by an increasing gap in fringe benefits, the most important of which is pension coverage. By documenting trends in RPP coverage across age groups, we are able to address this issue.

In the United States, previous studies have shown that the percentage of male workers with a pension plan has dropped significantly during the 1980s (Parsons, 1991; Bloom and Freeman, 1992; Even and Macpherson, 1994). The decline has been especially pronounced among young men. In Canada, the aforementioned administrative data suggests that, between the mid-1980s and the mid-1990s, pension coverage has dropped for men but has increased for women. As a result of these two offsetting trends, the fraction of Canadian workers covered has remained relatively stable during the period.

In this paper, we show that between the mid-1980s and the mid-1990s, pension coverage has dropped significantly for young men, has remained fairly constant for older men and young women and has increased considerably for older women. Because we have microdata on worker and job characteristics, we are able to assess the extent to which these changes have been associated with movements in the industrial and occupational structure of employment as well as by changes in unionization rate. Our results indicate that these movements are an important determinant of the changes in coverage rates. Specifically, we find that the decline in unionism and employment shifts across industries account for most of the decline in young men's coverage. We also show that most of the growth in older women's coverage is related to their greater propensity to hold relatively well paid jobs, which have a high likelihood of having pension coverage.

In section II, we discuss potential factors that may affect the RPP coverage of Canadian workers. Special attention is paid to recent legislative changes regarding pension plans that may have induced changes in the coverage rate. Next, we examine whether trends in the pension coverage from household surveys differ from those obtained using administrative data (Section III). In Section IV, we show how pension coverage of young and older full-time workers has changed over the last fifteen years in Canada. We discuss potential explanations for these trends in Section V and present our estimation results in Section VI. We conclude in Section VII.

II. Determinants of RPP coverage

Whether or not a worker is covered by an RPP depends, in an accounting sense, on three factors: 1) the **offer rate**, (i.e. the employer's decision to a plan to his/her employees) 2) the **eligibility rate**, (i.e. the percentage of workers employed in firms which offer a plan who are *eligible* to the plan) 3) the **participation rate**, (i.e. the percentage of eligible workers who *participate* in a plan).[1] As it is for most RPPs, whenever participation in a plan is compulsory the coverage rate will be determined solely by the offer rate and the eligibility conditions.

A) Offer rate

Firms may choose to offer a pension plan in order to reduce worker turnover - using pensions as a mechanism for deferring pay - or for attracting high-quality workers (Gustman et al., 1994) or even because they feel they have a responsibility to provide their employees part of their retirement income.

Three basic points need to be mentioned regarding the employer's decision to offer a registered pension plan. First, Canadian employers are not required by law to offer a pension plan to their

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[1] Define :
- L : the total number of paid workers in the economy;
- O : the total number of paid workers employed in firms offering a plan ;
- E : the total number of paid workers employed in firms offering a plan who are eligible to this plan ;
- P : the total number of eligible workers who choose to participate in a plan

- the **offer rate** = O/L, i.e. of all paid workers, what percentage are employed in firms offering plans ?
- the **eligibility rate** = E/O, i.e. of all paid workers employed in firms offering plans, what percentage are eligible?
- the **participation rate** = P/E, i.e. of all eligible workers, what percentage choose to participate in a plan ?
- the **coverage rate** = P/L, i.e. of all paid workers in the economy, what percentage are covered ?

Then, by definition, the coverage rate is the product of the offer rate, the eligibility rate and the participation rate, i.e. $P/L = (P/E) * (E/O) * (O/L)$. This simple equation shows that changes in the coverage rate will occur whenever variations in the extent to which firms offer plans, in the eligibility conditions and/or in the degree to which workers choose to participate in plans occur.

employees.[2] Second, if they choose to offer a plan, the plan does not have to cover all employees in the firm.[3] Third, an employer may offer different pension plans for different groups of workers within the firm: an employer may have a plan for executives, another for salaried workers and a third for hourly-paid workers.

Employers generally have the authority to voluntarily terminate the pension plan.[4] This may happen in the case of a business sale, mergers, corporate restructuring, bankruptcies or in response to specific institutional changes. For instance, changes in legislative requirements which would increase the costs and/or complexities associated with the administration of a plan may lead some firms to terminate existing plans. Frenken and Maser (1992) provide some evidence that, since the beginning of the 1990s, some employers have terminated their RPPs and replaced them with group RRSPs. Also, increases in employers' contributions to various programs, such as C/QPP or Employment Insurance, may prevent new employers from offering an RPP or may induce existing employers to terminate a plan (Frenken, 1996).

During the 1980s and early 1990s, a major reform of the pension legislation took place in most provinces. Apart from eligibility conditions, the legislative changes which have been introduced have affected at least three pension provisions: 1) the vesting requirements, 2) the locking-in requirements, and 3) cost sharing.[5]

Employees who leave the firm are entitled to a refund of their own contributions but they are not always entitled to a refund of their employer's contributions. The term "vesting" refers to the right of an employee who separates from the company to receive the employer contributions paid on his/her behalf. Prior to the aforementioned legislative changes, provincial and federal laws generally required that employees terminating employment be entitled to their employer contributions if they were at least 45 years old *and* had at least 10 years of continuous service. All RPPs had to satisfy this minimum requirement.[6] However, the new laws have altered this minimum

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2 Employers who offer RPPs are required by law to contribute to this RPP. Employers whose pension funds are running a surplus may not have to contribute. Employees who are covered by an RPP must contribute if the RPP is a *contributory* plan (i.e. if the pension plan contract requires them to contribute). If the plan is *non-contributory*, employees do not have to contribute and the employer bears the full cost of the plan. In 1994, roughly 75% of paid workers covered by an RPP were in contributory plans. There are substantial differences between the public and private sector: while almost all members of public sector plans are required to contribute, less than half of their counterparts in the private sector are required to do so (Statistics Canada, Cat. No. 74-507-XPB, p.54).

3 Mercer Handbook of Canadian Pension and Benefit Plans (1996, p. 8).

4 The consent of unions to terminate a plan may be required when pension plans are established through a collective bargaining agreement.

5 Prior to the mid-1980s, some provinces (e.g. Nova-Scotia, Ontario and Manitoba) had no requirement regarding the receipt of pre-retirement death benefits by an employee's surviving spouse. The new legislation introduced in these provinces now requires that surviving spouses receive 60%-100% of the commuted value of accrued benefits. While these changes increase costs of providing RPPs, their importance should be fairly limited.

6 Since this is a minimum requirement, pension plans can have more generous vesting features. For instance, in 1984, 5.7% of RPP members were in plans providing immediate vesting (Pension Plans in Canada, 1984: Cat. 74-401, Table 17).

requirement: employees terminating employment are now entitled to their employer contributions if they have at least 2 years of plan membership, regardless of their age. This change will increase costs for employers who previously had plans where the criteria for vesting was *more* than 2 years of plan membership.

Pension benefits are defined as being "locked-in" when they can be used solely to provide retirement income rather than being cashed out. The aforementioned legislative changes are likely to have increased the number of workers for which pension benefits are locked-in. Under the old legislation, benefits had to be locked-in only if individuals were at least 45 years old *and* had at least 10 years of continuous service. The new legislation now requires that benefits be locked-in as long as a worker has two years of plan membership. These new requirements may increase employers' costs for the following reason. When benefits are not locked-in, individuals who leave the company may choose to take a refund of their own contributions. However, this may imply forfeiting the employer contributions paid on their behalf.[7] In other words, the option of taking a refund may imply much lower costs for employers. Because the new legislation makes refund available for fewer workers, it is likely to result in higher costs for firms.[8]

A third change relates to the minimum contributions required from employers in contributory defined benefit plans. Prior to the new legislation, employer contributions simply had to be sufficient to provide the benefits to which employees were entitled. Other things equal, higher rates of return on funds originating from employee contributions necessitate lower employer contributions. As a result, employer contributions could, in some cases, amount to less than half of the employee's pension entitlement. The new legislation now imposes cost sharing, i.e. requires that employers pay 50% of an employee's pension entitlement. This is likely to increase costs for at least some employers.[9]

Other factors may affect the offer rate. First, the presence of unions may increase workers' chances of being offered a pension plan if unions negotiate both wage offers and the generosity of fringe benefits. Second, small firms may be less prone to offer their workforce a pension plan. If small firms have fewer financial resources and face lower training and hiring costs compared to larger firms, they may be less likely to offer a pension plan as a way to defer compensation and/or to reduce worker turnover. Also, the costs associated with the administration of pension plans may be lower in large firms as a result of economies of scale. Third, pension coverage is likely to be lower in industries engaging low-skilled workers. Because worker turnover is less costly in these industries than in other sectors, firms in industries requiring low-skilled workers may have fewer incentives to use pension plans as a means of keeping employees with the company. Changes in the

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7 In 1984, of all contributory plan members that had some form of vesting of employer contributions on termination of employment, roughly 94% would have forfeited their employer contributions had they decided to take a refund of their own contributions (Pension Plans in Canada, 1984 : Cat. 74-401, p. 48)

8 From a cost perspective, vesting is the more important issue. Reducing the number of years required until vesting occurs impacts employers costs.

9 Another factor that may have increased employer costs when the legislation was revised is that coverage had to be made available to part-time workers when full-time workers were covered by a plan. The immediate effect was to increase employer costs and (likely) to increase pension coverage. In the longer run, however, it is not clear whether coverage would increase among Canadian workers since the inclusion of part-time workers in pension plan coverage may decrease the incentives of some employers to offer plans.

unionization rate, changes in the relative importance of small and large firms and changes in the composition of employment by industry are all likely to induce changes in the offer rate and, consequently, changes in pension coverage.

B) Eligibility rate

Before the mid-1980s, pension legislation imposed no requirement on employers regarding which workers should be eligible to join a pension plan. Whenever they existed, eligibility conditions were then specific to each plan and were essentially based on the number of years of service, on an age requirement (minimum age or maximum age) or on a combination of the two. [10] The new legislation introduced by most provinces between 1984 and 1993 now imposes a minimum requirement on employers. It requires that full-time workers with at least two years of continuous service be eligible to join the pension plan, regardless of their age (Table 1). In other words, if a full-time worker belonging to the class of employees for whom a plan is established has at least two years of seniority, he/she must be allowed to join the plan. Other things equal, these legislative changes have increased the proportion of full-time employees eligible to join pension plans.[11]

Increases in the number of workers with low seniority could partly offset the effect of these legislative changes. For instance, the fraction of young workers who are not eligible may have increased over time if a greater percentage of youth do not satisfy the minimum two years of required service. The fact that the relative importance of jobs with short duration has increased over the last fifteen years (Heisz, 1996) is consistent with this conjecture.

C) Participation rate

Once a pension plan is offered and once an employee satisfies the eligibility conditions, he/she may either choose to participate in the plan or be compelled to do so. The voluntary or compulsory nature of participation is determined by each plan.[12] Between 1985 and 1995, the percentage of RPP members who are in plans where participation is compulsory has risen slightly, from 87% to 91% (Table 2).

The participation rate (with respect to RPPs) is the ratio of the total number of RPP members to the total number of eligible workers. The total number of eligible workers is the sum of three components: 1) the total number of workers who are in plans requiring compulsory participation, 2) the total number of eligible workers who are in plans involving voluntary participation and, 3) the total number of eligible workers who choose not to participate in plans involving voluntary participation. Unfortunately, administrative data allows us to measure only the first two

[10] For instance, of all workers covered by an RPP in 1980, 38% were in plans requiring no eligibility conditions, 62% were in plans requiring some eligibility conditions and 60.5% were in plans where the eligibility conditions were based on an age and/or a seniority requirement.

[11] As pointed out in footnote 9, the new legislation also requires “that eligibility for membership in a pension plan be made available to part-time employees, if membership is available to full-time employees in that class of employment.” (Mercer Handbook of Canadian Pension & Benefit Plans, 1996, p. 34)

[12] The only exception to this rule is observed in Manitoba. In this province, participation is compulsory for all plans once eligibility conditions are satisfied.

components. These data measure the number of covered workers and contain no information on eligible workers who choose not to participate in voluntary plans and who - as a result of their decision - are not covered by an RPP.

The growth of the percentage of RPP members who are in compulsory plans - from 87% to 91% - simply indicates that the number of employees in these plans has risen faster than the number of employees who joined voluntary plans. It does not necessarily imply that the participation rate has increased. In fact, the participation rate may well have decreased over time. This would occur if the number of employees who decided not to join voluntary plans had grown faster than the number of employees in compulsory plans.[13] If so, the relative importance of voluntary plans would have increased and the extent to which workers choose to participate in these plans would have decreased.

There is no data that allows us to assess whether the number of workers rejecting voluntary plans has increased over time. There is evidence that, since the beginning of the 1990s, some Canadian employers have terminated their RPPs and replaced them by group RRSPs, for which employee's participation is generally voluntary (Frenken and Maser, 1992). Other things equal, this conversion from compulsory plans to voluntary plans would reduce the participation rate and would consequently lower the RPP coverage rate.

III. Trends in Pension Coverage: Household Surveys vs. Administrative Data

Until recently, administrative data published by the Pensions Section of Statistics Canada have been the main source of information regarding Canadian pension plan coverage. The bulk of these data - henceforth, PPIC data - are obtained from the pension supervisory authorities in place in various provinces and at the federal level.[14] All pension plans registered with these authorities are included in the database. At the beginning of 1996, these plans accounted for 99% of all the RPPs in Canada and roughly 75% of all workers covered. In addition, Statistics Canada conducts a survey of a relatively small number of employers that operate pension plans not governed by the

[13] To see this, recall that P/E, the aggregate participation rate is:

(1) $P/E = (c + v1) / (c + v1 + v2)$

where c is the number of employees in plans requiring compulsory participation, v1 is the number of eligible employees who choose to participate in plans involving voluntary participation and v2 is the number of eligible employees who choose not to participate in plans involving voluntary participation. The aggregate participation rate P/E can be rewritten as a weighted average of group-specific participation rates:

(2) $P/E = 100\% * Wc + Pv * Wv$

where $Wc = [c / (c + v1 + v2)]$, $Wv = [(v1 + v2) / (c+ v1 + v2)]$, $Pv = [v1 / (v1 + v2)]$. Wc and Wv represent the demographic weight of workers in plans requiring compulsory participation and of workers who are eligible to plans involving voluntary participation, respectively. Pv is the participation rate of workers who are eligible to plans involving voluntary participation. By definition, the participation rate of workers in plans requiring compulsory membership equals 100%. It is easy to see that even though c rises faster than v1, P/E will fall whenever the two following conditions are met: 1) v2 grows faster than v1 and, 2) v1+v2 rises faster than c.

[14] As of January 1,1996, no regulatory legislation was in effect in Prince-Edward-Island.

aforementioned supervisory authorities.[15] Taken together, these two data sources cover all pension plans operated by employers. To calculate the coverage rate of paid workers, the number of workers covered by all plans is divided by the annual average of the number of paid workers, as obtained from the Labour Force Survey.[16]

One important feature of these administrative data is that they yield a consistent time-series of coverage rates at the aggregate level.[17] Furthermore, they contain a wealth of information on the characteristics of each pension plan (e.g. employee contribution formula, benefit formula, automatic indexing of pension benefits, whether a plan is a defined benefit plan or a defined contribution plan) which cannot be found in other data sets. Unfortunately, they lack information on important worker and job characteristics such as age, education level, seniority, occupation, union status and firm size. As a result, it is impossible to calculate coverage rates for workers of, say, different age groups and/or levels of schooling when using these data.[18]

To perform this task, it is necessary to use microdata that combines information on pension plan coverage, on one hand, and worker attributes and job characteristics, on the other hand. The Survey of Union Membership of 1984 (SUM), the Labour Market Activity Surveys of 1986-1990 (LMAS), and the Survey of Labour and Income Dynamics of 1993-1996 (SLID) all satisfy this requirement.[19] These household surveys are all based on the Labour Force Survey sample design and measure pension plan coverage by asking paid workers the following question:

> "Are you covered by a pension plan connected with this job (do not count, CPP/QPP, deferred profit sharing plans or personal savings plans for retirement)?"

It is important to note that the wording of the question is exactly the same across all surveys. Moreover, because it does not count personal savings plans for retirement connected to the job, this question excludes workers covered by group RRSPs. The coverage rate of workers is obtained directly by calculating the percentage of paid workers who have a pension plan.

Like administrative data, LMAS and SLID allow us to measure pension coverage in all jobs held by paid workers. In contrast, SUM measures pension coverage only for the *main* job held by paid

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15 Certain plans for federal and provincial government public servants are not subject to the legislation of these authorities but have their own acts regulating their operations.

16 While the estimates of the number of paid workers are annual averages, the number of workers covered by an RPP refers to the number of active, employed participants at the various plans' year-end, which could occur at any point during the calendar year. Also, members of Canadian RPPs living on Indian reserves, in the Yukon or in Northwest Territories and those working outside of Canada are included in the pension plan membership but are excluded from the LFS estimates of the number of paid workers.

17 The classification of plans by sector has been changed for the January 1, 1992 file. Thus, the distinction between the public sector and the private sector is not consistent over time.

18 Because they contain information on gender, administrative data allow an examination of the coverage rates of men and women.

19 Note that these surveys allow us to measure the coverage rate but contain no information on the offer rate, the eligibility rate and the participation rate.

workers in December.[20] For this reason, the comparisons made in this section involve LMAS and SLID on the one hand, and administrative data, on the other hand.

Table 3 shows the evolution of the number of employees covered by a pension plan between 1979 and 1996, according to administrative data and household surveys. The numbers are presented separately for men and women. As mentioned above, the data from household surveys is drawn from LMAS and SLID and covers the 1986-1996 period. The sample consists of all jobs held by paid workers in December. On the other hand, the administrative data cover most years of the 1979-1996 period.[21]

Two points are worth noting. First, administrative data and household surveys show very similar trends in the number of women covered by an RPP. Both data sets indicate that between the mid-1980s and the mid-1990s, the number of women covered has risen from about 1.8 million to 2.3 million. Estimates obtained from household surveys are - except for 1996 - slightly higher, exceeding by 2% to 4% those derived from administrative data. Second, the two data sources show distinct patterns for men during the 1990s. While administrative data indicate that the number of men covered by an RPP has dropped steadily from 3.1 million to 2.9 million between 1991 and 1996, household surveys suggest that membership has risen (from 2.9 million to 3.1 million) between 1990 and 1995 and then returned to its 1990 value by 1996. The growth in the number of men covered, observed in household surveys, is entirely caused by a surprising increase which takes place between 1993 and 1994. As a result, the estimates derived from household surveys, which were 3% to 5% lower than those obtained from administrative data before 1994, become 6-7% higher in 1994 and 1995.

These findings suggest that coverage rates will exhibit similar trends for women but different trends for men. This is indeed what happens. Both data sources indicate that pension plan coverage has increased for women between the mid-1980s and 1993.[22] The magnitude of the increase varies between 5 and 6 percentage points (Table 4). Both data sources also suggest that women's coverage fell slightly (by 1.6 to 2.5 points) between 1993 and 1996.

In contrast, coverage rates exhibit different trends for men. PPIC data show a downward trend between the mid-1980s and the late 1980s, an increase in coverage between 1989 and 1991 and a steady decline in coverage between 1991 and 1996, from 49% to 43%. As a result, men's coverage exhibits a slight downward trend between the mid-1980s and the mid-1990s. However, during the same period, data from household surveys exhibit no downward trend in coverage between the mid-1980s and the mid-1990s : the coverage rate in 1995 is virtually the same as it was in 1986. Finally, household surveys show a drop in coverage between 1995 and 1996.

Why trends in coverage rates are similar for women but different for men is unclear. One possible explanation is that the numbers obtained from the household surveys may be more reliable for

[20] The main job is the job with the greatest number of weekly hours.

[21] For administrative data, the numbers of RPP members for example 1996, is provided in the release for the reference period January 1, 1997.

[22] Changes in legislation which required employers to extend coverage to part-time workers if the employer already had a plan for full-time workers may explain part of the increase in coverage observed among women.

women than for men because proxy response is much less frequent for women than for men.[23] This may affect trends in men's coverage rates in two ways. First, if proxy respondents tend to overestimate pension plan coverage and if their relative importance had increased for male workers over the period, this could explain why we do not find a decline in men's coverage between the mid-1980s and the mid-1990s. This conjecture is problematic for two reasons. On one hand, it is not clear why proxy respondents would tend to overestimate rather than underestimate pension plan coverage.[24] On the other hand, the relative importance of proxy respondents for male workers has increased very little during the period considered.[25] A second conjecture is that proxy responses may be biased upwards and the magnitude of the bias may have increased over time. If so, women's coverage rates from household surveys should exhibit a faster growth compared to those obtained from administrative data: this is not the case.

Implicit in both conjectures is the idea that, as long as male workers who respond directly to the surveys (i.e. direct respondents) are fairly representative of all male workers - or more generally, constitute a consistently biased sub-sample of all male workers - one should observe a decline in coverage for the sub-sample of direct respondents. The numbers presented in Table 4 do not support this view. Pension coverage shows no downward trend for male workers who responded directly to the household surveys. Hence, there is little evidence that the diverging trends in men's coverage observed across the two data sources are caused by proxy response problems.

The tremendous growth of group RRSPs over the past decade may have played a role. Some respondents may have little understanding of group RRSPs and may consider them to be pension plans. If so, this would explain why coverage rates are higher in household surveys than under the PPIC data. More importantly, if the frequency of such response errors has risen over time, this would bias upwards the trends in RPP coverage obtained from household surveys but would have no impact on PPIC data. Since a greater proportion of men than women are employed in the private sector and since the private sector is more likely to offer group RRSPs, this could explain (partly) why trends in coverage are fairly similar for women but different for men.

Even though the reasons for the diverging trends observed for men remain unknown, we can still confidently use the household surveys to examine trends in pension coverage across age groups. We can do so because the major findings of this paper are likely to be robust for the following reasons. First, data from these surveys indicate - as will be shown below - a decline in the pension coverage of young males. This decline is observed despite the fact that the coverage rate of all males obtained from these surveys shows no downward trend between the mid-1980s and the mid-1990s, contrary to PPIC. Consequently, the decline observed for young males in household surveys is, if anything, likely to be a conservative estimate of the true decline. Second, our results also show a marked increase in the coverage of women aged 35 to 54. Because trends in women's coverage obtained from the household surveys match closely those derived from PPIC data, we are

[23] In our sample, proxy response is used for about 30% of female workers and about 50% of male workers.

[24] There is currently no data that allow us to check whether proxy responses are biased and if so, whether the proxy responses are biased upwards or downwards.

[25] Between 1986 and 1995, the percentage of proxy respondents rose from 49% to 54% for men and from 27% to 30% for women.

reasonably confident that the growth in coverage observed among older women is real. Third, using data on coverage rate in contributory RPP's drawn from the Longitudinal Administrative Databank (LAD), we find that, between the mid-1980s and the mid-1990s, the coverage rate of young men has decreased and the coverage rate of mature women has increased. For the reasons cited, we believe that the analysis of the evolution of pension coverage of young and older workers can be conducted successfully.[26]

IV. Pension Coverage Across Age Groups

In this section, our main interest is to examine how pension plan coverage has evolved for a subset of traditionally more stable, better-paid, higher quality jobs. We select a sample of paid workers, aged 17-64, employed full-time in the commercial sector in the main job they held in December. The main job is the job with the greatest number of weekly hours.[27] Observations with missing data are deleted. The data sets used are SUM, LMAS and SLID and cover the 1984-1996 period.

Pension coverage for the selected sample is presented in Table 5. Consistent with Table 4, when jobs held in all industries were considered, the data from household surveys indicate no downward trend in men's coverage rates between the mid-1980s and 1995. The percentage of full-time male workers with a pension plan varies between 50% and 53% during the period. Similarly, pension coverage for full-time female workers is increasing, at least until 1994: it rises from 36% in the mid-1980s to 41% in 1993.

The relative constancy of men's coverage masks diverging trends across age groups. Pension plan coverage has declined for young males: in 1984, 51% of full-time male employees aged 25-34 had an RPP, compared to only 45% in 1993.[28] The decline is even more pronounced among males aged 17-24 (from 28% in 1984 to 19% in 1993). In contrast, there is no evidence, at least until 1996, that coverage rates have declined for men aged 35 to 54. For men aged 55 to 64, pension coverage appears to be somewhat lower in the 1990s than it was in the mid-1980s. However, many pension plans allow for early retirement for workers aged 55 and over and, as a result, those who are still working full-time may not be representative of the whole male population aged 55 to 64.

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[26] The few studies available on the accuracy of pension data obtained from employees (Duncan and Hill, 1985; Mitchell, 1987) suggest that workers' responses to pension coverage are quite accurate but that responses to more complex questions contain substantial measurement error. Using a sample of roughly 400 workers employed in a large U.S. manufacturing firm, Duncan and Hill (1985) find that workers' responses about pension coverage are excellent: compared to the company records, only 3% of workers' answers are invalid. However, responses to the more demanding questions related to the right of vesting and to early retirement provisions are less accurate: they yield invalid answers in 11% and 28% of the cases, respectively. Mitchell (1987) uses a sample of 637 workers from the 1983 U.S. Survey of Consumer Finances. Two main findings emerge. First, misinformation about pension *provisions* (e.g. type of plan, early retirement provisions, contribution information) is widespread. Second, highly educated employees who have long seniority and who have well-paid jobs in large firms or in the unionized sector are better informed about the characteristics of their pension plan.

[27] The commercial sector excludes the following industries: 1) agriculture, 2) fishing and trapping, 3) education and related services, 4) health and welfare services, 5) religious organizations, 6) federal administration, 7) provincial administration, 8) local administration and 9) other government offices.

[28] The decline is statistically significant at the 5% level (two-tailed test): the z statistics equals 2.11. The decline observed between 1986 and 1995, which are some distance from the recessionary years of 1982 and 1992, is also significant.

Quite different patterns are observed among women working full-time. First, contrary to their male counterparts, women aged 25-34 do not appear to face a drop in their RPP coverage, at least until 1995. Second, of all men and women working full-time, women aged 35-54 enjoy the biggest increase in coverage during the period: their coverage grows from 40% in 1984 to 46% in 1993.[29] Like their male counterparts, women aged 17-24 face a decline in coverage.

A careful examination of Table 5 reveals that the estimated coverage rates are more volatile with SLID than with other surveys.[30] This certainly reflects - at least in part - the greater sample variability in SLID, where sample sizes are almost three times smaller than those obtained with either SUM or LMAS. Of particular concern is the fact that the years 1995 and 1996 yield quite different estimates than the years 1993 and 1994: the coverage rate of men and women aged 25-34 appears to be much lower in 1995-1996 than in 1993-1994. Furthermore, the increase in RPP coverage among women aged 35-54 is much more modest when 1996 is used as one of the two years of an observation period. The question that naturally arises is whether the decrease in coverage observed among young men (25-34) and the increase in coverage observed among mature women (35-54) are real.

The best piece of evidence to answer this question comes from the Longitudinal Administrative Databank (LAD) of Statistics Canada (Table 6). For the period 1986-1996, this file contains information on whether a person has contributed or not to an RPP and allows us to calculate the percentage of tax filers covered by a *contributory* pension plan.[31] Because most workers covered by an RPP are in contributory plans, the trends in coverage obtained from these numbers should reflect - in a fairly accurate way - the trends in RPP coverage.[32]

These data confirm that young men's coverage fell between the mid-1980s and the mid-1990s. Between 1986 and 1996, the percentage of young male tax filers covered by a contributory plan fell from 28% to 22%. Likewise, the data confirm that the coverage rate of women aged 35-54 rose during the period. The proportion of older female tax filers covered by a contributory plan rose from 34% to 39% between 1986 and 1996. We interpret these findings as strong evidence that RPP

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[29] The increase is statistically significant at the 6% level (two-tailed test): the z statistic equals 1.87.

[30] For the years 1993-1995, the SLID coverage rates are more volatile than for SUM and LMAS. For instance, pension coverage of women aged 17-24 is 16% in 1993, 11% in 1994 and 17% in 1995 and 1996. Pension coverage of women aged 55-64 also exhibits substantial volatility during these years.

[31] Two points are worth noting here. First, LAD has a largesample size: it includes 10% of all tax filers. Second, in order to provide estimates of the percentage of tax filers in contributory RPPs which are consistent over time, we follow Finnie (1997) and restrict the sample to tax filers aged 17-64, with no self-employment income and with annual wages of at least $1,000 (in 1994 constant dollars). The last restriction is imposed to ensure that the changes in the Canadian tax system which occurred in the 1980s - and which could have modified the proportion of low earners filing tax returns - will not spuriously affect the trends observed.

[32] As of January 1, 1996, 66% (82%) of men (women) with an RPP were in contributory plans.

coverage fell among men aged 25-34 and rose among women aged 35-54 between the mid-1980s and the mid-1990s.[33]

For the remainder of the paper, we focus on the two following age groups: 1) individuals aged 25-34 (young workers) and, 2) individuals aged 35-54 (mature workers). We do not analyze trends in pension coverage for workers aged 17-24 since their decline in coverage may have little impact on their retirement income, given their high probability of changing jobs in subsequent years. Likewise, we exclude individuals aged 55-64 since many may benefit from early retirement provisions and those still working full-time may not be representative of the whole population of individuals aged 55-64.

We compare coverage rates for the years 1984 and 1993. The justification for this choice is threefold. First, as mentioned above, SLID shows a marked increase in the number of male employees covered by an RPP between 1993 and 1994, contrary to administrative data (Table 3). The estimates from SLID are much closer to those from administrative data in 1993 than they are in either 1994 or 1995.[34] Second, SLID suggests a dramatic decrease in pension coverage of young women between 1994 and 1995 (from 41% to 33%) (Table 5). A priori, it is hard to understand why coverage rates of young women would have dropped so much during a two-year interval.[35] Third, the years 1984 and 1993 are at roughly similar points in the business cycle. If the percentage of new employees not eligible to join an RPP rises during expansion periods, this may affect coverage rates by reducing the percentage of workers who are eligible for RPPs. By choosing two years at the beginning of the respective expansion periods, we attempt to minimize such effects.[36]

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[33] Consistent with the results of Table 5, pension coverage of women aged 25-34 is fairly stable between 1986 and 1994. In contrast, pension coverage of men 35-54 shows a downward trend while data from household surveys shows a stable coverage, at least until 1996.

[34] In 1993, men's coverage rate in SLID exceeds that from PPIC data by 5.0 percentage points. The discrepancy is bigger in 1994, 1995 and 1996 since it amounts to 8.6, 7.4 and 5.7 percentage points, respectively (Table 4, Panels I and II.)

[35] To test whether the decline in coverage is statistically significant, one needs to incorporate not only the standard errors of proportions for 1994 and 1995 but also the correlation coefficient of proportions' estimates. This is necessary because many observations in 1994 and 1995 are dependent. Under plausible values of the correlation coefficient (i.e. between 0.5 and 0.9), the decline in coverage is statistically significant at the 5% level.

Yet, because the data from Table 6 shows no marked decline in the coverage of young women by contributory RPP's, we suspect that the statistically significant decline observed between 1994 and 1995 is not a real phenomenon. To investigate further this issue, we calculated the pension coverage of: 1) young women who were in our sample in 1994 but not in 1995 (i.e. the 1994 leavers) and, 2) young women who were not in our sample in 1994 but joined it in 1995 (i.e. the 1995 joiners). The RPP coverage of the leavers is 42% in 1994 and closely matches the RPP coverage of young women that year (41%). In contrast, the RPP coverage of the joiners is 23% in 1995. This dissimilarity is not found when we examine the years 1993-1994 and compare the RPP coverage of the 1993 leavers (29%) to that of the 1994 joiners (33%). Taken together, these results suggest that the dramatic decline in RPP coverage of young women is due to an abnormally low coverage rate for women who joined our sample in 1995. What underlies this low coverage rate is unknown to us.

[36] One strategy to overcome the variability in pension coverage from SLID is to pool the years 1993 – 1995. There are two difficulties associated with this strategy. First, the cross-sectional samples related to these years are not independent (due to the longitudinal nature of SLID) and the calculation of variances becomes more complex. Second, the target population is conceptually difficult to define for the pooled 1993 – 1995 sample and consequently makes comparing 1984 to the pooled 1993-1995 problematic.

V. *Why Has Pension Coverage Changed Across Age Groups?*

Between 1984 and 1993, the coverage rate for young men dropped from 51% to 45% (Table 7). The coverage rate of older men and of young women rose marginally. In contrast, the coverage rate of women aged 35-54 increased by 6 percentage points, from 40% to 46%. Hence, both young men and young women experienced a drop in their coverage rate *relative* to their older counterparts.

The drop in young men's coverage did not occur in all sectors of the economy. While young men employed in non-unionized jobs experienced a decline in coverage, RPP coverage did not drop for those who were unionized (Table 7). The decline was also limited to certain industrial groups: it was not observed in distributive services and business services. Young men employed in blue-collar occupations (e.g. occupations related to processing and construction) and clerical occupations were hit harder than those working in professional and managerial positions. This suggests that low-skilled young males faced a bigger decline in coverage than those with relatively high skills. Changes in coverage by education level are consistent with this hypothesis: young men with a university degree did *not* experience a decline in coverage, contrary to those with lower education.[37]

At least two factors that we can focus on are associated with the drop in young men's coverage. First, the unionization rate for this group fell substantially during the period: it dropped from 38% in 1984 to 29% in 1993 (Table 8). Since young men's coverage rates are twice as high in unionized jobs as they are in non-unionized jobs (Table 7), the decrease in the unionization rate is likely to have lowered their coverage rate. Second, employment of young males has shifted away from manufacturing (-6 percentage points) and towards consumer services (+5 percentage points). Since coverage rates in manufacturing are twice as high as they are in consumer services (Table 7), this inter-industrial shift is a second potential explanation.

While the drop in young men's coverage is not observed in all sectors of the economy, the increase in the pension coverage of women aged 35-54 appears to be widespread. It is found in both unionized and non-unionized jobs, in virtually all major industrial and occupational groups, and in all education levels (Table 7).

De-unionization also took place among women aged 35-54: their unionization rate fell from roughly 24% in 1984 to 16% in 1993 (Table 8). Yet despite their decline in their unionization rate, these women experienced an increase in their pension coverage rate. Substantial inter-sectoral shifts also took place among this group. Employment shifted away from manufacturing (-10 percentage points) and towards business services (+7 percentage points). The impact of this employment shift on the pension coverage of mature women is likely to be modest since their pension coverage rates in business services are just slightly higher than they are in manufacturing - at least for 1984. Furthermore, while older women's pension coverage rates for manufacturing and business services are similar, young men's coverage rates for manufacturing and consumer services differ widely. As a result, we should expect the inter-industrial shifts in employment to be a greater source of change in coverage for young men than for older women.

Employment of mature women also shifted away from primary/processing occupations (-8 percentage points) towards professional and managerial occupations (+10) percentage points. Once

[37] Changes in coverage rates by education level must be interpreted with caution because the education categories are not strictly comparable between 1984 and 1993.

again, the impact of this shift is likely to be modest since pension coverage in the former occupations is fairly close to that in the latter occupations.

VI. Estimation Results

In this section, we assess the extent to which changes in coverage rates among age groups are related to compositional effects for which we have some evidence (e.g. de-unionization, inter-industrial shifts in employment) or to structural changes in pension coverage (i.e. changes in coverage within cells). We estimate a logit model of the probability of being covered by a pension plan. Our set of controls consists of union status, industry (2-digit), occupation (8 groups) and province. As mentioned above, unions may negotiate with employers on fringe benefits as well as on wages. This may affect a firm's decision to offer and maintain an RPP. The industry variable is meant to capture sectoral differences in coverage. Controls for broad occupational groups are intended to take into account the fact that different pension plans may be offered to different groups of workers within the firm. Provincial controls encompass any differences in provincial legislation that may affect the coverage rate. For the sample of full-time workers aged 35-54, we also include two age categories (35-44 and 45-54). This inclusion attempts to highlight differences in the eligibility conditions related to age prior to the introduction of new legislation in the mid-1980s as well as potential age differences in the tendency to participate in voluntary plans.[38] Since coverage rates are higher for highly paid jobs than for low-paid jobs (Frenken and Maser, 1992), we also include real hourly wages as a regressor in a second specification. Because the endogeneity of wages may bias coefficient estimates, we also present results for a model without wages. Hourly wages may be a proxy for worker skills : workers in highly paid jobs may be highly skilled and firms may want to offer these workers pension coverage in order to reduce costs of turnover.

Ideally, we would like to include three additional regressors. First, controls for workers' education level should be included to capture differences in pension coverage that may occur across skill levels. Unfortunately, the education variable is not comparable between 1984 and 1993 and cannot be used on a consistent basis. Since older women's educational attainment has grown during the period and since coverage rates are likely to rise with education, the omission of this regressor may lead us to underestimate the impact of compositional effects on the growth of older women's coverage. In other words, the unexplained portion of the growth in their coverage may be overestimated.

Second, because eligibility conditions are based on the number of years of seniority, one would like to include tenure with the employer as a regressor. While this variable is available in both 1984 and 1993, it provides a misleading picture of changes in seniority. Data from the Labour Force Survey - which provides a consistent time series on tenure with the employer - shows virtually no change, in the proportion of young men with less than one year of seniority between 1984 and 1993 (22%). In contrast, SUM 1984 and SLID 1993 show a marked decrease in this proportion (from 24% to 13% in 1993). Consequently, using tenure with the employer as a regressor is likely to bias our results. As long as new employees are less likely to be covered by an RPP than those with more seniority,

[38] Because workers are classified into nine age groups in SUM 1984 (15-16, 17-19, 20-24, 25-34, 35-44, 45-54, 55-64, 65-69, 70 years and over), no further age breakdown can be used for workers aged 25-34.

including tenure could lead us to infer that a (spurious) decline in the percentage of young men with less than one year of seniority has tended to *increase* the coverage for young men.[39] [40]

Third, since RPP coverage varies with firm size (Morissette, 1993), ideally controls for firm size should be included. Unfortunately, SUM 1984 does not contain information on firm size. Data from the Longitudinal Employment Analysis Program (LEAP) of Statistics Canada - which provides a consistent time series on employment by firm size during the period - shows that the distribution of employment in the commercial sector has shifted moderately away from large firms and towards smaller firms between 1984 and 1993.[41] Along with de-unionization, this trend is likely to have decreased RPP coverage in Canada. Since both LMAS, and SLID contain information on firm size, an alternative strategy would be to use LMAS and SLID to examine changes in coverage between, say, 1986 and 1993. Unfortunately contrary to LEAP, LMAS and SLID suggest that the relative importance of large firms has *increased* between these two years.[42]

To determine the sources of change in coverage rates, we use three methods. First, we simply apply the Oaxaca-Blinder decomposition method to a linear probability model (LPM). Second we follow the approach of Even and Macpherson (1994). For each of the four demographic groups, we estimate the aforementioned logit model for the 1984 and 1993 samples. We then calculate the hypothetical (or predicted) coverage rate that would have been observed in 1993 if the 1993 sample characteristics had been combined with the 1984 logit coefficients.[43] [44] The difference between the

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[39] This is exactly the result we obtained for young males after estimating a logit model which included a dummy variable for employees with less than one year of seniority.

[40] New provincial laws introduced over the last decade have allowed full-time workers with at least two years of service to be eligible. Ideally, one would like to distinguish between employees with less than two years of seniority from others employees and then use several categories to classify these other employees. Data constraints do not allow this distinction. First, the Survey of Union Membership of 1984 classifies tenure with the employer into categories (1-6 months, 7-12 months, 1-5 years, 6-10 years, 11-20 years, over 20 years). These classifications do not allow us to distinguish workers with less than 2 years with the employer. However, we can identify workers with less than one year of seniority from other workers. Second, information on employer tenure is missing for about 17.1% of our sample in SLID 1993. To overcome this problem, we took advantage of the fact that: 1) many of these employees report information on *job* tenure and, 2) those who have been in their *job* for at least one year have also worked for the *employer* for at least one year. For employees who have been in their job for less than one year - and for which information on employer tenure is missing - employer tenure cannot be classified since it could be smaller than one year or greater than one year. This procedure allows us to reduce the number of observations for which employer tenure is missing from 15.4% to 1%. However, it is impossible to further classify those observations for which we have imputed a seniority of at least one year into more detailed categories (e.g. 1-5 years vs. 6-10 years). In any event, the construction of this variable led to implausible results as mentioned in the previous footnote.

[41] In 1984, 26.8% of workers in the commercial sector worked in firms with less than 20 employees; 19.2% worked in firms with 20-99 employees; 14.1% of workers were employed in firms with 100-499 employees and 39.9% of workers in firms with 500 employees or more. The distribution of employment in 1993 was 27.9%, 20.5%, 14.8%, and 36.8% respectively.

[42] Between 1986 and 1993, the percentage of workers in firms with 500 employees or more has dropped from 38.6% to 36.8% using LEAP data. The corresponding numbers from LMAS and SLID (excluding observations for which firm size is unknown) are 37.5% and 41.5%.

[43] This is done by calculating individual probabilities based on 1993 sample characteristics and 1984 logit coefficients and then by taking the average of these individual probabilities. For more details, see Even and Macpherson (1990).

1993 coverage rate and this hypothetical rate is due to changes in logit coefficients - which reflect changes in coverage within cells - and is called the “unexplained” change in coverage rates. The difference between the hypothetical rate and the 1984 coverage rate measures the “explained” change in coverage rates. This “explained” component can be further broken down to assess the impact of each regressor (e.g. union status, industry) on the changes in coverage. Third, we use the Doiron-Riddell’s (1993) method. This decomposition is based on a first-order Taylor series approximation of the probability of being covered by an RPP. Like the two previous methods, it allows to assess the impact of each regressor on the changes in coverage. The results are presented in Table 9.[45]

Men aged 25-34

For both specifications and for all three methods, the numbers show that de-unionization and inter-industrial shifts in employment were strongly associated with the drop in young men’s coverage. Depending on the type of method and specification used, the decline in unionization decreased young men’s coverage by 2.9 to 4.4 percentage points. [46] Movements of employment across industries caused an additional decrease ranging between 2.0 and 3.6 percentage points. When real hourly wages are omitted, de-unionization and inter-industrial shifts appear to account for virtually the whole decline in young men’s coverage. When real wages are included, the impact of de-unionization and of inter-sectoral shifts drops slightly. The drop in the real wages of young men (from $11.86 in 1984 to $11.11 in 1993 (in 1984 dollars)) is associated with a decline in coverage of 2.1-3.0 percentage points.

The decline in unionization and the drop in real wages of young men may not be purely exogenous : they could be caused - at least partly - by increases in competitive pressures which could induce employers : 1) to be more aggressive vis-à-vis unions and 2) to lower wages as well as pension coverage in entry-level jobs. Thus, increases in competition – which in turn could originate from technological changes - could be a major factor behind the decline in young men’s coverage : however, we have no measure of this. Other excluded factors discussed earlier may also have played a role.

Women aged 25-34

As was the case for young men, changes in unionization rate and inter-industrial shifts in employment tended to decrease the coverage rate for young women. Depending on the specification

[44] The results of likelihood ratio tests confirm that for all four demographic groups, separate regression models should be estimated for 1984 and 1993. The hypothesis that there is no significant difference between estimating separate logit models for each year and estimating a pooled model is always rejected at the 5% level of significance.

[45] The logit estimates and the estimates from the linear probability model are shown in Appendix 1. They show that the probability of being covered by a pension plan increases with unionization and wages and is generally higher among professional and managers than among clerical workers.

[46] When using the Doiron-Riddell’s method, we choose to linearize at the mean values of the explanatory variables (e.g. Riddell (1993). We do so because, for all four demographic groups, pension coverage is fairly close to 50% : this allows us to use the mean values as our “representative agent” each year. As a result, we are decomposing the *predicted* change in coverage when using the D-R method. With the Even-Macpherson’s method, we are decomposing the observed change in coverage.

and method used, the decrease in young women's unionization rate (from 18% in 1984 to 11% in 1993) is associated with a drop in their coverage ranging from 1.9 to 3.0 percentage points. Changes in the composition of employment by industry had a slightly more limited impact, ranging between 1.1 and 2.0 percentage points. All three methods and both specifications suggest that these factors were partly offset by employment shifts towards high-coverage occupations. Occupational shifts tended to increase young women's coverage by 0.4 to 1.7 percentage points. Contrary to young men, young women experienced an increase in their average real hourly wages during the period (from $8.69 in 1984 to $9.28 in 1993). This trend towards better-paid (and presumably higher skilled) jobs raised their coverage rates by about 1.9 - 3.3 percentage points. The impact of occupational shifts is attenuated when real hourly wages are included: this suggests that the occupation variable may partly capture movements of employment towards highly paid jobs. For all methods and for both specifications, we find an unaccounted for increase in young women's coverage which range from 2.3 to 4.0 percentage points. This may reflect movements of employment towards jobs requiring a strong attachment to the labour market and possibly offering better pension coverage. Taken together, these results indicate that the coverage rate among young women rose modestly because their growing propensity to be employed in highly-paid jobs was partly offset by their declining unionization rate and employment shifts towards low-coverage industries.

Women aged 35-54

When real wages are excluded, the LPM and D-R methods suggest that the growth of older women's coverage appears to be associated with two main factors: a decline in unionization (-2.2 to –2.6 percentage points) and a movement of employment towards high-coverage occupations (1.8-2.3 percentage points). Since these two factors offset each other, the accounted for change in coverage is very small and, as a result, virtually all of the change in coverage appears to be unaccounted for.

The Even-MacPherson (1990) method yields markedly different results. Contrary to our expectations, it suggests that occupational shifts tended to *decrease* the coverage of mature women and that the drop in unionization tended to *increase* their coverage. The reason for these implausible results is the following: since logit models are non-linear, it is impossible to do a 'standard' decomposition of the contribution of various regressors as one can do in linear probability models. To overcome this problem, Even and Macpherson (1990) measure the contribution of a given regressor j by multiplying the "explained" change in coverage (i.e. –0.1 percentage points) by the following *ratio* z_j:

$$(1)\ z_j = [\ (X_{jt+1} - X_{jt}) * B_{jt}\ ] \quad / \quad [\ (X_{t+1} - X_t) * B_t\ ]$$

where X_{jt+1} and X_{jt} are the average values of regressor j in year t+1 and t, respectively, B_{jt} is the logit coefficient for regressor j in year t. The denominator, $[(X_{t+1} - X_t) * B_t\ ]$, is simply the sum of changes in average values of *all* regressors, weighted by logit coefficients in year t. It measures the net impact of changes in characteristics (i.e. changes in the X's) on pension coverage. Whenever the sign of this denominator (0.004 percentage point) differs from the sign of the "explained" change (-0.1 percentage point) - which appears to occur when the "explained" change is close to zero - the contribution of regressor j will have an unexpected sign. This is what happens here. In a linear probability model, the contribution of regressor j is simply measured by the numerator of equation (1).

From a methodological point of view, this result is interesting. It suggests that the decomposition approach used in Even and Macpherson (1990, 1994) sometimes yields findings that differ from those obtained from the linear probability model. In their initial paper, Even and Macpherson (1990) compare, for five specifications estimated, the results of their decomposition approach to those obtained from the linear probability model and conclude that "the decomposition method proposed […] produces results similar to the linear probability model". Our results indicate that this conclusion does not necessarily hold in all samples.

When real wages are included, the impact of occupational shifts becomes negligible. Once again, this suggests that women's employment shifts across occupations partly reflects movements towards well paid jobs. Labour supply shifts towards well paid jobs, which have a high likelihood of having pension coverage, become the major source of change in the coverage rate of mature women: they account for most of their increase in coverage (4.5 to 6.6 percentage points). Hence, most of the growth in older women's coverage appears to be related to their movement towards well paid jobs. The decline in older women's unionization rate partly offsets this trend.

Men aged 35-54

The results for older men also indicate a negative impact for the decline in unionization. When real wages are omitted, the decline in unionization rate (from 44% to 39%) is associated with a drop in coverage of 1.6-2.1 percentage points. When real wages are included, de-unionization tend to decrease the coverage of mature men by 1.5-1.7 percentage points in the LPM and D-R models. As was the case for women aged 35-54, the Even-MacPherson (1990) method yields contributions of factors which have unexpected signs when real wages are included.[47]

VII. Conclusion

Over the last fifteen years, pension coverage has evolved differently for different age groups. Of the factors which we could consider, employment shifts towards low-coverage industries and the decline in unionization appear to be the most highly correlated with the decline in pension coverage of young men. Other factors may also have contributed. The growth in older women's pension coverage seems to result mainly from their greater propensity to be employed in jobs providing better wages and consequently better coverage, although declining unionization offset this effect to some extent. Because we had no controls for firm size, part of the decline in young men's coverage that we associated with de-unionization and inter-industrial shifts could in fact originate from employment shifts towards small firms. Similarly, part of the increase in older women's coverage which is related to labour supply shifts towards well paid jobs may be related to women's increase in educational attainment.

These findings do not rule out the possibility of a decline in coverage *within* industries for men. The reason is that, because household surveys show no decline in men's coverage between the mid-

[47] Contrary to our expectations, the results suggest that de-unionization tended to *raise* the coverage of mature men and that the growth of their real wages tended to *decrease* their coverage. Once again, this anomaly results from the fact that, in this particular model, the sign of the "explained" change (-0.2 percentage point) differs from the sign of the denominator involved in the calculations (0.02 percentage point).

1980s and the mid-1990s, contrary to administrative data, the decline in young men's coverage observed in this paper may underestimate the true decline. If so, it is not clear whether the decomposition method used in the paper would still yield the same result, i.e. show that the decline in unionism and inter-industrial shifts in employment account for the whole decrease in young men's coverage. The relative importance of these two factors could be diminished. Furthermore, administrative data shows that between 1991 and 1996, the number of men covered by an RPP has dropped by almost 300,000 and the coverage rate of male paid workers has fallen by almost 6 percentage points (Tables 3 and 4). This may signal a decrease in the coverage rate of older men, as well as young men.

Many explanations can be put forward to justify a possible decrease in RPP coverage. First, increases in competition - from abroad or within industries - may induce Canadian firms to cut labour costs and perhaps terminate some pension plans. Second, new firms entering a market may avoid offering plans to maximize their chances of survival during the first few years after entry. Third, the condition of the labour market may also justify a possible decrease in RPP coverage. If the labour market is relatively slack and if there is no shortage of skilled applicants in the industry in which they operate, firms may not need to offer pension plans to attract high-quality workers. Fourth, as mentioned previously, increases in employers' contributions to various programs, such as C/QPP or Employment Insurance, may lead new firms not to offer an RPP or induce existing firms to terminate a plan (Frenken, 1996). Finally, any increase in administrative costs (e.g. an increase in hourly fees for actuarial services in defined-benefit plans) could reduce firms' incentives to provide RPPs and lead them to either move to group RRSPs or to offer no retirement plans at all.

Whether or not there is a decline in men's coverage within industries, our results raise some concern about job quality for young men. First, several studies (Morissette, Myles and Picot, 1994; Beach and Slotsve, 1996) have documented a decline in real annual earnings of young men during the 1980s. Unless the decline in young men's pension coverage is totally offset by the growth in group RRSPs (with equivalent employer contributions), the drop in their *total compensation* is underestimated. Second, our results suggest that, unless the trends in pension coverage reverse or unless the growth in group RRSPs offsets the decrease in RPP coverage, new cohorts of young men may have to accept jobs providing lower fringe benefits than those received by previous cohorts. Recent work by Beaudry and Green (1996) and Morissette (1997) has shown that young males experienced a downward shift in their age-earnings profile during the 1980s. Our results raise a related question: will the drop in RPP coverage observed among young men have long-term effects, (i.e. affect their retirement income)? And if so, will this drop in retirement income be partly offset by the growth in retirement income of spouses, in today's young dual-earner couples?

At the same time, our results are good news for women. They suggest that, as long as women's movements towards better-paid occupations are permanent, women who are now aged 35-54 should have a greater pension income than those who were the same age fifteen years ago.

The decline in pension plan coverage for young males is not unique to Canada. Even and Macpherson (1994) have shown that, between 1979 and 1988, the coverage rate of men aged 21-35 fell from 56% to 49% in the United States.[48] They find that the decline in young men's coverage resulted mainly from a decline in the percentage of youth participating in pensions offered by employers, rather than a decline in the rate at which firms offered pensions to their workers. The

48 Their sample includes part-time workers as well as full-time workers.

decline in participation was in turn associated with the growing importance of 401(k) plans, which are defined-contribution plans for which participation of employees is voluntary. Because Canadian data currently do not distinguish offer rates from participation rates, it is impossible to assess what fraction of the decline in young men's pension coverage is due to decreases in offer rates from that due to decreases in participation rates.

Table 1 : Eligibility conditions for full-time employees.

As of ____, 19__, full-time employees who satisfy the following conditions must be allowed to join a plan, i.e. are eligible :

Date	Jurisdiction	Conditions
January 1, 1987	Federal	2 years of continuous service
January 1, 1993	Saskatchewan	
January 1, 1984	Manitoba	
January 1, 1988	Ontario	
January 1, 1988	Nova-Scotia	
December 31, 1991	New-Brunswick	
not proclaimed yet	Prince-Edward-Island	
January 1, 1990	Quebec	annual earnings of at least 35% of YMPE or 700 hours worked in a calendar year
January 1, 1993	British Columbia	2 years of continuous service and annual
January 1, 1987	Alberta	earnings of at least 35% of YMPE in each of 2 consecutive calendar years
January 1, 1985	Newfoundland	silent on eligibility conditions

*YMPE : Year's Maximum Pensionable Earnings
Note : Eligible workers must participate in a plan in Manitoba.

Source : Pension Plans in Canada 1996, Cat no. 74-401SPB

Table 2 : Percentage of RPP members in plans with compulsory participation, 1985-1994

Year	Men %	Women %	All %
1985	87.4	86.1	87.0
1986	87.3	85.9	86.9
1987	87.3	85.7	86.7
1988	88.4	89.9	88.9
1989	88.5	90.0	89.1
1990	88.6	89.6	89.0
1991	89.9	91.1	90.4
1992	90.7	91.4	91.0
1993	91.1	91.7	91.4
1994	91.0	91.3	91.1

Source : Special Tabulations from the Pensions Section, Statistics Canada.

Table 3 : Number of employees covered by a pension plan, 1979-1996

	Men			**Women**		
Year	(1) Administrative data ('000)	(2) Household surveys ('000)	(3) (2) / (1)	(1) Administrative data ('000)	(2) Household surveys ('000)	(3) (2) / (1)
1979	3,098	-	-	1,378	-	-
1981	3,181	-	-	1,477	-	-
1983	3,039	-	-	1,525	-	-
1985	3,047	-	-	1,621	-	-
1986	-	2,904	-	-	1,770	-
1987	3,082	2,943	0.95	1,763	1,838	1.04
1988	-	2,973	-	-	1,987	-
1989	3,128	2,959	0.95	1,981	2,027	1.02
1990	-	2,917	-	-	2,098	-
1991	3,129	-	-	2,189	-	-
1993	2,966	2,901	0.98	2,249	2,288	1.02
1994	2,930	3,149	1.07	2,240	2,317	1.03
1995	2,895	3,066	1.06	2,255	2,307	1.02
1996	2,866	2,919	1.02	2,250	2,216	0.98

* The sample selected from household surveys consists of jobs held in December by paid workers aged 17-64.

Source : Pension Plans in Canada 1996 : Cat. No. 74-401XPB
Pension Plans in Canada 1995 : Cat. No. 74-401SPB
Labour Market Activity Surveys of 1986-1990 (cross-sectional files)
Survey of Labour and Income Dynamics of 1993-1996 (cross-sectional files).

Table 4 : Pension coverage of men and women, 1985-1996 : comparison of PPIC data and household surveys*

I. PPIC data

	1985	1986	1987	1988	1989	1990	1991	1993	1994	1995	1996
Men	50.1	-	48.4	-	47.0	-	49.2	46.8	45.3	44.0	43.4
Women	35.6	-	35.8	-	37.4	-	40.8	41.9	41.1	40.6	40.3

II. Household surveys - All respondents

	1985	1986	1987	1988	1989	1990	1991	1993	1994	1995	1996
Men	-	51.8	51.4	51.7	53.2	53.1	-	51.8	53.9	51.4	49.1
Women	-	38.1	38.1	39.7	40.5	41.7	-	43.0	42.9	41.4	40.5

III. Household surveys : direct respondents**

	1985	1986	1987	1988	1989	1990	1991	1993	1994	1995	1996
Men	-	51.5	-	50.5	51.6	52.4	-	-	54.3	52.6	51.0
Women	-	39.1	-	40.1	41.6	43.3	-	-	46.8	43.6	43.1

IV. Household surveys : proxy respondents

	1985	1986	1987	1988	1989	1990	1991	1993	1994	1995	1996
Men	-	52.1	-	54.1	55.1	53.8	-	-	54.1	50.6	47.0
Women	-	35.4	-	38.2	37.9	37.3	-	-	33.5	36.4	34.5

* The sample selected from household surveys consists of jobs held in December by paid workers aged 17-64.
** The distinction between proxy respondents and direct respondents is not available in 1987 and 1993.

Source : PPIC data :
- Pension Plans in Canada 1996 : Cat. No. 74-401XPB
- Pension Plans in Canada 1995 : Cat. No. 74-401SPB

Household surveys :
- Labour Market Activity Surveys of 1986-1990 (cross-sectional files)
- Survey of Labour and Income Dynamics of 1993-1996 (cross-sectional files).

Table 5 : Pension coverage of men and women employed full-time in the commercial sector, by age, 1984-1996

	1984	1986	1987	1988	1989	1990	1993	1994	1995	1996
I. Men										
Age group										
17-24	0.284	0.240	0.246	0.269	0.244	0.222	0.194	0.164	0.185	0.167
	(0.012)	(0.012)	(0.012)	(0.012)	(0.014)	(0.014)	(0.030)	(0.028)	(0.030)	(n.a.)
25-34	0.511	0.485	0.471	0.475	0.482	0.464	0.454	0.464	0.415	0.416
	(0.010)	(0.009)	(0.008)	(0.009)	(0.011)	(0.010)	(0.025)	(0.023)	(0.029)	(n.a.)
35-54	0.636	0.620	0.625	0.631	0.642	0.643	0.642	0.659	0.614	0.573
	(0.009)	(0.008)	(0.008)	(0.008)	(0.009)	(0.009)	(0.019)	(0.020)	(0.018)	(n.a.)
55-64	0.640	0.636	0.629	0.605	0.613	0.627	0.600	0.647	0.589	0.592
	(0.019)	(0.016)	(0.014)	(0.018)	(0.020)	(0.019)	(0.048)	(0.068)	(0.047)	(n.a.)
17-64	0.529	0.513	0.508	0.515	0.524	0.523	0.526	0.534	0.502	0.481
	(0.006)	(0.006)	(0.006)	(0.006)	(0.007)	(0.007)	(0.013)	(0.010)	(0.013)	(n.a.)
Sample size	12,151	13,512	16,079	13,363	12,714	12,302	4,302	4,673	4,552	9,474
I. Women										
Age group										
17-24	0.212	0.183	0.196	0.209	0.222	0.219	0.164	0.116	0.175	0.177
	(0.012)	(0.012)	(0.012)	(0.014)	(0.017)	(0.018)	(0.036)	(0.029)	(0.034)	(n.a.)
25-34	0.413	0.398	0.389	0.403	0.384	0.403	0.426	0.410	0.327	0.337
	(0.014)	(0.013)	(0.012)	(0.013)	(0.014)	(0.015)	(0.032)	(0.029)	(0.030)	(n.a.)
35-54	0.399	0.391	0.398	0.411	0.438	0.427	0.461	0.472	0.452	0.426
	(0.014)	(0.013)	(0.011)	(0.013)	(0.014)	(0.013)	(0.030)	(0.025)	(0.025)	(n.a.)
55-64	0.449	0.442	0.388	0.411	0.366	0.451	0.455	0.366	0.454	0.335
	(0.033)	(0.034)	(0.029)	(0.033)	(0.037)	(0.034)	(0.068)	(0.066)	(0.073)	(n.a.)
17-64	0.356	0.347	0.350	0.365	0.373	0.385	0.410	0.393	0.372	0.363
	(0.008)	(0.007)	(0.007)	(0.008)	(0.009)	(0.009)	(0.018)	(0.015)	(0.017)	(n.a.)
Sample size	6,303	6,799	8,565	6,943	6,682	6,528	2,313	2,505	2,478	5,123

* The sample consists of paid workers aged 17-64 who are employed full-time in the commercial sector in their main job in December. Standard errors are in parentheses. For 1984 and 1993-1995, standard errors are corrected for the clustering of observations by individuals. For 1986-1990, standard errors are approximations of clustering-adjusted standard errors.
n.a. : not available.

Table 6 : Percentage of tax filers covered by a contributory RPP, 1986-1996*

	Men			Women		
Age	**25-34**	**35-54**	**17-64**	**25-34**	**35-54**	**17-64**
Year						
1986	28.1	42.3	30.5	28.6	33.7	26.2
1987	27.5	41.4	30.0	28.4	34.1	26.5
1988	27.4	41.4	30.2	28.8	35.9	27.7
1989	26.5	40.6	29.7	28.5	36.5	28.0
1990	26.3	40.3	29.7	28.9	37.2	28.8
1991	25.9	39.8	29.6	29.0	38.0	29.5
1992	25.5	39.6	29.6	29.6	39.0	30.4
1993	25.0	39.5	29.5	29.3	39.5	30.7
1994	23.7	38.7	28.6	28.5	39.4	30.3
1995	22.8	38.0	28.0	27.7	39.4	30.2
1996	21.8	37.1	27.4	26.7	39.1	29.8

* The number are derived from a 10% sample of all Canadian tax filers aged 17-64, with no self-employment income and with annual wages of at least $1000 (in 1994 constant dollars). Contributory RPPs are pension plans which require a contribution from the employee.

Source : Longitudinal Administrative Databank (LAD), Statistics Canada.

Table 7 : Pension coverage of young and older workers, 1984 and 1993

Variables	MEN Aged 25 - 34 1984	MEN Aged 25 - 34 1993	MEN Aged 35 - 54 1984	MEN Aged 35 - 54 1993	WOMEN Aged 25 - 34 1984	WOMEN Aged 25 - 34 1993	WOMEN Aged 35 - 54 1984	WOMEN Aged 35 - 54 1993
All	51.1	45.4	63.6	64.2	41.3	42.6	39.9	46.1
Union status								
Unionized	75.6	76.7	82.1	85.4	67.5	77.8	63.3	73.2
Non-unionized	36.0	32.5	49.4	50.6	35.4	38.7	32.6	41.9
Industry								
Forestry and mining	58.1	-	71.1	75.7	-	-	-	-
Construction	40.4	25.0	50.6	46.2	-	-	-	-
Manufacturing	57.1	53.2	69.8	75.3	44.4	50.6	42.4	54.9
Distributive services	62.6	62.1	71.6	73.2	64.3	61.3	60.0	61.0
Business services	46.0	46.7	61.7	54.3	48.3	50.6	50.8	56.4
Consumer services	29.9	24.6	37.1	33.9	21.4	19.4	23.9	26.8
Occupation								
Professional / managers	54.6	50.8	69.9	65.7	53.2	50.5	48.1	54.6
Natural / Social science	59.3	50.5	71.5	67.8	39.4	52.3	66.3	50.2
Clerical	61.2	36.2	74.1	75.2	46.9	41.5	47.8	56.2
Sales	45.3	53.4	56.6	45.2	38.8	45.6	22.3	31.5
Services	25.5	-	28.8	42.0	13.2	-	17.7	-
Primary / Processing	50.7	41.5	64.0	64.3	35.5	-	39.4	47.0
Construction	53.7	40.0	63.6	65.9	-	-	-	-
Other	49.1	56.5	60.6	71.8	-	-	-	-
Education*								
Less than university	50.2	43.2	62.9	64.2	40.3	40.4	39.4	45.4
University degree	56.7	58.7	69.8	63.7	47.5	55.8	49.5	54.6
Sample size	4,204	1,359	4,576	2,080	2,047	749	2,086	1,085

Note: The sample consists of paid workers aged 17-64 who are employed full-time in the commercial sector in their main job in December.

Note: * The education categories are not strictly comparable between 1984 and 1993.

Source: Survey of Union Membership, 1984
Survey of Labour and Income Dynamics, 1993 (cross sectional file)

Table 8 : Changes in the distribution of employment, 1984 and 1993

Variables	MEN				WOMEN			
	Aged 25 - 34		Aged 35 - 54		Aged 25 - 34		Aged 35 - 54	
	1984	1993	1984	1993	1984	1993	1984	1993
Unionized	38.1	29.2	43.5	38.8	18.2	10.8	23.6	15.9
Non-unionized	61.9	70.8	56.6	61.2	81.8	89.3	76.4	84.1
Industry								
Forestry and mining	5.9	3.4	5.8	4.9	-	-	-	-
Construction	8.5	10.0	8.9	7.3	-	-	-	-
Manufacturing	35.5	29.8	39.4	36.3	25.0	19.4	31.4	21.9
Distributive services	22.8	23.4	24.7	24.6	13.5	14.0	12.3	13.8
Business services	9.6	10.9	8.0	12.9	28.0	33.2	20.3	27.5
Consumer services	17.6	22.5	13.2	14.0	29.9	30.5	33.0	33.7
Occupation								
Professional / managers	13.4	15.4	17.5	19.6	16.1	21.7	12.2	22.1
Natural / Social science	9.7	10.0	6.6	7.2	4.6	5.9	2.3	5.5
Clerical	6.5	7.3	7.6	6.6	42.6	39.8	36.6	33.2
Sales	7.4	6.6	6.5	8.4	8.3	9.7	11.0	11.3
Services	5.2	6.8	4.7	4.9	11.2	9.1	13.1	12.3
Primary / Processing	32.4	29.0	32.4	29.9	12.2	7.2	18.7	10.4
Construction	10.9	10.2	10.2	8.4	-	-	-	-
Other	14.7	14.8	14.6	15.1	-	-	-	-
Education*								
Less than university degree	85.7	85.4	89.7	88.0	86.8	84.0	95.2	91.4
University degree	14.3	14.6	10.3	12.0	13.2	16.0	4.8	8.6
Average real hourly wages (1984 constant dollars)	$11.86	$11.11	$13.48	$14.18	$8.69	$9.28	$8.36	$9.51
Sample size	4,204	1,359	4,576	2,080	2,047	749	2,086	1,085

Note: The sample consists of paid workers aged 17-64 who are employed full-time in the commercial sector in their main job in December.

* Education categories are not strictly comparable between 1984 and 1993.

Source: Survey of Union Membership, 1984
Survey of Labour and Income Dynamics, 1993

Table 9 : Sources of change in pension coverage rates between 1984 and 1993.

Independent variable model	Men aged 25 - 34						Men aged 35-54					
	LPM	E-M	D-R	LPM	E-M	D-R	LPM	E-M	D-R	LPM	E-M	D-R
Occupation	0.47	0.43	0.54	0.35	0.33	0.43	0.67	0.80	0.71	0.37	-0.14	0.35
Province	0.10	0.11	0.13	-0.03	-0.04	-0.05	0.16	0.25	0.22	0.09	-0.05	0.12
Age	-	-	-	-	-	-	-0.13	-0.21	-0.18	-0.10	0.06	-0.15
Union	-3.48	-3.53	-4.41	-3.01	-2.93	-3.87	-1.58	-2.08	-1.83	-1.52	0.66	-1.72
Industry	-2.78	-2.91	-3.63	-2.03	-2.03	-2.68	-0.49	-0.16	-0.15	-0.47	0.09	-0.23
Hourly wages	-	-	-	-2.12	-2.24	-2.96	-	-	-	1.61	-0.83	2.16
Total explained	-5.7	-5.9	-7.37	-6.8	-6.9	-9.13	-1.4	-1.4	-1.23	0.0	-0.2	0.52
Total unexplained	0.0	0.2	-0.51	1.1	1.2	0.82	2.0	2.0	3.24	0.6	0.8	2.61
Total change	-5.7	-5.7	-	-5.7	-5.7	-	0.6	0.6	-	0.6	0.6	-
Approximation gap	-	-	-7.88	-	-	-8.31	-	-	2.01	-	-	3.13
Approximation error	-	-	0.01	-	-	0.01	-	-	-0.01	-	-	-0.09
Predicted change	-	-	-7.87	-	-	8.30	-	-	2.00	-	-	3.04
Independent variable/model	**Women aged 25-34**						**Women aged 35 - 54**					
	LPM	E-M	D-R	LPM	E-M	D-R	LPM	E-M	D-R	LPM	E-M	D-R
Occupation	1.27	1.71	1.74	0.40	0.67	0.53	1.82	-2.47	2.28	0.19	-0.02	-0.02
Province	-0.05	-0.07	-0.08	0.02	-0.06	-0.04	-0.27	0.41	-0.38	-0.32	-0.38	-0.49
Age	-	-	-	-	-	-	-0.03	0.04	-0.04	-0.03	-0.03	-0.05
Union	-2.26	-2.81	-2.85	-1.85	-2.97	-2.34	-2.16	2.81	-2.59	-1.79	-1.60	-2.07
Industry	-1.14	-1.13	-1.15	-1.37	-2.02	-1.59	0.68	-0.89	0.82	0.15	-0.11	-0.15
Hourly wages	-	-	-	1.87	3.27	2.58	-	-	-	4.45	5.04	6.55
Total explained	-2.2	-2.3	-2.33	-1.0	-1.1	-0.87	0.0	-0.1	0.09	2.7	2.9	3.76
Total unexplained	3.5	3.6	4.03	2.3	2.4	2.57	6.2	6.3	6.59	3.5	3.3	3.80
Total change	1.3	1.3	-	1.3	1.3	-	6.2	6.2	-	6.2	6.2	-
Approximation gap	-	-	1.70	-	-	1.70	-	-	6.68	-	-	7.56
Approximation error	-	-	0.01	-	-	0.01	-	-	0.20	-	-	0.25
Predicted change	-	-	1.71	-	-	1.71	-	-	6.88	-	-	7.81

- LPM : linear probability model. E-M : Even-MacPherson's method. D-R : Doiron-Riddell's method.

+ The sum of the contributions of all factors may not add to the total explained due to rounding.

Appendix 1

I. Men aged 25-34 : wages excluded - 1984

A) Linear Probability Model : 1984

Variable	Coefficient	Standard Error	z=b/s.e.	P[|Z|>z]	Mean of X
Constant	0.31618	0.32940E-01	9.599	0.00000	
PROFMAN	0.13188	0.32576E-01	4.048	0.00005	0.1335
NATSOC	0.81472E-01	0.35371E-01	2.303	0.02126	0.9695E-01
SALES	0.46627E-01	0.37189E-01	1.254	0.20992	0.7377E-01
SERVICES	-0.13366	0.44958E-01	-2.973	0.00295	0.5166E-01
PPMW	-0.11315	0.30160E-01	-3.752	0.00018	0.3238
OTHER	-0.16712	0.32602E-01	-5.126	0.00000	0.1470
CONSTR	-0.88148E-01	0.38681E-01	-2.279	0.02268	0.1085
NFLD	-0.85847E-01	0.61779E-01	-1.390	0.16466	0.1189E-01
PEI	-0.59557E-01	0.13019	-0.457	0.64734	0.2594E-02
NOVASCOT	-0.16970E-01	0.40436E-01	-0.420	0.67472	0.2927E-01
NEWBRUN	0.29458E-01	0.47555E-01	0.619	0.53562	0.2065E-01
QUEBEC	-0.80129E-01	0.17033E-01	-4.704	0.00000	0.2632
MANITOBA	0.20092E-01	0.36381E-01	0.552	0.58077	0.3649E-01
SASK	0.62756E-01	0.40681E-01	1.543	0.12292	0.3012E-01
ALBERTA	-0.11320E-01	0.24891E-01	-0.455	0.64926	0.1036
BRITCOL	-0.77971E-02	0.23609E-01	-0.330	0.74121	0.1082
DUNION	0.39014	0.15830E-01	24.646	0.00000	0.3814
D2SIC52	-0.61363E-01	0.58588E-01	-1.047	0.29493	0.1478E-01
D4SIC52	0.36687	0.59219E-01	6.195	0.00000	0.1426E-01
D5SIC52	0.38461	0.59096E-01	6.508	0.00000	0.1536E-01
D6SIC52	0.19756	0.10062	1.963	0.04959	0.4686E-02
D7SIC52	0.15391	0.28904	0.532	0.59439	0.5243E-03
D8SIC52	0.26351E-01	0.71973E-01	0.366	0.71428	0.9529E-02
D9SIC52C	0.10519	0.40338E-01	2.608	0.00911	0.3466E-01
D11SIC52	0.34020	0.57609E-01	5.905	0.00000	0.1525E-01
D13SIC52	-0.56815E-01	0.83185E-01	-0.683	0.49461	0.6757E-02
D16SIC52	0.92228E-02	0.44096E-01	0.209	0.83433	0.2972E-01
D17SIC52	-0.11909	0.80724E-01	-1.475	0.14014	0.7175E-02
D18SIC52	0.27892	0.44913E-01	6.210	0.00000	0.2820E-01
D19SIC52	0.18179	0.48452E-01	3.752	0.00018	0.2432E-01
D20SIC52	0.25222	0.44178E-01	5.709	0.00000	0.2918E-01
D21SIC52	0.57681E-01	0.45655E-01	1.263	0.20644	0.2627E-01
D22SIC52	0.83645E-01	0.54667E-01	1.530	0.12599	0.1687E-01
D23SIC52	0.27582	0.38515E-01	7.161	0.00000	0.4377E-01
D24SIC52	0.18207	0.41598E-01	4.377	0.00001	0.3354E-01
D25SIC52	-0.15012	0.70589E-01	-2.127	0.03345	0.9565E-02
D26SIC52	0.50562	0.90515E-01	5.586	0.00000	0.5622E-02
D27SIC52	0.32487	0.53500E-01	6.072	0.00000	0.1738E-01
D28SIC52	0.81192E-01	0.60084E-01	1.351	0.17660	0.1353E-01
D29SIC52	-0.53186E-01	0.46442E-01	-1.145	0.25212	0.3304E-01
D30SIC52	0.70646E-01	0.42327E-01	1.669	0.09511	0.5134E-01
D31SIC52	0.21470	0.32775E-01	6.551	0.00000	0.7715E-01
D32SIC52	0.21894	0.12113	1.808	0.07068	0.3054E-02
D33SIC52	0.32360	0.39834E-01	8.124	0.00000	0.4128E-01
D34SIC52	0.37650	0.42464E-01	8.866	0.00000	0.3387E-01
D35SIC52	0.30162E-01	0.31008E-01	0.973	0.33069	0.7263E-01
D37SIC52	0.23607	0.52608E-01	4.487	0.00001	0.1881E-01
D38SIC52	0.26285	0.66827E-01	3.933	0.00008	0.1076E-01
D39SIC52	0.10618E-01	0.61069E-01	0.174	0.86198	0.1326E-01
D43SIC52	-0.55343E-01	0.88824E-01	-0.623	0.53325	0.5924E-02
D44SIC52	0.38799E-02	0.36440E-01	0.106	0.91521	0.5341E-01
D45SIC52	-0.56750E-01	0.10589	-0.536	0.59199	0.4273E-02
D46SIC52	-0.14209	0.50232E-01	-2.829	0.00467	0.2844E-01
D47SIC52	-0.92063E-01	0.48058E-01	-1.916	0.05541	0.2317E-01

B) Logit model : 1984

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ÉÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍ»
º Maximum Likelihood Estimates                 º
º Dependent variable             PENSION       º
º Number of observations            4204       º
º Iterations completed                 5       º
º Log likelihood function      -2251.282       º
º Restricted log likelihood    -2912.926       º
º Chi-squared                   1323.288       º
º Degrees of freedom                  54       º
º Significance level           0.0000000       º
ÈÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍ¼
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Variable	Coefficient	Standard Error	z=b/s.e.	P[|Z|>z]	Mean of X
Constant	-0.78766	0.18043	-4.365	0.00001	
PROFMAN	0.58677	0.17741	3.307	0.00094	0.1335
NATSOC	0.37338	0.19579	1.907	0.05651	0.9695E-01
SALES	0.19504	0.19968	0.977	0.32869	0.7377E-01
SERVICES	-0.89328	0.26435	-3.379	0.00073	0.5166E-01
PPMW	-0.65639	0.17050	-3.850	0.00012	0.3238
OTHER	-0.99379	0.18626	-5.336	0.00000	0.1470
CONSTR	-0.51779	0.23113	-2.240	0.02507	0.1085
NFLD	-0.48311	0.35498	-1.361	0.17353	0.1189E-01
PEI	-0.33579	0.74221	-0.452	0.65097	0.2594E-02
NOVASCOT	-0.11469	0.22385	-0.512	0.60840	0.2927E-01
NEWBRUN	0.16633	0.26901	0.618	0.53636	0.2065E-01
QUEBEC	-0.45111	0.94711E-01	-4.763	0.00000	0.2632
MANITOBA	0.10207	0.19995	0.511	0.60970	0.3649E-01
SASK	0.37822	0.22796	1.659	0.09708	0.3012E-01
ALBERTA	-0.76350E-01	0.13687	-0.558	0.57695	0.1036
BRITCOL	-0.56421E-01	0.13020	-0.433	0.66477	0.1082
DUNION	1.9776	0.90644E-01	21.818	0.00000	0.3814
D2SIC52	-0.40669	0.33295	-1.221	0.22191	0.1478E-01
D4SIC52	1.9101	0.35682	5.353	0.00000	0.1426E-01
D5SIC52	1.8756	0.33617	5.579	0.00000	0.1536E-01
D6SIC52	0.88226	0.60148	1.467	0.14242	0.4686E-02
D7SIC52	0.74262	1.5894	0.467	0.64033	0.5243E-03
D8SIC52	0.19755	0.39361	0.502	0.61574	0.9529E-02
D9SIC52C	0.47845	0.21084	2.269	0.02325	0.3466E-01
D11SIC52	1.7001	0.33377	5.094	0.00000	0.1525E-01
D13SIC52	-0.34317	0.44516	-0.771	0.44077	0.6757E-02
D16SIC52	0.25779E-02	0.23348	0.011	0.99119	0.2972E-01
D17SIC52	-0.76164	0.48129	-1.582	0.11354	0.7175E-02
D18SIC52	1.3731	0.26530	5.176	0.00000	0.2820E-01
D19SIC52	0.92504	0.25482	3.630	0.00028	0.2432E-01
D20SIC52	1.1996	0.24453	4.906	0.00000	0.2918E-01
D21SIC52	0.26255	0.24245	1.083	0.27885	0.2627E-01
D22SIC52	0.38584	0.28558	1.351	0.17668	0.1687E-01
D23SIC52	1.3288	0.22020	6.035	0.00000	0.4377E-01
D24SIC52	0.82801	0.21298	3.888	0.00010	0.3354E-01
D25SIC52	-0.83268	0.41215	-2.020	0.04335	0.9565E-02
D26SIC52	2.8484	0.67602	4.214	0.00003	0.5622E-02
D27SIC52	1.5439	0.29058	5.313	0.00000	0.1738E-01
D28SIC52	0.38436	0.30572	1.257	0.20866	0.1353E-01
D29SIC52	-0.31061	0.25943	-1.197	0.23120	0.3304E-01
D30SIC52	0.30625	0.23295	1.315	0.18862	0.5134E-01
D31SIC52	1.0616	0.18053	5.880	0.00000	0.7715E-01
D32SIC52	0.99956	0.60620	1.649	0.09917	0.3054E-02
D33SIC52	1.8375	0.25127	7.313	0.00000	0.4128E-01
D34SIC52	2.4009	0.31690	7.576	0.00000	0.3387E-01
D35SIC52	0.15950	0.16157	0.987	0.32355	0.7263E-01
D37SIC52	1.0389	0.26647	3.899	0.00010	0.1881E-01
D38SIC52	1.2208	0.35781	3.412	0.00065	0.1076E-01
D39SIC52	0.97260E-01	0.31944	0.304	0.76077	0.1326E-01

D43SIC52	-0.33029	0.53069	-0.622	0.53368	0.5924E-02
D44SIC52	0.51089E-01	0.18803	0.272	0.78585	0.5341E-01
D45SIC52	-0.36215	0.69467	-0.521	0.60214	0.4273E-02
D46SIC52	-0.87988	0.30652	-2.871	0.00410	0.2844E-01
D47SIC52	-0.54708	0.29406	-1.860	0.06283	0.2317E-01

II. Men aged 25-34 : wages excluded - 1993

A) Linear Probability Model : 1993

Variable	Coefficient	Standard Error	z=b/s.e.	P[|Z|>z]	Mean of X
Constant	0.63211E-01	0.54792E-01	1.154	0.24865	
PROFMAN	0.29852	0.54040E-01	5.524	0.00000	0.1539
NATSOC	0.25808	0.62419E-01	4.135	0.00004	0.1004
SALES	0.26507	0.65224E-01	4.064	0.00005	0.6559E-01
SERVICES	0.86947E-01	0.75017E-01	1.159	0.24644	0.6799E-01
PPMW	0.41225E-02	0.52493E-01	0.079	0.93740	0.2897
OTHER	0.95414E-01	0.54552E-01	1.749	0.08028	0.1482
CONSTR	0.10960	0.67254E-01	1.630	0.10319	0.1018
NFLD	0.45895E-02	0.10554	0.043	0.96531	0.1244E-01
PEI	0.10639E-01	0.18521	0.057	0.95419	0.3886E-02
NOVASCOT	0.42840E-01	0.72596E-01	0.590	0.55512	0.2800E-01
NEWBRUN	0.80139E-01	0.80744E-01	0.993	0.32095	0.2185E-01
QUEBEC	-0.50137E-01	0.30774E-01	-1.629	0.10327	0.2474
MANITOBA	0.54734E-01	0.64373E-01	0.850	0.39518	0.3665E-01
SASK	-0.18358E-01	0.71846E-01	-0.256	0.79833	0.3009E-01
ALBERTA	0.58960E-01	0.43900E-01	1.343	0.17926	0.1024
BRITCOL	-0.45863E-01	0.38733E-01	-1.184	0.23637	0.1352
DUNION	0.45432	0.29832E-01	15.229	0.00000	0.2921
D2SIC52	0.17401	0.13085	1.330	0.18358	0.8340E-02
D4SIC52	0.24280	0.14105	1.721	0.08518	0.7256E-02
D5SIC52	0.42144	0.13209	3.190	0.00142	0.8560E-02
D6SIC52	0.21913	0.27651	0.792	0.42808	0.1782E-02
D7SIC52	0.10252E-01	0.43664	0.023	0.98127	0.6984E-03
D8SIC52	0.10259	0.13978	0.734	0.46298	0.7567E-02
D9SIC52	0.24992	0.63755E-01	3.920	0.00009	0.4463E-01
D11SIC52	0.80063E-01	0.12136	0.660	0.50944	0.9768E-02
D13SIC52	0.26640	0.16549	1.610	0.10745	0.5144E-02
D16SIC52	0.20483	0.73809E-01	2.775	0.00552	0.3183E-01
D17SIC52	0.10683	0.15137	0.706	0.48034	0.6138E-02
D18SIC52	0.35550	0.89948E-01	3.952	0.00008	0.1935E-01
D19SIC52	0.17753	0.11485	1.546	0.12217	0.1109E-01
D20SIC52	0.38869	0.10059	3.864	0.00011	0.1515E-01
D21SIC52	0.34929E-01	0.68906E-01	0.507	0.61222	0.3911E-01
D22SIC52	0.16957	0.10375	1.634	0.10217	0.1407E-01
D23SIC52	0.38326	0.73350E-01	5.225	0.00000	0.3335E-01
D24SIC52	0.31115	0.87821E-01	3.543	0.00040	0.2116E-01
D25SIC52	0.32187	0.11004	2.925	0.00344	0.1240E-01
D26SIC52	0.27655	0.16094	1.718	0.08573	0.5391E-02
D27SIC52	0.44001	0.11867	3.708	0.00021	0.1033E-01
D28SIC52	0.33109	0.12941	2.558	0.01051	0.8483E-02
D29SIC52	-0.52751E-01	0.79673E-01	-0.662	0.50791	0.3066E-01
D30SIC52	0.34383E-01	0.67293E-01	0.511	0.60939	0.6790E-01
D31SIC52	0.28002	0.55769E-01	5.021	0.00000	0.8704E-01
D32SIC52	-0.12554E-02	0.21780	-0.006	0.99540	0.2978E-02
D33SIC52	0.76973E-01	0.69351E-01	1.110	0.26704	0.4308E-01
D34SIC52	0.36669	0.84619E-01	4.333	0.00001	0.2450E-01
D35SIC52	0.24879	0.52315E-01	4.756	0.00000	0.7593E-01
D37SIC52	0.53005	0.91302E-01	5.805	0.00000	0.1873E-01
D38SIC52	0.28289	0.16955	1.668	0.09522	0.4938E-02
D39SIC52	0.28031	0.15021	1.866	0.06202	0.6845E-02
D43SIC52	0.37926	0.15549	2.439	0.01472	0.6001E-02
D44SIC52	0.65530E-02	0.57854E-01	0.113	0.90982	0.7865E-01
D45SIC52	-0.48597E-01	0.18301	-0.266	0.79059	0.4100E-02
D46SIC52	-0.95760E-01	0.68614E-01	-1.396	0.16282	0.6197E-01
D47SIC52	-0.27024E-01	0.88157E-01	-0.307	0.75919	0.2109E-01

B) Logit model : 1993

Maximum Likelihood Estimates	
Dependent variable	PENSION
Number of observations	1359
Iterations completed	5
Log likelihood function	-697.5605
Restricted log likelihood	-936.2975
Chi-squared	477.4740
Degrees of freedom	54
Significance level	0.0000000

Variable	Coefficient	Standard Error	z=b/s.e.	P[|Z|>z]	Mean of X
Constant	-2.3401	0.34073	-6.868	0.00000	
PROFMAN	1.6709	0.31753	5.262	0.00000	0.1539
NATSOC	1.4514	0.35933	4.039	0.00005	0.1004
SALES	1.4463	0.37054	3.903	0.00009	0.6559E-01
SERVICES	0.36013	0.46865	0.768	0.44222	0.6799E-01
PPMW	0.17162E-01	0.31682	0.054	0.95680	0.2897
OTHER	0.52847	0.31654	1.670	0.09501	0.1482
CONSTR	0.59269	0.39979	1.482	0.13821	0.1018
NFLD	0.75199E-02	0.60872	0.012	0.99014	0.1244E-01
PEI	0.69529E-01	1.0458	0.066	0.94699	0.3886E-02
NOVASCOT	0.25312	0.39983	0.633	0.52668	0.2800E-01
NEWBRUN	0.53680	0.45646	1.176	0.23959	0.2185E-01
QUEBEC	-0.29291	0.18062	-1.622	0.10486	0.2474
MANITOBA	0.32599	0.36997	0.881	0.37825	0.3665E-01
SASK	-0.12225	0.41288	-0.296	0.76717	0.3009E-01
ALBERTA	0.30806	0.24956	1.234	0.21705	0.1024
BRITCOL	-0.25467	0.22121	-1.151	0.24963	0.1352
DUNION	2.3753	0.18101	13.122	0.00000	0.2921
D2SIC52	0.94578	0.73151	1.293	0.19604	0.8340E-02
D4SIC52	1.2263	0.80907	1.516	0.12958	0.7256E-02
D5SIC52	2.3472	0.76625	3.063	0.00219	0.8560E-02
D6SIC52	1.1457	1.4674	0.781	0.43494	0.1782E-02
D7SIC52	-0.12828E-02	2.1403	-0.001	0.99952	0.6984E-03
D8SIC52	0.72554	0.80163	0.905	0.36542	0.7567E-02
D9SIC52	1.2897	0.35927	3.590	0.00033	0.4463E-01
D11SIC52	0.46044	0.64777	0.711	0.47721	0.9768E-02
D13SIC52	1.3193	0.94973	1.389	0.16480	0.5144E-02
D16SIC52	1.1261	0.41387	2.721	0.00651	0.3183E-01
D17SIC52	0.63219	0.85780	0.737	0.46113	0.6138E-02
D18SIC52	1.8769	0.50558	3.712	0.00021	0.1935E-01
D19SIC52	0.98472	0.65907	1.494	0.13514	0.1109E-01
D20SIC52	2.0956	0.56874	3.685	0.00023	0.1515E-01
D21SIC52	0.18367	0.42240	0.435	0.66369	0.3911E-01
D22SIC52	0.97086	0.59316	1.637	0.10168	0.1407E-01
D23SIC52	2.1515	0.44112	4.877	0.00000	0.3335E-01
D24SIC52	1.5976	0.47242	3.382	0.00072	0.2116E-01
D25SIC52	1.6857	0.65715	2.565	0.01031	0.1240E-01
D26SIC52	1.4320	0.87097	1.644	0.10014	0.5391E-02
D27SIC52	2.3471	0.71184	3.297	0.00098	0.1033E-01
D28SIC52	1.8303	0.68633	2.667	0.00766	0.8483E-02
D29SIC52	-0.25748	0.48442	-0.532	0.59506	0.3066E-01
D30SIC52	0.27741	0.41572	0.667	0.50459	0.6790E-01
D31SIC52	1.5680	0.33014	4.749	0.00000	0.8704E-01
D32SIC52	0.23694E-02	1.2742	0.002	0.99852	0.2978E-02
D33SIC52	0.35343	0.38486	0.918	0.35844	0.4308E-01
D34SIC52	2.3640	0.59157	3.996	0.00006	0.2450E-01
D35SIC52	1.3205	0.28827	4.581	0.00000	0.7593E-01
D37SIC52	2.8593	0.60712	4.710	0.00000	0.1873E-01
D38SIC52	1.3386	0.85750	1.561	0.11851	0.4938E-02
D39SIC52	1.4854	0.90789	1.636	0.10182	0.6845E-02

D43SIC52	2.0476	0.76665	2.671	0.00757	0.6001E-02
D44SIC52	0.14824	0.32116	0.462	0.64438	0.7865E-01
D45SIC52	-0.15745	1.0963	-0.144	0.88580	0.4100E-02
D46SIC52	-0.54375	0.42193	-1.289	0.19750	0.6197E-01
D47SIC52	-0.13939	0.57204	-0.244	0.80749	0.2109E-01

III. Men aged 25-34 : wages included - 1984

A) Linear Probability Model : 1984

Variable	Coefficient	Standard Error	z=b/s.e.	P[|Z|>z]	Mean of X
Constant	0.87664E-01	0.34752E-01	2.523	0.01165	
PROFMAN	0.14589E-01	0.32334E-01	0.451	0.65184	0.1335
NATSOC	-0.11947E-01	0.34718E-01	-0.344	0.73077	0.9695E-01
SALES	0.13641E-01	0.36074E-01	0.378	0.70532	0.7377E-01
SERVICES	-0.91166E-01	0.43619E-01	-2.090	0.03661	0.5166E-01
PPMW	-0.12896	0.29227E-01	-4.413	0.00001	0.3238
OTHER	-0.16999	0.31576E-01	-5.384	0.00000	0.1470
CONSTR	-0.99537E-01	0.37470E-01	-2.656	0.00790	0.1085
NFLD	-0.39142E-01	0.59901E-01	-0.653	0.51347	0.1189E-01
PEI	0.11286E-01	0.12616	0.089	0.92872	0.2594E-02
NOVASCOT	0.29538E-01	0.39264E-01	0.752	0.45187	0.2927E-01
NEWBRUN	0.66312E-01	0.46112E-01	1.438	0.15042	0.2065E-01
QUEBEC	-0.72989E-01	0.16502E-01	-4.423	0.00001	0.2632
MANITOBA	0.28836E-01	0.35240E-01	0.818	0.41321	0.3649E-01
SASK	0.70065E-01	0.39403E-01	1.778	0.07538	0.3012E-01
ALBERTA	-0.48859E-01	0.24214E-01	-2.018	0.04361	0.1036
BRITCOL	-0.57268E-01	0.23060E-01	-2.483	0.01301	0.1082
DUNION	0.33684	0.15665E-01	21.503	0.00000	0.3814
D2SIC52	-0.15278	0.57011E-01	-2.680	0.00737	0.1478E-01
D4SIC52	0.24420	0.57830E-01	4.223	0.00002	0.1426E-01
D5SIC52	0.20372	0.58266E-01	3.496	0.00047	0.1536E-01
D6SIC52	0.99883E-01	0.97628E-01	1.023	0.30626	0.4686E-02
D7SIC52	0.15711	0.27995	0.561	0.57465	0.5243E-03
D8SIC52	-0.28334E-01	0.69786E-01	-0.406	0.68473	0.9529E-02
D9SIC52C	0.75881E-01	0.39108E-01	1.940	0.05234	0.3466E-01
D11SIC52	0.28887	0.55881E-01	5.169	0.00000	0.1525E-01
D13SIC52	-0.31990E-01	0.80581E-01	-0.397	0.69137	0.6757E-02
D16SIC52	-0.14818E-01	0.42733E-01	-0.347	0.72877	0.2972E-01
D17SIC52	-0.10043	0.78192E-01	-1.284	0.19901	0.7175E-02
D18SIC52	0.19143	0.43818E-01	4.369	0.00001	0.2820E-01
D19SIC52	0.91850E-01	0.47239E-01	1.944	0.05185	0.2432E-01
D20SIC52	0.16719	0.43094E-01	3.880	0.00010	0.2918E-01
D21SIC52	0.23168E-01	0.44267E-01	0.523	0.60071	0.2627E-01
D22SIC52	0.52408E-01	0.52980E-01	0.989	0.32256	0.1687E-01
D23SIC52	0.22853	0.37412E-01	6.108	0.00000	0.4377E-01
D24SIC52	0.10528	0.40554E-01	2.596	0.00943	0.3354E-01
D25SIC52	-0.16310	0.68372E-01	-2.386	0.01705	0.9565E-02
D26SIC52	0.33095	0.88297E-01	3.748	0.00018	0.5622E-02
D27SIC52	0.22947	0.52135E-01	4.401	0.00001	0.1738E-01
D28SIC52	0.11519	0.58229E-01	1.978	0.04791	0.1353E-01
D29SIC52	-0.14881	0.45349E-01	-3.282	0.00103	0.3304E-01
D30SIC52	-0.21508E-01	0.41370E-01	-0.520	0.60313	0.5134E-01
D31SIC52	0.15280	0.31962E-01	4.781	0.00000	0.7715E-01
D32SIC52	0.16396	0.11736	1.397	0.16240	0.3054E-02
D33SIC52	0.23479	0.38950E-01	6.028	0.00000	0.4128E-01
D34SIC52	0.23561	0.41996E-01	5.610	0.00000	0.3387E-01
D35SIC52	0.27666E-02	0.30078E-01	0.092	0.92671	0.7263E-01
D37SIC52	0.17915	0.51068E-01	3.508	0.00045	0.1881E-01
D38SIC52	0.22038	0.64774E-01	3.402	0.00067	0.1076E-01
D39SIC52	-0.40988E-01	0.59229E-01	-0.692	0.48893	0.1326E-01
D43SIC52	-0.62594E-01	0.86030E-01	-0.728	0.46687	0.5924E-02
D44SIC52	-0.49257E-01	0.35438E-01	-1.390	0.16455	0.5341E-01
D45SIC52	-0.81657E-01	0.10256	-0.796	0.42594	0.4273E-02
D46SIC52	-0.10050	0.48716E-01	-2.063	0.03912	0.2844E-01
D47SIC52	-0.70069E-01	0.46564E-01	-1.505	0.13238	0.2317E-01
HRWAGE	0.28315E-01	0.17074E-02	16.584	0.00000	11.86

B) Logit model : 1984

Maximum Likelihood Estimates	
Dependent variable	PENSION
Number of observations	4204
Iterations completed	5
Log likelihood function	-2131.552
Restricted log likelihood	-2912.926
Chi-squared	1562.747
Degrees of freedom	55
Significance level	0.0000000

Variable	Coefficient	Standard Error	z=b/s.e.	P[|Z|>z]	Mean of X
Constant	-2.1266	0.20811	-10.218	0.00000	
PROFMAN	0.74156E-02	0.18630	0.040	0.96825	0.1335
NATSOC	-0.96573E-01	0.20349	-0.475	0.63508	0.9695E-01
SALES	0.38025E-01	0.20494	0.186	0.85281	0.7377E-01
SERVICES	-0.60843	0.27388	-2.222	0.02632	0.5166E-01
PPMW	-0.73953	0.17376	-4.256	0.00002	0.3238
OTHER	-1.0093	0.18983	-5.317	0.00000	0.1470
CONSTR	-0.57396	0.23933	-2.398	0.01647	0.1085
NFLD	-0.27199	0.37764	-0.720	0.47137	0.1189E-01
PEI	0.70891E-01	0.76244	0.093	0.92592	0.2594E-02
NOVASCOT	0.15720	0.23013	0.683	0.49455	0.2927E-01
NEWBRUN	0.39129	0.27798	1.408	0.15925	0.2065E-01
QUEBEC	-0.39897	0.97547E-01	-4.090	0.00004	0.2632
MANITOBA	0.17151	0.21024	0.816	0.41463	0.3649E-01
SASK	0.46746	0.23510	1.988	0.04677	0.3012E-01
ALBERTA	-0.28031	0.14367	-1.951	0.05104	0.1036
BRITCOL	-0.32691	0.13694	-2.387	0.01697	0.1082
DUNION	1.7387	0.92912E-01	18.713	0.00000	0.3814
D2SIC52	-0.91928	0.34468	-2.667	0.00765	0.1478E-01
D4SIC52	1.1765	0.35485	3.316	0.00091	0.1426E-01
D5SIC52	0.92936	0.35078	2.649	0.00806	0.1536E-01
D6SIC52	0.34994	0.60594	0.578	0.56359	0.4686E-02
D7SIC52	0.80363	1.7137	0.469	0.63912	0.5243E-03
D8SIC52	-0.14397	0.40210	-0.358	0.72031	0.9529E-02
D9SIC52C	0.31088	0.21548	1.443	0.14909	0.3466E-01
D11SIC52	1.5064	0.34319	4.390	0.00001	0.1525E-01
D13SIC52	-0.15021	0.44636	-0.337	0.73648	0.6757E-02
D16SIC52	-0.15256	0.24047	-0.634	0.52580	0.2972E-01
D17SIC52	-0.68805	0.49146	-1.400	0.16151	0.7175E-02
D18SIC52	0.93891	0.27339	3.434	0.00059	0.2820E-01
D19SIC52	0.44588	0.26767	1.666	0.09576	0.2432E-01
D20SIC52	0.73773	0.24921	2.960	0.00307	0.2918E-01
D21SIC52	0.74911E-01	0.25047	0.299	0.76488	0.2627E-01
D22SIC52	0.21571	0.28752	0.750	0.45309	0.1687E-01
D23SIC52	1.0957	0.22439	4.883	0.00000	0.4377E-01
D24SIC52	0.43435	0.22240	1.953	0.05082	0.3354E-01
D25SIC52	-0.99560	0.42116	-2.364	0.01808	0.9565E-02
D26SIC52	1.8625	0.67985	2.740	0.00615	0.5622E-02
D27SIC52	1.0926	0.30121	3.627	0.00029	0.1738E-01
D28SIC52	0.56724	0.30835	1.840	0.06582	0.1353E-01
D29SIC52	-0.93619	0.27745	-3.374	0.00074	0.3304E-01
D30SIC52	-0.17775	0.24842	-0.715	0.47430	0.5134E-01
D31SIC52	0.76665	0.18686	4.103	0.00004	0.7715E-01
D32SIC52	0.73946	0.61916	1.194	0.23237	0.3054E-02
D33SIC52	1.4427	0.26346	5.476	0.00000	0.4128E-01
D34SIC52	1.7091	0.33356	5.124	0.00000	0.3387E-01
D35SIC52	-0.67037E-02	0.16762	-0.040	0.96810	0.7263E-01
D37SIC52	0.76696	0.28073	2.732	0.00630	0.1881E-01
D38SIC52	1.0396	0.36377	2.858	0.00426	0.1076E-01
D39SIC52	-0.22060	0.33518	-0.658	0.51044	0.1326E-01

D43SIC52	-0.38190	0.54029	-0.707	0.47967	0.5924E-02
D44SIC52	-0.30150	0.20063	-1.503	0.13290	0.5341E-01
D45SIC52	-0.53017	0.68941	-0.769	0.44188	0.4273E-02
D46SIC52	-0.62305	0.31450	-1.981	0.04759	0.2844E-01
D47SIC52	-0.42530	0.30174	-1.409	0.15869	0.2317E-01
HRWAGE	0.15833	0.11052E-01	14.326	0.00000	11.86

IV. Men aged 25-34 : wages included - 1993

A) Linear Probability Model : 1993

Variable	Coefficient	Standard Error	z=b/s.e.	P[|Z|>z]	Mean of X
Constant	-0.16363	0.57220E-01	-2.860	0.00424	
PROFMAN	0.17157	0.53478E-01	3.208	0.00134	0.1539
NATSOC	0.11534	0.61683E-01	1.870	0.06151	0.1004
SALES	0.19495	0.63155E-01	3.087	0.00202	0.6559E-01
SERVICES	0.33409E-01	0.72397E-01	0.461	0.64446	0.6799E-01
PPMW	-0.33568E-01	0.50661E-01	-0.663	0.50758	0.2897
OTHER	0.70584E-01	0.52565E-01	1.343	0.17934	0.1482
CONSTR	0.69663E-01	0.64853E-01	1.074	0.28274	0.1018
NFLD	0.31384E-01	0.10162	0.309	0.75744	0.1244E-01
PEI	0.73572E-01	0.17838	0.412	0.68001	0.3886E-02
NOVASCOT	0.70691E-01	0.69930E-01	1.011	0.31207	0.2800E-01
NEWBRUN	0.10469	0.77757E-01	1.346	0.17816	0.2185E-01
QUEBEC	-0.41946E-01	0.29632E-01	-1.416	0.15690	0.2474
MANITOBA	0.62959E-01	0.61967E-01	1.016	0.30963	0.3665E-01
SASK	-0.85223E-03	0.69176E-01	-0.012	0.99017	0.3009E-01
ALBERTA	0.19633E-01	0.42431E-01	0.463	0.64357	0.1024
BRITCOL	-0.97080E-01	0.37617E-01	-2.581	0.00986	0.1352
DUNION	0.40414	0.29131E-01	13.873	0.00000	0.2921
D2SIC52	0.94944E-01	0.12619	0.752	0.45181	0.8340E-02
D4SIC52	0.90752E-01	0.13658	0.664	0.50639	0.7256E-02
D5SIC52	0.19050	0.12914	1.475	0.14018	0.8560E-02
D6SIC52	0.81334E-01	0.26650	0.305	0.76022	0.1782E-02
D7SIC52	-0.17042E-01	0.42030	-0.041	0.96766	0.6984E-03
D8SIC52	0.53957E-01	0.13463	0.401	0.68858	0.7567E-02
D9SIC52	0.16563	0.61919E-01	2.675	0.00747	0.4463E-01
D11SIC52	0.34896E-01	0.11690	0.299	0.76531	0.9768E-02
D13SIC52	0.28689	0.15930	1.801	0.07172	0.5144E-02
D16SIC52	0.16465	0.71153E-01	2.314	0.02067	0.3183E-01
D17SIC52	0.10358	0.14570	0.711	0.47712	0.6138E-02
D18SIC52	0.24043	0.87307E-01	2.754	0.00589	0.1935E-01
D19SIC52	0.98890E-01	0.11082	0.892	0.37221	0.1109E-01
D20SIC52	0.22538	0.98134E-01	2.297	0.02164	0.1515E-01
D21SIC52	-0.23330E-01	0.66569E-01	-0.350	0.72599	0.3911E-01
D22SIC52	0.76894E-01	0.10028	0.767	0.44319	0.1407E-01
D23SIC52	0.28717	0.71226E-01	4.032	0.00006	0.3335E-01
D24SIC52	0.19532	0.85288E-01	2.290	0.02201	0.2116E-01
D25SIC52	0.22512	0.10634	2.117	0.03426	0.1240E-01
D26SIC52	0.44164E-01	0.15657	0.282	0.77788	0.5391E-02
D27SIC52	0.27909	0.11531	2.420	0.01550	0.1033E-01
D28SIC52	0.32274	0.12456	2.591	0.00957	0.8483E-02
D29SIC52	-0.12611	0.77024E-01	-1.637	0.10157	0.3066E-01
D30SIC52	-0.74505E-01	0.65642E-01	-1.135	0.25637	0.6790E-01
D31SIC52	0.16841	0.54780E-01	3.074	0.00211	0.8704E-01
D32SIC52	0.97530E-03	0.20964	0.005	0.99629	0.2978E-02
D33SIC52	-0.28320E-01	0.67543E-01	-0.419	0.67501	0.4308E-01
D34SIC52	0.15508	0.84040E-01	1.845	0.06499	0.2450E-01
D35SIC52	0.19539	0.50625E-01	3.860	0.00011	0.7593E-01
D37SIC52	0.41679	0.88578E-01	4.705	0.00000	0.1873E-01
D38SIC52	0.18585	0.16347	1.137	0.25559	0.4938E-02
D39SIC52	0.25713	0.14460	1.778	0.07536	0.6845E-02
D43SIC52	0.45270	0.14984	3.021	0.00252	0.6001E-02
D44SIC52	-0.84616E-02	0.55706E-01	-0.152	0.87927	0.7865E-01
D45SIC52	0.53718E-01	0.17644	0.304	0.76078	0.4100E-02
D46SIC52	0.32860E-02	0.66751E-01	0.049	0.96074	0.6197E-01
D47SIC52	-0.65166E-02	0.84879E-01	-0.077	0.93880	0.2109E-01
HRWAGE	0.33024E-01	0.32311E-02	10.221	0.00000	11.11

B) Logit model : 1993

Maximum Likelihood Estimates	
Dependent variable	PENSION
Number of observations	1359
Iterations completed	5
Log likelihood function	-650.1791
Restricted log likelihood	-936.2975
Chi-squared	572.2369
Degrees of freedom	55
Significance level	0.0000000

Variable	Coefficient	Standard Error	z=b/s.e.	P[|Z|>z]	Mean of X
Constant	-3.8090	0.39334	-9.684	0.00000	
PROFMAN	0.98162	0.33116	2.964	0.00304	0.1539
NATSOC	0.65078	0.38062	1.710	0.08730	0.1004
SALES	1.0933	0.38852	2.814	0.00489	0.6559E-01
SERVICES	-0.53887E-01	0.48160	-0.112	0.91091	0.6799E-01
PPMW	-0.20931	0.32777	-0.639	0.52309	0.2897
OTHER	0.42007	0.32686	1.285	0.19873	0.1482
CONSTR	0.34171	0.42657	0.801	0.42309	0.1018
NFLD	0.13505	0.61457	0.220	0.82606	0.1244E-01
PEI	0.44460	1.0705	0.415	0.67790	0.3886E-02
NOVASCOT	0.39425	0.41491	0.950	0.34201	0.2800E-01
NEWBRUN	0.71939	0.47945	1.500	0.13350	0.2185E-01
QUEBEC	-0.30228	0.18933	-1.597	0.11036	0.2474
MANITOBA	0.42947	0.39911	1.076	0.28189	0.3665E-01
SASK	-0.68584E-01	0.43977	-0.156	0.87607	0.3009E-01
ALBERTA	0.48613E-01	0.26590	0.183	0.85493	0.1024
BRITCOL	-0.64422	0.23413	-2.752	0.00593	0.1352
DUNION	2.1834	0.18525	11.786	0.00000	0.2921
D2SIC52	0.59842	0.74581	0.802	0.42234	0.8340E-02
D4SIC52	0.46506	0.84618	0.550	0.58260	0.7256E-02
D5SIC52	1.3070	0.84973	1.538	0.12401	0.8560E-02
D6SIC52	0.31648	1.5410	0.205	0.83728	0.1782E-02
D7SIC52	-0.17741	2.1387	-0.083	0.93389	0.6984E-03
D8SIC52	0.48958	0.81574	0.600	0.54840	0.7567E-02
D9SIC52	0.82038	0.38416	2.135	0.03272	0.4463E-01
D11SIC52	0.27655	0.65891	0.420	0.67470	0.9768E-02
D13SIC52	1.4700	0.93661	1.569	0.11655	0.5144E-02
D16SIC52	0.94022	0.43459	2.163	0.03051	0.3183E-01
D17SIC52	0.81500	0.82148	0.992	0.32114	0.6138E-02
D18SIC52	1.3386	0.57523	2.327	0.01996	0.1935E-01
D19SIC52	0.72565	0.75293	0.964	0.33516	0.1109E-01
D20SIC52	1.1788	0.58198	2.025	0.04282	0.1515E-01
D21SIC52	-0.11815	0.42177	-0.280	0.77937	0.3911E-01
D22SIC52	0.41847	0.64660	0.647	0.51751	0.1407E-01
D23SIC52	1.6406	0.45009	3.645	0.00027	0.3335E-01
D24SIC52	1.0125	0.51222	1.977	0.04808	0.2116E-01
D25SIC52	1.2002	0.67772	1.771	0.07658	0.1240E-01
D26SIC52	0.12509	0.91654	0.136	0.89144	0.5391E-02
D27SIC52	1.4937	0.72152	2.070	0.03843	0.1033E-01
D28SIC52	1.9437	0.75719	2.567	0.01026	0.8483E-02
D29SIC52	-0.77732	0.51201	-1.518	0.12897	0.3066E-01
D30SIC52	-0.41383	0.45028	-0.919	0.35808	0.6790E-01
D31SIC52	0.97076	0.34215	2.837	0.00455	0.8704E-01
D32SIC52	-0.45021E-01	1.3932	-0.032	0.97422	0.2978E-02
D33SIC52	-0.22293	0.39692	-0.562	0.57435	0.4308E-01
D34SIC52	1.3327	0.63418	2.101	0.03560	0.2450E-01
D35SIC52	1.1056	0.29967	3.689	0.00022	0.7593E-01
D37SIC52	2.4810	0.62576	3.965	0.00007	0.1873E-01
D38SIC52	0.87347	0.92513	0.944	0.34509	0.4938E-02
D39SIC52	1.6581	0.95885	1.729	0.08377	0.6845E-02

D43SIC52	2.6624	0.78521	3.391	0.00070	0.6001E-02
D44SIC52	0.83970E-01	0.33682	0.249	0.80313	0.7865E-01
D45SIC52	0.55573	1.1019	0.504	0.61403	0.4100E-02
D46SIC52	0.13690	0.44429	0.308	0.75799	0.6197E-01
D47SIC52	0.18155	0.56247	0.323	0.74687	0.2109E-01
HRWAGE	0.19854	0.22044E-01	9.007	0.00000	11.11

V. Men aged 35-54 : wages excluded - 1984

A) Linear Probability Model : 1984

Variable	Coefficient	Standard Error	z=b/s.e.	P[|Z|>z]	Mean of X
Constant	0.38492	0.31615E-01	12.175	0.00000	
PROFMAN	0.14498	0.27672E-01	5.239	0.00000	0.1749
NATSOC	0.83834E-01	0.34144E-01	2.455	0.01407	0.6554E-01
SALES	0.17825E-01	0.34078E-01	0.523	0.60092	0.6543E-01
SERVICES	-0.17770	0.39871E-01	-4.457	0.00001	0.4701E-01
PPMW	-0.10580	0.26116E-01	-4.051	0.00005	0.3235
OTHER	-0.11649	0.28394E-01	-4.103	0.00004	0.1457
CONSTR	-0.59918E-01	0.34143E-01	-1.755	0.07927	0.1020
NFLD	-0.53432E-02	0.51588E-01	-0.104	0.91751	0.1483E-01
PEI	-0.56231E-02	0.11501	-0.049	0.96101	0.2864E-02
NOVASCOT	-0.47676E-02	0.38417E-01	-0.124	0.90123	0.2776E-01
NEWBRUN	-0.88446E-02	0.43130E-01	-0.205	0.83752	0.2159E-01
QUEBEC	-0.53246E-01	0.15497E-01	-3.436	0.00059	0.2722
MANITOBA	0.36464E-01	0.34523E-01	1.056	0.29086	0.3511E-01
SASK	0.75265E-01	0.46230E-01	1.628	0.10351	0.1887E-01
ALBERTA	0.16113E-01	0.25743E-01	0.626	0.53136	0.8155E-01
BRITCOL	0.10438E-02	0.22203E-01	0.047	0.96250	0.1051
DA4554	0.32041E-01	0.12606E-01	2.542	0.01103	0.4056
DUNION	0.34081	0.14479E-01	23.538	0.00000	0.4345
D2SIC52	0.14050	0.61422E-01	2.287	0.02217	0.1145E-01
D4SIC52	0.31895	0.48346E-01	6.597	0.00000	0.2032E-01
D5SIC52	0.29015	0.57461E-01	5.050	0.00000	0.1481E-01
D6SIC52	0.17425	0.10300	1.692	0.09070	0.3755E-02
D7SIC52	0.19747	0.14534	1.359	0.17425	0.1822E-02
D8SIC52	0.12031E-01	0.88127E-01	0.137	0.89141	0.5348E-02
D9SIC52	0.23537	0.35037E-01	6.718	0.00000	0.4652E-01
D11SIC52	0.12683	0.62524E-01	2.029	0.04250	0.1081E-01
D12SIC52	-0.42563E-02	0.97510E-01	-0.044	0.96518	0.4153E-02
D13SIC52	0.35811E-02	0.80236E-01	0.045	0.96440	0.6277E-02
D15SIC52	-0.16158	0.82435E-01	-1.960	0.04998	0.5940E-02
D16SIC52	0.83887E-01	0.44958E-01	1.866	0.06206	0.2478E-01
D17SIC52	-0.45286E-01	0.61590E-01	-0.735	0.46217	0.1127E-01
D18SIC52	0.34670	0.39019E-01	8.885	0.00000	0.3601E-01
D19SIC52	0.86263E-01	0.48949E-01	1.762	0.07802	0.1974E-01
D20SIC52	0.26833	0.37669E-01	7.123	0.00000	0.3913E-01
D21SIC52	0.67557E-01	0.38550E-01	1.752	0.07969	0.3635E-01
D22SIC52	0.12242	0.45869E-01	2.669	0.00761	0.2246E-01
D23SIC52	0.32348	0.34511E-01	9.373	0.00000	0.5467E-01
D24SIC52	0.15068	0.41283E-01	3.650	0.00026	0.3029E-01
D25SIC52	0.14083	0.61022E-01	2.308	0.02101	0.1153E-01
D27SIC52	0.30056	0.47875E-01	6.278	0.00000	0.2018E-01
D28SIC52	0.30071E-01	0.67063E-01	0.448	0.65387	0.9245E-02
D29SIC52	-0.66242E-01	0.40716E-01	-1.627	0.10376	0.4088E-01
D30SIC52	0.55300E-02	0.39456E-01	0.140	0.88854	0.4696E-01
D31SIC52	0.17389	0.29278E-01	5.939	0.00000	0.1076
D32SIC52	0.14401	0.10682	1.348	0.17761	0.3433E-02
D33SIC52	0.32479	0.36890E-01	8.804	0.00000	0.4382E-01
D34SIC52	0.35090	0.43702E-01	8.029	0.00000	0.2674E-01
D35SIC52	0.30047E-01	0.31425E-01	0.956	0.33899	0.6577E-01
D37SIC52	0.37194	0.46375E-01	8.020	0.00000	0.2254E-01
D38SIC52	0.35648	0.51276E-01	6.952	0.00000	0.1738E-01
D39SIC52	0.54455E-02	0.54792E-01	0.099	0.92083	0.1515E-01
D43SIC52	-0.20728	0.92078E-01	-2.251	0.02438	0.4731E-02
D44SIC52	-0.98405E-01	0.45174E-01	-2.178	0.02938	0.2514E-01
D46SIC52	-0.11088	0.51103E-01	-2.170	0.03003	0.1984E-01
D47SIC52	-0.18407	0.50770E-01	-3.626	0.00029	0.1816E-01
D52SIC52	0.16935	0.17810	0.951	0.34165	0.1206E-02

B) Logit model : 1984

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ÉÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍ»
º Maximum Likelihood Estimates                 º
º Dependent variable              PENSION      º
º Number of observations             4576      º
º Iterations completed                  6      º
º Log likelihood function       -2308.121      º
º Restricted log likelihood     -2999.672      º
º Chi-squared                    1383.103      º
º Degrees of freedom                   56      º
º Significance level            0.0000000      º
ÈÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍ¼
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Variable	Coefficient	Standard Error	z=b/s.e.	P[|Z|>z]	Mean of X
Constant	-0.46264	0.18420	-2.512	0.01202	
PROFMAN	0.61290	0.16943	3.617	0.00030	0.1749
NATSOC	0.36827	0.21388	1.722	0.08509	0.6554E-01
SALES	-0.21364E-01	0.19676	-0.109	0.91354	0.6543E-01
SERVICES	-1.1158	0.24809	-4.498	0.00001	0.4701E-01
PPMW	-0.65598	0.16350	-4.012	0.00006	0.3235
OTHER	-0.75504	0.17742	-4.256	0.00002	0.1457
CONSTR	-0.41043	0.21885	-1.875	0.06074	0.1020
NFLD	-0.17384E-01	0.31166	-0.056	0.95552	0.1483E-01
PEI	-0.64330E-02	0.67066	-0.010	0.99235	0.2864E-02
NOVASCOT	0.41889E-02	0.22463	0.019	0.98512	0.2776E-01
NEWBRUN	-0.83849E-02	0.25933	-0.032	0.97421	0.2159E-01
QUEBEC	-0.30242	0.90974E-01	-3.324	0.00089	0.2722
MANITOBA	0.26258	0.21079	1.246	0.21286	0.3511E-01
SASK	0.49266	0.27811	1.771	0.07648	0.1887E-01
ALBERTA	0.94546E-01	0.14793	0.639	0.52273	0.8155E-01
BRITCOL	0.40977E-01	0.13373	0.306	0.75929	0.1051
DA4554	0.20970	0.74843E-01	2.802	0.00508	0.4056
DUNION	1.8340	0.87721E-01	20.908	0.00000	0.4345
D2SIC52	0.65505	0.32540	2.013	0.04411	0.1145E-01
D4SIC52	1.7153	0.32523	5.274	0.00000	0.2032E-01
D5SIC52	1.3603	0.34025	3.998	0.00006	0.1481E-01
D6SIC52	0.73345	0.61484	1.193	0.23290	0.3755E-02
D7SIC52	1.0137	0.77732	1.304	0.19219	0.1822E-02
D8SIC52	0.11498	0.45609	0.252	0.80097	0.5348E-02
D9SIC52	1.1287	0.20105	5.614	0.00000	0.4652E-01
D11SIC52	0.56767	0.32916	1.725	0.08460	0.1081E-01
D12SIC52	-0.47045E-01	0.52352	-0.090	0.92840	0.4153E-02
D13SIC52	-0.45432E-01	0.41974	-0.108	0.91381	0.6277E-02
D15SIC52	-0.78527	0.47102	-1.667	0.09548	0.5940E-02
D16SIC52	0.30554	0.24255	1.260	0.20777	0.2478E-01
D17SIC52	-0.27065	0.32779	-0.826	0.40899	0.1127E-01
D18SIC52	2.0472	0.28934	7.076	0.00000	0.3601E-01
D19SIC52	0.34275	0.25958	1.320	0.18670	0.1974E-01
D20SIC52	1.3367	0.22565	5.924	0.00000	0.3913E-01
D21SIC52	0.25638	0.20621	1.243	0.21377	0.3635E-01
D22SIC52	0.54523	0.24790	2.199	0.02785	0.2246E-01
D23SIC52	1.8416	0.23429	7.860	0.00000	0.5467E-01
D24SIC52	0.62795	0.22750	2.760	0.00578	0.3029E-01
D25SIC52	0.57432	0.33684	1.705	0.08819	0.1153E-01
D27SIC52	1.4608	0.29623	4.931	0.00000	0.2018E-01
D28SIC52	0.23182E-01	0.35156	0.066	0.94742	0.9245E-02
D29SIC52	-0.42009	0.22409	-1.875	0.06085	0.4088E-01
D30SIC52	-0.11119	0.21665	-0.513	0.60778	0.4696E-01
D31SIC52	0.77931	0.16363	4.763	0.00000	0.1076
D32SIC52	0.60247	0.59390	1.014	0.31038	0.3433E-02
D33SIC52	2.2326	0.31062	7.187	0.00000	0.4382E-01
D34SIC52	2.6826	0.43949	6.104	0.00000	0.2674E-01
D35SIC52	0.11615	0.16361	0.710	0.47774	0.6577E-01
D37SIC52	1.9183	0.31827	6.027	0.00000	0.2254E-01

D38SIC52	1.9789	0.36187	5.469	0.00000	0.1738E-01
D39SIC52	0.40648E-01	0.29545	0.138	0.89057	0.1515E-01
D43SIC52	-1.2766	0.63462	-2.012	0.04426	0.4731E-02
D44SIC52	-0.46378	0.24450	-1.897	0.05784	0.2514E-01
D46SIC52	-0.58988	0.29372	-2.008	0.04461	0.1984E-01
D47SIC52	-1.1084	0.32063	-3.457	0.00055	0.1816E-01
D52SIC52	0.72409	0.91095	0.795	0.42668	0.1206E-02

VI. Men aged 35-54 : wages excluded - 1993

A) Linear Probability Model : 1993

Variable	Coefficient	Standard Error	z=b/s.e.	P[|Z|>z]	Mean of X
Constant	0.31241	0.48978E-01	6.379	0.00000	
PROFMAN	0.12700	0.43294E-01	2.934	0.00335	0.1958
NATSOC	0.89603E-01	0.50847E-01	1.762	0.07803	0.7182E-01
SALES	-0.45214E-01	0.51636E-01	-0.876	0.38123	0.8397E-01
SERVICES	-0.45243E-02	0.60806E-01	-0.074	0.94069	0.4845E-01
PPMW	-0.77295E-01	0.41026E-01	-1.884	0.05956	0.2987
OTHER	0.54630E-02	0.43923E-01	0.124	0.90102	0.1510
CONSTR	0.96035E-02	0.53251E-01	0.180	0.85688	0.8385E-01
NFLD	-0.94019E-01	0.74460E-01	-1.263	0.20670	0.1523E-01
PEI	-0.71423E-01	0.14246	-0.501	0.61612	0.3965E-02
NOVASCOT	-0.14847E-01	0.55082E-01	-0.270	0.78751	0.2902E-01
NEWBRUN	0.89884E-02	0.56952E-01	0.158	0.87460	0.2712E-01
QUEBEC	-0.41151E-01	0.23807E-01	-1.728	0.08390	0.2568
MANITOBA	0.31193E-01	0.53041E-01	0.588	0.55647	0.3163E-01
SASK	0.21553E-01	0.56973E-01	0.378	0.70520	0.2701E-01
ALBERTA	0.34866E-01	0.33875E-01	1.029	0.30336	0.1017
BRITCOL	-0.68593E-02	0.31466E-01	-0.218	0.82744	0.1197
DA4554	0.44304E-01	0.18836E-01	2.352	0.01867	0.3646
DUNION	0.31451	0.22105E-01	14.228	0.00000	0.3882
D2SIC52	0.71140E-01	0.90200E-01	0.789	0.43029	0.1132E-01
D4SIC52	0.38238	0.81742E-01	4.678	0.00000	0.1442E-01
D5SIC52	0.48131	0.89711E-01	5.365	0.00000	0.1217E-01
D6SIC52	0.25939	0.14397	1.802	0.07160	0.4114E-02
D7SIC52	-0.31114	0.17865	-1.742	0.08157	0.2578E-02
D8SIC52	0.33969	0.14455	2.350	0.01878	0.4086E-02
D9SIC52	0.33504	0.58087E-01	5.768	0.00000	0.3345E-01
D11SIC52	0.25854	0.84149E-01	3.072	0.00212	0.1323E-01
D12SIC52	-0.22028	0.14242	-1.547	0.12194	0.4112E-02
D13SIC52	-0.20513E-01	0.11422	-0.180	0.85746	0.6715E-02
D15SIC52	0.59058E-01	0.13506	0.437	0.66192	0.4777E-02
D16SIC52	0.15953	0.65265E-01	2.444	0.01452	0.2555E-01
D17SIC52	-0.48884E-01	0.11992	-0.408	0.68355	0.5908E-02
D18SIC52	0.32866	0.57298E-01	5.736	0.00000	0.3744E-01
D19SIC52	0.27467	0.66503E-01	4.130	0.00004	0.2426E-01
D20SIC52	0.46114	0.58155E-01	7.929	0.00000	0.3328E-01
D21SIC52	0.32814	0.75291E-01	4.358	0.00001	0.1707E-01
D22SIC52	0.17852E-01	0.74717E-01	0.239	0.81117	0.1759E-01
D23SIC52	0.38131	0.46817E-01	8.145	0.00000	0.6713E-01
D24SIC52	0.41201	0.64255E-01	6.412	0.00000	0.2485E-01
D25SIC52	0.19090	0.99086E-01	1.927	0.05403	0.9011E-02
D27SIC52	0.50518	0.69442E-01	7.275	0.00000	0.2086E-01
D28SIC52	0.25791E-01	0.87775E-01	0.294	0.76889	0.1174E-01
D29SIC52	0.28506E-01	0.70128E-01	0.406	0.68438	0.2426E-01
D30SIC52	-0.38174E-01	0.57509E-01	-0.664	0.50682	0.4794E-01
D31SIC52	0.18008	0.46311E-01	3.889	0.00010	0.8537E-01
D32SIC52	0.37641	0.16734	2.249	0.02449	0.2961E-02
D33SIC52	0.38139	0.55703E-01	6.847	0.00000	0.4627E-01
D34SIC52	0.38035	0.58686E-01	6.481	0.00000	0.3474E-01
D35SIC52	0.16889	0.44326E-01	3.810	0.00014	0.7643E-01
D37SIC52	0.32165	0.60386E-01	5.327	0.00000	0.3109E-01
D38SIC52	0.36071	0.76149E-01	4.737	0.00000	0.1675E-01
D39SIC52	-0.24399	0.66786E-01	-3.653	0.00026	0.2373E-01
D43SIC52	0.11444	0.13551	0.844	0.39841	0.4565E-02
D44SIC52	0.10923	0.49465E-01	2.208	0.02722	0.5779E-01
D46SIC52	-0.26623	0.68484E-01	-3.887	0.00010	0.2556E-01
D47SIC52	0.15889	0.65842E-01	2.413	0.01581	0.2330E-01
D52SIC52	-0.66628E-01	0.29450	-0.226	0.82101	0.9300E-03

B) Logit model : 1993

Maximum Likelihood Estimates	
Dependent variable	PENSION
Number of observations	2080
Iterations completed	6
Log likelihood function	-991.9953
Restricted log likelihood	-1357.349
Chi-squared	730.7068
Degrees of freedom	56
Significance level	0.0000000

Variable	Coefficient	Standard Error	z=b/s.e.	P[|Z|>z]	Mean of X
Constant	-0.83823	0.30618	-2.738	0.00619	
PROFMAN	0.58852	0.28264	2.082	0.03732	0.1958
NATSOC	0.38621	0.32612	1.184	0.23630	0.7182E-01
SALES	-0.39325	0.32115	-1.225	0.22075	0.8397E-01
SERVICES	-0.89937E-01	0.39246	-0.229	0.81874	0.4845E-01
PPMW	-0.54640	0.27570	-1.982	0.04749	0.2987
OTHER	-0.91230E-02	0.29689	-0.031	0.97549	0.1510
CONSTR	0.39210E-01	0.37651	0.104	0.91706	0.8385E-01
NFLD	-0.56747	0.46307	-1.225	0.22040	0.1523E-01
PEI	-0.33948	0.84868	-0.400	0.68915	0.3965E-02
NOVASCOT	-0.74080E-01	0.33735	-0.220	0.82619	0.2902E-01
NEWBRUN	0.63734E-01	0.34931	0.182	0.85522	0.2712E-01
QUEBEC	-0.29985	0.14926	-2.009	0.04454	0.2568
MANITOBA	0.16696	0.33558	0.498	0.61882	0.3163E-01
SASK	0.10361	0.35294	0.294	0.76909	0.2701E-01
ALBERTA	0.17496	0.20642	0.848	0.39666	0.1017
BRITCOL	-0.55237E-01	0.19354	-0.285	0.77533	0.1197
DA4554	0.30818	0.11849	2.601	0.00930	0.3646
DUNION	1.9046	0.14676	12.977	0.00000	0.3882
D2SIC52	0.26960	0.49370	0.546	0.58500	0.1132E-01
D4SIC52	2.5123	0.86539	2.903	0.00369	0.1442E-01
D5SIC52	2.8508	0.74460	3.829	0.00013	0.1217E-01
D6SIC52	1.1056	1.0205	1.083	0.27865	0.4114E-02
D7SIC52	-1.8355	1.2654	-1.451	0.14690	0.2578E-02
D8SIC52	1.5748	0.79577	1.979	0.04783	0.4086E-02
D9SIC52	1.6102	0.37436	4.301	0.00002	0.3345E-01
D11SIC52	1.2280	0.47371	2.592	0.00953	0.1323E-01
D12SIC52	-1.6918	1.0016	-1.689	0.09121	0.4112E-02
D13SIC52	-0.25721	0.63096	-0.408	0.68353	0.6715E-02
D15SIC52	-0.18676E-01	0.72342	-0.026	0.97940	0.4777E-02
D16SIC52	0.65243	0.36216	1.801	0.07163	0.2555E-01
D17SIC52	-0.15454	0.71635	-0.216	0.82920	0.5908E-02
D18SIC52	1.6121	0.38241	4.216	0.00002	0.3744E-01
D19SIC52	1.3311	0.41867	3.179	0.00148	0.2426E-01
D20SIC52	2.8217	0.47770	5.907	0.00000	0.3328E-01
D21SIC52	1.5531	0.45179	3.438	0.00059	0.1707E-01
D22SIC52	0.25823E-01	0.40200	0.064	0.94878	0.1759E-01
D23SIC52	1.9391	0.29858	6.494	0.00000	0.6713E-01
D24SIC52	2.1330	0.43381	4.917	0.00000	0.2485E-01
D25SIC52	0.70653	0.56948	1.241	0.21473	0.9011E-02
D27SIC52	3.8330	0.94056	4.075	0.00005	0.2086E-01
D28SIC52	0.16947	0.47481	0.357	0.72115	0.1174E-01
D29SIC52	-0.58111E-01	0.39931	-0.146	0.88429	0.2426E-01
D30SIC52	-0.40503	0.33521	-1.208	0.22693	0.4794E-01
D31SIC52	0.65451	0.26524	2.468	0.01360	0.8537E-01
D32SIC52	2.2379	1.5471	1.447	0.14803	0.2961E-02
D33SIC52	2.8515	0.58757	4.853	0.00000	0.4627E-01
D34SIC52	2.1853	0.45111	4.844	0.00000	0.3474E-01
D35SIC52	0.78904	0.23825	3.312	0.00093	0.7643E-01
D37SIC52	1.4307	0.34358	4.164	0.00003	0.3109E-01

D38SIC52	1.8049	0.46382	3.892	0.00010	0.1675E-01
D39SIC52	-1.5829	0.51133	-3.096	0.00196	0.2373E-01
D43SIC52	0.48848	0.72032	0.678	0.49769	0.4565E-02
D44SIC52	0.43999	0.26369	1.669	0.09520	0.5779E-01
D46SIC52	-1.6984	0.50610	-3.356	0.00079	0.2556E-01
D47SIC52	0.74370	0.35251	2.110	0.03488	0.2330E-01
D52SIC52	-0.28452	1.4978	-0.190	0.84934	0.9300E-03

VII. Men aged 35-54 : wages included - 1984

A) Linear Probability Model : 1984

Variable	Coefficient	Standard Error	z=b/s.e.	P[|Z|>z]	Mean of X
Constant	0.17746	0.32795E-01	5.411	0.00000	
PROFMAN	0.28534E-01	0.27586E-01	1.034	0.30097	0.1749
NATSOC	-0.15437E-01	0.33519E-01	-0.461	0.64513	0.6554E-01
SALES	-0.15195E-01	0.33029E-01	-0.460	0.64548	0.6543E-01
SERVICES	-0.13194	0.38669E-01	-3.412	0.00064	0.4701E-01
PPMW	-0.11848	0.25281E-01	-4.686	0.00000	0.3235
OTHER	-0.11941	0.27476E-01	-4.346	0.00001	0.1457
CONSTR	-0.75181E-01	0.33049E-01	-2.275	0.02292	0.1020
NFLD	0.34384E-01	0.49971E-01	0.688	0.49140	0.1483E-01
PEI	0.79550E-01	0.11140	0.714	0.47515	0.2864E-02
NOVASCOT	0.27714E-01	0.37220E-01	0.745	0.45651	0.2776E-01
NEWBRUN	0.30367E-01	0.41795E-01	0.727	0.46749	0.2159E-01
QUEBEC	-0.55686E-01	0.14997E-01	-3.713	0.00020	0.2722
MANITOBA	0.45044E-01	0.33409E-01	1.348	0.17758	0.3511E-01
SASK	0.82330E-01	0.44736E-01	1.840	0.06572	0.1887E-01
ALBERTA	-0.10389E-01	0.24955E-01	-0.416	0.67720	0.8155E-01
BRITCOL	-0.40304E-01	0.21613E-01	-1.865	0.06221	0.1051
DA4554	0.25208E-01	0.12204E-01	2.066	0.03887	0.4056
DUNION	0.32824	0.14029E-01	23.397	0.00000	0.4345
D2SIC52	0.72704E-01	0.59560E-01	1.221	0.22220	0.1145E-01
D4SIC52	0.21703	0.47141E-01	4.604	0.00000	0.2032E-01
D5SIC52	0.78478E-01	0.56894E-01	1.379	0.16778	0.1481E-01
D6SIC52	0.72485E-01	0.99836E-01	0.726	0.46782	0.3755E-02
D7SIC52	0.17820	0.14064	1.267	0.20514	0.1822E-02
D8SIC52	-0.57039E-01	0.85366E-01	-0.668	0.50402	0.5348E-02
D9SIC52	0.18834	0.34009E-01	5.538	0.00000	0.4652E-01
D11SIC52	0.95138E-01	0.60528E-01	1.572	0.11600	0.1081E-01
D12SIC52	-0.21102E-01	0.94360E-01	-0.224	0.82304	0.4153E-02
D13SIC52	-0.90206E-02	0.77643E-01	-0.116	0.90751	0.6277E-02
D15SIC52	-0.13169	0.79786E-01	-1.651	0.09884	0.5940E-02
D16SIC52	0.57940E-01	0.43529E-01	1.331	0.18316	0.2478E-01
D17SIC52	-0.40578E-01	0.59598E-01	-0.681	0.49596	0.1127E-01
D18SIC52	0.25321	0.38130E-01	6.641	0.00000	0.3601E-01
D19SIC52	0.15531E-01	0.47536E-01	0.327	0.74388	0.1974E-01
D20SIC52	0.20625	0.36621E-01	5.632	0.00000	0.3913E-01
D21SIC52	0.25270E-01	0.37380E-01	0.676	0.49902	0.3635E-01
D22SIC52	0.94885E-01	0.44413E-01	2.136	0.03264	0.2246E-01
D23SIC52	0.27159	0.33525E-01	8.101	0.00000	0.5467E-01
D24SIC52	0.98168E-01	0.40059E-01	2.451	0.01426	0.3029E-01
D25SIC52	0.89075E-01	0.59121E-01	1.507	0.13190	0.1153E-01
D27SIC52	0.20872	0.46621E-01	4.477	0.00001	0.2018E-01
D28SIC52	0.16642E-01	0.64898E-01	0.256	0.79762	0.9245E-02
D29SIC52	-0.12663	0.39549E-01	-3.202	0.00137	0.4088E-01
D30SIC52	-0.72709E-01	0.38439E-01	-1.892	0.05855	0.4696E-01
D31SIC52	0.11290	0.28543E-01	3.955	0.00008	0.1076
D32SIC52	0.10189	0.10339	0.985	0.32441	0.3433E-02
D33SIC52	0.23500	0.36061E-01	6.517	0.00000	0.4382E-01
D34SIC52	0.19523	0.43208E-01	4.518	0.00001	0.2674E-01
D35SIC52	-0.64585E-02	0.30479E-01	-0.212	0.83219	0.6577E-01
D37SIC52	0.26965	0.45252E-01	5.959	0.00000	0.2254E-01
D38SIC52	0.28128	0.49801E-01	5.648	0.00000	0.1738E-01
D39SIC52	-0.67904E-02	0.53024E-01	-0.128	0.89810	0.1515E-01
D43SIC52	-0.19106	0.89104E-01	-2.144	0.03201	0.4731E-02
D44SIC52	-0.15043	0.43813E-01	-3.434	0.00060	0.2514E-01
D46SIC52	-0.66896E-01	0.49513E-01	-1.351	0.17668	0.1984E-01
D47SIC52	-0.20719	0.49145E-01	-4.216	0.00002	0.1816E-01
D52SIC52	0.11991	0.17236	0.696	0.48660	0.1206E-02
HRWAGE	0.22772E-01	0.12971E-02	17.557	0.00000	13.48

B) Logit model : 1984

Maximum Likelihood Estimates	
Dependent variable	PENSION
Number of observations	4576
Iterations completed	6
Log likelihood function	-2173.865
Restricted log likelihood	-2999.672
Chi-squared	1651.615
Degrees of freedom	57
Significance level	0.0000000

Variable	Coefficient	Standard Error	z=b/s.e.	P[|Z|>z]	Mean of X
Constant	-1.7701	0.20911	-8.465	0.00000	
PROFMAN	-0.94351E-02	0.17848	-0.053	0.95784	0.1749
NATSOC	-0.16685	0.22460	-0.743	0.45755	0.6554E-01
SALES	-0.22672	0.20385	-1.112	0.26605	0.6543E-01
SERVICES	-0.88923	0.26043	-3.414	0.00064	0.4701E-01
PPMW	-0.74032	0.16714	-4.429	0.00001	0.3235
OTHER	-0.75112	0.18188	-4.130	0.00004	0.1457
CONSTR	-0.49838	0.22428	-2.222	0.02627	0.1020
NFLD	0.23012	0.32770	0.702	0.48253	0.1483E-01
PEI	0.51384	0.69726	0.737	0.46116	0.2864E-02
NOVASCOT	0.18740	0.23085	0.812	0.41692	0.2776E-01
NEWBRUN	0.24786	0.27142	0.913	0.36113	0.2159E-01
QUEBEC	-0.35364	0.94507E-01	-3.742	0.00018	0.2722
MANITOBA	0.33159	0.22091	1.501	0.13334	0.3511E-01
SASK	0.59703	0.28914	2.065	0.03894	0.1887E-01
ALBERTA	-0.94819E-01	0.15514	-0.611	0.54108	0.8155E-01
BRITCOL	-0.25304	0.13924	-1.817	0.06917	0.1051
DA4554	0.17488	0.77777E-01	2.248	0.02455	0.4056
DUNION	1.7500	0.89641E-01	19.522	0.00000	0.4345
D2SIC52	0.27536	0.34577	0.796	0.42581	0.1145E-01
D4SIC52	1.0785	0.32977	3.271	0.00107	0.2032E-01
D5SIC52	0.18668	0.36136	0.517	0.60543	0.1481E-01
D6SIC52	0.11626	0.62044	0.187	0.85136	0.3755E-02
D7SIC52	0.92677	0.79133	1.171	0.24153	0.1822E-02
D8SIC52	-0.31060	0.49372	-0.629	0.52928	0.5348E-02
D9SIC52	0.92250	0.20630	4.472	0.00001	0.4652E-01
D11SIC52	0.36360	0.33432	1.088	0.27678	0.1081E-01
D12SIC52	-0.16022	0.51952	-0.308	0.75778	0.4153E-02
D13SIC52	-0.13749	0.43077	-0.319	0.74959	0.6277E-02
D15SIC52	-0.69913	0.49493	-1.413	0.15777	0.5940E-02
D16SIC52	0.18669	0.25192	0.741	0.45865	0.2478E-01
D17SIC52	-0.24950	0.33427	-0.746	0.45543	0.1127E-01
D18SIC52	1.4913	0.29225	5.103	0.00000	0.3601E-01
D19SIC52	-0.89048E-01	0.26927	-0.331	0.74087	0.1974E-01
D20SIC52	0.95571	0.22973	4.160	0.00003	0.3913E-01
D21SIC52	-0.23431E-01	0.21355	-0.110	0.91263	0.3635E-01
D22SIC52	0.36137	0.25364	1.425	0.15424	0.2246E-01
D23SIC52	1.5789	0.23936	6.597	0.00000	0.5467E-01
D24SIC52	0.35176	0.23644	1.488	0.13682	0.3029E-01
D25SIC52	0.32820	0.35040	0.937	0.34895	0.1153E-01
D27SIC52	0.97135	0.30542	3.180	0.00147	0.2018E-01
D28SIC52	-0.53492E-01	0.36916	-0.145	0.88479	0.9245E-02
D29SIC52	-0.82195	0.23563	-3.488	0.00049	0.4088E-01
D30SIC52	-0.58793	0.22991	-2.557	0.01055	0.4696E-01
D31SIC52	0.45726	0.17049	2.682	0.00732	0.1076
D32SIC52	0.33638	0.60029	0.560	0.57523	0.3433E-02
D33SIC52	1.6990	0.31919	5.323	0.00000	0.4382E-01
D34SIC52	1.8128	0.45124	4.017	0.00006	0.2674E-01
D35SIC52	-0.88491E-01	0.17106	-0.517	0.60494	0.6577E-01
D37SIC52	1.3909	0.32886	4.230	0.00002	0.2254E-01

D38SIC52	1.6520	0.37652	4.387	0.00001	0.1738E-01
D39SIC52	-0.38608E-01	0.30746	-0.126	0.90007	0.1515E-01
D43SIC52	-1.3169	0.68146	-1.932	0.05330	0.4731E-02
D44SIC52	-0.93919	0.26960	-3.484	0.00049	0.2514E-01
D46SIC52	-0.29109	0.30383	-0.958	0.33803	0.1984E-01
D47SIC52	-1.4764	0.35420	-4.168	0.00003	0.1816E-01
D52SIC52	0.42735	0.92548	0.462	0.64425	0.1206E-02
HRWAGE	0.14277	0.95598E-02	14.934	0.00000	13.48

VIII. Men aged 35-54 : wages included - 1993

A) Linear Probability Model : 1993

Variable	Coefficient	Standard Error	z=b/s.e.	P[|Z|>z]	Mean of X
Constant	0.67829E-01	0.49993E-01	1.357	0.17485	
PROFMAN	0.28763E-01	0.41968E-01	0.685	0.49311	0.1958
NATSOC	-0.12835E-01	0.49141E-01	-0.261	0.79394	0.7182E-01
SALES	-0.61479E-01	0.49354E-01	-1.246	0.21289	0.8397E-01
SERVICES	0.65330E-01	0.58319E-01	1.120	0.26262	0.4845E-01
PPMW	-0.79563E-01	0.39202E-01	-2.030	0.04240	0.2987
OTHER	-0.56387E-02	0.41978E-01	-0.134	0.89315	0.1510
CONSTR	-0.15397E-01	0.50915E-01	-0.302	0.76235	0.8385E-01
NFLD	-0.26022E-01	0.71318E-01	-0.365	0.71520	0.1523E-01
PEI	0.67555E-02	0.13624	0.050	0.96045	0.3965E-02
NOVASCOT	0.21402E-01	0.52697E-01	0.406	0.68465	0.2902E-01
NEWBRUN	0.58284E-01	0.54535E-01	1.069	0.28519	0.2712E-01
QUEBEC	-0.35791E-01	0.22752E-01	-1.573	0.11570	0.2568
MANITOBA	0.75078E-01	0.50781E-01	1.478	0.13928	0.3163E-01
SASK	0.61212E-01	0.54515E-01	1.123	0.26151	0.2701E-01
ALBERTA	0.47350E-01	0.32382E-01	1.462	0.14368	0.1017
BRITCOL	-0.28493E-01	0.30108E-01	-0.946	0.34397	0.1197
DA4554	0.28446E-01	0.18035E-01	1.577	0.11473	0.3646
DUNION	0.31106	0.21124E-01	14.726	0.00000	0.3882
D2SIC52	0.10921E-01	0.86298E-01	0.127	0.89930	0.1132E-01
D4SIC52	0.22010	0.78974E-01	2.787	0.00532	0.1442E-01
D5SIC52	0.31367	0.86565E-01	3.624	0.00029	0.1217E-01
D6SIC52	0.19777	0.13764	1.437	0.15077	0.4114E-02
D7SIC52	-0.36560	0.17075	-2.141	0.03226	0.2578E-02
D8SIC52	0.20483	0.13847	1.479	0.13908	0.4086E-02
D9SIC52	0.27446	0.55675E-01	4.930	0.00000	0.3345E-01
D11SIC52	0.19189	0.80551E-01	2.382	0.01721	0.1323E-01
D12SIC52	-0.23965	0.13610	-1.761	0.07825	0.4112E-02
D13SIC52	0.47416E-01	0.10925	0.434	0.66427	0.6715E-02
D15SIC52	0.85155E-01	0.12907	0.660	0.50941	0.4777E-02
D16SIC52	0.13451	0.62390E-01	2.156	0.03109	0.2555E-01
D17SIC52	-0.12930	0.11474	-1.127	0.25980	0.5908E-02
D18SIC52	0.22069	0.55298E-01	3.991	0.00007	0.3744E-01
D19SIC52	0.15972	0.64081E-01	2.492	0.01269	0.2426E-01
D20SIC52	0.36814	0.55970E-01	6.578	0.00000	0.3328E-01
D21SIC52	0.26525	0.72086E-01	3.680	0.00023	0.1707E-01
D22SIC52	0.17865E-02	0.71405E-01	0.025	0.98004	0.1759E-01
D23SIC52	0.26876	0.45461E-01	5.912	0.00000	0.6713E-01
D24SIC52	0.32228	0.61736E-01	5.220	0.00000	0.2485E-01
D25SIC52	0.93499E-01	0.94939E-01	0.985	0.32471	0.9011E-02
D27SIC52	0.42536	0.66602E-01	6.387	0.00000	0.2086E-01
D28SIC52	-0.62696E-01	0.84113E-01	-0.745	0.45604	0.1174E-01
D29SIC52	-0.43595E-01	0.67211E-01	-0.649	0.51657	0.2426E-01
D30SIC52	-0.12350	0.55293E-01	-2.234	0.02551	0.4794E-01
D31SIC52	0.12468	0.44430E-01	2.806	0.00501	0.8537E-01
D32SIC52	0.33178	0.15993	2.075	0.03803	0.2961E-02
D33SIC52	0.30918	0.53479E-01	5.781	0.00000	0.4627E-01
D34SIC52	0.21624	0.57304E-01	3.774	0.00016	0.3474E-01
D35SIC52	0.96949E-01	0.42670E-01	2.272	0.02308	0.7643E-01
D37SIC52	0.23521	0.58035E-01	4.053	0.00005	0.3109E-01
D38SIC52	0.28485	0.72968E-01	3.904	0.00009	0.1675E-01
D39SIC52	-0.26392	0.63833E-01	-4.134	0.00004	0.2373E-01
D43SIC52	0.10905	0.12949	0.842	0.39971	0.4565E-02
D44SIC52	0.45658E-01	0.47487E-01	0.961	0.33630	0.5779E-01
D46SIC52	-0.22991	0.65491E-01	-3.511	0.00045	0.2556E-01
D47SIC52	0.10487	0.63034E-01	1.664	0.09616	0.2330E-01
D52SIC52	-0.15307	0.28147	-0.544	0.58657	0.9300E-03
HRWAGE	0.24134E-01	0.17344E-02	13.915	0.00000	14.19

B) Logit model : 1993

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ÉÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍ»
º Maximum Likelihood Estimates                 º
º Dependent variable              PENSION      º
º Number of observations             2080      º
º Iterations completed                  6      º
º Log likelihood function       -904.9929      º
º Restricted log likelihood     -1357.349      º
º Chi-squared                    904.7116      º
º Degrees of freedom                   57      º
º Significance level            0.0000000      º
ÈÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍ¼
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Variable	Coefficient	Standard Error	z=b/s.e.	P[|Z|>z]	Mean of X
Constant	-2.6660	0.36011	-7.403	0.00000	
PROFMAN	0.87980E-01	0.30173	0.292	0.77060	0.1958
NATSOC	-0.23379	0.34609	-0.676	0.49933	0.7182E-01
SALES	-0.43776	0.33847	-1.293	0.19589	0.8397E-01
SERVICES	0.63333	0.42175	1.502	0.13318	0.4845E-01
PPMW	-0.51609	0.28840	-1.790	0.07353	0.2987
OTHER	0.54696E-01	0.31193	0.175	0.86081	0.1510
CONSTR	0.11579	0.40598	0.285	0.77549	0.8385E-01
NFLD	-0.11123	0.51052	-0.218	0.82752	0.1523E-01
PEI	0.10554	0.90440	0.117	0.90710	0.3965E-02
NOVASCOT	0.17661	0.36428	0.485	0.62781	0.2902E-01
NEWBRUN	0.48169	0.37031	1.301	0.19334	0.2712E-01
QUEBEC	-0.28072	0.15998	-1.755	0.07930	0.2568
MANITOBA	0.46981	0.35733	1.315	0.18858	0.3163E-01
SASK	0.47793	0.37506	1.274	0.20256	0.2701E-01
ALBERTA	0.26116	0.21598	1.209	0.22660	0.1017
BRITCOL	-0.26774	0.20592	-1.300	0.19351	0.1197
DA4554	0.23036	0.12579	1.831	0.06706	0.3646
DUNION	1.8680	0.15064	12.401	0.00000	0.3882
D2SIC52	-0.10279	0.52771	-0.195	0.84556	0.1132E-01
D4SIC52	1.5651	0.87604	1.787	0.07400	0.1442E-01
D5SIC52	1.9018	0.76310	2.492	0.01270	0.1217E-01
D6SIC52	0.64356	1.0293	0.625	0.53183	0.4114E-02
D7SIC52	-2.3331	1.2737	-1.832	0.06699	0.2578E-02
D8SIC52	0.73285	0.83970	0.873	0.38280	0.4086E-02
D9SIC52	1.3530	0.39306	3.442	0.00058	0.3345E-01
D11SIC52	0.87172	0.49259	1.770	0.07678	0.1323E-01
D12SIC52	-1.5573	0.97634	-1.595	0.11070	0.4112E-02
D13SIC52	0.18517	0.68821	0.269	0.78789	0.6715E-02
D15SIC52	0.14287	0.73814	0.194	0.84653	0.4777E-02
D16SIC52	0.56916	0.37640	1.512	0.13051	0.2555E-01
D17SIC52	-0.93356	0.78161	-1.194	0.23232	0.5908E-02
D18SIC52	1.0489	0.40013	2.621	0.00876	0.3744E-01
D19SIC52	0.49240	0.43481	1.132	0.25746	0.2426E-01
D20SIC52	2.3086	0.49341	4.679	0.00000	0.3328E-01
D21SIC52	1.2009	0.46011	2.610	0.00905	0.1707E-01
D22SIC52	-0.78672E-01	0.42421	-0.185	0.85287	0.1759E-01
D23SIC52	1.2749	0.31374	4.063	0.00005	0.6713E-01
D24SIC52	1.6949	0.45809	3.700	0.00022	0.2485E-01
D25SIC52	0.17736	0.59818	0.296	0.76685	0.9011E-02
D27SIC52	3.5171	0.95379	3.687	0.00023	0.2086E-01
D28SIC52	-0.45326	0.49417	-0.917	0.35903	0.1174E-01
D29SIC52	-0.53875	0.44797	-1.203	0.22911	0.2426E-01
D30SIC52	-1.0950	0.37174	-2.946	0.00322	0.4794E-01
D31SIC52	0.35390	0.28106	1.259	0.20797	0.8537E-01
D32SIC52	2.1183	1.5772	1.343	0.17925	0.2961E-02
D33SIC52	2.9996	0.64703	4.636	0.00000	0.4627E-01
D34SIC52	1.2428	0.47012	2.644	0.00820	0.3474E-01
D35SIC52	0.39258	0.25875	1.517	0.12922	0.7643E-01
D37SIC52	0.93277	0.36714	2.541	0.01106	0.3109E-01

D38SIC52	1.4109	0.48656	2.900	0.00374	0.1675E-01
D39SIC52	-2.1068	0.53715	-3.922	0.00009	0.2373E-01
D43SIC52	0.44948	0.77737	0.578	0.56312	0.4565E-02
D44SIC52	-0.23812E-01	0.28453	-0.084	0.93330	0.5779E-01
D46SIC52	-1.7158	0.53729	-3.193	0.00141	0.2556E-01
D47SIC52	0.35924	0.36732	0.978	0.32808	0.2330E-01
D52SIC52	-0.97013	1.5253	-0.636	0.52477	0.9300E-03
HRWAGE	0.16879	0.14298E-01	11.805	0.00000	14.19

IX. Women aged 25-34 : wages excluded - 1984

A) Linear Probability Model : 1984

Variable	Coefficient	Standard Error	z=b/s.e.	P[|Z|>z]	Mean of X
Constant	0.22132	0.28742E-01	7.700	0.00000	
PROFMAN	0.11195	0.28563E-01	3.919	0.00009	0.1609
NATSOC	0.21538E-01	0.48146E-01	0.447	0.65463	0.4552E-01
SALES	0.54083E-01	0.38410E-01	1.408	0.15912	0.8325E-01
SERVICES	-0.82168E-01	0.56981E-01	-1.442	0.14929	0.1115
PPMW	-0.11289	0.40150E-01	-2.812	0.00493	0.1215
CONSTRO	-0.12306	0.47731E-01	-2.578	0.00993	0.5160E-01
NFLD	-0.87848E-01	0.10085	-0.871	0.38369	0.9159E-02
PEI	-0.20119E-01	0.16794	-0.120	0.90464	0.3228E-02
NOVASCOT	-0.56142E-01	0.62035E-01	-0.905	0.36547	0.2517E-01
NEWBRUN	-0.80996E-01	0.72161E-01	-1.122	0.26168	0.1830E-01
QUEBEC	-0.98040E-02	0.24582E-01	-0.399	0.69002	0.2439
MANITOBA	-0.41710E-01	0.52331E-01	-0.797	0.42543	0.3627E-01
SASK	0.67255E-02	0.62833E-01	0.107	0.91476	0.2448E-01
ALBERTA	0.22511E-01	0.35327E-01	0.637	0.52399	0.1040
BRITCOL	0.28970E-01	0.33486E-01	0.865	0.38696	0.1055
DUNION	0.30273	0.27823E-01	10.880	0.00000	0.1823
D2SIC52	-0.97879E-01	0.25267	-0.387	0.69847	0.1438E-02
D5SIC52	0.38114	0.92883E-01	4.103	0.00004	0.1251E-01
D9SIC52	0.12410	0.65257E-01	1.902	0.05720	0.2599E-01
D11SIC52	0.68390E-01	0.91533E-01	0.747	0.45496	0.1185E-01
D13SIC52	0.10729	0.10674	1.005	0.31482	0.8659E-02
D15SIC52	0.39274E-01	0.60059E-01	0.654	0.51316	0.3807E-01
D16SIC52	0.23294	0.12111	1.923	0.05444	0.6460E-02
D18SIC52	0.41706	0.11631	3.586	0.00034	0.7066E-02
D19SIC52	0.28619	0.67341E-01	4.250	0.00002	0.2404E-01
D21SIC52	0.23924	0.82085E-01	2.914	0.00356	0.1514E-01
D22SIC52	0.10624	0.93799E-01	1.133	0.25739	0.1119E-01
D23SIC52	0.27987	0.85469E-01	3.274	0.00106	0.1390E-01
D24SIC52	0.22418	0.62786E-01	3.570	0.00036	0.3091E-01
D25SIC52	0.32969	0.12541	2.629	0.00857	0.5985E-02
D27SIC52	0.41120	0.85390E-01	4.816	0.00000	0.1359E-01
D28SIC52	0.45654E-01	0.11654	0.392	0.69525	0.7054E-02
D29SIC52	0.96568E-01	0.10795	0.895	0.37103	0.8179E-02
D31SICC	0.32873	0.69184E-01	4.752	0.00000	0.2201E-01
D33SIC52	0.36978	0.49646E-01	7.448	0.00000	0.5429E-01
D34SIC52	0.55406	0.89064E-01	6.221	0.00000	0.1250E-01
D35SIC52	0.13614	0.50036E-01	2.721	0.00651	0.4621E-01
D37SIC52	0.41514	0.36686E-01	11.316	0.00000	0.1187
D38SIC52	0.37880	0.49607E-01	7.636	0.00000	0.4665E-01
D39SIC52	0.96045E-02	0.65348E-01	0.147	0.88315	0.2413E-01
D43SIC52	0.31202E-01	0.11901	0.262	0.79319	0.6963E-02
D44SIC52	-0.74067E-01	0.39957E-01	-1.854	0.06378	0.9065E-01
D45SIC52	-0.47235E-01	0.80454E-01	-0.587	0.55713	0.2806E-01
D46SIC52	-0.10725	0.60380E-01	-1.776	0.07569	0.8365E-01
D47SIC52	0.19260	0.57643E-01	3.341	0.00083	0.3310E-01

B) Logit model : 1984

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ÉÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍ»
º Maximum Likelihood Estimates                 º
º Dependent variable            PENSION        º
º Number of observations           2047        º
º Iterations completed                6        º
º Log likelihood function     -1096.025        º
º Restricted log likelihood   -1387.512        º
º Chi-squared                  582.9727        º
º Degrees of freedom                 45        º
º Significance level          0.0000000        º
ÈÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍ¼
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Variable	Coefficient	Standard Error	z=b/s.e.	P[|Z|>z]	Mean of X
Constant	-1.3288	0.15864	-8.376	0.00000	
PROFMAN	0.59133	0.15234	3.882	0.00010	0.1609
NATSOC	0.10622	0.25997	0.409	0.68285	0.4552E-01
SALES	0.29448	0.20214	1.457	0.14517	0.8325E-01
SERVICES	-0.65648	0.35790	-1.834	0.06662	0.1115
PPMW	-0.63228	0.21647	-2.921	0.00349	0.1215
CONSTRO	-0.69333	0.26318	-2.634	0.00843	0.5160E-01
NFLD	-0.54933	0.63997	-0.858	0.39069	0.9159E-02
PEI	-0.93816E-01	0.94453	-0.099	0.92088	0.3228E-02
NOVASCOT	-0.31600	0.35551	-0.889	0.37408	0.2517E-01
NEWBRUN	-0.50137	0.44063	-1.138	0.25519	0.1830E-01
QUEBEC	-0.33366E-01	0.13578	-0.246	0.80589	0.2439
MANITOBA	-0.22627	0.29412	-0.769	0.44170	0.3627E-01
SASK	0.53744E-01	0.35512	0.151	0.87971	0.2448E-01
ALBERTA	0.16210	0.19976	0.812	0.41708	0.1040
BRITCOL	0.19174	0.18500	1.036	0.30000	0.1055
DUNION	1.6000	0.15503	10.320	0.00000	0.1823
D2SIC52	-0.66642	1.6448	-0.405	0.68536	0.1438E-02
D5SIC52	1.6351	0.48255	3.388	0.00070	0.1251E-01
D9SIC52	0.60195	0.33193	1.814	0.06975	0.2599E-01
D11SIC52	0.37926	0.48474	0.782	0.43398	0.1185E-01
D13SIC52	0.50497	0.52888	0.955	0.33969	0.8659E-02
D15SIC52	0.17766	0.33483	0.531	0.59570	0.3807E-01
D16SIC52	1.0970	0.58781	1.866	0.06201	0.6460E-02
D18SIC52	1.9421	0.61872	3.139	0.00170	0.7066E-02
D19SIC52	1.3595	0.34219	3.973	0.00007	0.2404E-01
D21SIC52	1.1230	0.40242	2.791	0.00526	0.1514E-01
D22SIC52	0.50125	0.48849	1.026	0.30483	0.1119E-01
D23SIC52	1.3319	0.42225	3.154	0.00161	0.1390E-01
D24SIC52	1.0559	0.31848	3.315	0.00092	0.3091E-01
D25SIC52	1.5529	0.59935	2.591	0.00957	0.5985E-02
D27SIC52	1.9229	0.43184	4.453	0.00001	0.1359E-01
D28SIC52	0.25909	0.64394	0.402	0.68742	0.7054E-02
D29SIC52	0.54065	0.55299	0.978	0.32823	0.8179E-02
D31SICC	1.5545	0.36462	4.263	0.00002	0.2201E-01
D33SIC52	1.7780	0.28656	6.205	0.00000	0.5429E-01
D34SIC52	3.6196	0.89525	4.043	0.00005	0.1250E-01
D35SIC52	0.68995	0.25295	2.728	0.00638	0.4621E-01
D37SIC52	1.8877	0.19366	9.748	0.00000	0.1187
D38SIC52	1.7230	0.25531	6.749	0.00000	0.4665E-01
D39SIC52	0.10400	0.35654	0.292	0.77052	0.2413E-01
D43SIC52	0.16357	0.68193	0.240	0.81043	0.6963E-02
D44SIC52	-0.40765	0.23374	-1.744	0.08115	0.9065E-01
D45SIC52	-0.29794	0.54794	-0.544	0.58661	0.2806E-01
D46SIC52	-0.82985	0.38569	-2.152	0.03143	0.8365E-01
D47SIC52	0.89600	0.28830	3.108	0.00188	0.3310E-01

X. Women aged 25-34 : wages excluded - 1993

A) Linear Probability Model : 1993

Variable	Coefficient	Standard Error	z=b/s.e.	P[|Z|>z]	Mean of X
Constant	0.26318	0.47860E-01	5.499	0.00000	
PROFMAN	0.83067E-01	0.44303E-01	1.875	0.06079	0.2172
NATSOC	0.60299E-01	0.72810E-01	0.828	0.40758	0.5827E-01
SALES	0.68700E-01	0.59011E-01	1.164	0.24435	0.9739E-01
SERVICES	-0.26477E-01	0.94906E-01	-0.279	0.78026	0.9074E-01
PPMW	-0.54952E-01	0.85100E-01	-0.646	0.51845	0.7152E-01
CONSTRO	0.11845E-01	0.77172E-01	0.153	0.87801	0.6744E-01
NFLD	-0.21174	0.12098	-1.750	0.08009	0.1798E-01
PEI	-0.39155E-01	0.25425	-0.154	0.87761	0.3827E-02
NOVASCOT	-0.39553E-01	0.86595E-01	-0.457	0.64784	0.3643E-01
NEWBRUN	0.52602E-01	0.10318	0.510	0.61018	0.2469E-01
QUEBEC	-0.25347E-01	0.43161E-01	-0.587	0.55703	0.2114
MANITOBA	-0.11305	0.96747E-01	-1.169	0.24260	0.2928E-01
SASK	0.15079	0.96158E-01	1.568	0.11685	0.2856E-01
ALBERTA	-0.71542E-01	0.57211E-01	-1.250	0.21112	0.1085
BRITCOL	-0.97080E-02	0.54675E-01	-0.178	0.85907	0.1309
DUNION	0.40207	0.58712E-01	6.848	0.00000	0.1075
D2SIC52	-0.20847	0.23984	-0.869	0.38473	0.4369E-02
D5SIC52	0.48424	0.20255	2.391	0.01681	0.6550E-02
D9SIC52	0.13348E-01	0.10890	0.123	0.90245	0.3029E-01
D11SIC52	0.54426	0.16741	3.251	0.00115	0.1110E-01
D13SIC52	0.12046	0.24114	0.500	0.61739	0.4805E-02
D15SIC52	0.14460	0.14447	1.001	0.31688	0.1620E-01
D16SIC52	0.20570	0.23394	0.879	0.37924	0.4687E-02
D18SIC52	0.56840	0.17116	3.321	0.00090	0.9519E-02
D19SIC52	-0.87010E-01	0.97214E-01	-0.895	0.37077	0.3253E-01
D21SIC52	0.56243	0.17294	3.252	0.00115	0.8795E-02
D22SIC52	-0.20928E-02	0.17191	-0.012	0.99029	0.8874E-02
D23SIC52	0.36419	0.23019	1.582	0.11362	0.4910E-02
D24SIC52	0.34801	0.13452	2.587	0.00968	0.1566E-01
D25SIC52	0.27255	0.24723	1.102	0.27029	0.4280E-02
D27SIC52	0.12002	0.27538	0.436	0.66297	0.3305E-02
D28SIC52	0.17985	0.11664	1.542	0.12309	0.2144E-01
D29SIC52	0.20970	0.19885	1.055	0.29161	0.6516E-02
D31SIC52	0.72788E-01	0.16091	0.452	0.65102	0.1029E-01
D33SIC52	0.27000	0.82518E-01	3.272	0.00107	0.5414E-01
D34SIC52	0.20448	0.15513	1.318	0.18744	0.1182E-01
D35SIC52	0.25187	0.73863E-01	3.410	0.00065	0.6351E-01
D37SIC52	0.50925	0.61835E-01	8.236	0.00000	0.1140
D38SIC52	0.31675	0.77535E-01	4.085	0.00004	0.5602E-01
D39SIC52	0.33741E-01	0.10109	0.334	0.73855	0.2873E-01
D43SIC52	0.54232E-01	0.11850	0.458	0.64720	0.2239E-01
D44SIC52	-0.76818E-01	0.58778E-01	-1.307	0.19124	0.1333
D45SIC52	-0.84057E-01	0.12517	-0.672	0.50187	0.3148E-01
D46SIC52	-0.19598	0.10054	-1.949	0.05126	0.6242E-01
D47SIC52	-0.16109	0.85187E-01	-1.891	0.05862	0.4210E-01

B) Logit model : 1993

Maximum Likelihood Estimates	
Dependent variable	PENSION
Number of observations	749
Iterations completed	6
Log likelihood function	-383.5193
Restricted log likelihood	-510.8376
Chi-squared	254.6367
Degrees of freedom	45
Significance level	0.0000000

Variable	Coefficient	Standard Error	z=b/s.e.	P[|Z|>z]	Mean of X
Constant	-1.0992	0.26417	-4.161	0.00003	
PROFMAN	0.46618	0.24605	1.895	0.05814	0.2172
NATSOC	0.34952	0.42047	0.831	0.40583	0.5827E-01
SALES	0.37074	0.32003	1.158	0.24668	0.9739E-01
SERVICES	-0.28144	0.64069	-0.439	0.66046	0.9074E-01
PPMW	-0.32056	0.47063	-0.681	0.49579	0.7152E-01
CONSTRO	0.42720E-01	0.44962	0.095	0.92430	0.6744E-01
NFLD	-1.4005	0.82060	-1.707	0.08788	0.1798E-01
PEI	-0.22888	1.4750	-0.155	0.87669	0.3827E-02
NOVASCOT	-0.23889	0.50393	-0.474	0.63545	0.3643E-01
NEWBRUN	0.29569	0.55035	0.537	0.59107	0.2469E-01
QUEBEC	-0.13650	0.24930	-0.548	0.58401	0.2114
MANITOBA	-0.69267	0.62581	-1.107	0.26836	0.2928E-01
SASK	0.93913	0.54490	1.723	0.08480	0.2856E-01
ALBERTA	-0.38982	0.33648	-1.159	0.24666	0.1085
BRITCOL	-0.27975E-01	0.30702	-0.091	0.92740	0.1309
DUNION	2.2604	0.36738	6.153	0.00000	0.1075
D2SIC52	-1.8599	2.5368	-0.733	0.46346	0.4369E-02
D5SIC52	2.1920	1.0834	2.023	0.04304	0.6550E-02
D9SIC52	-0.78517E-01	0.59931	-0.131	0.89576	0.3029E-01
D11SIC52	2.6451	1.0448	2.532	0.01135	0.1110E-01
D13SIC52	0.63116	1.2678	0.498	0.61860	0.4805E-02
D15SIC52	0.73850	0.75853	0.974	0.33026	0.1620E-01
D16SIC52	0.94656	1.1898	0.796	0.42629	0.4687E-02
D18SIC52	2.8868	1.1804	2.446	0.01446	0.9519E-02
D19SIC52	-0.57919	0.57979	-0.999	0.31781	0.3253E-01
D21SIC52	2.6402	0.98447	2.682	0.00732	0.8795E-02
D22SIC52	-0.63825E-02	0.95792	-0.007	0.99468	0.8874E-02
D23SIC52	2.7436	2.3645	1.160	0.24591	0.4910E-02
D24SIC52	1.5811	0.66916	2.363	0.01814	0.1566E-01
D25SIC52	1.3240	1.1893	1.113	0.26560	0.4280E-02
D27SIC52	0.52507	1.3095	0.401	0.68844	0.3305E-02
D28SIC52	0.79877	0.56997	1.401	0.16109	0.2144E-01
D29SIC52	1.0185	0.99837	1.020	0.30767	0.6516E-02
D31SIC52	0.29959	0.86641	0.346	0.72951	0.1029E-01
D33SIC52	1.2771	0.46045	2.774	0.00554	0.5414E-01
D34SIC52	0.83165	0.89194	0.932	0.35113	0.1182E-01
D35SIC52	1.1266	0.36962	3.048	0.00230	0.6351E-01
D37SIC52	2.3905	0.35659	6.704	0.00000	0.1140
D38SIC52	1.4277	0.41489	3.441	0.00058	0.5602E-01
D39SIC52	0.18596	0.52511	0.354	0.72324	0.2873E-01
D43SIC52	0.24420	0.64537	0.378	0.70515	0.2239E-01
D44SIC52	-0.39474	0.33396	-1.182	0.23721	0.1333
D45SIC52	-0.44861	0.82873	-0.541	0.58828	0.3148E-01
D46SIC52	-1.5041	0.72695	-2.069	0.03854	0.6242E-01
D47SIC52	-1.1203	0.61352	-1.826	0.06785	0.4210E-01

XI. Women aged 25-34 : wages included - 1984

A) Linear Probability model : 1984

Variable	Coefficient	Standard Error	z=b/s.e.	P[|Z|>z]	Mean of X
Constant	0.24839E-02	0.34615E-01	0.072	0.94279	
PROFMAN	0.35054E-01	0.28694E-01	1.222	0.22183	0.1609
NATSOC	-0.95103E-01	0.48078E-01	-1.978	0.04792	0.4552E-01
SALES	0.32530E-01	0.37415E-01	0.869	0.38461	0.8325E-01
SERVICES	-0.50352E-01	0.55504E-01	-0.907	0.36431	0.1115
PPMW	-0.77303E-01	0.39194E-01	-1.972	0.04857	0.1215
CONSTRO	-0.13505	0.46441E-01	-2.908	0.00364	0.5160E-01
NFLD	-0.43682E-01	0.98177E-01	-0.445	0.65637	0.9159E-02
PEI	0.30714E-01	0.16342	0.188	0.85092	0.3228E-02
NOVASCOT	-0.25913E-01	0.60407E-01	-0.429	0.66794	0.2517E-01
NEWBRUN	-0.43810E-01	0.70276E-01	-0.623	0.53302	0.1830E-01
QUEBEC	-0.15871E-01	0.23917E-01	-0.664	0.50696	0.2439
MANITOBA	-0.19202E-01	0.50945E-01	-0.377	0.70624	0.3627E-01
SASK	0.27051E-02	0.61118E-01	0.044	0.96470	0.2448E-01
ALBERTA	-0.87264E-02	0.34485E-01	-0.253	0.80023	0.1040
BRITCOL	0.63726E-02	0.32639E-01	0.195	0.84520	0.1055
DUNION	0.24675	0.27563E-01	8.952	0.00000	0.1823
D2SIC52	-0.33065E-01	0.24584	-0.135	0.89301	0.1438E-02
D5SIC52	0.22759	0.91474E-01	2.488	0.01285	0.1251E-01
D9SIC52	0.95321E-01	0.63532E-01	1.500	0.13352	0.2599E-01
D11SIC52	0.55491E-01	0.89041E-01	0.623	0.53315	0.1185E-01
D13SIC52	0.51084E-01	0.10396	0.491	0.62315	0.8659E-02
D15SIC52	0.63654E-01	0.58463E-01	1.089	0.27624	0.3807E-01
D16SIC52	0.20803	0.11783	1.766	0.07747	0.6460E-02
D18SIC52	0.30497	0.11362	2.684	0.00727	0.7066E-02
D19SIC52	0.23178	0.65698E-01	3.528	0.00042	0.2404E-01
D21SIC52	0.18364	0.80012E-01	2.295	0.02172	0.1514E-01
D22SIC52	0.84844E-01	0.91258E-01	0.930	0.35252	0.1119E-01
D23SIC52	0.26629	0.83145E-01	3.203	0.00136	0.1390E-01
D24SIC52	0.17786	0.61224E-01	2.905	0.00367	0.3091E-01
D25SIC52	0.26930	0.12212	2.205	0.02744	0.5985E-02
D27SIC52	0.33373	0.83372E-01	4.003	0.00006	0.1359E-01
D28SIC52	0.23029E-01	0.11338	0.203	0.83904	0.7054E-02
D29SIC52	0.41177E-01	0.10513	0.392	0.69530	0.8179E-02
D31SICC	0.27187	0.67503E-01	4.028	0.00006	0.2201E-01
D33SIC52	0.27000	0.49179E-01	5.490	0.00000	0.5429E-01
D34SIC52	0.46493	0.87029E-01	5.342	0.00000	0.1250E-01
D35SIC52	0.11605	0.48705E-01	2.383	0.01719	0.4621E-01
D37SIC52	0.37717	0.35860E-01	10.518	0.00000	0.1187
D38SIC52	0.30781	0.48704E-01	6.320	0.00000	0.4665E-01
D39SIC52	-0.35264E-02	0.63575E-01	-0.055	0.95577	0.2413E-01
D43SIC52	0.31226E-01	0.11576	0.270	0.78735	0.6963E-02
D44SIC52	-0.13661	0.39301E-01	-3.476	0.00051	0.9065E-01
D45SIC52	-0.42884E-02	0.78359E-01	-0.055	0.95635	0.2806E-01
D46SIC52	-0.58157E-01	0.58909E-01	-0.987	0.32353	0.8365E-01
D47SIC52	0.13922	0.56289E-01	2.473	0.01338	0.3310E-01
HRWAGE	0.31505E-01	0.29385E-02	10.722	0.00000	8.694

B) Logit model : 1984

Maximum Likelihood Estimates	
Dependent variable	PENSION
Number of observations	2047
Iterations completed	6
Log likelihood function	-1044.161
Restricted log likelihood	-1387.512
Chi-squared	686.7013
Degrees of freedom	46
Significance level	0.0000000

Variable	Coefficient	Standard Error	z=b/s.e.	P[|Z|>z]	Mean of X
Constant	-2.6403	0.22021	-11.990	0.00000	
PROFMAN	0.14669	0.16482	0.890	0.37346	0.1609
NATSOC	-0.62917	0.28304	-2.223	0.02622	0.4552E-01
SALES	0.20105	0.21556	0.933	0.35097	0.8325E-01
SERVICES	-0.50036	0.38025	-1.316	0.18822	0.1115
PPMW	-0.42506	0.21840	-1.946	0.05162	0.1215
CONSTRO	-0.78494	0.26821	-2.927	0.00343	0.5160E-01
NFLD	-0.35558	0.66541	-0.534	0.59309	0.9159E-02
PEI	0.23656	0.93840	0.252	0.80098	0.3228E-02
NOVASCOT	-0.14313	0.35860	-0.399	0.68980	0.2517E-01
NEWBRUN	-0.30362	0.44802	-0.678	0.49797	0.1830E-01
QUEBEC	-0.99446E-01	0.13974	-0.712	0.47666	0.2439
MANITOBA	-0.10420	0.29952	-0.348	0.72792	0.3627E-01
SASK	0.11180E-01	0.36308	0.031	0.97544	0.2448E-01
ALBERTA	-0.59891E-01	0.20858	-0.287	0.77401	0.1040
BRITCOL	0.37826E-01	0.19119	0.198	0.84317	0.1055
DUNION	1.3169	0.16066	8.197	0.00000	0.1823
D2SIC52	-0.23964	1.6854	-0.142	0.88694	0.1438E-02
D5SIC52	1.0062	0.51063	1.971	0.04877	0.1251E-01
D9SIC52	0.46624	0.33584	1.388	0.16505	0.2599E-01
D11SIC52	0.32457	0.48999	0.662	0.50772	0.1185E-01
D13SIC52	0.22983	0.55480	0.414	0.67868	0.8659E-02
D15SIC52	0.37838	0.33216	1.139	0.25463	0.3807E-01
D16SIC52	1.0253	0.59560	1.721	0.08517	0.6460E-02
D18SIC52	1.3391	0.62369	2.147	0.03179	0.7066E-02
D19SIC52	1.1306	0.35333	3.200	0.00138	0.2404E-01
D21SIC52	0.83619	0.40452	2.067	0.03872	0.1514E-01
D22SIC52	0.42495	0.48517	0.876	0.38109	0.1119E-01
D23SIC52	1.3219	0.43137	3.064	0.00218	0.1390E-01
D24SIC52	0.84356	0.32862	2.567	0.01026	0.3091E-01
D25SIC52	1.2727	0.60369	2.108	0.03502	0.5985E-02
D27SIC52	1.6146	0.45295	3.565	0.00036	0.1359E-01
D28SIC52	0.14701	0.65064	0.226	0.82124	0.7054E-02
D29SIC52	0.25607	0.56574	0.453	0.65081	0.8179E-02
D31SICC	1.2773	0.37348	3.420	0.00063	0.2201E-01
D33SIC52	1.2990	0.30170	4.306	0.00002	0.5429E-01
D34SIC52	3.1329	0.89517	3.500	0.00047	0.1250E-01
D35SIC52	0.61553	0.25936	2.373	0.01763	0.4621E-01
D37SIC52	1.7471	0.19834	8.809	0.00000	0.1187
D38SIC52	1.4301	0.26606	5.375	0.00000	0.4665E-01
D39SIC52	0.33621E-01	0.37040	0.091	0.92768	0.2413E-01
D43SIC52	0.14898	0.69521	0.214	0.83032	0.6963E-02
D44SIC52	-0.78617	0.25013	-3.143	0.00167	0.9065E-01
D45SIC52	0.17935E-02	0.56274	0.003	0.99746	0.2806E-01
D46SIC52	-0.47788	0.40564	-1.178	0.23876	0.8365E-01
D47SIC52	0.72375	0.31306	2.312	0.02079	0.3310E-01
HRWAGE	0.18247	0.19479E-01	9.367	0.00000	8.694

XIII. Women aged 35-54 : wages excluded - 1984

A) Linear probability model : 1984

Variable	Coefficient	Standard Error	z=b/s.e.	P[|Z|>z]	Mean of X
Constant	0.31539	0.31277E-01	10.084	0.00000	
PROFMAN	0.49564E-01	0.31970E-01	1.550	0.12107	0.1222
NATSOC	0.17670	0.66664E-01	2.651	0.00803	0.2285E-01
SALES	-0.12093	0.36196E-01	-3.341	0.00083	0.1098
SERVICES	-0.11097	0.44294E-01	-2.505	0.01224	0.1311
PPMW	-0.77499E-01	0.37135E-01	-2.087	0.03689	0.1870
CONSTRO	-0.71656E-01	0.44487E-01	-1.611	0.10724	0.6078E-01
NFLD	-0.18350	0.98093E-01	-1.871	0.06138	0.9524E-02
PEI	-0.86602E-01	0.15766	-0.549	0.58281	0.3596E-02
NOVASCOT	-0.96879E-01	0.62280E-01	-1.556	0.11982	0.2438E-01
NEWBRUN	-0.13621E-01	0.71719E-01	-0.190	0.84936	0.1807E-01
QUEBEC	-0.43458E-01	0.24631E-01	-1.764	0.07767	0.2483
MANITOBA	-0.62901E-01	0.53798E-01	-1.169	0.24232	0.3318E-01
SASK	-0.14890E-01	0.64178E-01	-0.232	0.81653	0.2292E-01
ALBERTA	-0.51063E-01	0.38604E-01	-1.323	0.18592	0.7759E-01
BRITCOL	-0.51385E-01	0.34217E-01	-1.502	0.13317	0.9637E-01
DA4554	0.46865E-01	0.19484E-01	2.405	0.01616	0.3919
DUNION	0.27977	0.26134E-01	10.705	0.00000	0.2364
D5SIC52	0.38113	0.12674	3.007	0.00264	0.6335E-02
D9SIC52	0.33713E-01	0.56200E-01	0.600	0.54859	0.3796E-01
D11SIC52	0.78422E-02	0.96482E-01	0.081	0.93522	0.1038E-01
D13SIC52	-0.15012	0.88678E-01	-1.693	0.09049	0.1305E-01
D15SIC52	-0.12363	0.51510E-01	-2.400	0.01639	0.6077E-01
D16SIC52	0.29568	0.12701	2.328	0.01991	0.5734E-02
D18SIC52	0.23374	0.90474E-01	2.583	0.00978	0.1193E-01
D19SIC52	0.65139E-01	0.64462E-01	1.011	0.31225	0.2595E-01
D21SIC52	0.13201	0.82732E-01	1.596	0.11056	0.1464E-01
D22SIC52	-0.41566E-01	0.11382	-0.365	0.71497	0.7202E-02
D23SIC52	0.85101E-01	0.61241E-01	1.390	0.16465	0.3201E-01
D24SIC52	0.25355	0.60518E-01	4.190	0.00003	0.3275E-01
D27SICC	0.39969	0.79551E-01	5.024	0.00000	0.1552E-01
D28SIC52	-0.43497E-01	0.81800E-01	-0.532	0.59490	0.1520E-01
D29SIC52	-0.16032	0.10277	-1.560	0.11876	0.8832E-02
D30SIC52	-0.20953	0.10679	-1.962	0.04976	0.8128E-02
D31SIC52	0.16210	0.59004E-01	2.747	0.00601	0.3101E-01
D33SIC52	0.35827	0.55519E-01	6.453	0.00000	0.3887E-01
D34SIC52	0.36702	0.10200	3.598	0.00032	0.9156E-02
D35SIC52	0.30503E-01	0.50057E-01	0.609	0.54228	0.4436E-01
D37SIC52	0.38203	0.41649E-01	9.172	0.00000	0.7860E-01
D38SIC52	0.36614	0.59733E-01	6.130	0.00000	0.2882E-01
D39SIC52	-0.79460E-01	0.64845E-01	-1.225	0.22043	0.2367E-01
D43SIC52	-0.13331	0.12700	-1.050	0.29384	0.5746E-02
D44SIC52	-0.39749E-01	0.43311E-01	-0.918	0.35874	0.7170E-01
D45SIC52	-0.17342	0.68449E-01	-2.534	0.01129	0.2752E-01
D46SIC52	-0.74276E-01	0.49652E-01	-1.496	0.13467	0.9087E-01
D47SIC52	-0.21187E-01	0.66028E-01	-0.321	0.74830	0.2466E-01

B) Logit model : 1984

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ÉÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍ»
º Maximum Likelihood Estimates                  º
º Dependent variable               PENSION      º
º Number of observations              2086      º
º Iterations completed                   6      º
º Log likelihood function        -1119.533      º
º Restricted log likelihood      -1402.864      º
º Chi-squared                     566.6616      º
º Degrees of freedom                    45      º
º Significance level             0.0000000      º
ÈÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍ¼
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Variable	Coefficient	Standard Error	z=b/s.e.	P[|Z|>z]	Mean of X
Constant	-0.80542	0.16514	-4.877	0.00000	
PROFMAN	0.24069	0.16773	1.435	0.15131	0.1222
NATSOC	0.87055	0.36283	2.399	0.01643	0.2285E-01
SALES	-0.66043	0.20333	-3.248	0.00116	0.1098
SERVICES	-0.68527	0.25842	-2.652	0.00801	0.1311
PPMW	-0.45175	0.19808	-2.281	0.02257	0.1870
CONSTRO	-0.44686	0.23534	-1.899	0.05759	0.6078E-01
NFLD	-1.3801	0.77807	-1.774	0.07611	0.9524E-02
PEI	-0.48159	0.90351	-0.533	0.59402	0.3596E-02
NOVASCOT	-0.54979	0.36774	-1.495	0.13491	0.2438E-01
NEWBRUN	-0.75151E-01	0.39782	-0.189	0.85017	0.1807E-01
QUEBEC	-0.22900	0.13635	-1.680	0.09305	0.2483
MANITOBA	-0.34217	0.29911	-1.144	0.25264	0.3318E-01
SASK	-0.56519E-01	0.35643	-0.159	0.87401	0.2292E-01
ALBERTA	-0.27083	0.21559	-1.256	0.20903	0.7759E-01
BRITCOL	-0.25709	0.19184	-1.340	0.18021	0.9637E-01
DA4554	0.25763	0.10699	2.408	0.01605	0.3919
DUNION	1.4285	0.14214	10.050	0.00000	0.2364
D5SIC52	1.6815	0.67951	2.475	0.01334	0.6335E-02
D9SIC52	0.11209	0.28512	0.393	0.69422	0.3796E-01
D11SIC52	0.45133E-02	0.49295	0.009	0.99269	0.1038E-01
D13SIC52	-0.77712	0.47775	-1.627	0.10382	0.1305E-01
D15SIC52	-0.69672	0.29509	-2.361	0.01822	0.6077E-01
D16SIC52	1.3125	0.65907	1.991	0.04644	0.5734E-02
D18SIC52	1.0113	0.46915	2.156	0.03112	0.1193E-01
D19SIC52	0.30258	0.31862	0.950	0.34229	0.2595E-01
D21SIC52	0.55775	0.40975	1.361	0.17345	0.1464E-01
D22SIC52	-0.22488	0.60266	-0.373	0.70904	0.7202E-02
D23SIC52	0.29619	0.30712	0.964	0.33483	0.3201E-01
D24SIC52	1.1055	0.31212	3.542	0.00040	0.3275E-01
D27SICC	1.8037	0.42741	4.220	0.00002	0.1552E-01
D28SIC52	-0.26424	0.43390	-0.609	0.54253	0.1520E-01
D29SIC52	-1.0321	0.72737	-1.419	0.15593	0.8832E-02
D30SIC52	-1.5226	0.90516	-1.682	0.09255	0.8128E-02
D31SIC52	0.69823	0.29515	2.366	0.01800	0.3101E-01
D33SIC52	1.8736	0.35950	5.212	0.00000	0.3887E-01
D34SIC52	1.9392	0.69982	2.771	0.00559	0.9156E-02
D35SIC52	0.15147	0.25518	0.594	0.55278	0.4436E-01
D37SIC52	1.6794	0.21887	7.673	0.00000	0.7860E-01
D38SIC52	1.6896	0.32369	5.220	0.00000	0.2882E-01
D39SIC52	-0.47182	0.38741	-1.218	0.22328	0.2367E-01
D43SIC52	-0.78091	0.81754	-0.955	0.33948	0.5746E-02
D44SIC52	-0.17879	0.22807	-0.784	0.43309	0.7170E-01
D45SIC52	-1.5292	0.59286	-2.579	0.00990	0.2752E-01
D46SIC52	-0.41216	0.28444	-1.449	0.14733	0.9087E-01
D47SIC52	-0.75999E-01	0.35351	-0.215	0.82978	0.2466E-01

XIV. Women aged 35-54 : wages excluded - 1993

A) Linear Probability Model : 1993

Variable	Coefficient	Standard Error	z=b/s.e.	P[|Z|>z]	Mean of X
Constant	0.34970	0.43816E-01	7.981	0.00000	
PROFMAN	0.74139E-01	0.37508E-01	1.977	0.04809	0.2214
NATSOC	0.71920E-01	0.63794E-01	1.127	0.25958	0.5501E-01
SALES	-0.12288	0.49828E-01	-2.466	0.01366	0.1124
SERVICES	-0.15608	0.63029E-01	-2.476	0.01328	0.1232
PPMW	-0.11096E-01	0.67925E-01	-0.163	0.87024	0.1044
CONSTRO	-0.10494	0.71465E-01	-1.468	0.14199	0.5134E-01
NFLD	-0.75554E-04	0.11082	-0.001	0.99946	0.1424E-01
PEI	0.83558E-01	0.24828	0.337	0.73646	0.2716E-02
NOVASCOT	-0.76163E-01	0.88159E-01	-0.864	0.38762	0.2292E-01
NEWBRUN	0.60910E-01	0.90577E-01	0.672	0.50129	0.2174E-01
QUEBEC	0.43748E-01	0.34173E-01	1.280	0.20048	0.2432
MANITOBA	0.11292	0.68015E-01	1.660	0.09686	0.4065E-01
SASK	0.91719E-01	0.82540E-01	1.111	0.26648	0.2641E-01
ALBERTA	0.65578E-01	0.49495E-01	1.325	0.18519	0.9180E-01
BRITCOL	0.92994E-01	0.44529E-01	2.088	0.03676	0.1159
DA4554	0.48397E-01	0.27404E-01	1.766	0.07738	0.3852
DUNION	0.30917	0.41944E-01	7.371	0.00000	0.1591
D5SIC52	0.52100E-03	0.17154	0.003	0.99758	0.6178E-02
D9SIC52	-0.76003E-01	0.78491E-01	-0.968	0.33290	0.3397E-01
D11SIC52	-0.87965E-01	0.21656	-0.406	0.68460	0.3651E-02
D13SIC52	-0.43298	0.17597	-2.461	0.01387	0.6052E-02
D15SIC52	-0.20708	0.91834E-01	-2.255	0.02413	0.3977E-01
D16SIC52	-0.24680	0.27893	-0.885	0.37625	0.2208E-02
D18SIC52	0.41231	0.13026	3.165	0.00155	0.1216E-01
D19SIC52	0.18042	0.90348E-01	1.997	0.04583	0.2737E-01
D21SIC52	-0.20691	0.17250	-1.199	0.23034	0.6237E-02
D22SIC52	0.44595	0.14944	2.984	0.00284	0.7975E-02
D23SIC52	0.33512	0.10620	3.155	0.00160	0.1738E-01
D24SIC52	0.46072E-01	0.10371	0.444	0.65687	0.1940E-01
D27SIC52	0.24754	0.10992	2.252	0.02432	0.1617E-01
D28SIC52	-0.37114E-02	0.12627	-0.029	0.97655	0.1233E-01
D29SIC52	-0.71476E-01	0.17341	-0.412	0.68021	0.5882E-02
D30SIC52	-0.27344	0.11684	-2.340	0.01927	0.1339E-01
D31SIC52	0.21295	0.81820E-01	2.603	0.00925	0.3020E-01
D33SIC52	0.15547	0.71442E-01	2.176	0.02954	0.4722E-01
D34SIC52	0.26715	0.11758	2.272	0.02308	0.1348E-01
D35SIC52	-0.24994E-01	0.66681E-01	-0.375	0.70779	0.4744E-01
D37SIC52	0.45063	0.52463E-01	8.590	0.00000	0.1016
D38SIC52	0.31484	0.81017E-01	3.886	0.00010	0.2973E-01
D39SIC52	-0.21102	0.76609E-01	-2.754	0.00588	0.3532E-01
D43SIC52	-0.17609	0.11860	-1.485	0.13761	0.1364E-01
D44SIC52	-0.88695E-01	0.52209E-01	-1.699	0.08935	0.1084
D45SIC52	-0.29156	0.94460E-01	-3.087	0.00202	0.2837E-01
D46SIC52	-0.21786	0.70709E-01	-3.081	0.00206	0.8232E-01
D47SIC52	-0.40516E-01	0.70385E-01	-0.576	0.56486	0.4416E-01

B) Logit model : 1993

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ÉÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍ»
º Maximum Likelihood Estimates                  º
º Dependent variable              PENSION       º
º Number of observations             1085       º
º Iterations completed                  7       º
º Log likelihood function       -551.6084       º
º Restricted log likelihood     -748.7535       º
º Chi-squared                    394.2901       º
º Degrees of freedom                   45       º
º Significance level            0.0000000       º
ÈÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍÍ¼
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Variable	Coefficient	Standard Error	z=b/s.e.	P[|Z|>z]	Mean of X
Constant	-0.72240	0.23367	-3.092	0.00199	
PROFMAN	0.38804	0.20570	1.886	0.05923	0.2214
NATSOC	0.37933	0.33581	1.130	0.25865	0.5501E-01
SALES	-0.65509	0.27458	-2.386	0.01704	0.1124
SERVICES	-1.2306	0.42287	-2.910	0.00361	0.1232
PPMW	-0.17707	0.39530	-0.448	0.65419	0.1044
CONSTRO	-0.73477	0.40370	-1.820	0.06874	0.5134E-01
NFLD	-0.44302E-01	0.63013	-0.070	0.94395	0.1424E-01
PEI	0.53234	1.3655	0.390	0.69665	0.2716E-02
NOVASCOT	-0.55341	0.51505	-1.074	0.28261	0.2292E-01
NEWBRUN	0.41429	0.53634	0.772	0.43985	0.2174E-01
QUEBEC	0.19631	0.20069	0.978	0.32799	0.2432
MANITOBA	0.62664	0.39398	1.591	0.11172	0.4065E-01
SASK	0.59682	0.49164	1.214	0.22477	0.2641E-01
ALBERTA	0.33800	0.27138	1.245	0.21296	0.9180E-01
BRITCOL	0.56284	0.25482	2.209	0.02719	0.1159
DA4554	0.33185	0.16008	2.073	0.03817	0.3852
DUNION	1.8976	0.26875	7.061	0.00000	0.1591
D5SIC52	-0.44251E-01	0.83295	-0.053	0.95763	0.6178E-02
D9SIC52	-0.39695	0.41035	-0.967	0.33336	0.3397E-01
D11SIC52	-0.63034	1.1765	-0.536	0.59212	0.3651E-02
D13SIC52	-2.6258	1.2060	-2.177	0.02946	0.6052E-02
D15SIC52	-1.1225	0.52929	-2.121	0.03394	0.3977E-01
D16SIC52	-1.4409	1.4057	-1.025	0.30534	0.2208E-02
D18SIC52	2.3759	0.91107	2.608	0.00911	0.1216E-01
D19SIC52	0.87047	0.47025	1.851	0.06416	0.2737E-01
D21SIC52	-0.97559	1.0339	-0.944	0.34536	0.6237E-02
D22SIC52	2.6522	1.2776	2.076	0.03790	0.7975E-02
D23SIC52	1.8113	0.74654	2.426	0.01525	0.1738E-01
D24SIC52	-0.35395E-02	0.53557	-0.007	0.99473	0.1940E-01
D27SIC52	1.2992	0.67616	1.922	0.05467	0.1617E-01
D28SIC52	-0.25753E-01	0.63155	-0.041	0.96747	0.1233E-01
D29SIC52	-0.25384	0.87661	-0.290	0.77215	0.5882E-02
D30SIC52	-1.5484	0.81493	-1.900	0.05743	0.1339E-01
D31SIC52	0.92492	0.42149	2.194	0.02820	0.3020E-01
D33SIC52	0.63145	0.41190	1.533	0.12527	0.4722E-01
D34SIC52	1.2865	0.72929	1.764	0.07772	0.1348E-01
D35SIC52	-0.11938	0.34133	-0.350	0.72652	0.4744E-01
D37SIC52	2.3300	0.33588	6.937	0.00000	0.1016
D38SIC52	1.5950	0.46295	3.445	0.00057	0.2973E-01
D39SIC52	-1.2793	0.51042	-2.506	0.01220	0.3532E-01
D43SIC52	-0.84318	0.74370	-1.134	0.25689	0.1364E-01
D44SIC52	-0.42404	0.26323	-1.611	0.10720	0.1084
D45SIC52	-3.3619	1.5337	-2.192	0.02838	0.2837E-01
D46SIC52	-1.1740	0.45708	-2.569	0.01021	0.8232E-01
D47SIC52	-0.20601	0.36178	-0.569	0.56906	0.4416E-01

XV. Women aged 35-54 : wages included - 1984

A) Linear Probability Model : 1984

Variable	Coefficient	Standard Error	z=b/s.e.	P[|Z|>z]	Mean of X
Constant	0.41117E-01	0.36730E-01	1.119	0.26296	
PROFMAN	-0.43402E-01	0.31552E-01	-1.376	0.16896	0.1222
NATSOC	0.60585E-01	0.64698E-01	0.936	0.34906	0.2285E-01
SALES	-0.10868	0.34805E-01	-3.122	0.00179	0.1098
SERVICES	-0.62565E-01	0.42739E-01	-1.464	0.14322	0.1311
PPMW	-0.40596E-01	0.35808E-01	-1.134	0.25691	0.1870
CONSTRO	-0.76131E-01	0.42763E-01	-1.780	0.07503	0.6078E-01
NFLD	-0.11628	0.94431E-01	-1.231	0.21818	0.9524E-02
PEI	-0.14129E-01	0.15165	-0.093	0.92577	0.3596E-02
NOVASCOT	-0.58542E-01	0.59937E-01	-0.977	0.32871	0.2438E-01
NEWBRUN	0.42720E-01	0.69073E-01	0.618	0.53626	0.1807E-01
QUEBEC	-0.32967E-01	0.23690E-01	-1.392	0.16405	0.2483
MANITOBA	-0.38643E-01	0.51745E-01	-0.747	0.45518	0.3318E-01
SASK	-0.59094E-02	0.61693E-01	-0.096	0.92369	0.2292E-01
ALBERTA	-0.86776E-01	0.37209E-01	-2.332	0.01969	0.7759E-01
BRITCOL	-0.76179E-01	0.32946E-01	-2.312	0.02076	0.9637E-01
DA4554	0.48682E-01	0.18729E-01	2.599	0.00934	0.3919
DUNION	0.23115	0.25397E-01	9.101	0.00000	0.2364
D5SIC52	0.22638	0.12241	1.849	0.06441	0.6335E-02
D9SIC52	-0.16777E-01	0.54160E-01	-0.310	0.75674	0.3796E-01
D11SIC52	-0.17951E-01	0.92761E-01	-0.194	0.84655	0.1038E-01
D13SIC52	-0.17478	0.85260E-01	-2.050	0.04037	0.1305E-01
D15SIC52	-0.10829	0.49526E-01	-2.187	0.02877	0.6077E-01
D16SIC52	0.19641	0.12232	1.606	0.10834	0.5734E-02
D18SIC52	0.13218	0.87316E-01	1.514	0.13006	0.1193E-01
D19SIC52	0.43213E-01	0.61985E-01	0.697	0.48571	0.2595E-01
D21SIC52	0.54371E-01	0.79747E-01	0.682	0.49537	0.1464E-01
D22SIC52	-0.79514E-01	0.10944	-0.727	0.46752	0.7202E-02
D23SIC52	0.34547E-01	0.58995E-01	0.586	0.55815	0.3201E-01
D24SIC52	0.17289	0.58501E-01	2.955	0.00312	0.3275E-01
D27SICC	0.24209	0.77421E-01	3.127	0.00177	0.1552E-01
D28SIC52	-0.48718E-01	0.78629E-01	-0.620	0.53553	0.1520E-01
D29SIC52	-0.23826	0.98967E-01	-2.407	0.01606	0.8832E-02
D30SIC52	-0.23901	0.10267	-2.328	0.01992	0.8128E-02
D31SIC52	0.88856E-01	0.56995E-01	1.559	0.11899	0.3101E-01
D33SIC52	0.20102	0.54720E-01	3.674	0.00024	0.3887E-01
D34SIC52	0.21512	0.98737E-01	2.179	0.02936	0.9156E-02
D35SIC52	-0.20755E-01	0.48277E-01	-0.430	0.66725	0.4436E-01
D37SIC52	0.31971	0.40320E-01	7.929	0.00000	0.7860E-01
D38SIC52	0.28238	0.57777E-01	4.887	0.00000	0.2882E-01
D39SIC52	-0.11735	0.62398E-01	-1.881	0.06001	0.2367E-01
D43SIC52	-0.27027	0.12253	-2.206	0.02740	0.5746E-02
D44SIC52	-0.10552	0.41938E-01	-2.516	0.01187	0.7170E-01
D45SIC52	-0.13511	0.65860E-01	-2.051	0.04022	0.2752E-01
D46SIC52	-0.31174E-01	0.47842E-01	-0.652	0.51465	0.9087E-01
D47SIC52	-0.43346E-01	0.63490E-01	-0.683	0.49479	0.2466E-01
HRWAGE	0.38151E-01	0.29352E-02	12.998	0.00000	8.356

B) Logit model : 1984

Maximum Likelihood Estimates	
Dependent variable	PENSION
Number of observations	2086
Iterations completed	6
Log likelihood function	-1038.683
Restricted log likelihood	-1402.864
Chi-squared	728.3619
Degrees of freedom	46
Significance level	0.0000000

Variable	Coefficient	Standard Error	z=b/s.e.	P[|Z|>z]	Mean of X
Constant	-2.5397	0.22884	-11.098	0.00000	
PROFMAN	-0.34767	0.18428	-1.887	0.05921	0.1222
NATSOC	0.29243	0.39229	0.745	0.45601	0.2285E-01
SALES	-0.68315	0.21378	-3.196	0.00140	0.1098
SERVICES	-0.35581	0.27831	-1.278	0.20109	0.1311
PPMW	-0.22951	0.20540	-1.117	0.26383	0.1870
CONSTRO	-0.43609	0.24924	-1.750	0.08017	0.6078E-01
NFLD	-1.1117	0.83156	-1.337	0.18126	0.9524E-02
PEI	-0.52653E-01	0.95575	-0.055	0.95607	0.3596E-02
NOVASCOT	-0.31893	0.37421	-0.852	0.39407	0.2438E-01
NEWBRUN	0.27616	0.41146	0.671	0.50212	0.1807E-01
QUEBEC	-0.21254	0.14205	-1.496	0.13458	0.2483
MANITOBA	-0.20179	0.31164	-0.648	0.51730	0.3318E-01
SASK	0.16032E-01	0.37378	0.043	0.96579	0.2292E-01
ALBERTA	-0.53444	0.23433	-2.281	0.02256	0.7759E-01
BRITCOL	-0.47847	0.20401	-2.345	0.01901	0.9637E-01
DA4554	0.28913	0.11202	2.581	0.00985	0.3919
DUNION	1.1480	0.14934	7.687	0.00000	0.2364
D5SIC52	1.0294	0.73980	1.392	0.16407	0.6335E-02
D9SIC52	-0.20969	0.29740	-0.705	0.48077	0.3796E-01
D11SIC52	-0.18914	0.51271	-0.369	0.71220	0.1038E-01
D13SIC52	-0.95676	0.48083	-1.990	0.04661	0.1305E-01
D15SIC52	-0.59439	0.30004	-1.981	0.04759	0.6077E-01
D16SIC52	0.77059	0.67096	1.148	0.25077	0.5734E-02
D18SIC52	0.46525	0.49971	0.931	0.35184	0.1193E-01
D19SIC52	0.13558	0.33623	0.403	0.68678	0.2595E-01
D21SIC52	0.85030E-01	0.42587	0.200	0.84174	0.1464E-01
D22SIC52	-0.49416	0.65241	-0.757	0.44878	0.7202E-02
D23SIC52	-0.20458E-01	0.31948	-0.064	0.94894	0.3201E-01
D24SIC52	0.66194	0.32788	2.019	0.04350	0.3275E-01
D27SICC	1.1527	0.45379	2.540	0.01108	0.1552E-01
D28SIC52	-0.34157	0.43514	-0.785	0.43248	0.1520E-01
D29SIC52	-1.6395	0.75224	-2.180	0.02929	0.8832E-02
D30SIC52	-1.9125	0.92822	-2.060	0.03937	0.8128E-02
D31SIC52	0.30146	0.32052	0.941	0.34693	0.3101E-01
D33SIC52	1.0041	0.37896	2.650	0.00806	0.3887E-01
D34SIC52	1.2789	0.74835	1.709	0.08745	0.9156E-02
D35SIC52	-0.19237	0.27118	-0.709	0.47808	0.4436E-01
D37SIC52	1.4076	0.22808	6.172	0.00000	0.7860E-01
D38SIC52	1.2312	0.33267	3.701	0.00021	0.2882E-01
D39SIC52	-0.83085	0.40344	-2.059	0.03946	0.2367E-01
D43SIC52	-2.2592	1.1077	-2.039	0.04140	0.5746E-02
D44SIC52	-0.67924	0.24491	-2.773	0.00555	0.7170E-01
D45SIC52	-1.4101	0.60920	-2.315	0.02063	0.2752E-01
D46SIC52	-0.17399	0.30285	-0.575	0.56562	0.9087E-01
D47SIC52	-0.32582	0.38524	-0.846	0.39769	0.2466E-01
HRWAGE	0.23992	0.20658E-01	11.614	0.00000	8.356

XVI. Women aged 35-54 : wages included - 1993

A) Linear Probability Model : 1993

Variable	Coefficient	Standard Error	z=b/s.e.	P[|Z|>z]	Mean of X
Constant	0.11136	0.49924E-01	2.231	0.02571	
PROFMAN	-0.40914E-01	0.38371E-01	-1.066	0.28631	0.2214
NATSOC	-0.48614E-01	0.62950E-01	-0.772	0.43996	0.5501E-01
SALES	-0.13822	0.48062E-01	-2.876	0.00403	0.1124
SERVICES	-0.15416	0.60757E-01	-2.537	0.01117	0.1232
PPMW	0.13301E-01	0.65532E-01	0.203	0.83916	0.1044
CONSTRO	-0.94024E-01	0.68899E-01	-1.365	0.17236	0.5134E-01
NFLD	0.28029E-01	0.10687	0.262	0.79311	0.1424E-01
PEI	0.16241	0.23949	0.678	0.49767	0.2716E-02
NOVASCOT	-0.98155E-02	0.85303E-01	-0.115	0.90839	0.2292E-01
NEWBRUN	0.89433E-01	0.87369E-01	1.024	0.30601	0.2174E-01
QUEBEC	0.48222E-01	0.32945E-01	1.464	0.14326	0.2432
MANITOBA	0.15495	0.65730E-01	2.357	0.01840	0.4065E-01
SASK	0.15195	0.79848E-01	1.903	0.05705	0.2641E-01
ALBERTA	0.87432E-01	0.47773E-01	1.830	0.06723	0.9180E-01
BRITCOL	0.96579E-01	0.42925E-01	2.250	0.02445	0.1159
DA4554	0.37771E-01	0.26443E-01	1.428	0.15317	0.3852
DUNION	0.25795	0.40835E-01	6.317	0.00000	0.1591
D5SIC52	-0.12537	0.16595	-0.755	0.44996	0.6178E-02
D9SIC52	-0.91538E-01	0.75681E-01	-1.210	0.22646	0.3397E-01
D11SIC52	-0.12773	0.20880	-0.612	0.54072	0.3651E-02
D13SIC52	-0.43021	0.16962	-2.536	0.01120	0.6052E-02
D15SIC52	-0.17844	0.88581E-01	-2.014	0.04396	0.3977E-01
D16SIC52	-0.32178	0.26900	-1.196	0.23162	0.2208E-02
D18SIC52	0.28691	0.12634	2.271	0.02315	0.1216E-01
D19SIC52	0.49311E-01	0.88313E-01	0.558	0.57659	0.2737E-01
D21SIC52	-0.23739	0.16632	-1.427	0.15349	0.6237E-02
D22SIC52	0.36016	0.14437	2.495	0.01261	0.7975E-02
D23SIC52	0.20358	0.10342	1.968	0.04902	0.1738E-01
D24SIC52	-0.99279E-01	0.10128	-0.980	0.32697	0.1940E-01
D27SIC52	0.11581	0.10698	1.083	0.27898	0.1617E-01
D28SIC52	0.20121E-02	0.12172	0.017	0.98681	0.1233E-01
D29SIC52	-0.14420	0.16735	-0.862	0.38887	0.5882E-02
D30SIC52	-0.24345	0.11268	-2.161	0.03073	0.1339E-01
D31SIC52	0.66167E-01	0.80555E-01	0.821	0.41142	0.3020E-01
D33SIC52	0.35144E-02	0.70926E-01	0.050	0.96048	0.4722E-01
D34SIC52	0.93544E-01	0.11499	0.814	0.41593	0.1348E-01
D35SIC52	-0.59163E-01	0.64390E-01	-0.919	0.35819	0.4744E-01
D37SIC52	0.36483	0.51471E-01	7.088	0.00000	0.1016
D38SIC52	0.24872	0.78444E-01	3.171	0.00152	0.2973E-01
D39SIC52	-0.24391	0.73938E-01	-3.299	0.00097	0.3532E-01
D43SIC52	-0.17775	0.11432	-1.555	0.11998	0.1364E-01
D44SIC52	-0.20793	0.52059E-01	-3.994	0.00006	0.1084
D45SIC52	-0.20832	0.91528E-01	-2.276	0.02284	0.2837E-01
D46SIC52	-0.17148	0.68356E-01	-2.509	0.01212	0.8232E-01
D47SIC52	-0.53966E-01	0.67864E-01	-0.795	0.42649	0.4416E-01
HRWAGE	0.33596E-01	0.37521E-02	8.954	0.00000	9.523

B) Logit model : 1993

Maximum Likelihood Estimates	
Dependent variable	PENSION
Number of observations	1085
Iterations completed	7
Log likelihood function	-510.4281
Restricted log likelihood	-748.7535
Chi-squared	476.6507
Degrees of freedom	46
Significance level	0.0000000

Variable	Coefficient	Standard Error	z=b/s.e.	P[|Z|>z]	Mean of X
Constant	-2.5398	0.33956	-7.480	0.00000	
PROFMAN	-0.23291	0.23050	-1.010	0.31230	0.2214
NATSOC	-0.21078	0.36318	-0.580	0.56166	0.5501E-01
SALES	-0.68455	0.28823	-2.375	0.01755	0.1124
SERVICES	-1.3126	0.47758	-2.749	0.00599	0.1232
PPMW	-0.29794E-01	0.41011	-0.073	0.94209	0.1044
CONSTRO	-0.72497	0.42112	-1.722	0.08516	0.5134E-01
NFLD	0.18756	0.66105	0.284	0.77662	0.1424E-01
PEI	1.0544	1.3885	0.759	0.44762	0.2716E-02
NOVASCOT	-0.12861	0.55339	-0.232	0.81623	0.2292E-01
NEWBRUN	0.70679	0.56698	1.247	0.21255	0.2174E-01
QUEBEC	0.23002	0.21155	1.087	0.27691	0.2432
MANITOBA	0.94988	0.41327	2.298	0.02154	0.4065E-01
SASK	0.98310	0.51051	1.926	0.05414	0.2641E-01
ALBERTA	0.57872	0.29412	1.968	0.04911	0.9180E-01
BRITCOL	0.56428	0.26167	2.156	0.03105	0.1159
DA4554	0.35016	0.17037	2.055	0.03984	0.3852
DUNION	1.6923	0.28148	6.012	0.00000	0.1591
D5SIC52	-0.99497	0.85667	-1.161	0.24546	0.6178E-02
D9SIC52	-0.52078	0.42713	-1.219	0.22275	0.3397E-01
D11SIC52	-0.88822	1.1180	-0.794	0.42694	0.3651E-02
D13SIC52	-2.5702	1.2244	-2.099	0.03581	0.6052E-02
D15SIC52	-0.80837	0.52794	-1.531	0.12572	0.3977E-01
D16SIC52	-2.1980	1.9265	-1.141	0.25389	0.2208E-02
D18SIC52	1.6091	0.91551	1.758	0.07881	0.1216E-01
D19SIC52	0.13643	0.50155	0.272	0.78561	0.2737E-01
D21SIC52	-1.1220	1.0556	-1.063	0.28781	0.6237E-02
D22SIC52	2.0782	1.2840	1.618	0.10556	0.7975E-02
D23SIC52	1.4744	0.85257	1.729	0.08375	0.1738E-01
D24SIC52	-0.96991	0.57949	-1.674	0.09418	0.1940E-01
D27SIC52	1.0376	0.70399	1.474	0.14052	0.1617E-01
D28SIC52	0.67306E-01	0.65395	0.103	0.91803	0.1233E-01
D29SIC52	-0.72745	0.91669	-0.794	0.42745	0.5882E-02
D30SIC52	-1.4092	0.84735	-1.663	0.09630	0.1339E-01
D31SIC52	0.57715	0.46895	1.231	0.21842	0.3020E-01
D33SIC52	-0.33527	0.45710	-0.733	0.46327	0.4722E-01
D34SIC52	0.13192	0.77344	0.171	0.86457	0.1348E-01
D35SIC52	-0.34339	0.35941	-0.955	0.33936	0.4744E-01
D37SIC52	1.9310	0.34858	5.540	0.00000	0.1016
D38SIC52	1.1837	0.47399	2.497	0.01252	0.2973E-01
D39SIC52	-1.3876	0.50794	-2.732	0.00630	0.3532E-01
D43SIC52	-0.88726	0.78219	-1.134	0.25666	0.1364E-01
D44SIC52	-1.2989	0.30123	-4.312	0.00002	0.1084
D45SIC52	-2.8361	1.5577	-1.821	0.06865	0.2837E-01
D46SIC52	-0.92395	0.50941	-1.814	0.06972	0.8232E-01
D47SIC52	-0.29636	0.38433	-0.771	0.44065	0.4416E-01
HRWAGE	0.23331	0.28882E-01	8.078	0.00000	9.523

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