

THE RELATIVE EARNINGS POSITION OF CANADIAN ABORIGINALS IN THE 1990s

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Abstract / Résumé

Using 1996 census data we address the earning differentials of the Canadian Aboriginal-population compared to the majority population of non-visible minority, Canadian-born males and females. We find that earnings penalties tend to be largest for those with only Aboriginal origins (compared to those Aboriginals with multiple ethnic origins), but lower for females. We also discover that earnings penalties tend to be concentrated at the lower tail of the earnings distribution.

En utilisant les données de recensement de 1996, nous adressons les salaires différentiels de la population Canadien-Autochtone comparé avec la majorité de la population des minorités non-visibles, hommes et femmes née au Canada. Nous trouvons que les pénalités de salaires ont tendance à être les plus importantes pour ceux qui sont uniquement d'origins autochtones (comparé avec les autochtones ayant plusieurs origines ethniques), mais plus bas pour les femmes. Nous avons découvert que les pénalités de salaires ont tendance à être concentré du côté le plus faible de la distribution des salaires.

I. Introduction

There is little evidence on the earnings of Canadian Aboriginals relative to non-Aboriginals in the 1990s. That research which has been conducted, generally finds that Aboriginals earn less than non-visible minority Canadians even after controlling for a variety of socio-economic characteristics. This "unexplained" earnings differential is commonly attributed to labour market discrimination, although it could be the result of other non-discriminatory yet unobserved characteristics which are correlated with Aboriginal status.

The first purpose of this research is to address what has happened to Aboriginal earnings versus those of non-Aboriginals at the time of the 1996 Census. Secondly, the research will also address the important question: If there are discrepancies between Aboriginal and non-Aboriginal earnings, exactly where in the earnings distribution do these discrepancies exist? Are they at the lower tail of the distribution, the upper tail, or is any earnings differential uniform regardless of location along the distribution? With the exception of Pendakur and Pendakur (2002) which addresses the first issue, the recent economics literature is silent on these questions.

What follows is organized in the usual way: the following section provides context to the problem being addressed. Section III discusses the 1996 Census which will be utilized in the empirical part of the paper. Discussion of the results is the topic of the fourth section. The final section concludes.

II. Background and Research Methodology

There has been relatively little research conducted on the labour market experiences of Aboriginals. The exceptions to this are outlined in Table 1.¹ Although the representation of these disparate results is limited, it does outline the results of recent studies using methodology most related to the methodology followed below.² Most of the studies include a number of ethnic groups (some include both Canadian- and foreign-born) and compare Aboriginals to a control group, usually non-visible minorities. Furthermore, the studies all follow one of two methodologies: First, a dummy variable for Aboriginal status is employed, the estimated coefficient of which if negative (positive) measures the earnings penalty (premium) for being a member of the Aboriginal group. If negative, the coefficient value could, at least in part, be due to labour market discrimination. Second, a decomposition methodology is used in some cases where a counterfactual estimate of earnings is done by giving the characteristics of one group to the other group. Any negative

earnings differential that cannot be explained by differences in endowments, could then be considered, again at least in part, the result of discrimination. Thus, for example, if we witness earnings differences between groups, it could be the result of endowments (e.g., education) or because of differential returns to these endowments. The former reason is considered legitimate, while the latter could be due to labour market discrimination. Of the two methodologies, decomposition is usually preferred because it does not constrain returns to labour market characteristics to be equal for all groups analyzed. Furthermore, a number of these previous studies control for selectivity bias into either labour force participation, or into full-time, full-year employment. The argument is that discrimination could take place by limiting employment opportunities for Aboriginals. Thus, not controlling for this would tend to upward bias any estimates of discrimination.

The results of this research are varied. With the exception of Pendakur and Pendakur (2002) who use the more restrictive dummy variable methodology and discover an Aboriginal male earnings disadvantage of 63 per cent, the other estimates are more modest and tend to follow a pattern: Aboriginal males have a higher earnings disadvantage compared to Aboriginal females, Aboriginals with single ethnic origins tend to face larger earnings penalties compared to those with multiple ethnic origins, and earnings penalties for Aboriginals tend to be reduced for those involved in full-time and full-year employment..

These studies, however, can be extended in two important ways. First, with the exception of Pendakur and Pendakur (2002), there is no time dimension to any study. As a result, we have no way of knowing if the earnings position of Aboriginals has improved over time relative to non-Aboriginal Canadians. Second, the previous work does not address the distribution of Aboriginal and non-Aboriginal earnings. As a result, we cannot ascertain exactly where in the earnings distribution these differentials exist. We have no *a priori* expectations about whether these differentials continue to exist, or if they exist, where in the earnings distribution they will be most pronounced.

Data from the 1996 Canadian census will be used and the familiar Oaxaca (1973) and Blinder (1973) earnings decomposition technique employed to analyze the relative earnings position of Aboriginal Canadians in the mid-1990s. These results can then be matched with the earlier Canadian work to address the evolution of the relative earnings differential. In particular, the earlier studies by George and Kuhn (1994) and de Silva (1999) will serve as our comparators, since these two studies are the closest to ours in terms of focus, methodology and data. Second, although comparisons with earlier studies will give us an indication

of the evolution of mean earnings between Aboriginal and non-Aboriginals, nothing can be said about the location in the earnings distribution of any differentials. Thus, quantile regressions will be used to estimate differentials at various points of the earnings distribution.

III. Data

The data come from the 1996 Census Public Use Microdata File (PUMF) on individuals. The 1996 PUMF is a 2.8 per cent sample of the individuals enumerated in the full census. Since this work is intended, at least in part, to be comparable to past work in the area (George and Kuhn, 1994; de Silva, 1999) the data cuts closely follow these past studies. In particular, the data are limited to include only those Canadian-born individuals between the ages of 15 and 64 who lived in any of the ten provinces in 1995 and did not live in collective housing. Since it is the goal of this paper to determine earnings differentials of Aboriginals compared to the non-Aboriginal Canadians, both immigrants and Canadians who were visible minorities were removed from the sample.³

To avoid biasing coefficient estimates in the econometric work that follows, individuals with earnings that equal or exceed the top-coded level of \$120,000 are excluded.⁴ Similarly, to accurately calculate net family income (i.e., family income less individual earnings), individuals with top-coded family incomes were also removed from the sample.⁵ Any individuals who claimed any self-employment income were also eliminated. Finally, inconsistent responses (such as claiming positive earnings but no weeks worked) were dropped from the final sample.

The Aboriginal population is further disaggregated into those with "some" Aboriginal origin and those with exclusively or "all" Aboriginal origins. The latter category includes only those with one Aboriginal background (e.g., Inuit or Métis) while the latter includes those with at least one Aboriginal ethnic background with one or more Aboriginal or non-Aboriginal backgrounds.⁶

The final full male sample consists of 109,317 non-Aboriginals and 4,254 Aboriginals (2,660 of whom claimed to have some Aboriginal origins and an additional 1,594 with all Aboriginal origins). The final female sample contains 104,032 non-Aboriginals and 4,276 Aboriginals (2,790 with some and 1,486 with all Aboriginal origins, respectively).⁷

IV. Results

Summary statistics for the male and female samples are presented in Table 2. In general, these statistics show those with some Aboriginal origins have characteristics and labour market outcomes in between the groups with no and some Aboriginal origins. Thus, in general, non-

Aboriginals tend to earn more than those in the some Aboriginal origin group who, in turn, each more than those who are exclusively Aboriginal. Likewise, non-Aboriginals tend to be older, have the highest rates of marriage, are more likely to be living in an urban area, and are most concentrated in Ontario and Québec. Non-Aboriginals are also more likely to have completed a university education, to speak French, have higher incidents of full-time and full-year employment, and higher net family incomes. They are also less likely to have young children in the household. These results hold across gender lines.

The relative rankings (i.e., non-Aboriginals compared to some Aboriginal and all Aboriginal origins) are also comparable to those of George and Kuhn (1994) and de Silva (1999). Still, there are some notable differences between these results and ours. Compared to de Silva our data suggest a relative improvement in the earnings position of Aboriginals. Our results show the unadjusted earnings disadvantage of males with some and all Aboriginal origins to be 16.5 per cent and 45.8 per cent, respectively. The comparable numbers from de Silva are 34.8 per cent and 58.5 per cent. For females, our numbers show earnings disadvantages of 19.3 per cent and 29.6 per cent for individuals with some and all Aboriginal origins, compared to de Silva's numbers of 22.3 per cent and 41.3 per cent. Thus, it would appear that, at least on the surface, Aboriginals have gained some ground in five-year intercensus period.

We are also able to compare our results to those of these two previous studies using a subsample of workers who worked full-time and full-year in 1995.⁸ As reported in Table 2, the proportion of the Aboriginal population who worked full-time and full-year in 1995 is substantially less than the comparable figure for the White population. Later, this result will prove useful in adjusting for selectivity into full-time and full-year employment, but for now, it is useful to compare apples with apples and look at only those who had significant attachment to the labour market in 1995. The results using this subsample of individuals are found in Table 3. Compared to the results in Table 2, individuals tend to have the characteristics we would expect: Generally they are older, have higher levels of education, are more likely to be married, live in an urban area, etc. As with the summary statistics on the entire sample in the previous table, those with some Aboriginal origins tend to fall in between the group of non-Aboriginals and those with all Aboriginal origins. Here too the Aboriginal-non-Aboriginal earnings differential is much less: males with all (any) Aboriginal origins earn 26.4 (11.5) per cent less than non-Aboriginals. George and Kuhn report figures of 18.1 (11.6) per cent for all (any) Aboriginal origins. De Silva does not disaggregate his figure for

males and reports the earnings disadvantage for any Aboriginal origins to be 14.8 per cent compared to our figure of 11.5 per cent.

For females, our results for wage differentials for those with all (any) Aboriginal origins are 17.0 (10.9) per cent. These are somewhat higher than George and Kuhn's equivalent figures of 10.8 (6.5) per cent, but lower than de Silva's figure of 13.7 per cent for any Aboriginal origins. Thus, compared to George and Kuhn, our results are mixed with female Aboriginals and males with all Aboriginal origins showing a worsening of their unadjusted earnings positions, and males with mixed ancestry showing a relative improvement. Compared to de Silva, our results show a wholesale improvement in the relative earnings positions of Aboriginal males and females. However, the fact that we removed individuals with top-coded incomes from our data, whereas de Silva appears not to have done this, could explain some of this difference.⁹

In sum, these initial calculations are largely in agreement with those in the literature which have used prior Canadian census data. Generally, we show that the Aboriginal wage gap is larger for men than for women, and larger for those with all Aboriginal origins compared to those with multiple origins. This pattern of wage differentials agrees with similar estimates in previous studies. This is important to note since the questions pertaining to ethnic origin changed in the 1996 Census. Thus, comparison of these results with those based on earlier census data sets should be viewed cautiously.¹⁰ The multivariate estimates below will provide a more complete answer as to the sources of these earnings differentials.

Tables 4m and 4f contain the OLS earnings regressions for males and females, respectively. A series of Chow tests were used to test the hypothesis that the coefficients in separate regressions were jointly different for individuals in different groups. For each gender, four comparisons were made: non-Aboriginals versus the three Aboriginal definitions (i.e., any, some and all Aboriginal origins), and some Aboriginal versus all Aboriginal origins. Only when comparing White males with some Aboriginal origins, were we unable to reject the null hypotheses of joint coefficient equality at the 5 per cent level of significance. Thus, there is no empirical support for pooling the data and simply using dummy coefficients to differentiate one group from another.¹¹

For males, coefficient estimates across equations tend to be similar and tests of coefficient equality confirm this, although some of this is undoubtedly due to the large standard errors obtained when estimating some of the smaller samples (e.g., all Aboriginal). What is interesting is the large variance in returns to education for Aboriginals. For example, for those with any Aboriginal origins, there is a wage penalty of .34 log

point associated with having only education through grade 4 compared to finishing high school. On the other end of the education spectrum, post-graduate education is rewarded by .43 log points. By comparison, the wage penalty (premium) for low (high) education non-Aboriginals is .31 (.32). For females, the results are similar.

Tables 5m and 5f present the OLS earnings regressions corrected for selectivity into full-year, full-time work for males and females, respectively. This correction is potentially important because estimates without it may bias any earnings differentials estimates. For example, if Aboriginals of high ability (which is not observed) tend to enter full-time and full-year employment, then the Aboriginal wage differential will tend to be biased downward underestimating any potential discrimination. Correcting for selectivity avoids this potential problem. The Heckman (1979) two-step procedure was used in which a first stage probit equation is estimated with a dichotomous dependent variable for full-year, full-time coded to one if the individual worked 48 or more primarily full-time (i.e., at least 30-hour) weeks in 1995. The variable is coded to zero for individuals when one or both of these conditions does not hold.¹² Within each table, are coefficient estimates from separate regressions for non-Aboriginals, and Aboriginals (both aggregated and with some and all Aboriginal backgrounds). The first point to note is that there is evidence of selectivity bias into full-time, full-year work for both males and females. For males, there are negative coefficients on the inverse Mill's ratio (λ) in each estimate, but only for non-Aboriginals is the estimate significant (likely due to the larger sample size). For women, by contrast, selectivity bias is positive in all cases, but significant only in the cases of non-Aboriginals and any Aboriginal origins. In both the male and female cases, the lack of significant selectivity bias among Aboriginals appears to be due to relatively small sample sizes. Thus, these estimates suggest that males are negatively selected into full-time and full-year employment whereas females are positively selected. Thus, males in full-time, full year employment tend to have unobservable wage-earning characteristics which are on average below those of the entire sample of males (i.e., including those not working full-time and full-year). For females, the opposite holds and those working full-time and full-year are positively selected.

Table 6 presents some of the main results of the paper: the earnings decompositions. Results for both males and females are shown here using both non-Aboriginals and Aboriginals as the base for comparison purposes.¹³ Also, results with and without selectivity correction into full-time and full-year employment are shown.¹⁴

Using the estimates without selectivity correction, both males and

females of any Aboriginal origin have earnings on average about 15 per cent less than non-Aboriginals when we look at only the sample of full-time and full-year workers in the upper panel of Table 6.¹⁵ The rent component (or potential discrimination) ranges from 4.8 per cent to 7.9 per cent depending on the gender and the base used (i.e., Aboriginal or non-Aboriginal base). This figure, however, is quite different for those with all and some Aboriginal origins. In the former case, the rent component ranges from 13.1 per cent to 23.9 per cent, while in the latter case it ranges from 0.6 per cent to 5.4 per cent. The magnitude of these results as well as the patterns tend to mirror the results of the earlier studies by George and Kuhn and de Silva, although our results for those with all Aboriginal (both male and female) are somewhat higher.¹⁶

Turning to the estimates with correction for selectivity into full-time and full-year employment the results change, reflecting the selectivity biases shown in Tables 5m and 5f. The lower panel of Table 6 shows that the total Aboriginal wage differential for males (of both Aboriginal definitions) decreases while for females it increases compared to the case where we do not control for selectivity. This reflects the result that males are negatively selected, and females positively selected into full-time and full-year employment. Similarly, the rent component decreases for males (becoming an earnings premium) and increases for females, again reflecting the nature of the selectivity biases. Our results differ from those of the earlier studies, likely due in large part to the sensitivity of the selectivity probit equation to alternative specifications.¹⁷

Although the above decomposition estimates are useful, they only indicate that *on average* that non-Aboriginals could be paid economic rents. These estimates tell us nothing about where in the earnings distribution these differences may exist. In other words, we have no way of knowing if the rent differential is constant throughout the earnings distribution. Recall from above that Chow tests generally indicated that we could not pool the non-Aboriginal and Aboriginal observations. Also recall that pairwise t-tests between the estimated coefficients in the Aboriginal and non-Aboriginal equations tended not to be significantly different indicating that income-generating factors do not tend to differ between the two groups. In order to be able to utilize quantile regressions, it is necessary to be able to pool the data and include an intercept shifter for each Aboriginal group. Table 7 presents the results from the pooled OLS regressions where individuals with both some and all Aboriginal origins are aggregated (the top panel of Table 7). These two Aboriginal groups are also disaggregated for both males and females (the lower panel of Table 7). Also, since the decompositions of Table 6 did not allow inclusion of occupation and industry controls (due to a

small number of observations in each cell), these were also included to test for industry and occupation effects on earnings.

The 1st, 4th, 7th, and 10th columns are the unadjusted earnings differentials for males and females. These, obviously, are identical to the total log wage differentials in the top panel of Table 6. Columns 2, 5, 8 and 11 show the corresponding estimates which include the same demographic variables underlying the decompositions in Table 6, with the coefficient estimates on the appropriate dummy variables reported. These estimates are almost identical to the decomposition estimates (using the non-Aboriginal base) reported in Table 6. The estimates which include controls for occupation and industry (columns 3, 6, 9 and 12) are always larger in absolute value than the estimates without these controls (columns 2, 5, 8 and 11). In the case of females with all Aboriginal origins, for example, the wage penalty increases from about .12 log points to .17 log points when industry and occupation controls are included. Thus, estimates without industry and occupation effects tend to underestimate the earnings penalty of Aboriginal workers. In other words, it appears that Aboriginals tend to be concentrated in industries and/or occupations that where earnings are lower. This could be indicative of labour market segregation, a form of discrimination.¹⁸

The coefficient estimates when both Aboriginal groups are aggregated (column 3 for males and column 6 for females) are obtained using controls that are almost identical controls to those used in analyzing the 1991 Census by Pendakur and Pendakur (1998). For females, our results are roughly the same. For males, however, our estimate of the Aboriginal earnings differential is much less.¹⁹

Since the estimates in Table 7 are almost identical to those in Table 6, it appears reasonable to use quantile regressions to estimate the model using Aboriginal dummy variables at different points in the earnings distribution.²⁰ In other words, since the coefficient estimates are consistent across groups with only the intercept differing, we can now pool the data and include dummy for intercept shifters. In particular, we will estimate different regression equations for the 10th, 25th, 50th, 75th and 90th quantiles. These results are presented in Table 8, along with the OLS results from Table 7 for reference. In the case of males of all Aboriginal origin the wage differential decreases as we move from the lower tale of the wage distribution to the upper tail: a wage penalty of .3556 at $q=.10$ compared to a penalty of .1478 at $q=.90$. The results are significant in all cases and show that the OLS wage penalty (.2144) masks differences at various points along the distribution. For males with some Aboriginal origins, the results are generally insignificant, but there is a significant wage penalty of .0248 at $q=.75$. For females, the same generally pattern

is observed: lower wage penalties at higher points along the earnings distribution.

V. Conclusions

Using the 1996 census as well as the familiar earnings decomposition methodology, we arrive at results similar to those of earlier studies which have also addressed Aboriginal/non-Aboriginal wage differentials. We find that the unexplained wage (or rent) differential accounts for up to 64 per cent of the total wage differential between these two groups. This wage differential tends to be higher for Aboriginals who are of single Aboriginal origin and less for those of multiple origins. In general, both males and females of mixed Aboriginal origins tend to have unexplained wage penalties of about 5 per cent or less, compared to figures of between 13 and 23 per cent. Thus, those with only Aboriginal origins tend to have a higher unexplained wage differential. This is generally in agreement with past research which has used data from previous census years to estimate similar models.

What has not been addressed in the previous literature is where in the earnings distribution these Aboriginal wage penalties exist and how they might change conditional on the location in the earnings distribution. We employ quantile regression techniques to address this issue. We find that largest wage penalties for Aboriginals are found at the lower tail of the earnings distribution, with the wage penalty diminishing as we move to points at the upper tail of the same distribution.

Our results show that there has been little movement in the wage penalty of Aboriginals over the decade between the 1986 and 1996 Censuses. Further, they also indicate that the largest earnings penalties are incurred by individuals of with only Aboriginal origins compared to those with either mixed or no Aboriginal ethnic background. Furthermore, our results suggest that industry and occupation, as well as access to full-time, full-year employment are important determinants of relative Aboriginal earnings. Finally, we have shown that the largest wage penalty exists at the lower tail of the earnings distribution.

Table 1
Recent Studies on Aboriginal Wages Differentials

Study	Data	Dependent variable	Comparison group	Controls			Methodology	Aboriginal Group Differential (%)						
				FT/FY	Occ/Ind	Sel. Bias		Male	Female					
							Dummy var.	Decomp.	Any	Single	Multiple	Any	Single	Multiple
George & Kuhn (1994)	1986 Census	Log Earnings	Non-visible minorities	No	No	Yes	No	Yes	-7.0	-10.2	N/A	-2.4	-5.1	N/A
				Yes	No	No	No	Yes	-6.8	-10.1	N/A	-5.5	-8.9	N/A
Baker & Benjamin (1997)	1991 Census	Log Earnings	Canadian-born Whites	No	Yes	No	No	Yes	-9.1	N/A	N/A	N/A	N/A	N/A
Pendakur & Pendakur (1998)	1991 Census	Log Earnings	Canadian-born, British origin Whites	No	Yes	No	No	Yes	-12.6	N/A	N/A	-6.7	N/A	N.a
DeSilva (1999)	1991 Census	Log Earnings	Non-visible minorities	No	No	No	No	Yes	-14.7	-25.0	-9.8	-7.4	-9.7	-6.0
				No	No	Yes	No	Yes	-13.2	N/A	N/A	-9.0	N/A	N/A
				Yes	No	No	No	Yes	-6.9	N/A	N/A	-3.6	N/A	N/a
Hum & Simpson (1999)	1993 SLID	Log Wage	Non-visible minorities Canadian-born	No	No	Yes	Yes	No	-5.4	N/A	N/A	-2.1	N/A	N/A
Pendakur & Pendakur (2002)	1996 Census	Log Earnings	Canadian-born, British origin Whites	No	No	No	Yes	No	-63.0	N/A	N/A	-15.0	N/A	N/A

Notes: FT/FY refers to a sample which only includes this type of worker. Under the controls category, Occ/Ind refer to controls for occupation and industry, Sel. Bias is selectivity bias which controls for participation in the labour force or full-time, full-year employment. Methodology refers to one of a dummy controlling for Aboriginal status, while decomposition uses the standard Oaxaca/Blinder technique outlined in the text. Aboriginal group comparisons are Any (which includes any Aboriginal origin), Single (which includes only those with all Aboriginal origins), and Multiple (which represents a mix of Aboriginal plus any other ethnic origin).

Table 2
Summary Statistics for None, Some, All or Any Aboriginal
Origins, Males and Females
 (Proportion of group total unless otherwise stated)

Variable	Males Aboriginal Origins				Females Aboriginal Origins			
	None	Some	All	Any	None	Some	All	Any
Annual wages (current \$)	29,842	24,914	16,186	21,643	18,294	14,763	12,878	14,108
Aboriginal wage differential (%)	0.0	-16.5	-45.8	-27.5	0.0	-19.3	-29.6	-22.9
Age (years)	36.61	33.63	34.31	33.89	35.85	32.75	34.40	33.33
Married	0.6027	0.5162	0.4341	0.4854	0.5782	0.4753	0.4118	0.4532
Single	0.3344	0.4120	0.4780	0.4368	0.3039	0.3767	0.4428	0.3997
Divorced/widowed/ separated	0.0629	0.0718	0.0878	0.0778	0.1180	0.1480	0.1454	0.1471
Census metropolitan area	0.5352	0.4571	0.1870	0.3559	0.5458	0.4724	0.2376	0.3908
Newfoundland	0.0260	0.0323	0.0270	0.0303	0.0242	0.0269	0.0242	0.0260
Nova Scotia	0.0409	0.0282	0.0201	0.0252	0.0392	0.0305	0.0155	0.0253
New Brunswick/PEI	0.0424	0.0271	0.0213	0.0249	0.0415	0.0244	0.0148	0.0210
Quebec	0.2975	0.1560	0.1424	0.1509	0.2780	0.1495	0.1447	0.1478
Ontario	0.3273	0.2782	0.1531	0.2313	0.3361	0.2853	0.1797	0.2486
Manitoba	0.0359	0.1049	0.1662	0.1279	0.0389	0.1018	0.1514	0.1190
Saskatchewan	0.0318	0.0624	0.1343	0.0893	0.0377	0.0620	0.1299	0.0856
Alberta	0.0930	0.1459	0.1336	0.1413	0.0969	0.1545	0.1440	0.1508
British Columbia	0.1052	0.1650	0.2020	0.1789	0.1076	0.1652	0.1958	0.1759
Grades 0-4	0.0056	0.0049	0.0270	0.0132	0.0031	0.0025	0.0114	0.0056
Grades 5-8	0.0479	0.0492	0.1518	0.0877	0.0259	0.0237	0.0989	0.0498
Grades 9-13	0.2396	0.3203	0.3902	0.3465	0.2016	0.2487	0.3439	0.2818
High school graduate	0.2477	0.2188	0.1481	0.1923	0.2918	0.2595	0.1898	0.2353
Post-secondary/Trade	0.3347	0.3447	0.2641	0.3145	0.3472	0.3785	0.3096	0.3545
Undergraduate university degree	0.0868	0.0387	0.0125	0.0289	0.0996	0.0663	0.0363	0.0559
Post-graduate university degree/diploma	0.0377	0.0233	0.0063	0.0169	0.0308	0.0208	0.0101	0.0171
English	0.6236	0.7282	0.8789	0.7847	0.6253	0.7290	0.8816	0.7820
French	0.1523	0.0496	0.0533	0.0510	0.1552	0.0559	0.0464	0.0526
Bilingual	0.2241	0.2222	0.0678	0.1643	0.2195	0.2151	0.0720	0.1653
Children 0-5 years of age	0.2047	0.2312	0.2980	0.2562	0.1937	0.2376	0.2880	0.2551
Children 6 years of age or greater	0.3244	0.2989	0.3243	0.3084	0.3664	0.3509	0.4206	0.3751
Net family income (\$/1000)	29.975	27.891	21.888	25.641	40.001	35.402	25.937	32.113
Full-time, full-year work	0.6032	0.4951	0.3388	0.4365	0.4432	0.3516	0.3405	0.3478
Sample size	109,317	2,660	1,594	4,254	104,032	2,790	1,486	4,276

Table 3
Summary Statistics for None, Some, All or Any Aboriginal Origins,
Full-time & Full-year Workers Males and Females
 (Proportion of group total unless otherwise stated)

Variable	Males Aboriginal Origins				Females Aboriginal Origins			
	None	Some	All	Any	None	Some	All	Any
Annual wages (current \$)	39,932	37,780	29,379	35,337	28,373	26,191	23,538	25,289
Aboriginal wage differential (%)	0.0	-5.4	-26.4	-11.5	0.0	-7.7	-17.0	-10.9
Age (years)	39.82	38.13	38.67	38.28	38.81	36.84	38.38	37.36
Married	0.7493	0.7069	0.6333	0.6855	0.6542	0.5800	0.5277	0.5622
Single	0.1802	0.2096	0.2630	0.2251	0.1963	0.2324	0.3063	0.2576
Divorced/widowed/ separated	0.0705	0.0835	0.1037	0.0894	0.1495	0.1876	0.1660	0.1802
Census metropolitan area	0.5697	0.5186	0.2444	0.4389	0.5957	0.5484	0.2589	0.4499
Newfoundland	0.0187	0.0121	0.0167	0.0135	0.0210	0.0102	0.0217	0.0141
Nova Scotia	0.0365	0.0251	0.0204	0.0237	0.0369	0.0245	0.0178	0.0222
New Brunswick/PEI	0.0351	0.0235	0.0222	0.0232	0.0367	0.0153	0.0138	0.0148
Quebec	0.2917	0.1708	0.1611	0.1680	0.2853	0.1774	0.1482	0.1675
Ontario	0.3460	0.3083	0.2037	0.2779	0.3503	0.3262	0.1858	0.2784
Manitoba	0.0386	0.1086	0.1796	0.1292	0.0392	0.1081	0.1542	0.1237
Saskatchewan	0.0316	0.0592	0.1315	0.0802	0.0366	0.0489	0.1245	0.0746
Alberta	0.0968	0.1390	0.1074	0.1298	0.0937	0.1356	0.1640	0.1453
British Columbia	0.1051	0.1534	0.1574	0.1546	0.1003	0.1539	0.1700	0.1594
Grades 0-4	0.0044	0.0030	0.0259	0.0097	0.0026	0.0031	0.0099	0.0054
Grades 5-8	0.0390	0.0425	0.1352	0.0695	0.0206	0.0173	0.0791	0.0383
Grades 9-13	0.1878	0.2308	0.2926	0.2488	0.1578	0.1835	0.2332	0.2004
High school graduate	0.2326	0.2179	0.1630	0.2019	0.2849	0.2467	0.1937	0.2286
Post-secondary/Trade	0.3795	0.4191	0.3463	0.3980	0.3783	0.4302	0.4012	0.4203
Undergraduate university degree	0.1079	0.0539	0.0204	0.0442	0.1159	0.0897	0.0711	0.0834
Post-graduate university degree/diploma	0.0488	0.0327	0.0167	0.0280	0.0398	0.0296	0.0119	0.0235
English	0.6365	0.7062	0.8630	0.7518	0.6328	0.6932	0.8775	0.7559
French	0.1377	0.0532	0.0444	0.0506	0.1493	0.0591	0.0534	0.0572
Bilingual	0.2258	0.2407	0.0926	0.1976	0.2179	0.2477	0.0692	0.1870
Sample size	65,945	1,317	540	1,857	46,109	981	506	1,487

Table 4m
Results from OLS Wage Regressions, Males, Full-time, Full-year
 (Standard errors are in parentheses)

Variable	Non-Aboriginal	Any Aboriginal	Some Aboriginal	All Aboriginal
Age	0.0924 (.0021)*	0.0860 (.0127)*	0.0898 (.0139)*	0.0810 (.0270)*
Age ² /100	-0.0992 (.0025)*	-0.0957 (.0155)*	-0.0984 (.0171)*	-0.0931 (.0328)*
Married	0.2326 (.0085)*	0.2935 (.0452)*	0.2635 (.0507)*	0.2939 (.0932)*
Divorced/widowed/sep.	0.1679 (.0131)*	0.1705 (.0689)*	0.2052 (.0771)*	0.0886 (.1406)
Census metropolitan area	0.0683 (.0058)*	0.0544 (.0343)	0.0114 (.0365)	0.0586 (.0867)
Newfoundland	-0.1302 (.0206)*	0.0194 (.1430)	0.0605 (.1619)	-0.0808 (.2849)
Nova Scotia	-0.1926 (.0149)*	-0.1256 (.1088)	-0.1417 (.1141)	-0.1010 (.2584)
New Brunswick/PEI	-0.1549 (.0157)*	-0.2727 (.1120)*	-0.0688 (.1191)	-0.8506 (.2595)*
Quebec	-0.0840 (.0120)*	-0.1525 (.0653)*	-0.1130 (.0716)	-0.1022 (.1502)
Manitoba	-0.1172 (.0145)*	-0.1667 (.0542)*	-0.0393 (.0612)	-0.3310 (.1137)*
Saskatchewan	-0.0979 (.0159)*	-0.1641 (.0652)*	-0.0276 (.0781)	-0.2950 (.1262)*
Alberta	-0.0401 (.0098)*	-0.0219 (.0544)	-0.0293 (.0565)	0.0225 (.1352)
British Columbia	0.0462 (.0095)*	0.0079 (.0519)	0.0924 (.0550)	-0.1851 (.1208)
Grades 0-4	-0.3098 (.0410)*	-0.3432 (.1704)*	0.0549 (.3171)	-0.3071 (.2450)
Grades 5-8	-0.2332 (.0153)*	-0.1933 (.0739)*	-0.1193 (.0959)	-0.1664 (.1348)
Grades 9-13	-0.1268 (.0084)*	-0.1251 (.0487)*	-0.1150 (.0524)*	-0.1293 (.1095)
Post-secondary/Trade	0.0893 (.0071)*	0.0682 (.0446)	0.0777 (.0466)	0.0381 (.1064)
Undergraduate univ. degree	0.2721 (.0100)*	0.4094 (.0853)*	0.3635 (.0843)*	0.6358 (.2663)*
Post-graduate univ. degree/ diploma	0.3247 (.0136)*	0.4337 (.1040)*	0.3993 (.1045)*	0.6589 (.2962)*
French	-0.0750 (.0141)*	0.0136 (.0951)	-0.0055 (.1039)	-0.1149 (.2117)
Bilingual	0.0263 (.0103)*	0.1278 (.0519)*	0.0995 (.0530)	-0.0083 (.1557)
Constant	8.2034 (.0407)*	8.2873 (.2388)*	8.2346 (.2596)*	8.4135 (.5171)*
R-squared	0.1466	0.1572	0.1704	0.1278
Adjusted R-squared	0.1463	0.1476	0.1570	0.0925
Sample size	65,945	1,857	1,317	540

Note: *denotes significance at the 5 per cent level.

Table 4f
Results from OLS Wage Regressions, Females, Full-time, Full-year
 (Standard errors are in parentheses)

Variable	Non-Aboriginal	Any Aboriginal	Some Aboriginal	All Aboriginal
Age	0.0892 (.0026)*	0.0513 (.0156)*	0.0540 (.0181)*	0.0338 (.0308)
Age ² /100	-0.0974 (.0031)*	-0.0497 (.0200)*	-0.0504 (.0234)*	-0.0232 (.0384)
Married	0.0547 (.0096)*	0.0581 (.0519)*	0.0969 (.0610)	-0.0167 (.0972)
Divorced/widowed/sep.	0.0587 (.0123)*	-0.0652 (.0664)*	-0.0749 (.0765)	-0.0578 (.1283)
Census metropolitan area	0.1377 (.0070)*	0.0871 (.0417)	0.1254 (.0459)*	-0.0225 (.0924)
Newfoundland	-0.1433 (.0233)*	-0.5842 (.1704)	-0.2487 (.2208)	-0.7527 (.2809)*
Nova Scotia	-0.2086 (.0176)*	-0.2611 (.1370)	-0.2004 (.1444)	-0.3583 (.3184)
New Brunswick/PEI	-0.1860 (.0184)*	-0.2108 (.1668)*	-0.3552 (.1818)	0.1416 (.3463)
Quebec	-0.1081 (.0140)*	-0.1167 (.0802)*	-0.1966 (.0881)	0.2084 (.1773)
Manitoba	-0.1561 (.0171)*	-0.1808 (.0680)*	-0.2067 (.0769)	-0.0120 (.1369)
Saskatchewan	-0.1731 (.0177)*	-0.2249 (.0829)*	-0.2501 (.1075)	-0.0288 (.1454)
Alberta	-0.1154 (.0118)*	-0.2374 (.0651)	-0.3110 (.0726)	-0.0464 (.1338)
British Columbia	0.0238 (.0116)*	-0.1063 (.0627)	-0.1476 (.0684)	0.0568 (.1328)
Grades 0-4	-0.4757 (.0628)*	-0.6857 (.2724)*	0.3150 (.3966)	-1.2431 (.4177)*
Grades 5-8	-0.3281 (.0237)*	-0.4263 (.1124)*	-0.5168 (.1743)	-0.3758 (.1775)*
Grades 9-13	-0.1427 (.0102)*	-0.2287 (.0606)*	-0.1503 (.0675)*	-0.3252 (.1230)*
Post-secondary/Trade	0.1603 (.0080)*	0.0533 (.0512)	0.0602 (.0553)	0.0648 (.1124)
Undergraduate univ. degree	0.4692 (.0113)*	0.5010 (.0805)*	0.4932 (.0865)*	0.5378 (.1768)*
Post-graduate univ. degree/ diploma	0.5646 (.0173)*	0.4030 (.1354)*	-0.4475 (.1353)*	0.2313 (.3857)
French	-0.0874 (.0164)*	-0.0015 (.1135)	-0.0172 (.1264)	-0.0746 (.2328)
Bilingual	0.0216 (.0117)*	0.0435 (.0657)*	0.0417 (.0675)	-0.0559 (.1892)
Constant	8.0246 (.0487)*	8.8154 (.2921)*	8.7195 (.3299)*	9.1194 (.5986)*
R-squared	0.1482	0.1300	0.1659	0.1177
Adjusted R-squared	0.1478	0.1176	0.1476	0.0794
Sample size	46,109	1,487	981	506

Note: *denotes significance at the 5 per cent level.

Table 5m
Results from Selectivity-Corrected OLS Wage Regressions, Males
 (Standard errors are in parentheses)

Variable	Non-Aboriginal	Any Aboriginal	Some Aboriginal	All Aboriginal
Age	0.0619 (.0040)*	0.0567 (.0233)*	0.0571 (.0259)*	0.0436 (.0428)
Age ² /100	-0.0639 (.0047)*	-0.0631 (.0267)*	-0.0617 (.0299)*	-0.0527 (.0487)
Married	0.1649 (.0115)*	0.1925 (.0809)*	0.1728 (.0790)*	0.1550 (.1543)
Divorced/widowed/sep.	0.1341 (.0138)*	0.1311 (.0746)	0.1751 (.0809)*	0.0180 (.1554)
Census metropolitan area	0.0492 (.0063)*	0.0080 (.0465)	-0.0198 (.0426)	-0.0061 (.1053)
Newfoundland	-0.0482 (.0228)*	0.1878 (.1816)	0.2635 (.2100)	0.0691 (.3157)
Nova Scotia	-0.1517 (.0158)*	-0.0860 (.1138)	-0.1122 (.1178)	-0.0144 (.2742)
New Brunswick/PEI	-0.1132 (.0166)*	-0.2295 (.1174)	-0.0204 (.1252)	-0.7795 (.2728)*
Quebec	-0.0840 (.0122)*	-0.1287 (.0685)	-0.0870 (.0751)	-0.1144 (.1547)
Manitoba	-0.1220 (.0147)*	-0.1396 (.0580)*	-0.0281 (.0629)	-0.2830 (.1237)*
Saskatchewan	-0.0920 (.0162)*	-0.1213 (.0720)	-0.0034 (.0812)	-0.2186 (.1446)
Alberta	-0.0321 (.0100)*	0.0213 (.0623)	0.0036 (.0616)	0.1209 (.1621)
British Columbia	0.0628 (.0099)*	0.0574 (.0621)	0.1208 (.0592)*	-0.0665 (.1609)
Grades 0-4	-0.2648 (.0417)*	-0.2169 (.1909)	0.2290 (.3380)	-0.1804 (.2719)
Grades 5-8	-0.1811 (.0166)*	-0.1024 (.0960)	-0.0284 (.1142)	-0.0641 (.1638)
Grades 9-13	-0.1007 (.0090)*	-0.0635 (.0640)	-0.0624 (.0636)	-0.0339 (.1394)
Post-secondary/Trade	0.0867 (.0073)*	0.0860 (.0470)	0.0965 (.0492)*	0.0576 (.1101)
Undergraduate univ. degree	0.2499 (.0105)*	0.3830 (.0892)*	0.3429 (.0876)*	0.5799 (.2790)*
Post-graduate univ. degree/ diploma	0.3103 (.0139)*	0.4089 (.1080)*	0.3931 (.1073)*	0.4559 (.3595)
French	-0.0465 (.0147)*	0.0253 (.0971)	-0.0169 (.1062)	0.0207 (.2457)
Bilingual	0.0375 (.0106)*	0.1181 (.0534)*	0.0972 (.0541)	-0.0113 (.1602)
Constant	8.9921 (.0975)*	9.1453 (.6178)*	9.1310 (.6505)*	9.6154 (1.1796)*
λ	-0.2518 (.0281)*	-0.2884 (.1904)	-0.2872 (.1897)	-0.4321 (.3790)
Sample size	109,317	4,254	2,660	1,594
Uncensored observations	65,945	1,857	1,317	540
Censored observations	43,372	2,397	1,343	1,054

Note: *denotes significance at the 5 per cent level.

Table 5f
Results from Selectivity-Corrected OLS Wage Regressions, Females
 (Standard errors are in parentheses)

Variable	Non-Aboriginal	Any Aboriginal	Some Aboriginal	All Aboriginal
Age	0.1022 (.0037)*	0.0974 (.0272)*	0.0844 (.0251)*	0.0573 (.1308)
Age ² /100	-0.1123 (.0043)*	-0.1003 (.0317)*	-0.0844 (.0304)*	-0.0577 (.1427)
Married	0.0533 (.0096)*	0.0796 (.0542)	0.1091 (.0618)	0.0007 (.1341)
Divorced/widowed/sep.	0.0609 (.0124)*	-0.0763 (.0684)	-0.0813 (.0772)	-0.0618 (.1280)
Census metropolitan area	0.1525 (.0077)*	0.1279 (.0471)*	0.1609 (.0505)*	-0.0156 (.0983)
Newfoundland	-0.1521 (.0234)*	-0.7318 (.1866)*	-0.3909 (.2343)	-0.7656 (.2849)*
Nova Scotia	-0.2166 (.0178)*	-0.3171 (.1428)*	-0.2504 (.1479)	-0.3449 (.3215)
New Brunswick/PEI	-0.1892 (.0184)*	-0.3012 (.1750)	-0.4272 (.1865)*	0.1255 (.3515)
Quebec	-0.1057 (.0141)*	-0.1429 (.0835)	-0.2161 (.0896)*	0.2039 (.1762)
Manitoba	-0.1588 (.0172)*	-0.1845 (.0699)*	-0.2084 (.0766)*	-0.0092 (.1355)
Saskatchewan	-0.1768 (.0178)*	-0.2785 (.0888)*	-0.2920 (.1107)*	-0.0474 (.1749)
Alberta	-0.1216 (.0120)*	-0.2567 (.0675)*	-0.3427 (.0752)*	-0.0335 (.1491)
British Columbia	0.0149 (.0117)*	-0.1541 (.0684)*	-0.1715 (.0703)*	0.0279 (.2035)
Grades 0-4	-0.4923 (.0630)*	-0.7919 (.2829)*	0.2966 (.4001)	-1.3277 (.6139)*
Grades 5-8	-0.3508 (.0242)*	-0.5283 (.1247)*	-0.5844 (.1790)*	-0.4396 (.3864)
Grades 9-13	-0.1631 (.0104)*	-0.2835 (.0673)*	-0.1675 (.0686)*	-0.3760 (.2998)
Post-secondary/Trade	0.4778 (.0080)*	0.0658 (.0530)	0.0711 (.0561)	0.0642 (.1107)
Undergraduate univ. degree	0.5740 (.0115)*	0.5741 (.0904)*	0.5327 (.0902)*	0.5843 (.3060)*
Post-graduate univ. degree/ diploma	0.1002 (.0175)*	0.4103 (.1399)*	0.4613 (.1372)*	0.1951 (.4270)
French	-0.0179 (.0166)*	0.0240 (.1173)	-0.0039 (.1276)	-0.0657 (.2341)
Bilingual	0.0375 (.0118)*	0.0561 (.0678)	0.0549 (.0685)	-0.0703 (.2016)
Constant	7.6696 (.0868)*	7.4869 (.7043)*	7.8375 (.6011)*	8.4559 (3.6314)*
λ	-0.1081 (.0218)*	-0.3794 (.1824)*	0.2586 (.1472)	0.1775 (.9587)
Sample size	104,032	4,276	2,790	1,486
Uncensored observations	46,109	1,487	981	506
Censored observations	57,923	2,789	1,809	980

Note: *denotes significance at the 5 per cent level.

Table 6
Wage Decompositions by Gender and Aboriginal Definition

	Males with base as		Females	
	Non-Aboriginals	Aboriginals	Non-Aboriginals	Aboriginals
<i>No selectivity correction</i>				
<i>Non-Aboriginals versus any Aboriginal origins</i>				
Total log wage differential	-0.1375	-0.1375	-0.1384	-0.1384
Attribute differential	-0.0711	-0.0893	-0.0619	-0.0915
Rent differential	-0.0664	-0.0482	-0.0764	-0.0469
Rent as a percentage of total	48.28	35.04	55.23	33.86
<i>Non-Aboriginals versus all Aboriginal origins</i>				
Total log wage differential	-0.3605	-0.3605	-0.2465	-0.2465
Attribute differential	-0.1463	-0.2231	-0.1235	-0.0886
Rent differential	-0.2142	-0.1374	-0.1230	-0.1579
Rent as a percentage of total	59.41	38.11	49.90	64.06
<i>Non-Aboriginals versus some Aboriginal origins</i>				
Total log wage differential	-0.0461	-0.0461	-0.0826	-0.0826
Attribute differential	-0.0403	-0.0351	-0.0302	-0.0601
Rent differential	-0.0058	-0.0110	-0.0524	-0.0225
Rent as a percentage of total	12.56	23.82	63.45	27.23
<i>With selectivity correction into full-year, full-time employment</i>				
<i>Non-Aboriginals versus any Aboriginal origins</i>				
Total log wage differential	-0.0701	-0.0701	-0.4975	-0.4975
Attribute differential	-0.0984	-0.0887	-0.1144	-0.1285
Rent differential	0.0283	0.0186	-0.3831	-0.3690
Rent as a percentage of total	-40.32	-26.57	77.00	74.17
<i>Non-Aboriginals versus all Aboriginal origins</i>				
Total log wage differential	-0.0479	-0.0479	-0.3448	-0.3448
Attribute differential	-0.1464	-0.1329	-0.1731	-0.1602
Rent differential	0.0985	0.0850	-0.1717	-0.1847
Rent as a percentage of total	-205.69	-177.36	49.80	53.55
<i>Non-Aboriginals versus some Aboriginal origins</i>				
Total log wage differential	-0.0014	-0.0014	-0.2940	-0.2940
Attribute differential	-0.0696	-0.0458	-0.0832	-0.1293
Rent differential	0.0682	0.0444	-0.2108	-0.1646
Rent as a percentage of total	-4862.32	-3170.34	71.71	56.01

Table 7
Results from OLS Wage Regressions, Males and Females, Full-time, Full-year
 (Standard errors are in parentheses)

	(1)	Males (2)	(3)	(4)	Females (5)	(6)
Any Aboriginal	-0.1375 (.0176)*	-0.0657 (.0164)*	-0.0809 (.0159)*	-0.1384 (.0197)*	-0.0758 (.0184)*	-0.0895 (.0175)*
Other demographic variable	no	yes	yes	no	yes	yes
Industry and occupation controls	no	no	yes	no	no	yes
R-squared	0.0009	0.1474	0.2036	0.0010	0.1477	0.2354
Adjusted R-squared	0.0009	0.1471	0.2028	0.0010	0.1473	0.2344
Sample size	67,802	67,802	67,802	47,596	47,596	47,596
	(7)	(8)	(9)	(10)	(11)	(12)
All Aboriginal	-0.3605 (.0323)*	-0.2144 (.0301)*	-0.2454 (.0293)*	-0.2465 (.0334)*	-0.1223 (.0312)*	-0.1727 (.0298)*
Some Aboriginal	-0.0461 (.0193)*	-0.0058 (.0193)	-0.0155 (.0187)	-0.0826 (.0241)*	-0.0520 (.0223)*	-0.0480 (.0212)*
Other demographic variables	no	yes	yes	no	yes	yes
Industry and occupation controls	no	no	yes	no	no	yes
R-squared	0.0019	0.1478	0.2041	0.0014	0.1478	0.2356
Adjusted R-squared	0.0019	0.1475	0.2034	0.0013	0.1473	0.2346
Sample size	67,802	67,802	67,802	47,596	47,596	47,596

Note: * denotes significance at the 5 per cent level.

Table A1f
Probit Results for Selectivity into Full-year, Full-time Employment,
Females
 (Standard errors are in parentheses)

Variable	Non-Aboriginal	Any Aboriginal	Some Aboriginal	All Aboriginal
Age	0.2254 (.0030)*	0.1950 (.0154)*	0.2061 (.0199)*	0.1883 (.0252)*
Age ² /100	-0.2632 (.0038)*	-0.2204 (.0200)*	-0.2385 (.0262)*	-0.0020 (.0003)*
Married	0.1267 (.0132)*	0.1845 (.0566)*	0.2190 (.0746)*	0.1761 (.0913)
Divorced/widowed/sep.	0.0614 (.0175)*	0.0059 (.0729)	0.0481 (.0956)	-0.0208 (.1163)
Census metropolitan area	0.2244 (.0089)*	0.1315 (.0449)*	0.1753 (.0546)*	0.0390 (.0861)
Newfoundland	-0.1387 (.0282)*	0.5574 (.1532)*	-0.8113 (.2042)*	-0.1549 (.2478)
Nova Scotia	-0.1483 (.0222)*	-0.2706 (.1401)	-0.3916 (.1622)*	0.1092 (.2913)
New Brunswick/PEI	-0.0820 (.0226)*	-0.3518 (.1588)*	-0.4459 (.1881)*	0.0121 (.3193)
Quebec	0.0432 (.0180)*	-0.0524 (.0891)	-0.0776 (.1109)	-0.0194 (.1604)
Manitoba	-0.0626 (.0221)*	-0.0210 (.0741)	-0.0196 (.0948)	0.0304 (.1248)
Saskatchewan	-0.0809 (.0227)*	-0.2385 (.0859)*	-0.3146 (.1213)*	-0.1627 (.1318)
Alberta	-0.1123 (.0152)*	-0.0801 (.0688)	-0.1789 (.0832)*	0.1120 (.1262)
British Columbia	-0.1497 (.0146)*	-0.2219 (.0663)*	-0.1887 (.0813)*	-0.2512 (.1188)*
Grades 0-4	-0.3315 (.0740)*	-0.4086 (.2740)	-0.1733 (.4855)	-0.7059 (.3216)*
Grades 5-8	-0.3902 (.0274)*	-0.4178 (.1093)*	-0.4556 (.1874)*	-0.5667 (.1491)*
Grades 9-13	-0.1794 (.0126)*	-0.2258 (.0617)*	-0.1141 (.0775)	-0.4104 (.1066)*
Post-secondary/Trade	0.0304 (.0103)*	0.0264 (.0555)	0.0131 (.0664)	-0.0002 (.1044)
Undergraduate univ. degree	0.1101 (.0151)*	0.2641 (.0552)*	0.1769 (.1103)*	0.4619 (.2012)*
Post-graduate univ. degree/ diploma	-0.1354 (.0245)*	0.0283 (.1579)*	0.0666 (.1783)	-0.2875 (.3599)
French	-0.1840 (.0208)*	0.0310 (.1225)	0.0686 (.1522)	-0.0196 (.2150)
Bilingual	-0.0567 (.0147)*	0.0273 (.0712)	0.0728 (.0817)	
Children 0-5 years of age	-0.4630 (.0127)*	-0.4042 (.0613)*	-0.5426 (.0762)*	-0.1461 (.1075)
Children 6 years or greater	-0.3395 (.0114)*	-0.2821 (.0584)*	-0.3750 (.0731)*	-0.1345 (.1003)
Net family income	-0.0082 (.0002)*	-0.0046 (.0010)*	-0.0060 (.0012)*	0.0000 (.0000)
Constant	-4.1142 (.0544)*	-3.8920 (.2697)*	-3.9828 (.3409)*	-4.0463 (.4632)*
Sample size	104,032	4,276	2,790	1,486

Note: *denotes significance at the 5 per cent level.

Table 8
Results from Quantile Wage Regressions, Males and Females, Full-time, Full-year
 (Bootstrapped standard errors are in parenthesis)

	Males					
	q=.10	q=.25	q=.50	q=.75	q=.90	OLS
All Aboriginal	-0.3556 (.0837)*	-0.2222 (.0308)*	-0.2045 (.0367)*	-0.1506 (.0308)*	-0.1478 (.0355)*	-0.2144 (.0301)*
Some Aboriginal	0.0051 (.0386)	-0.0203 (.0275)	-0.0275 (.0115)	-0.0248 (.0115)*	-0.0287 (.0170)	-0.0058 (.0193)
Pseudo R-squared	0.0961	0.1315	0.1434	0.1291	0.1114	0.1478
Sample size	67,802	67,802	67,802	67,802	67,802	67,802
	Females					
	q=.10	q=.25	q=.50	q=.75	q=.90	OLS
All Aboriginal	-0.1617 (.1061)	-0.0698 (.0432)	-0.0795 (.0201)*	-0.0632 (.0215)*	-0.0546 (.0317)	-0.1223 (.0312)*
Some Aboriginal	-0.0766 (.0466)	-0.0659 (.0234)*	-0.0668 (.0155)*	-0.0405 (.0153)*	-0.0421 (.0141)*	-0.0520 (.0223)*
Pseudo R-squared	0.0800	0.1184	0.1405	0.1603	0.1611	0.1478
Sample size	47,596	47,596	47,596	47,596	47,596	47,596

Note: * denotes significance at the 5 per cent level.

Table A1m
Probit Results for Selectivity into Full-year, Full-time Employment,
Males
 (Standard errors are in parentheses)

Variable	Non-Aboriginal	Any Aboriginal	Some Aboriginal	All Aboriginal
Age	0.1980 (.0028)*	0.1514 (.0144)*	0.1752 (.0186)*	0.1919 (.0255)*
Age ² /100	-0.2271 (.0034)*	-0.1650 (.0182)*	-0.1908 (.0236)*	-0.2085 (.0324)*
Married	0.3873 (.0135)*	0.5009 (.0568)*	0.4231 (.0763)*	0.1676 (.0915)
Divorced/widowed/sep.	0.0892 (.0204)*	0.1212 (.0880)	0.0384 (.1178)	-0.0203 (.1168)
Census metropolitan area	0.1838 (.0093)*	0.3138 (.0473)*	0.2401 (.0581)*	0.0430 (.0862)
Newfoundland	-0.6375 (.0274)*	-0.8994 (.1464)*	-1.1445 (.1823)*	-0.1133 (.2506)
Nova Scotia	-0.3657 (.0221)*	-0.2763 (.1429)	-0.2355 (.1729)	-0.1145 (.2913)
New Brunswick/PEI	-0.3479 (.0227)*	-0.2628 (.1462)	-0.2851 (.1765)	-0.1164 (.3070)
Quebec	-0.0375 (.0189)*	-0.1611 (.0920)	-0.2102 (.1143)	-0.0158 (.1634)
Manitoba	0.0274 (.0245)	-0.1898 (.0737)*	-0.0948 (.0982)	0.0227 (.1256)
Saskatchewan	-0.0648 (.0259)*	-0.2768 (.0851)*	-0.1969 (.1227)	-0.1517 (.1323)
Alberta	-0.0951 (.0162)*	-0.2844 (.0726)*	-0.2291 (.0888)*	0.1183 (.1268)
British Columbia	0.1533 (.0154)*	-0.3129 (.0688)*	-0.1901 (.0868)*	-0.2452 (.1191)*
Grades 0-4	-0.3690 (.0538)*	-0.6842 (.1920)*	-0.9787 (.3812)*	-0.6790 (.3473)
Grades 5-8	-0.4202 (.0210)*	-0.5574 (.0900)*	-0.6030 (.1362)*	-0.5369 (.1493)*
Grades 9-13	-0.2324 (.0125)*	-0.3613 (.0625)*	-0.3221 (.0782)*	-0.4192 (.1066)*
Post-secondary/Trade	0.0105 (.0115)	-0.1083 (.0621)	-0.1198 (.0754)	0.0001 (.1044)
Undergraduate univ. degree	0.2207 (.0176)*	0.2236 (.1371)	0.1929 (.1554)	0.4659 (.2011)*
Post-graduate univ. degree/ diploma	0.1639 (.0248)*	0.1996 (.1716)*	0.0557 (.1856)	-0.2859 (.3596)
French	-0.2430 (.0217)*	-0.0657 (.1263)*	0.0849 (.1624)	0.0210 (.2165)
Bilingual	-0.1053 (.0161)*	0.0671 (.0738)	0.0246 (.0849)	-0.1378 (.1699)
Children 0-5 years of age	0.1030 (.0132)*	0.0922 (.0601)	0.1806 (.0771)*	-0.1306 (.1080)
Children 6 years or greater	0.0444 (.0119)*	-0.0566 (.0598)	0.0978 (.0762)	-0.1259 (.1009)
Net family income	-0.0086 (.0002)*	-0.0065 (.0012)*	-0.0066 (.0015)*	-0.0007 (.0019)
Constant	-3.5245 (.0525)*	-3.0973 (.2603)*	-3.4615 (.3325)*	-4.1154 (.4686)*
Sample size	109,317	4,254	2,660	1594

Note: *denotes significance at the 5 per cent level.

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Notes

1. See also Stelcner (2000) for a useful review of the studies up until this date.
2. Since these results are limited to those closest in methodology to ours, readers are encouraged to read the papers cited in Table 1.
3. A number of studies (Baker and Benjamin, 1997; Pendakur and Pendakur, 1998; Hum and Simpson, 1999) have shown that immigrant status and ethnic group affiliation are often confounded in empirical work. Furthermore, few individuals of Aboriginal origin are foreign born. For these reasons we eliminated the foreign born from the sample. Furthermore, although Pendakur and Pendakur (1998, 2002) show that the group of non-visible minorities is heterogeneous in terms of earnings, after controlling for various labour market characteristics, for consistency with earlier studies, we will use the aggregated group of non-visible minorities as our comparison group.
4. Females in all regions had top-coded earnings of \$120,000 as did males in the Atlantic provinces. Males outside of Atlantic Canada were top-coded to \$200,000. Thus, all individuals with earnings at or greater than \$120,000 were excluded. Exclusion of these observations results in downward biased coefficients on the variables that are correlated with top-coded incomes (e.g., education, province of residence, age (as a proxy for experience)). Since proportionately fewer individuals of Aboriginal origins are at the top-coded level of income, our estimates will tend to underestimate the earnings differentials between Whites and Aboriginals, although this bias is likely to be modest given the small number of individuals dropped from the sample.
5. Net family income was calculated by subtracting individual wage and salary income from census family income. Since the former was

continuous, while the latter was categorical (e.g., \$10,000 to \$14,999), the mid-point of each category was used as actual family income. In the few cases where net family income was calculated to be negative (about 1 per cent of the cases), the individual was dropped from the sample.

6. Aboriginal groups are from the variable ABETHNCP in the PUMF. This is a variable derived by Statistics Canada based on the answers to questions about ethnic origin. For example, if an individual claimed only an Inuit ethnic background, he would be considered all Aboriginal. Another individual with Inuit and English backgrounds would be considered to have some Aboriginal background. Another census question (used for the first time in 1996) asks respondents to self-identify in regards to Aboriginal background (i.e., the variable ABSRP). For unknown reasons, this results in more individuals claiming both all Aboriginal origin and no Aboriginal origin. Almost no respondents claimed mixed Aboriginal background. The results using this definition differed and will be discussed below, but generally it is the first definition that will be used to ensure comparability with earlier studies.
7. In some cases, the sample will further be limited to include only full-time and full-year workers (i.e., those workers who worked at least 48 mostly full-time weeks in 1995). In this case, the numbers of non-Aboriginal males falls to 65,945 and the number of Aboriginal males falls to 1,857. For females, these respective numbers decline to 46,109 and 1,487.
8. Full-year workers are those who claimed to have worked 48 or more weeks in 1995 (inclusive of weeks of paid vacation, training, and medical leave) and full-time workers are those who worked "mainly" full-time (30 or more hours per week).
9. We address this censoring of top-coded earnings below when we estimate an earnings model using Tobit analysis.
10. Statistics Canada warns against using data from the 1996 census in comparisons with earlier censuses. This is largely due to the fact that the 1996 Census included a new coding of the question on ethnic origins (the variable ETHNICRP) which included a greater variety of response options. This could potentially influence inter-census comparisons. Our analysis, however, as well as the earlier research cited uses the Aboriginal ethnic variable (ABETHNCP) which appears to be more consistent across censuses. Of larger concern to us is the fact that undercoverage in the 1996 Census was considerably higher among Aboriginals since an enumeration was not completed on 77 Indian reserves which resulted in an undercount of about 44,000

individuals (Statistics Canada, 1998). It seems highly unlikely that this undercount is a representative subsample.

11. George and Kuhn also perform these tests and do find support for pooling the Aboriginal subsamples and including a dummy for some Aboriginal origins. Although our Chow tests suggested that these subsamples should not be pooled, there were very few statistically significant differences in coefficient values across estimated equations, and most of these were the result of provincial dummy coefficient estimates (which were likely the result of small numbers in each cell). We also pooled the Aboriginal population and including dummy for some Aboriginal origins (a la George and Kuhn). This did not markedly change the results. See Table 7 along with the related discussion in the text.
12. The results of these probit estimations are presented in the appendix (Tables A1m and A1f).
13. In the first case, we ask the question, "How would Aboriginal earnings be changed if Aboriginals had the same rate of return to attributes as non-Aboriginals?" In the second case, the question is, "How would non-Aboriginal earnings be changed if they had the same rate of return to attributes as Aboriginals?"
14. Tables 4 are used for the wage decompositions with no selectivity correction, while the results for selectivity correction use the results from Tables 5. In the former case, only full-time and full-year individuals are included, while in the latter case, individuals with less than full-time and full-year employment (including those individuals who are not in the labour force) are also included as long as they meet the other criteria outlined above. Since the wage and salary distribution is right censored (at \$120,000 for males from the Atlantic provinces and all females and at \$200,000 for males in all other provinces), Tobit regressions without corrections for selectivity bias were also used which took into account this censoring. This increased the rent differential modestly in all cases (by a maximum of about 2 percentage points). This was expected since the censoring affected mainly non-Aboriginals and thus the decompositions using OLS, which does not take into account this censoring, slightly underestimate the actual rent differential.
15. The non-Aboriginal wage premium is calculated as $e^x - 1$ where x is the log difference between non-Aboriginal and Aboriginal earnings. Thus, the total non-Aboriginal wage premium in percentage terms (from the top left of Table 6) is calculated as $e^{.1375} - 1 = 14.7$ per cent.
16. The decompositions were also done using controls for occupation and industry, with the results robust to this specification. In addi-

tion, they were carried out using the entire sample (i.e., including all employees, not just full-time and full-year employees) with variables added for weeks worked and part-time status. As expected, the total log wage differential increased dramatically in all cases, as did the rent differential, suggestive of the difficulties of Aboriginals in attaining this type of employment. Finally, the self-reporting Aboriginal variable (ABSRP) was used as an alternative definition of Aboriginal status. This decreased the total and rent differentials for both males and females. This is an interesting result and worthy of further investigation, but clearly beyond the scope of this paper.

17. George and Kuhn, as well as de Silva, also have a negative selectivity bias for both males and females. George and Kuhn point out (and this is reflected in the differences in our results) that the selectivity probit equations are sensitive to specification and thus the results must be interpreted with caution. This likely explains (a large part of) the divergence of our results with those of these other studies.
18. See Pendakur and Pendakur (2002) for discussion of this issue.
19. Pendakur and Pendakur (1998, Table 2) estimate equations almost identical to ours, but estimate separate equations for individuals in CMAs and non-CMAs (whereas we aggregate these into one equation and use a CMA dummy variable). They also use the more restrictive category of British-origin, Canadian-born individuals whereas we use Canadian-born, non-visible minorities. As a result, their estimates of the Aboriginal earnings differential for males residing in CMAs (non-CMAs) is -12.5% (-18.8%). For females, the corresponding numbers are -6.8% and -8.9% . These latter results reflect, at least in part, the heterogeneity of non-immigrant groups.
20. Pendakur and Pendakur (1998) similarly find almost identical results using both the linear OLS specification with dummy variables for various minority groups, and the more computationally complex decompositions.

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