

Topics in Canadian Aboriginal Earnings, Employment and Education: An Empirical Analysis

by

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Abstract

This dissertation is divided into three main components that each relate to the socioeconomic wellbeing of Aboriginal peoples in the Canadian labour market. Specifically, using data from the master file of the Canadian census for the years 1996, 2001 and 2006, the first section examines the wage differential for various Aboriginal and non-Aboriginal groups, including a comparison of those living on-and-off-reserves. The study finds that, while a sizeable wage gap between Aboriginal and non-Aboriginal persons still exists, this disparity has narrowed over the three census periods for those living off-reserve. The Aboriginal-non-Aboriginal wage differential is largest among the on-reserve population and this gap has remained relatively constant over the three census periods considered in the study. The second study in the dissertation uses data from the master file of the Canadian Labour Force Survey for 2008 and 2009 to estimate the probability that an individual is a labour force participant, and, conditional on labour force participation, the probability that a respondent is unemployed, comparing several Aboriginal and non-Aboriginal groups. The results reveal that Aboriginal men and women have lower rates of labour force participation and higher rates of unemployment in both periods as compared to their non-Aboriginal counterparts.

Aboriginal peoples were also disproportionately burdened by a slowdown in economic activity as measured by a change in the probability of unemployment moving from 2008 to 2009, as compared to non-Aboriginal people, who experienced a smaller increase in the probability of unemployment moving from a period of positive to negative economic growth. Finally, the third study examines the probability of high school dropout comparing Aboriginal peoples living on-and-off-reserve using data from the master file of the Aboriginal Peoples Survey for 2001. The findings reveal dramatically higher rates of dropout among Aboriginal people living on-reserve as compared to those living off-reserve. Limitations of all three studies as well as some possible directions of future research related to similar issues concerning Canada's Aboriginal population are discussed in the concluding chapter of the dissertation.

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Chapter 1

Introduction

The focus of this dissertation is on the behaviour and relative success of Aboriginal people in the Canadian labour market. The paper is comprised of three unique and independent studies all relating to the aforementioned theme. An additional unifying thread connecting the three studies is that each paper emphasizes the importance of research focused on Aboriginal peoples to public policy discourse in Canada. The purpose of this introductory chapter is to provide a brief overview of each of the three studies that comprise the dissertation. This chapter will also highlight some of the important definitional issues relevant to research focused on Aboriginal peoples in Canada that will hopefully better clarify how the population and various subgroups are defined throughout the paper.

The first study uses data from the master file of the Canadian census for the years 1996, 2001 and 2006 to estimate the Aboriginal-non-Aboriginal wage differential for a number of different Aboriginal groups living both on-and-off-reserves. The paper then decomposes the various wage differentials using the well-known Oaxaca (1973) decomposition technique into an ‘explained’ (endowments) portion and an ‘unexplained’ (coefficients) portion. The explained portion is attributable to observable characteristics while the unexplained portion is attributable to the returns to the endowment characteristics. The results of the Oaxaca decomposition are subsequently further sub-decomposed (Jann, 2008) to reveal the individual contribution of each variable in the model to the endowments and the coefficients portions of the wage differential. Finally, quantile regressions using the

Recentered Influence Functions (Firpo et al., 2007, 2009) are employed to determine where on the earnings distribution the Aboriginal-non-Aboriginal wage gap is the largest.

The results of the first study suggest that Aboriginal people continue to experience a persistent, sizeable wage differential as compared to their non-Aboriginal counterparts. While this gap has improved over the last decade for some of the Aboriginal groups living off-reserves, the wage disparity experienced by individuals living on-reserves is the largest of all the Aboriginal groups in the study and has remained relatively constant over the three census periods. Differences in age, education and occupational type were among the most salient variables contributing to the explained portion of the earnings gap between the various Aboriginal and non-Aboriginal groups. The results of the Recentered Influence Functions revealed that the wage gap between Aboriginals and non-Aboriginals is largest at the lowest tenth percentile of the earnings distribution for both males and females.

Using data from the master file of the Canadian Labour Force Survey for 2008 and 2009 and a series of logistic regression models, the second study estimates the probability that an individual is first, a labour force participant and, second, conditional on labour force participation, that he/she is unemployed, for a number of Aboriginal and non-Aboriginal groups. The study employs an extension of the Oaxaca decomposition for non-linear models (Fairlie, 1999, 2003) to decompose the differences in the probabilities of labour force participation and unemployment between Aboriginal and non-Aboriginal persons into an 'explained' and an 'unexplained' portion similar to what was described above in the first paper. The study investigates the question of whether Aboriginal persons are more likely than non-Aboriginal persons to be 'discouraged workers' or work 'involuntary in part-time jobs' because they are unable to obtain more desirable full-time opportunities.

The results of the second study indicate that the probability of labour force participation among Aboriginal Canadians is lower than that of non-Aboriginal Canadians, while the probability of unemployment is higher among Aboriginal peoples as compared to their non-Aboriginal counterparts. The period from 2008-2009 captures a change in economic activity in Canada (Zietsma, 2010), which revealed that Aboriginal Canadians were disproportionately burdened by the decline in economic growth as evidenced by relatively larger increases in the probability of unemployment moving from 2008 to 2009 for all Aboriginal groups as compared to non-Aboriginal males and females. The study also found that, all else being equal, Aboriginal identity increased the probability that an individual was a 'discouraged worker' for both males and females in 2008 and 2009. The effect of Aboriginal identity on the probability of involuntary part-time status was statistically significant only for males in 2009.

Finally, the third study employs a similar methodological framework as described in the second study to estimate the probability of being a high school dropout comparing Aboriginal people living on-and-off-reserves using data from the 2001 Aboriginal Peoples Survey (APS). The findings of this study are consistent with the well-documented reality that secondary school dropout rates on-reserves are dramatically higher than those among Aboriginal persons living off-reserves. A limitation of this study is that the APS only samples Aboriginal peoples, making comparisons with non-Aboriginals impossible using this particular dataset. The APS is, however, a post-censal survey meaning that estimates of the dropout rate for the non-Aboriginal population or the national average from the appropriate census year, in this case 2001, would serve as a suitable benchmark. Using data from the 2001 Census, Mendelson (2004); for example, finds that in 2001, 48 percent of the

Aboriginal population did not possess a high-school diploma, as compared with 31 percent of the non-Aboriginal population. The present study finds the dropout rate among Aboriginals living off-reserve was 46 percent for males and 40 percent for females. Among the on-reserve population the dropout rate was 72 percent and 65 percent for males and females respectively.

A fundamental starting point of any research project is to establish a clear definition of the study's population of interest. This is particularly crucial when conducting research focused on Aboriginal peoples as Statistics Canada acknowledges that "There is no single or 'correct' definition of Aboriginal populations. The choice of a definition depends on the purpose for which the information is being used" (Statistics Canada, 2007 p7). The Canadian Census is currently the most comprehensive source of data for Aboriginal peoples and it offers four different options for defining the Aboriginal population: by ancestry (ethnic origin), by Aboriginal self-reported identity, by Registered or Treaty Indian Status, or by Membership of an Indian Band or First Nation (Statistics Canada, 2007). In addition, the master file of the Census contains a variable to indicate whether or not a respondent lives on an Indian Reserve. The classification of Aboriginal identity can be further sub-divided into three main groups: North American Indian, Métis and Inuit. "Registered Indians (Status Indians) refer to those persons registered under the Indian Act, while Treaty Indians refer to people who are registered under the Indian Act and who belong to an Indian Band or First Nation that signed a treaty with the Crown" (Statistics Canada, 2007 p.9).

Various studies adopt differing definitions of the Aboriginal population, the emphasis throughout this dissertation is placed on self-reported Aboriginal identity; for example, whether or not the respondent identifies him/herself as an Aboriginal person, and, if so, with

which of the aforementioned Aboriginal groups (North American Indian, Métis, or Inuit). The reason for the definitional focus on Aboriginal identity is three-fold: First, to maintain consistency across the three studies that comprise the dissertation. All of the datasets used in each of the three papers contain at least one self-reported Aboriginal identity question, not all of them, however, ask the respondent about his/her ancestry, nor do they necessarily contain a variable denoting Registered Indian Status. (Specifically the Labour Force Survey is lacking these additional variables). Secondly, alternate definitions may focus on Registered Indian Status (i.e. Pendakur and Pendakur, 2011), but Status Indians are predominately North American Indians (i.e. not Métis or Inuit) and only about 50 percent of those living off-reserve who identify themselves as North American Indians have Registered Indian Status under the Indian Act (Statistics Canada, 2007b). Thus, a definition of the Aboriginal population based on legislation would exclude a number of Aboriginal persons from the sample. Finally, it has been suggested that the economic disparity between Aboriginal and non-Aboriginal peoples increases with ‘intensity of Aboriginal ethnicity’ (George and Kuhn, 1994). Indeed the findings of a number of studies in the wage differential literature, including the first paper in this dissertation, confirm this assertion. Therefore, to define the Aboriginal sample based solely on Aboriginal ancestry (origins) would risk masking the severity of the problem.

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Chapter 2

Canadian Aboriginal Wage Differentials over Time: 1996-2006

I. INTRODUCTION

Aboriginal peoples are among the most economically disadvantaged groups in Canada and, yet, despite this fact, there has been relatively little empirical research aimed at developing a better understanding of this reality. The present study attempts to reduce this void by examining Canadian Aboriginal wage differentials over three recent census periods, 1996, 2001 and 2006 respectively. Specifically, using data from the long-form of the Canadian census which is distributed to approximately 20 percent of households across the country, this paper seeks to address four primary questions: First, what is the current Aboriginal-non-Aboriginal wage differential for different Aboriginal groups living off-reserve? Second, what is the current wage disparity experienced by Aboriginal peoples living on-reserves as compared to non-Aboriginals? Third, how have the wage gaps for the aforementioned groups of Aboriginals, both those living on-and-off-reserves, changed from 1996 - 2006? And, finally, among the Aboriginal Identity population living both on-and-off-reserves, where along the earnings distribution is the Aboriginal non-Aboriginal wage differential the largest?

The results of this analysis suggest a persistent wage disadvantage experienced by Aboriginal males and females in all three time periods under consideration. As of 2006, the most broadly defined Aboriginal group in the study, off-reserve, self-reported Aboriginal identity, experience an earnings disadvantage relative to non-Aboriginal persons of approximately 16 percent for males and 14 percent for females respectively. The on-reserve

wage gap is much larger, at 50 percent for males and 35 percent for females. Notable gains in the proportion of individuals having completed high school and/or some post secondary education in a number of the Aboriginal groups considered in this study have resulted in somewhat modest improvements in the narrowing of the Aboriginal-non-Aboriginal wage differential over time from 1996 to 2006. Finally, consistent with the results of Pendakur and Pendakur (2007, 2011), this study finds the largest wage differentials for males occur at both the lowest and highest ends of the earnings distribution. For females, the wage disparity is most pronounced at the lowest percentiles of the earnings function.

The present study will begin by reviewing the small body of existing literature to examine the Aboriginal-non-Aboriginal wage differential with varying model specifications and datasets. In order to provide a realistic platform for the interpretation of the results of this study, the paper will provide a detailed discussion of the preferred methodology employed in the analysis, the attributes of the datasets used in the study and highlight some of the specific challenges inherent in working with data on Aboriginal peoples. Following the presentation of the findings, the study will conclude by discussing the potential implications of this research for policy makers concerned with Aboriginal socioeconomic issues.

II. REVIEW OF LITERATURE

As noted, there are relatively few empirical studies focused on the economic attributes of Aboriginal Canadians, aside from a number of reports, which not without merit, provide predominately a descriptive representation of Canada's Aboriginal population. Appendix table 1.0 presents a very brief summary of the regression adjusted or net

Aboriginal-non-Aboriginal wage differentials in Canada after controlling for the effect of other determinants of wages. Results presented in the table are the coefficients on an Aboriginal dummy variable in a conventional log wage equation, before adjusting for possible selection bias into full-time, full-year employment since not all studies correct for sample selection, with the exception of Hum and Simpson (1998) who do not report uncorrected results.

The results suggest a persistent earnings disadvantage experienced by Aboriginal peoples ranging in magnitude from nearly 3 percent to more than 50 percent depending on the year, the dataset used in the analysis and the specifications of the model. The variation in choice of dataset and methodology employed in the aforementioned literature, make it impossible to observe how the Aboriginal-non-Aboriginal wage differential has changed over time by comparing results across different studies. Therefore, one of the primary aims of this study is to employ a consistent methodology using three periods of Census data; 1996, 2001 and 2006, to illustrate how the earnings disparity experienced by Aboriginal Canadians has changed over the last decade. Furthermore, the present study will provide estimates of the wage differential experienced by Aboriginal persons living on reserve, a feature not possible with the use of the public version of the Census or the Survey of Labour and Income Dynamics as used in all of the other studies cited here, with the exception of Pendakur and Pendakur (2002, 2007, 2011).

The methodology adopted in this paper largely follows that of George and Kuhn (1994), which provides a comprehensive examination of the Aboriginal-non-Aboriginal wage differential using data from the 1986 public use micro file of the Canadian census. The authors estimate separate earnings equations for Aboriginal males and females as well as

non-Aboriginal males and females and subsequently decompose the respective wage gaps into two parts, a portion that is attributable to observable, wage determining characteristics, or endowments, and a portion attributable to differences in the returns to endowments, using the Oaxaca (1973) decomposition technique common in the wage differential literature. George and Kuhn also acknowledge and adjust for the possibility of sample selection bias into both the full-time-full-year sample as well as the small group of Aboriginal persons living on-reserves.¹ The public use versions of census data do not explicitly distinguish between on-and-off-reserve statuses; however, George and Kuhn derived this variable using a methodology proposed by Wright (1993), whereby census variables for household type, which denotes whether the respondent lives in a collective dwelling, and household tenure, which includes a category for 'band housing,' are combined allowing one to deduce if the respondent lives on a reserve. Note that modifications have been made to later census years to make this reliable derivation of an on-off-reserve indicator impossible. Also important, is the fact that the authors distinguish individuals reporting solely Aboriginal origins from those reporting only some Aboriginal ancestry. The results of George and Kuhn's study suggest that the earnings gap between Aboriginals and non-Aboriginals is significantly larger for those identifying themselves as having only Aboriginal origins, with a gross wage differential of 18.1 percent for solely Aboriginal males and 10.8 percent for solely Aboriginal females (George & Kuhn, 1994). The disadvantage experienced by individuals indicating some Aboriginal ancestry, and who live off-reserve, is an 11.6 percent gap for

¹ As an instrument to determine the selection into full-time-full-year work the authors use total family income less the individual's income from wages and salaries as well as two variables denoting the presence of children in the female regressions. In the models that correct for selection into the on-reserve sample, the authors use a variable to indicate the first language an individual learns and still understands.

Aboriginal males and a 6.5 percent gap for Aboriginal females. The authors, acknowledging the potential problems arising from the under-enumeration of several reserves and northern communities, estimate an additional earnings disadvantage for living on-reserve of 14 percent for males and 9 percent for females. George and Kuhn note that “no individuals reporting multiple ethnic origins live on-reserves, thus confounding the effects of degree of Aboriginal identification with the reserve effect itself” (George & Kuhn, 1994). The results of the Oaxaca decomposition reveal that approximately 50 percent of the wage gap between Aboriginals and non-Aboriginals can be explained by differences in endowments between the two groups; of particular importance in the lower level of educational attainments among Native Canadians (George & Kuhn, 1994).

Hum and Simpson (1999) study the wage differentials for a number of visible minority groups in Canada, one of which is Aboriginal persons. The authors estimate the effect of self-reported Aboriginal identity on earnings from wages and salaries. They use data from the 1994 panel of the Survey of Labour and Income Dynamics (SLID), which excludes individuals living on-reserves and in the Yukon and Northwest Territories. As in a number of studies described here, Hum and Simpson test for the possibility of sample selection bias and find a small, but statistically significant negative selection effect into full-time-full-year work.² The intuitive argument is that since it is often difficult to find steady, permanent employment, those who are able to obtain this type of work are in some unobservable way more ‘skilled’ or ‘able’ than others. The negative coefficient, then, would suggest the opposite relationship, that the less ‘skilled’ or less ‘able’ individuals are the ones

² Hum and Simpson use variables denoting family size to correct for selection into full-time-full-year work.

who obtain full-time-full-year employment.³ Given that so much of the integrity of the selection correction depends on finding selection instruments that are unrelated to an individual's earnings, this unexpected result must be read with caution. The authors also include control variables for occupational level in their models, a feature afforded by the richness of the information contained in the SLID. While these variables certainly add explanatory power to the model, there is the concern that variables for occupational level and/or occupational type may mask important channels through which wage inequity may be manifest, thereby potentially underestimating the 'true' earnings differential between groups.

Hum and Simpson find the effect of Aboriginal identity on earnings to be quite small and statistically insignificant, reporting a selection corrected 4.6 percent disadvantage for Aboriginal males and a selection corrected 2.4 percent disadvantage for Aboriginal females respectively (Hum & Simpson, 1999).⁴ Perhaps the lack of statistical significance reflects the possibility that estimates are based on relatively small samples of Aboriginals, the sample contained 129 Aboriginal males and 160 Aboriginal females, or 2.06 percent and 2.29 percent of the entire sample respectively. Since Hum and Simpson were considering the earnings disparity experienced by a number of different ethnic groups, and not solely focused on Aboriginal peoples, this was likely not of paramount concern as the samples of other ethnic groups in the SLID are quite large.

³ This interpretation of the meaning of the negative coefficient on the selection term is paraphrased from George and Kuhn, 1994.

⁴ Hum and Simpson only report results corrected for selection bias into the full-time-full-year sample, uncorrected results are not presented in their paper.

Both DeSilva (1999) and Mueller (2004) adopt a similar methodology to that used by George and Kuhn (1994) in their respective analyses. Both authors estimate the earnings disparity for individuals reporting multiple as well as single ethnic origins. Unlike George and Kuhn, however, neither DeSilva nor Mueller distinguish between Aboriginals living-on- and those living off-reserve, nor do they exclude part-time-part-year workers from the sample, instead controlling for weeks worked.

DeSilva finds quite a large unadjusted differential for men and women reporting multiple ethnic origins, one of which being Aboriginal, with an earnings gap of 35 percent for males and 22 percent for females. This differential is even larger for individuals who report having only Aboriginal origins, with men experiencing a 58 percent disadvantage and women experiencing a 41 percent disadvantage (DeSilva, 1999). DeSilva estimates Aboriginal-non-Aboriginal wage differentials, controlling for the effect of various wage-determining characteristics. For Aboriginal and non-Aboriginal males and females, he finds a statistically insignificant selection term suggesting selection bias is not a problem in this sample, noting however, that this result could be due to the choice of selection instruments and should be interpreted with caution. DeSilva's sample is taken from the 1991 Canadian Census Public Use Microdata File. A limitation of public use Census data from this particular year is that it contains a relatively small number of Aboriginal people since respondents to the Aboriginal People's Survey, a post censual dataset collected in 1991, are not included in the public versions of the census files to protect participants' confidentiality and anonymity.

Mueller (2004) found a much smaller wage differential between Aboriginals and non-Aboriginals at 16.5 percent for males and 19.3 percent for females reporting some Aboriginal

origins. Consistent with estimates by previous authors, Mueller finds a greater earnings gap for individuals reporting only Aboriginal origins at 45.8 percent for males and 29.6 percent for females. Mueller extends his analysis to include a quantile regression model aimed at locating the point on the earnings distribution where the Aboriginal-non-Aboriginal wage differential is the largest. He finds the wage gap at the lower end of the earnings function is the largest and tends to narrow towards the higher end of the wage distribution.

Pendakur and Pendakur (2007) test for the presence of ‘glass ceilings’ (greater wage disparity experienced at higher levels of earnings) among native-born ethnic minorities in Canada. Using data from the 2001 master file of the Canadian census, the authors estimate both OLS regressions and quantile regressions for the 20th, 50th, 80th and 90th percentiles on a conditional earnings distribution. Pendakur and Pendakur focus their analysis on three primary groups: Aboriginals, visible minorities and whites. Controlling for differences in observable characteristics, they find that Aboriginal women experience an adjusted earnings disadvantage of approximately 19 percent less than white women, and Aboriginal men face an unadjusted disparity of approximately 53 percent less than comparable white male workers (Pendakur & Pendakur, 2007). The wage differential for Aboriginal women is largest at the lower end (20th percentile) of the earnings distribution, while Aboriginal women in the 80th and 90th percentiles make nearly as much as their comparable white female counterparts. The situation for Aboriginal men is similar in that they experience the largest wage differentials at the bottom of the wage distribution, however, at no point do Aboriginal male earnings approach parity with those of white males. The smallest differential experienced by Aboriginal males is approximately 21 percent less than white males in the 90th percentile of the earnings distribution.

Most recently, in a subsequent analysis, Pendakur & Pendakur (2011) apply a similar methodology to examine the differences in wages as well as difference in the total incomes between Aboriginal and non-Aboriginal Canadians using the master files of the Canadian Census for the periods 1996, 2001 and 2006. The authors first estimate OLS regressions on the log of wages and then subsequently on the log of total income for a number of Aboriginal and non-Aboriginal groups. Quantile regressions are run to investigate the possible presence of ‘glass ceilings’ and ‘sticky floors’ on data from the 2001 Census. Considering different definitions of ‘Aboriginal Identity,’ the study reveals that Aboriginals who are Registered Indians have the largest earnings differential (among those living off-reserves), with Registered males living off-reserve earning 23 percent less than non-Aboriginal males and Registered females living off-Reserve earning 12 percent less than non-Aboriginal females in 2006. The wage gap experienced by those with self-reported Aboriginal identity experience a smaller earnings differential, while those who report Aboriginal ancestry, but are not Registered Indians and do not identify themselves as Aboriginal persons face the smallest wage disparity of all the Aboriginal classifications with males and females earning just 7 percent less than non-Aboriginals in 2006 (Pendakur & Pendakur, 2011). These results once again demonstrate the relationship between ‘degrees of Aboriginal identity’ and earnings differentials suggested by George and Kuhn (1994). Consistent with the results of previous studies, the wage differential experienced by both males and females living on-reserves is largest, an earnings disadvantage of 56 percent and 15 percent for males and females respectively. Somewhat encouraging, however, is the fact that the authors observe a narrowing of the gap in overall earnings for the various Aboriginal identity groups living off-reserve from 1995 to 2005, there was little change in the total income differentials of the

Aboriginal origin-only groups (Pendakur & Pendakur, 2011). Finally, the results of the quantile regressions for 2001 suggest that the wage differential experienced by Aboriginals is largest at the lower end, in this case, the 20th percentile of the earnings distribution, a result that is more pronounced for males as opposed to females depending upon the specific Aboriginal group under consideration. For example, estimates of the wage gap at the 10th percentile for Aboriginal males range from 12 to 64 percent, while the range for Aboriginal women in the 10th percentile is 0 to 36 percent (Pendakur & Pendakur, 2011).

While Pendakur and Pendakur (2011) offer a comprehensive analysis of the changing nature of Aboriginal wage differentials in Canada from 1995 through to 2005, addressing a number of the issues that are also covered here, there are a few key differences between the aforementioned and the present study. Firstly, the present study focuses on self-reported Aboriginal identity and Aboriginal ancestry to define the various Aboriginal groups used in the analysis, rather than the legal definition of Registered Indian Status, as legislative changes may have had a large influence over this variable across the three census periods. The present study focuses only on the difference in earnings from wages and salaries and does not examine differences in total income between Aboriginal and non-Aboriginal peoples, estimates which are then decomposed and corrected for possible selection bias. The most recent Pendakur and Pendakur (2011) study does not correct for possible sample selection bias into full-time employment, nor do the authors decompose the earnings differentials into explained and unexplained components. Finally, while both studies examine the wage differential experienced by Aboriginal peoples at various points on the earnings distribution, Pendakur and Pendakur (2011) estimate this only for the year 2001, while the present study uses all three census periods. Pendakur and Pendakur (2011) employ

a conditional quantile regression methodology; however, the present study makes use of re-centered influence functions (RIF) (Firpo et al., 2007), which are unconditional regressions estimated at various points on the earnings distribution. A more detailed discussion of the RIF regression procedure is given in the methodology section of the paper.

A number of the studies described in table 1.0, specifically Baker and Benjamin (1997), Pendakur and Pendakur (1998, 2002) and Hum and Simpson (1999), estimate Aboriginal earnings differentials as one part of a larger analysis focusing on the trends in earnings inequality experienced by various ethnic minority groups. The results displayed in table 1.0 are the estimates of the uncorrected wage gap⁵ between Aboriginals and non-Aboriginals using the broadest classification of self-reported Aboriginal ethnicity. In studies that distinguished between ‘single’ and ‘multiple’ Aboriginal origins, results reported in the table reflect those for individuals reporting multiple ethnic origins, one of which being an Aboriginal group. The wide variations in the estimates are striking, even in cases where the same data set and/or year is used. In particular, the Pendakur and Pendakur (2002) study, which examines the Aboriginal-non-Aboriginal wage differential for several time periods, finds very large disparities in all cases for both Aboriginal males and females. They use the master file of the Canadian Census and do not explicitly differentiate between individuals working part-time and those who work full-time, nor do they explicitly exclude persons living on Indian reserves or in the Yukon and North West Territories - important characteristics that likely contribute to the magnitude of their findings. Given the differences in methodology, datasets and defining characteristics of the Aboriginal

⁵ With the exception of Hum and Simpson (1999) who only report earnings differentials corrected for selection bias.

population adopted by the various studies reviewed here, it is quite difficult to observe with certainty any distinct trend in the Aboriginal-non-Aboriginal wage differential over time. The present study will address this issue by estimating the same model with consistent parameters on the three most recent Census periods using data obtained from the master files of the Canadian Census.

III. Data and Descriptive Statistics

Data for this study is taken from the master file of the Canadian census for the years 1996, 2001 and 2006. The census master files offer several important advantages over the public use files. Firstly, the master files contain a sample that is roughly equal to 20 percent of the Canadian population as compared to the 3 percent sample contained in the public use data. Second, the master files contain an explicit variable denoting on-off reserve status for the Aboriginal population. Third, the master files enable comparisons to be made among various Aboriginal groups. This last point is particularly important in that there are substantial differences in the sample sizes of those who report Aboriginal origins and those who identify themselves as Aboriginal persons. The detailed categorization of Aboriginal groups, North American Indian, Métis and Inuit, available in the master files enables clearer distinctions to be made among Aboriginal subgroups.

The way in which the Aboriginal population and subsequent sub-populations are defined is an important issue for any quantitative research involving Aboriginal peoples. Traditionally, Aboriginal groups could be classified by self-reported Aboriginal identity and/or self-reported Aboriginal origins. The Aboriginal origin classification was further subdivided into single and multiple origins, where single origins referred to individuals who

report having only Aboriginal ancestry and multiple origins referred to individuals who report a number of ethnic origins, at least one of which is Aboriginal. This is the classification method used by George and Kuhn (1994), for example. The 1996 census marked a change in the emphasis on ‘origins’ as the primary method of defining the Aboriginal sample in favour of focusing on self-reported Aboriginal identity (Stat Can, 2007). As Pendakur and Pendakur (2011) point out in their most recent paper, there are now three ways to define the Aboriginal sample in Canadian census data: by origin, by self-reported identity or by Registered Indian Status under the Indian Act. The third, a legal definition of an Aboriginal person, is somewhat limiting in that Indian Status primarily pertains to the North American Indians, thus largely excluding the majority of the Métis and Inuit populations, and only about 50 percent of the total North American Indian population who have formal Registered Indian Status. Since earlier studies have found sizeable differences in the wage gap experienced by individuals who report Aboriginal ancestry versus those who presently identify themselves as Aboriginal persons, the present study retains both classifications: those who report Aboriginal origins, but do not identify themselves as an Aboriginal person (ABORIG) and those who currently identify themselves as Aboriginal persons (ABIDENTITY). The broad group of self-identifying Aboriginal persons living off-reserve is further sub-divided into those who identify as Métis (METIS), those who identify as Inuit (INUIT), and those who identify as North American Indian (NAINDIAN). The on-reserve sample (RESERVE) is defined as those individuals who identify as Aboriginal and live on a legal reserve as defined by Indian Northern Affairs Canada in the reference year.⁶ Acknowledging that the Aboriginal population is especially

⁶ The legal definition of a Reserve is used for consistency in comparing census periods over time, however, it is

sensitive to changes in enumeration, particularly for those living on-reserves and in Northern communities, the aforementioned groups will allow for the most reliable inter-temporal comparisons possible given this limitation in the data.

Interestingly, in all three census periods there is a sizable group of individuals who live off-reserve and identify themselves as Aboriginal persons and yet do not report Aboriginal origins (ABNOAN). Though not mutually exclusive of the other off-reserve categories (with the exception of course of the origin-only category), this seventh category was added to the analysis to examine if the wage differential for this group is markedly different from that experienced by the entire Aboriginal Identity group (most of whom report having at least one Aboriginal ancestor) and/or those who report Aboriginal origins, but do not presently identify themselves as Aboriginal persons.

The sample includes individuals between the ages of 15 and 65 years who work full-time-full-year and report positive earnings from wages and salaries. For the purposes of this analysis, full-time-full-year is defined as someone who works mainly full-time weeks, at least 48 weeks per year in the reference year and at least 35 hours per week. The sample is further restricted to exclude self-employed persons and students. It bears mention that the way in which an individual's attendance at school was measured in census data had changed over the three periods used in this analysis. The 2006 census data no longer distinguishes whether an individual attended school part-time or full-time as can be seen in the 1996 and

important to note that there have been some changes to this definition over the three periods considered in this study. Statistics Canada has provided an adjustment for this in the 2006 data which is discussed in subsequent sections of the paper.

2001 datasets. Rather, the most recent census simply flags a respondent '1' if he/she attended any type of formal schooling in the reference year. Therefore, to keep the sample criterion as consistent as possible across all three periods, individuals who attended any type of formal schooling in the reference year were excluded from the sample. The analysis covers individuals from across Canada including those living in the Yukon and Northwest Territories; however, geographic control variables are added to the models to account for variation in wages attributable to differences in provincial economic conditions. As noted, Aboriginal persons living on-reserves are also included in this analysis.

The total number of individuals in this study's full-time-full-year (FTFY) sample in 2006 is approximately 1,450,110 males and females across all categories. The reason that the sample sizes are approximate is that in order to ensure the strict confidentiality of all responses, Statistics Canada requires that samples used from census data be rounded to the nearest multiple of five. The Aboriginal off-reserve sample (Aboriginal Identity + Aboriginal Origin) represents approximately 4.4% of the total FTFY population in this study and the on-reserve sample represents approximately 2.0% of the total FTFY population in this study. Note that Aboriginal Identity group refers to anyone who identifies themselves as an Aboriginal person and lives off-reserve. As such, this category includes the subgroups of Métis, Inuit, North American Indian and Aboriginal Identity without Aboriginal origins described above. Also included in the Aboriginal Identity classification are individuals who identify with more than one Aboriginal group (i.e. Inuit and Métis) as well as respondents who identify themselves as Aboriginal persons, but do not identify with any of the three Aboriginal groups listed above. These groups were too small in size to be reliably analyzed individually over the three census periods.

The first two rows of Table 2-2 present the mean nominal earnings from wages and salaries for 2005 for each of the groups in the study followed by the mean age of each group shown in the third row. The non-Aboriginal population is slightly older than the Aboriginal population in this study by approximately 2 years. Non-Aboriginal males reach maximum earnings at around 39 years of age, while Aboriginal Identity males do not maximize their earnings until about 41 years of age. Looking at the specific Aboriginal groups, maximum earnings occur earliest for Inuit males at approximately 32 years of age, while North American Indian Males do not reach maximum earnings from wages and salaries until about 46 years of age. Aboriginal males living on-reserve reach maximum earnings by the age of 36 years. The inflection points of the female earnings functions are slightly different. Non-Aboriginal and Aboriginal females reach maximum earnings at approximately 35 and 31 years of age respectively. Opposite to the males, North American Indian women living off-reserve are first to reach maximum earnings at the young age of 27 years, while Inuit women do not maximize their earnings until they are approximately 48 years old. Aboriginal females living on-reserve reach maximum earnings by the age of 37.

Education is among the most important observable wage determining characteristics. Table 2-3 details the current levels of educational attainment of the FTFY sample among the various Aboriginal groups as compared to their non-Aboriginal counterparts in 2006. Since the education credentials of males and females sometimes differ quite markedly, the educational attainments of males and females are presented separately. The education variables in the far left hand column of the table denote an individual's highest level of education in the reference year, high school grad; for example, would be someone whose highest level of education is a high school diploma or equivalent. For reporting purposes,

certain educational categories were collapsed. In particular, community college was combined with trade school (or trade certification) and the category 'grad school' refers to any formal educational attainment above a bachelor's degree.

The results in Table 2-3 highlight that both Aboriginal males and females lag behind their non-Aboriginal counterparts in most educational categories, with the interesting exception of college and trades school. It is apparent that Inuit are the least educated among the off-reserve populations, with rates of high school non-completion even lower than those living on reserve.

Figures 2-2 and 2-3 show the percentage change from 1996 to 2006 in the proportion of people with less than high school, high school graduates and bachelor's degrees in each group for the FTFY sample. Changes in census questions make the three categories of less than high school, high school graduation and bachelor's degree the standard benchmarks for consistent comparisons in educational attainment over time. From Fig. 2-2 it is apparent that both Inuit and on-reserve males have made substantial growth in increasing the proportion of people in their respective populations with high school diplomas, a growth rate that is far greater than the non-Aboriginal population. Similarly, the on-reserve and Métis male populations have made notable strides in increasing the proportion of bachelor's degree holders over the 10 year period in this analysis. With the exception of the on-reserve sample, all other males have shown a decline in the proportion of people with less than high school education. This suggests a growing disparity in educational attainment among males living on-reserves as compared to non-Aboriginals even among the FTFY sample. Fig. 2-3, which details the changes in educational attainments among females in various groups from 1996-2006, shows improvements across all categories, most notably with the increase in the proportion of on-reserve women to gain a bachelor's degree over the past 10 years. Despite the gains that Aboriginals have made in improving their levels of

education, Table 2-3 suggests that a large gap remains between the educational attainment of many Aboriginal groups; most notably Inuit males and on-reserve males and females, and non-Aboriginals, particularly with respect to post secondary education.

IV. METHODOLOGY

i. Simple Earnings Equations

As is common in the Literature, an ordinary-least-squares wage equation is estimated where the natural log of wages is regressed on various observable, wage determining characteristics.

$$\text{LnWages} = \alpha + X\beta + \varepsilon$$

Where X represents a vector of observable characteristics including: age, age-squared, education, marital status and mother tongue. Provincial dummy variables and a variable denoting residence in a census metropolitan area were used to control for various regional differences that may result simply from different labour market conditions across provinces and in cities as compared to rural communities. To account for the effect of premiums paid in certain higher earning sectors in the economy, models were run with and without controls for occupational type using the National Occupational Classification System (NOCS) 2006 and 2001 definitions. (The models presented here include controls for occupational type). All statistical analyses were carried out using STATA software.

The simple model described above has been used in the aforementioned literature in two ways to illustrate the difference between the wages paid to Aboriginals and those paid to non-Aboriginals. One method, employed in Pendakur and Pendakur (1998, 2002) as well as the Hum and Simpson (1999) is to include dummy variables for self-reported multi-

Aboriginal or single-Aboriginal origins and visible minority status. This methodology illustrates the consequence of being Aboriginal on wages while holding all other variables constant at their mean values. This parsimonious model has the obvious advantage of being able to show the magnitude and direction of the effect quite easily without any additional steps or computations. The current study also estimates two similar dummy variable models. The potential disadvantage to this model, however, is that it restricts the effects of each explanatory variable to be the same across both Aboriginal and non-Aboriginal groups. Consider, for example; the effect of education on earnings. It is plausible that a university degree may have a larger impact on the income of an Aboriginal person than it would have on a non-Aboriginal person, since there are relatively fewer Aboriginals (particularly males), with undergraduate degrees. The opposite may also be true, that a university education does not have as great a positive effect on the earnings of Aboriginals because there are some other unobservable characteristics influencing this relationship. As such, separate wage equations were also estimated for Aboriginal and non-Aboriginal persons so as to allow the explanatory variables to have different effects for each group.

ii. Detailed Decompositions of Earnings Differentials

In total seven different equations are estimated for each of the census periods under examination, with non-Aboriginal males and females as the reference group. The raw differential is then decomposed using the Oaxaca technique (Oaxaca, 1973), which has become conventional in these types of analyses. The model can be more formally written as:

$$\ln Wages_W = \alpha_w + \beta_w X_w + \varepsilon$$

$$\ln Wages_A = \alpha_A + \beta_A X_A + \varepsilon$$

The decomposition result is:

$$\ln Wages_w - \ln Wages_A = \beta_w (X_w - X_A) + (\beta_w - \beta_A) X_A$$

Where:

Subscripts 'w' refer to 'white' and 'a' refer to 'Aboriginal' respectively

$\beta_w (X_w - X_A)$ represents the '*Endowments*' portion of the gap

$(\beta_w - \beta_A) X_A$ represents the '*Returns to Endowments*' portion of the gap

The 'explained' or endowments portion of the gap refers to the proportion of the wage differential that is attributed to differences in observable characteristics between the two groups, while the 'unexplained' portion of the gap reflects the returns to those endowments. As it is written above, the decomposition is computed assuming that wages of whites are free from discrimination (positive or negative) and thus the only wage discrimination present in this context is directed towards the Aboriginals. It makes intuitive sense to assume that the disadvantaged group is necessarily the one to experience discrimination, should discrimination be present; however, a common criticism in the wage differential literature has been that it is impossible to conclude with certainty that one group is completely exempt from discriminatory treatment, thereby overstating the endowment effect and understating that of the returns component (i.e. Jann, 2008). A solution to this

problem is to use the coefficients from a pooled regression over both groups (Neumark, 1988; Oaxaca & Ransom, 1994; and Jann, 2008). The results presented in this paper use the pooled weights; however, decompositions were also computed using the ‘white’ and ‘Aboriginal’ weights. Due to the relatively small size of the Aboriginal sample as compared to the non-Aboriginal sample, there is very little difference in the explained versus unexplained proportions of the wage differential using the pooled weights as compared to the white weights. Using the Aboriginal weights, that is to assume that the pay structure of Aboriginal people is free from discrimination and non-Aboriginals are paid according to this configuration, a greater portion of the raw differential is attributable to observable characteristics than is the case when using either the ‘pooled’ or ‘white’ weights.

iii. Sample Selection Bias

Important to any examination of earnings differentials is the potential of selection bias into the sample of full-time-full-year work. This concern is typically dealt with using a well established Heckman correction procedure (Heckman, 1974). The concept of selection bias acknowledges the possibility that there are some unobservable, systematic characteristics (i.e. motivation, energy or aptitude) inherent to individuals who works full-time-full-year that are not necessarily embodied in individuals who do not belong to this group (George & Kuhn, 1994). This bias can be dealt with by estimating a first-stage probit equation using a variable that is believed to be related to the likelihood that an individual will work full-time-full-year, but is not related to that individual’s earnings, and then re-estimating the earnings equations incorporating the results of this probit model - the inverse mills ratio - as an independent variable in the original wage equation

Following George and Kuhn (1994), an instrument was derived that uses the individual respondent's income from wages and salaries as a proportion of census family income. A variable denoting the presence of children less than fourteen years of age in the home was added to the selection equations for females. Family income net an individual's income from wages and salaries offers, in theory, a measure of an individual's need to work and as such is an important factor in determining a respondent's labour force activity. If, for example, a respondent's wages represent only a small share of his/her family income, then his/her economic welfare is less dependent on their labour force participation as compared to someone whose income from wages and salaries represents a larger share of family income. The fact that family income (net an individual's income) is not an individual characteristic and thus assumed to be unrelated to those factors that determine an individual's earnings, make it an appropriate variable choice as a selection correction instrument. A variable denoting children ages 0 to 14 years in the home is added to the selection equations for females since it is well established that the presence of school age children has particularly important implications for the labour supply decisions of women. The differentials adjusted for selectivity bias are presented in the appendix section of the paper.

A second selection problem that bears mention is the selection from off-reserve to-on-reserve. It is likely that there are important unobservable socioeconomic and cultural characteristics that influence an individual's decision to remain or move to an Aboriginal reserve. It is also quite possible that some, if not all, of these same characteristics are also important factors in determining, directly or indirectly, an individual's earnings. If this is the case, then the selection bias inherent in the on-reserve sample makes it difficult to obtain a 'true' estimation of the earnings disparity between Aboriginal people living on-and-off-

reserve. The method for addressing this issue is the same Heckman correction procedure described above. The practical difficulty, however, is in finding an appropriate selection instrument; a variable that is correlated to an individual's decision to live on-reserve, but that is unrelated to the determination of that individual's wages. As a result the present analysis does not correct for the potential selection bias in the on-reserve sample, but raises the issue as important cautionary note to bear in mind when interpreting the uncorrected results for the on-off-reserve differential.

iv. Re-centered Influence Functions (RIF) and Decompositions

The purpose of this final section is to examine the changes in the Aboriginal-non-Aboriginal wage differential at different points along the wage distribution and to observe how these various differentials have changed over the three census periods. Specifically, we consider wages at the 10th, 25th, 50th, 75th and 90th percentiles. The methodology employed is the Recentered Influence Function (RIF) technique developed by Firpo et al. (2007). As described thoroughly in Chi and Li (2008); for example, the RIF method produces *unconditional* quantile estimates which allow one to observe the effect of a one unit change in an independent variable on a desired outcome for a population with heterogeneous characteristics. This is an important distinction from the commonly used *conditional* quantile regression that estimates the effect of a one unit change in an independent variable on a desired outcome for a sub-sample of a population with some shared characteristics (conditions) (Chi & Li, 2008). As noted, unconditional quantile regression is an integral part of the Recentered Influence Function methodology proposed by Firpo et al. (2007) that will be used in the paper. The particular advantage of unconditional quantile regression, as opposed to the more commonly used conditional quantile regression, is that it allows for one

to observe the impact of a marginal change in a variable of interest on the outcome - in this case, the log of wages – across the entire earnings function while holding constant the distribution of all other observable characteristics in the model (i.e. Chi & Li, 2008).

For each of the three census periods covered in the study (1996, 2001 and 2006) wage differentials are estimated at each of the five aforementioned percentiles for the Aboriginal Identity group only, non-Aboriginals being the reference group. As with the OLS regressions, separate models are estimated for males and females. According to the RIF method, differentials are decomposed into two components, a “wage composition” effect and a “wage structure” effect. The wage composition effect is analogous to the ‘endowments’ or ‘explained’ portion of the wage gap, while the wage structure effect is tantamount to the ‘coefficients’ or ‘returns to endowments’ portion of the gap in the traditional application of the Oaxaca decomposition described earlier in the paper (Firpo et al., 2007). The RIF procedure for decomposing this wage differential is two-fold: First, a counterfactual distribution is estimated using a reweighting process described by DiNardo et al (1996) whereby, in this case, Aboriginals are paid as though they received the equivalent returns to their endowments as their non-Aboriginal counterparts. Second, the wage composition and wage structure effects are further sub-decomposed to reveal the individual contribution of each observable characteristic to the differential (Firpo et al., 2007). The detailed RIF regression output for all groups at the median value of \ln wages can be found in the appendix.

V. RESULTS

i. Simple Earnings Equations

The results of the first set of pooled models for all persons living off-reserves displayed in appendix table 2-4 shows the effect of Aboriginal Identity to be an earnings disadvantage of 6.2 points for males and 6.4 points for females in 2006, holding all else constant. The results in the following appendix table 2-5 of the pooled models for all Aboriginal persons, both on-and-off reserves, indicate an on-reserve disparity of 26 points for males and 10.8 points for females in 2006, all else being equal.

The results of the simple OLS earnings equations for males and females are detailed in tables 2-6 and 2-7 at the end of the paper. The models shown here contain controls variables for occupational type based on the 2006 NOCS, note that the omitted reference category for the occupational classifications were NOCS 'A' a categorization denoting managerial-type jobs.

The results of the male regressions are displayed in table 2-6. With respect to the geographic variables, non-Aboriginal males enjoy an earnings advantage living in a city as opposed to a rural community, while the overall male Aboriginal identity population experience a statistically significant earnings disadvantage associated with living in a city. Interestingly, although only about one quarter of the on-reserve sample lives in a CMA, individuals on reserves located near larger urban centers experience a statistically significant earnings advantage as compared to those living in rural areas.

The returns to each successive higher education category are positive, increase with each higher level of educational attainment and are generally statistically significant across

all groups. The patterns of earnings premiums for successfully higher education levels are fairly similar across the different Aboriginal groups with some notable exceptions. Inuit males, for example, receive the highest returns to high school and college diplomas, while on-reserve males experience the greatest benefit from a bachelor's degree and off-reserve North American Indian males from a master's degree. The effects of the other control variables behave as predicted in the wage differential literature.

Turning briefly to the results of the OLS earnings regressions for females presented in table 2-7 unlike their male counterparts, Aboriginal Identity women do not experience an earnings disadvantage living in a city as opposed to a rural community. Interestingly, the relationship between marriage and earnings is negative for non-Aboriginal women, but Aboriginal women, both those living on-and-off-reserves, show an earnings advantage to being married as opposed to single and never married. Among all the female groups, Inuit women receive the greatest monetary benefit from a high school education, while the returns to a bachelor's degree are highest for women living on-reserves. Similar to the males, North American Indian females living off-reserve receive the highest returns to a master's degree relative to all other groups for that level of educational attainment. Note that the study does not control for major area of study which could greatly influence the returns to an investment in education especially at post-secondary and post graduate levels. An interesting area of future study might be to examine the differences in field of study between Aboriginals and non-Aboriginals who have pursued post secondary and post graduate degrees and track how these choices subsequently influenced the earnings and labour market experience of each respective group.

ii. Detailed Decompositions of Earnings Differentials

Tables 2-12 and 2-13 present the results of the Oaxaca detailed earnings decompositions for 2006. Among the most important wage determining characteristics that account for the largest share of the ‘explained’ or endowments portion of the gap are: age, education and occupational classification variables. Looking at the sub decomposition of the ‘unexplained’ portion of the wage differential, in general, the education and occupational controls play an important role in understanding the returns to endowments component as well. Noteworthy is the fact that in all groups, under the unexplained portion of the wage gap, the constant or intercept terms are typically large and statistically significant. This would suggest that important group differences, perhaps many of which may be unobservable, between the various Aboriginal groups and non-Aboriginals exists which account for a large part of the unexplained portion of the wage differential between the groups.

Not surprisingly, both Aboriginal males and females living on-reserves experience the largest wage differentials relative to their non-Aboriginal counterparts, experiencing earnings disadvantages of approximately 50 and 34 percent respectively less than non-Aboriginals. Among males living off-reserves, North American Indians experience the second largest differential of about 21 percent, a gap similar to that of the ‘ABNOAN’ group. What is interesting, however, is that, among North American Indians (off-reserve) a larger proportion of the wage gap is attributable to endowments as compared to the ‘ABNOAN’ group where about two thirds of the wage differential is ‘unexplained.’ Inuit males experience a sizeable differential, but much of this is due to differences in observable characteristics. Consistent with previous studies, the results here suggest that Aboriginals

who report only Aboriginal origins, but do not identify themselves as Aboriginal persons, experience the smallest wage disparity. A similar pattern is captured in 2006 among females, with the exception of the Inuit women, who actually experience a small earnings advantage over their non-Aboriginal counterparts. For both males and females the most important observable characteristics contributing to the endowment portion of the differential are education, age (which includes both age and age-squared) and the collection of variables controlling for occupational type. What is most striking is that Inuit women have a slight earnings advantage of about 2.5 percent over non-Aboriginal women.

Aboriginal Canadians have faced a sizeable earnings differential in all three census periods under consideration in this study. Overall, both males and females in the broadly defined Aboriginal identity group have experienced a notable decline in the size of their respective wage differentials over the fifteen year period. The size of the wage differential for both males and females reporting only Aboriginal origins has increased slightly, while Métis men and women have enjoyed the most sizeable reduction in respective wage gaps over the three census periods considered in this study. Inuit males and females have also made notable improvements in closing the earnings gap, with Inuit females in particular experiencing an earnings advantage over their non-Aboriginal counterparts in 2006. The wage differential has remained roughly the same for North American males living off-reserve over all three periods, while North American females living off-reserve have seen a widening of the wage gap they experience from 1996 to 2001 followed by a small improvement from 2001 to 2006.

With respect to males and females living on-reserves, the wage disparity among the on-reserve population improved notably in 2001 only to worsen again by 2006. This result

must be interpreted with caution as the on-reserve sample is particularly sensitive to the issues of incomplete and under-enumeration as well as changes to the legal definition of 'reserve' over time. In response to these concerns, Statistics Canada introduced two adjustments to the 2006 census data. The first adjustment specifically addressed the fact that a change in the legal definition of 'reserve' between 2001 and 2006 meant that approximately 10,000 people (in the entire sample) were classified as on-reserve in 2001, but were not classified as on-reserve in 2006. Adjusting for this reality by returning these individuals to the on-reserve sample has the effect of narrowing the wage gap by approximately 3 percent for males and 2.5 percent for females respectively. The second adjustment is intended to make historical comparisons of Aboriginal people over time more accurate. It involved two parts: an adjustment for incomplete enumeration of reserves (only those reserves that participated in all three census periods, in this case, are included) as well as the adjustment noted above for changes to the legal definition of a 'reserve.' Overall, the effect of the second, two-part adjustment is quite minimal -- a narrowing of the wage gap for males by about 1 percent and less than 1 percent for females respectively.

iii. Sample Selection Bias

The following tables present the results of the Aboriginal-non-Aboriginal wage differentials after correcting for possible selection bias into the full-time-full-year sample. For illustrative purposes, tables 2-18 through 2-20 provide a summary of the selection corrected differentials for the various groups in the study. Following George and Kuhn (1994), the selection instrument used is census family income less the respondents' income from wages and salaries. We find, as one would expect, a positive selection effect for white males only. For all other groups, male and female, we find negative selection effects. These

are unexpected results. The logical expectation, as noted earlier in the paper, is for a positive selection into full-time-full-year as those individuals who are able to secure such employment possess some favorable unobservable characteristics which differentiate them from the rest of the population. This holds true, however, only for the non-Aboriginal males. After adjusting for the negative selection effects obtained here the resulting Aboriginal-non-Aboriginal wage differential suggest that, Aboriginals actually have a sizeable earnings advantage of their non-Aboriginal counterparts. This counterintuitive finding is consistent with the results obtained by several authors noted in the introductory paragraphs of this paper (George & Kuhn, 1994; DeSilva, 1999; Murray, 2005). George and Kuhn, for example, write that “most striking about the selection coefficients is the fact that, while generally insignificant, they are all negative, suggesting not positive but negative selection into market work among all groups. In contrast to the intuitive argument . . . the sample of full-time-full-year workers is estimated to be on average somewhat less able on dimensions that are unobservable . . . than the rest of the population” (George & Kuhn, 1994 p. 19).). The most likely explanation is that the selection results are unstable due to the difficulty in finding an appropriate selection instrument that affects selection into full-time-full-year employment, but is uncorrelated with the outcome of interest. For this reason, this study focuses primarily on the interpretation and discussion of the uncorrected results.

iv. Recentered Influence Functions

The final objective of this study is to examine how the magnitude of Aboriginal-non-Aboriginal wage differentials changed at different points on the earnings distribution. Looking first at males, for most groups wage disparity as given by the raw differential, is largest at the tails of the earnings distribution, the 10th and 90th percentiles. The exception is,

however, for males living on-reserve where the earnings differential at the 10th percentile is dramatically larger than at any other point on the distribution and there does not seem to be a widening of the gap as one moves to the upper end of the earnings function. Also, at the lower end, a smaller proportion of the wage differential is attributable to the ‘composition effect’ or ‘explained’ as compared to the case at the upper end of the earnings function where the majority of the disparity is attributable to differences in observable characteristics.

Turning to the females, we find the largest differential at the bottom 10th percentile of the earnings distribution and less variance in the magnitude of the wage gap as we move along the rest of the earnings function. Similar to the males, however, a greater portion of the wage can be explained by differences in endowments at higher percentiles on the female earnings distribution as well.

VI. CONCLUDING REMARKS

This paper has examined Aboriginal-non-Aboriginal wage differentials for a number of Aboriginal groups in three census periods: 1996, 2001 and 2006 respectively, using data from the long-form of the Canadian Census. The findings of this study are consistent with the previous authors who examine Native Canadian earnings differentials in that a significantly large wage disparity exists between Aboriginal males and females and their non-Aboriginal counterparts in all three periods with only modest improvements noted in 2006. The present study goes beyond the limitations inherent in the public use files to provide estimates of the wage differential experienced by various Aboriginal groups, as well as to differentiate between those who identify themselves as Aboriginal persons and those who simply report having Aboriginal origins. Inuit women by far have the smallest wage gap

in all three periods, even achieve a positive earnings premium as compared to non-Aboriginal females in 2006. North American Indian men living off-reserve have wage disparities similar in magnitude in all three periods, while Métis and Inuit men have made slight improvements over the fifteen years considered in this study. A significant portion of the Aboriginal-non-Aboriginal wage differential is attributed to differences in endowments of wage determining characteristics between the two groups. The wage differential experienced by both males and females living on-reserves appeared to have improved from 1996-2001 only to worsen from 2001-2006. Upon closer examination, however, using the adjustments provided in the 2006 data, we find that this apparent improvement was in large part due to changes in the legal definition of 'reserve' from 2001 to 2006. Taking this into account, the on-reserve differential remains relatively unchanged from 2001 to 2006. The fact that overall, the gains in narrowing the Aboriginal-non-Aboriginal wage gap over the three census periods covered in this study have been modest is in part reflective of the staggering difference in education levels between the two groups. Despite notable gains in educational attainment over the past decade or so, Aboriginal Canadians still lag dramatically behind the rest of the country in secondary and post-secondary education. And, as revealed in the detailed earnings decompositions, education is the single most important observable characteristics accounting for the largest portion of the wage differential attributable to endowments.

The present analysis, through the use of the census master files, has afforded an up-to-date and detailed examination of Canadian Aboriginal-non-Aboriginal wage differentials over the past decade. Notwithstanding, however, there are a number of limitations that bear reemphasis. Foremost are concerns over the representativeness of the Aboriginal sample

included in the census since a number of Indian reserves and northern communities refused to participate in the survey or were under enumerated. Although the 2006 Census data does offer a correction for this, which after taking this adjustment into account by looking at only those reserves that participated in all three census periods, makes little difference in the magnitude of the on-reserve differential, under-enumeration remains an important concern among the on-reserve population. Secondly, although the census is often the preferred dataset for analysis involving Aboriginal peoples since the sample sizes are so large, there is still, however, the issue of a relatively limited set of variables. More detailed datasets such as the Survey of Labour and Income Dynamics, for example, contain many more variables that might help to understand some of the important socio-cultural differences between the two groups, albeit at the cost of a significantly smaller, potentially less representative off-reserve sample. Finally, there are clearly two important sample selection considerations in the present study: selection into full-time-full-year work and selection into the on-reserve sample among Aboriginal people. Due to the difficulty of finding variables that affect the selection decision but that do not affect the wage outcome, the selection correction for selection into full-time-full-year work did not yield reliable results, a common finding in the literature, and the on-reserve selection effect could not be estimated at all.

Indeed examining additional variables to help explain a greater portion of the Aboriginal-non-Aboriginal wage differential is an important area in need of further examination. There are several suggestions that can be made in this vein. Many authors assert the presence of discrimination in the labour markets, both direct and systemic, as one possible explanation for the portion of the earnings gap attributable to the returns on endowments. A number of authors have examined the notion of social capital and its

potential influence on earnings (i.e. Crudeli, 2005; Gomez & Santor, 2001). One could posit that in certain cases belonging to an Aboriginal network may provide individuals with some benefit. Important cultural differences between the two groups may greatly influence an Aboriginal person's ability to fully assimilate into the mainstream society thereby affecting his/her employment prospects and subsequently his/her wages.

Having a detailed knowledge of the changing nature of the Aboriginal-non-Aboriginal wage differential over time is an important starting point for examining other key issues related to the economic welfare of Canada's growing Aboriginal population. The key question to emerge from this study is how to continue to improve the educational attainments of Aboriginal Canadians to bring them up to the level of their non-Aboriginal counterparts. An understanding of the observable characteristics which help to explain this disparity is important for policy makers seeking to develop strategies and implement initiatives geared towards improving the economic outcomes of Aboriginal Canadians living both on-and-off-reserves.

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VIII. Tables

Table 2-1 Aboriginal-Non Aboriginal Wage Differentials from Aboriginal Dummy Variable in Log Wage Equation: Summary of Literature

Study	Method	Sample	Data Set	Net Wage Differential (%)		
				Year	Men	Women
George & Kuhn (1994)	OLS, Heckman Selection, Oaxaca Decomposition	FTFY, living on-and-off-reserve, excludes Yukon and NWT	1986 Census PUST	1986	-11.6	-6.5
Baker & Benjamin (1997)	OLS, Oaxaca Decomposition	FTFY, from across Canada	1991 Census PUST	1991	-17.9	
Pendakur & Pendakur (1998)	OLS, Oaxaca Decomposition	Individuals ages 20-64 living in CMA's excluding Atlantic region	1991 Census PUST	1991	-12.5	-6.8
DeSilva (1999)	OLS, Heckman Selection, Oaxaca Decomposition	All employees, ages 15-64 years old excluding Yukon and NWT	1991 Census PUST	1991	-35.0	-22.0
Hum & Simpson (1999) ⁷	OLS, Heckman Selection	All employees, ages 15-64 years old, off-reserve, excluding Yukon and NWT	Survey of Labour and Income Dynamics	1994	-4.5	-2.4
Pendakur & Pendakur (2002)	OLS	Random sample from across Canada	Census Master File	1971	-48.0	-20.0
				1981	-37.0	-10.0
				1986	-44.0	-4.0

⁷ Results reported here are not corrected for selectivity bias as Hum and Simpson (1999) do not provide uncorrected estimates in their paper.

				1991	-48.0	-19.0
				1996	-57.0	-16.0
Mueller (2004)	OLS, Heckman Selection, Oaxaca Decomposition, Quantile regression	All employees, ages 15-64 years old, off-reserve, excluding Yukon and NWT	1996 Census PUST	1996	-16.5	-19.3
Murray (2005)	OLS, Heckman Selection, Oaxaca Decomposition, Quantile regression, Longitudinal Models	Individuals ages 15-64 years old, off-reserve, excluding Yukon and NWT	Survey of Labour and Income Dynamics	1993- 2001 Panel	-2.76	-3.89
Pendakur & Pendakur (2007)	OLS, Quantile Regression	Individuals ages 25-64 from across Canada with wages and salaries as their primary source of income	2001 Census Master File	2001	-53.0	-19.0
Pendakur & Pendakur (201)	OLS, Quantile Regression	All individuals older than 15 years of age, across Canada	1996, 2001 and 2006 Census Master File	2006 2001 1996	23.0 32.0 35.0	12.0 25.0 10.0

Figure 2-1 Representation of the Relationships between Aboriginal and Non-Aboriginal Groups in the Study

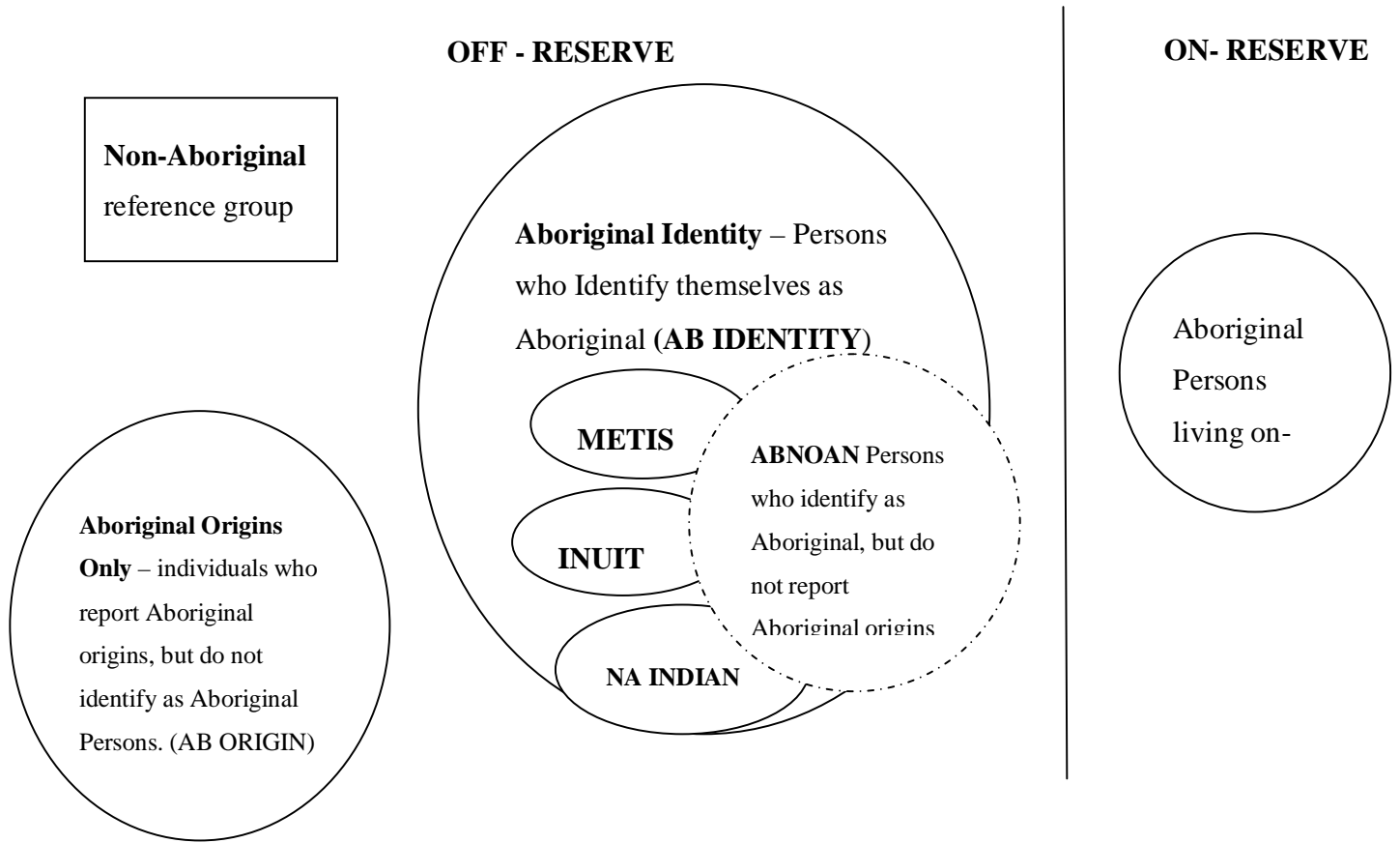


Table 2-2 Select Summary Statistics, Full-Time-Full-Year Sample, 2006 Census

	NON ABORIG	AB IDENTITY	AB ORIGIN	ABNOAN	METIS	INUIT	NA INDIAN	ON- RESERVE
Mean annual earnings females (\$)	36565	31600	33916	29854	31530	37519	31143	25966
Mean annual earnings males (\$)	47637	40593	43431	38810	42060	40949	38614	28884
mean age	42.3	39.9	39.5	40	39.9	39.1	39.8	42.2
(Non CMA)	14.7	28.8	17.7	25.7	28.3	83.9	23.9	73.9
City	85.3	71.2	71.5	74.3	71.7	16.2	76.1	26.1
(Ontario)	40.8	25.6	40.8	30.2	20.6	4.3	33.7	20
Nfld	1.2	2	1.7	1.3	1.3	10.9	1.2	0.4
Pei	0.4	0.1	0.2	0.1	N/A	N/A	0.1	0.2
Ns	2.8	2.1	3.6	2.8	1.9	1.1	2.1	2.2
Nb	2.3	1.2	2.6	1.7	0.9	0.5	1.5	2.6
Que	23.2	8.3	23.3	9.7	6	21.7	9.3	14.2
Man	3.3	13.7	3.8	12.9	19.2	1.7	8.9	13.7
Sask	2.7	8.6	2.1	7.2	11.2	0.5	6.8	9.8
Alb	11.5	19	11.4	17.6	24.1	4.1	14.7	11.8
Bc	11.6	14.4	10.1	14.9	13.3	1.5	17.4	24.8
Ynwt	0.2	5	0.4	1.6	1.5	53.7	4.3	0.3
(single)	29.6	39.2	44.4	39.4	36.7	47.2	41.9	38.2
Married	56.3	44.5	41	42.8	47.5	44.5	40.6	47.3
Divsep	13.1	15.1	13.9	16.4	14.7	6.2	16.3	12.2
Widow	1	1.2	0.7	1.4	1.1	2.1	1.2	2.3

(Non Vismin)	85.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Visible minority	14.3							
(Female)	40.4	43.8	38.3	42.5	41.4	48	46	49
Male	59.6	56.2	50.9	57.5	58.6	52.1	54	51.1
Registered		32.9		29.3	7.9	3	64.5	81.8
(Not registered)	NA	67.1	NA	70.5	92.2	97	35.5	18.2
SAMPLE N	1318870	35585	27760	4295	15555	5115	13875	29055

Notes: NA cell size is too small to produce reliable estimates. Sample sizes are rounded.

Table 2-3 Current Educational Attainment 2006 Census (% of sample)

	NON ABORIG	AB IDENTITY	AB ORIGIN	ABNOAN	METIS	INUIT	NA INDIAN	ON- RESERVE
MALES								
Less than HS	18.1	24.5	19.7	25.9	22.4	40.9	25.3	34.2
High School Grad	24.4	27.5	26.9	30.4	27.7	17.2	28.2	19.4
College or Trade School	39.8	41.2	42.5	39.1	43	39.3	39.4	40.2
BA Degree	15.2	5.9	9.5	4	6.1	2.2	6	5.2
Grad School	2.5	0.9	1.4	0.6	0.8	0.4	1.1	1.0
Sample in 000's	786	19.8	14.2	2.5	9.1	2.7	7.4	14.7
FEMALES								
Less than HS	13.7	17.6	13.3	18.4	15.8	37.1	16.8	25.3
High School Grad	26	28	26.9	31.1	29.7	19.3	27.5	20.1
College or Trade School	39.1	42.3	43.8	39.4	43.2	36.9	42.3	42.5
BA Degree	18	10.6	13.8	9.4	9.9	6.1	11.7	10
Grad School	3.2	1.5	2.2	1.7	1.4	0.6	1.7	2.1
Sample in 000's	533	15.9	10.6	1.8	6.5	2.4	6.5	14.4

Figure 2-2 Percentage Change in Educational Attainment 1996 - 2006, Males

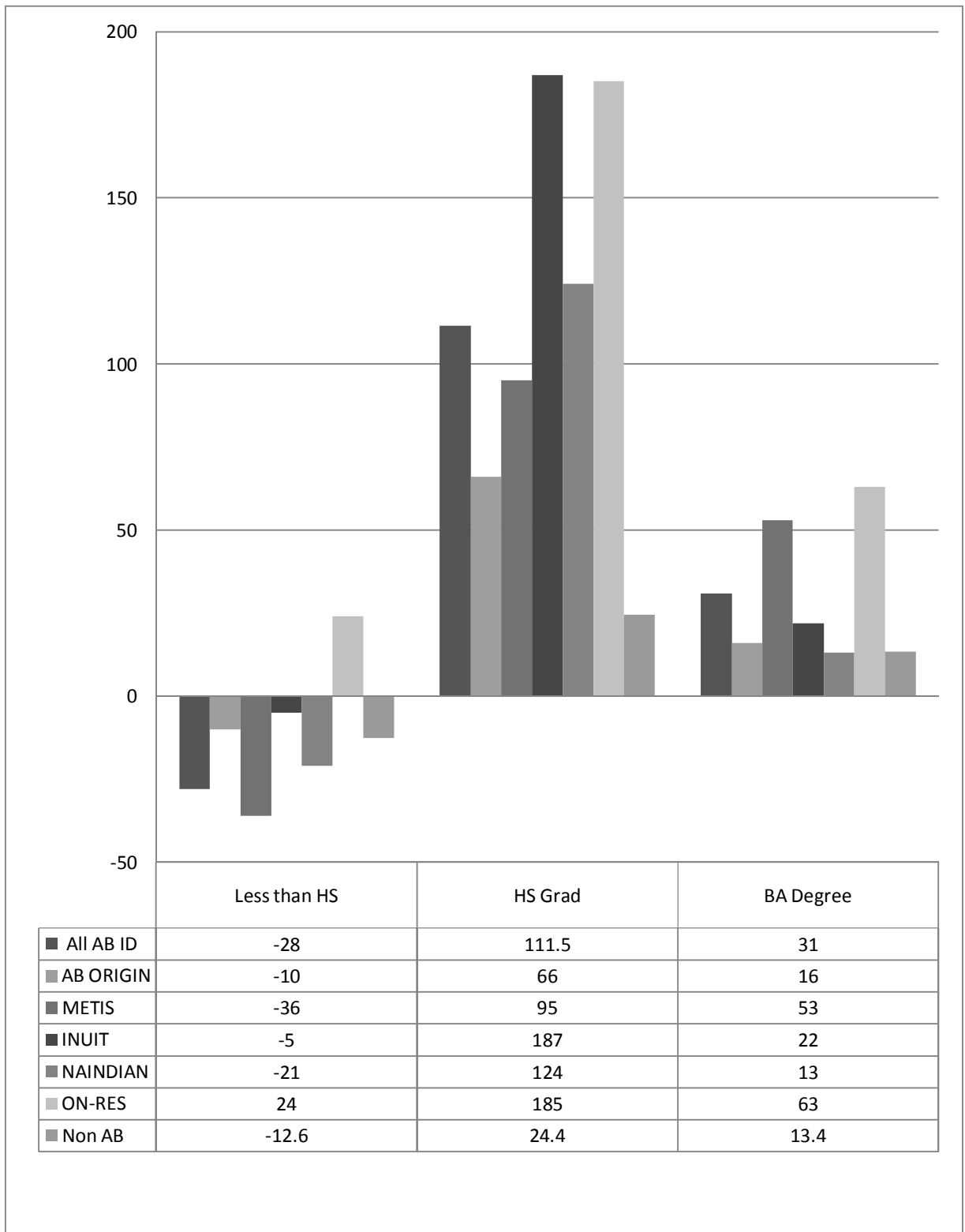


Figure 2-3 Percentage Change in Educational Attainment 1996 - 2006, Females

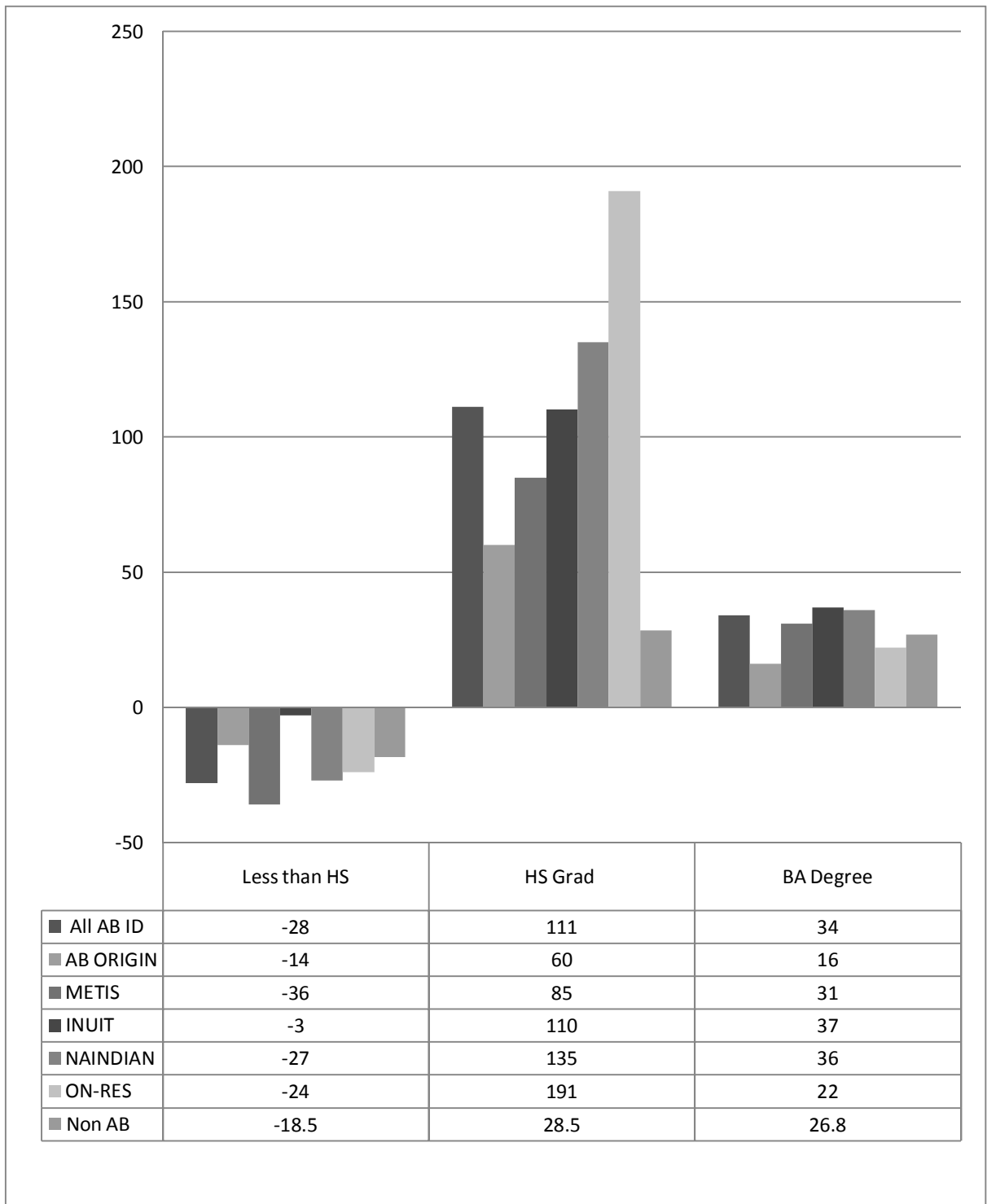


Table 2-4 OLS Ln Wage Regression, Pooled Models for Aboriginal Identity and Aboriginal Origin, Off-Reserve, Males and Females (t-statistic in parenthesis)

	2006		2001		1996	
	MALES	FEMALES	MALES	FEMALES	MALES	FEMALES
lnwage	10.7667	10.50221	10.58131	10.29715	10.47498	10.17783
abidentity	-0.062	-0.064	-0.083	-0.098	-0.019	-0.031
	(11.27)**	(12.01)**	(11.34)**	(12.26)**	(2.27)*	(3.30)**
origin only	-0.024	-0.024	-0.027	-0.039	-0.1	-0.106
	(4.23)**	(4.27)**	(3.55)**	(4.55)**	(12.30)**	(11.81)**
age	0.077	0.069	0.07	0.069	0.072	0.069
	(145.26)**	(121.76)**	(111.55)**	(91.49)**	(112.54)**	(88.01)**
agesq	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001
	(129.68)**	(100.98)**	(98.39)**	(78.19)**	(98.49)**	(76.28)**
(ontario)						
nfld	-0.19	-0.209	-0.213	-0.219	-0.148	-0.206
	(26.01)**	(31.54)**	(26.34)**	(25.30)**	(19.83)**	(24.58)**
pei	-0.292	-0.22	-0.318	-0.239	-0.229	-0.237
	(22.92)**	(18.71)**	(22.43)**	(15.82)**	(16.47)**	(15.62)**
ns	-0.201	-0.207	-0.207	-0.207	-0.183	-0.223
	(42.21)**	(44.50)**	(38.40)**	(33.56)**	(35.54)**	(36.67)**
nb	-0.228	-0.225	-0.228	-0.266	-0.174	-0.246
	(42.75)**	(43.31)**	(37.76)**	(39.34)**	(30.30)**	(35.82)**
que	-0.152	-0.149	-0.139	-0.133	-0.106	-0.125
	(46.13)**	(45.66)**	(37.54)**	(31.53)**	(29.65)**	(29.60)**
man	-0.15	-0.123	-0.15	-0.145	-0.136	-0.162
	(36.17)**	(28.73)**	(31.92)**	(26.72)**	(30.34)**	(30.19)**
sask	-0.132	-0.13	-0.145	-0.152	-0.122	-0.178

	(28.21)**	(27.77)**	(27.46)**	(25.16)**	(24.34)**	(29.88)**
alb	0.074	-0.021	-0.004	-0.084	-0.03	-0.105
	(29.97)**	(7.89)**	-1.39	(24.01)**	(10.15)**	(29.34)**
bc	-0.038	-0.04	-0.017	-0.001	0.045	0.013
	(15.49)**	(15.25)**	(6.01)**	-0.21	(16.62)**	(3.86)**
ynnwt	0.155	0.294	0.106	0.199	0.19	0.23
	(11.38)**	(22.48)**	(6.39)**	(11.37)**	(12.79)**	(13.92)**
(rural)						
city	0.064	0.094	0.078	0.118	0.064	0.104
	(29.44)**	(41.11)**	(32.60)**	(40.66)**	(28.57)**	(36.20)**
(single)						
married	0.161	-0.013	0.178	0.013	0.179	0.003
	(80.22)**	(6.38)**	(75.81)**	(4.86)**	(75.41)**	-1.27
divsep	0.074	-0.021	0.089	-0.002	0.093	0.002
	(25.55)**	(8.31)**	(26.44)**	-0.71	(27.45)**	-0.65
widow	0.056	-0.065	0.115	-0.016	0.113	-0.025
	(5.24)**	(10.59)**	(9.02)**	(2.04)*	(9.27)**	(3.25)**
(white)						
vismin	-0.309	-0.186	-0.322	-0.211	-0.295	-0.205
	(132.72)**	(79.38)**	(113.74)**	(65.83)**	(97.49)**	(59.51)**
(english)						
french	-0.035	-0.049	-0.081	-0.091	-0.089	-0.086
	(8.57)**	(12.28)**	(17.56)**	(17.28)**	(19.99)**	(16.38)**
biling	0.035	0.063	0.022	0.054	0.019	0.035
	(12.69)**	(23.69)**	(7.03)**	(15.55)**	(6.20)**	(10.11)**
nolang	-0.344	-0.213	-0.354	-0.211	-0.303	-0.319

	(31.00)**	(20.00)**	(27.35)**	(15.78)**	(24.60)**	(25.02)**
(less than HS)						
hsgrad	0.1	0.151	0.1	0.12	0.125	0.151
	(37.87)**	(48.63)**	(33.62)**	(33.07)**	(44.00)**	(43.92)**
tracert	0.18	0.134	0.187	0.131	0.173	0.145
	(64.01)**	(37.90)**	(64.71)**	(30.57)**	(62.85)**	(34.41)**
college	0.251	0.299	0.232	0.253	0.243	0.288
	(90.12)**	(93.28)**	(86.74)**	(76.83)**	(97.41)**	(92.56)**
ba	0.433	0.529	0.495	0.545	0.486	0.557
	(135.93)**	(150.06)**	(146.38)**	(134.96)**	(155.97)**	(141.34)**
aboveba	0.462	0.562	0.498	0.571	0.507	0.598
	(84.66)**	(105.67)**	(73.05)**	(79.59)**	(76.76)**	(81.63)**
masters	0.524	0.635	0.578	0.657	0.586	0.695
	(119.84)**	(133.09)**	(114.32)**	(105.80)**	(122.30)**	(109.46)**
phd	0.643	0.713	0.657	0.74	0.698	0.77
	(86.06)**	(72.99)**	(74.71)**	(51.51)**	(84.72)**	(50.52)**
(manage)						
bus/finance	-0.24	-0.184	-0.205	-0.144	-0.416	-0.419
	(80.89)**	(69.45)**	(59.86)**	(42.70)**	(66.85)**	(42.15)**
science	-0.089	0.021	-0.041	0.06	-0.024	-0.02
	(30.76)**	(4.89)**	(12.52)**	(10.46)**	(7.23)**	(4.48)**
health	-0.197	-0.052	-0.1	-0.039	-0.081	-0.036
	(33.26)**	(15.45)**	(15.01)**	(8.87)**	(22.20)**	(6.63)**
govt. / educat.	-0.278	-0.16	-0.238	-0.127	-0.3	-0.286
	(69.97)**	(49.42)**	(52.17)**	(29.87)**	(81.60)**	(63.10)**
recreation	-0.418	-0.257	-0.3	-0.165	-0.008	0.018

	(67.10)**	(46.33)**	(41.80)**	(22.39)**	-1.63	(3.80)**
sales/service	-0.375	-0.474	-0.324	-0.405	-0.001	0.101
	(135.60)**	(158.27)**	(105.12)**	(105.96)**	-0.19	(19.86)**
transport	-0.241	-0.274	-0.215	-0.286	-0.144	0.046
	(93.89)**	(44.86)**	(74.86)**	(37.35)**	(30.45)**	(9.12)**
primary indus.	-0.417	-0.632	-0.389	-0.559	-0.165	-0.035
	(80.78)**	(63.45)**	(68.58)**	(48.11)**	(30.41)**	(7.87)**
manufact	-0.202	-0.311	-0.195	-0.321	-0.495	-0.447
	(61.69)**	(72.19)**	(55.32)**	(61.84)**	(88.35)**	(75.13)**
Constant	8.965	8.809	8.89	8.626	8.618	8.449
	(805.80)**	(737.22)**	(693.94)**	(554.00)**	(658.02)**	(527.50)**
R-squared	0.2	0.26	0.17	0.19	0.19	0.21
N Rounded	819790	559430	798855	510285	723860	433200

** p = 0.01 * p=0.05

Table 2-5 OLS Ln Wage Regression, Pooled Models for All Aboriginal Groups, Males and Females (t-statistic in parenthesis)

	2006		2001		1996	
	MALES	FEMALES	MALES	FEMALES	MALES	FEMALES
lnwage	10.76478	10.50038	10.57986	10.29586	10.47421	10.17717
(white)						
origin only	-0.024	-0.024	-0.028	-0.039	-0.019	-0.031
	(4.26)**	(4.24)**	(3.63)**	(4.61)**	(2.27)*	(3.29)**
naindian	-0.118	-0.098	-0.109	-0.125	-0.111	-0.118
	(14.39)**	(12.96)**	(10.40)**	(11.49)**	(10.02)**	(10.14)**
metis	-0.032	-0.05	-0.073	-0.08	-0.092	-0.099
	(4.29)**	(6.62)**	(7.13)**	(6.85)**	(7.16)**	(6.65)**
Inuit	-0.013	0.121	-0.044	0.059	-0.063	0.033
	-0.46	(4.96)**	-1.27	-1.67	-1.83	-0.81
manyab	-0.051	-0.096	-0.075	-0.029	-0.063	0.005
	-1.78	(3.77)**	-0.86	-0.35	-0.75	-0.06
(off-reserve)						
reserve	-0.26	-0.108	-0.201	-0.035	-0.215	-0.054
	(19.14)**	(8.93)**	(12.27)**	(2.09)*	(9.34)**	(2.27)*
age	0.077	0.069	0.07	0.069	0.072	0.069
	(146.46)**	(123.20)**	(112.36)**	(92.25)**	(112.89)**	(88.41)**
age2	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001
	(130.73)**	(102.17)**	(99.12)**	(78.84)**	(98.80)**	(76.63)**
(ontario)						
nfld	-0.189	-0.21	-0.213	-0.22	-0.149	-0.207
	(26.14)**	(31.92)**	(26.49)**	(25.65)**	(19.92)**	(24.79)**
pei	-0.291	-0.219	-0.318	-0.239	-0.229	-0.236

	(23.05)**	(18.86)**	(22.56)**	(15.95)**	(16.53)**	(15.68)**
ns	-0.201	-0.207	-0.208	-0.207	-0.183	-0.224
	(42.50)**	(44.94)**	(38.72)**	(33.96)**	(35.66)**	(36.93)**
nb	-0.227	-0.225	-0.228	-0.267	-0.174	-0.246
	(43.02)**	(43.70)**	(38.08)**	(39.88)**	(30.49)**	(36.09)**
que	-0.15	-0.148	-0.139	-0.132	-0.106	-0.124
	(46.01)**	(45.74)**	(37.59)**	(31.64)**	(29.67)**	(29.69)**
man	-0.152	-0.123	-0.15	-0.144	-0.136	-0.161
	(37.11)**	(29.22)**	(32.40)**	(26.97)**	(30.51)**	(30.17)**
sask	-0.133	-0.129	-0.146	-0.152	-0.123	-0.178
	(28.72)**	(28.00)**	(27.84)**	(25.51)**	(24.69)**	(30.15)**
alb	0.073	-0.022	-0.005	-0.085	-0.03	-0.105
	(29.94)**	(8.31)**	-1.57	(24.47)**	(10.30)**	(29.63)**
bc	-0.037	-0.039	-0.017	-0.002	0.045	0.012
	(15.28)**	(15.37)**	(6.16)**	-0.73	(16.58)**	(3.75)**
ynnwt	0.153	0.268	0.103	0.178	0.185	0.213
	(10.91)**	(19.87)**	(6.06)**	(9.93)**	(12.24)**	(12.61)**
(rural)						
city	0.064	0.094	0.078	0.118	0.064	0.104
	(30.00)**	(41.72)**	(32.99)**	(41.03)**	(28.62)**	(36.36)**
(single)						
married	0.161	-0.012	0.178	0.013	0.179	0.004
	(80.92)**	(6.16)**	(76.40)**	(5.07)**	(75.75)**	-1.4
divsep	0.074	-0.021	0.089	-0.002	0.094	0.002
	(25.81)**	(8.24)**	(26.67)**	-0.69	(27.58)**	-0.7
widow	0.056	-0.063	0.115	-0.016	0.112	-0.025

	(5.27)**	(10.47)**	(9.05)**	(1.98)*	(9.25)**	(3.27)**
(white)						
vismin	-0.309	-0.186	-0.323	-0.21	-0.296	-0.205
(english)						
	(133.71)**	(80.16)**	(114.44)**	(66.34)**	(97.79)**	(59.75)**
french	-0.036	-0.05	-0.081	-0.091	-0.09	-0.086
	(9.01)**	(12.66)**	(17.77)**	(17.51)**	(20.12)**	(16.48)**
biling	0.035	0.063	0.022	0.054	0.019	0.035
	(12.45)**	(23.69)**	(6.94)**	(15.55)**	(6.17)**	(10.15)**
nolang	-0.344	-0.213	-0.354	-0.21	-0.303	-0.319
	(31.21)**	(20.18)**	(27.55)**	(15.88)**	(24.67)**	(25.21)**
(less than HS)						
hsgrad	0.101	0.151	0.099	0.119	0.124	0.151
	(38.31)**	(49.26)**	(33.76)**	(33.39)**	(44.15)**	(44.18)**
tradecert	0.18	0.134	0.187	0.131	0.173	0.145
	(64.67)**	(38.45)**	(65.06)**	(30.93)**	(63.09)**	(34.60)**
college	0.251	0.299	0.232	0.253	0.243	0.288
	(91.04)**	(94.62)**	(87.20)**	(77.64)**	(97.76)**	(93.09)**
ba	0.434	0.53	0.494	0.545	0.486	0.557
	(137.22)**	(152.21)**	(147.33)**	(136.45)**	(156.54)**	(142.15)**
aboveba	0.462	0.563	0.499	0.572	0.507	0.598
	(85.36)**	(107.01)**	(73.56)**	(80.45)**	(77.01)**	(82.05)**
masters	0.524	0.636	0.578	0.657	0.586	0.695
	(120.81)**	(134.70)**	(115.07)**	(106.86)**	(122.72)**	(110.00)**
phd	0.642	0.713	0.657	0.742	0.697	0.77
	(86.65)**	(73.68)**	(75.15)**	(52.10)**	(84.98)**	(50.74)**

(manage)						
bus/finance	-0.24	-0.184	-0.205	-0.144	-0.415	-0.419
	(81.39)**	(70.17)**	(60.23)**	(43.11)**	(67.02)**	(42.32)**
science	-0.088	0.021	-0.041	0.06	-0.024	-0.02
	(30.89)**	(4.92)**	(12.58)**	(10.50)**	(7.28)**	(4.54)**
health	-0.197	-0.053	-0.1	-0.039	-0.081	-0.036
	(33.46)**	(15.71)**	(15.07)**	(8.93)**	(22.28)**	(6.69)**
govt. / educat.	-0.277	-0.16	-0.237	-0.127	-0.3	-0.286
	(70.43)**	(50.17)**	(52.58)**	(30.35)**	(81.86)**	(63.40)**
recreation	-0.417	-0.258	-0.3	-0.165	-0.008	0.018
	(67.45)**	(46.82)**	(42.07)**	(22.59)**	-1.65	(3.79)**
sales/service	-0.374	-0.474	-0.324	-0.405	-0.001	0.1
	(136.59)**	(159.98)**	(105.77)**	(107.07)**	-0.34	(19.82)**
transport	-0.241	-0.274	-0.215	-0.286	-0.144	0.046
	(94.52)**	(45.37)**	(75.39)**	(37.72)**	(30.52)**	(9.18)**
primary indus.	-0.415	-0.632	-0.388	-0.558	-0.165	-0.035
	(81.32)**	(64.08)**	(69.01)**	(48.52)**	(30.52)**	(7.89)**
manufact	-0.201	-0.311	-0.195	-0.322	-0.495	-0.446
	(61.98)**	(72.92)**	(55.66)**	(62.43)**	(88.63)**	(75.46)**
Constant	8.965	8.807	8.891	8.629	8.619	8.451
	(812.72)**	(745.60)**	(699.28)**	(560.07)**	(660.69)**	(530.48)**
R-squared	0.2	0.27	0.17	0.19	0.19	0.21
N – Rounded	834620	573885	811745	521945	729645	437995

** p = 0.01 * p=0.05

Table 2-6 Separate OLS Ln Wage Regressions, Males, 2006 (t-statistic in parenthesis)

	WHITE	AB IDENTITY	AB ORIGIN	ABNOAN	METIS	INUIT	NAINDIAN	ON RESERVE
lnwage	10.77137	10.61136	10.67895	10.56644	10.64687	10.62009	10.56139	10.27106
age	0.077	0.081	0.083	0.078	0.078	0.064	0.091	0.071
	(141.15)**	(26.31)**	(23.45)**	(9.20)**	(17.63)**	(7.96)**	(17.72)**	(16.79)**
age2	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001
	(126.12)**	(23.23)**	(20.15)**	(8.16)**	(15.64)**	(6.62)**	(15.68)**	(13.93)**
(ont)								
nfld	-0.192	-0.154	-0.168	-0.272	-0.228	-0.175	-0.127	0.411
	(25.43)**	(4.30)**	(4.05)**	(2.26)*	(3.63)**	-1.92	-1.78	(3.43)**
pei	-0.29	-0.346	-0.362	-0.427	-0.556	0	-0.212	0.032
	(22.49)**	(2.30)*	(3.08)**	-1.08	-1.74	(.)	-0.94	-0.21
ns	-0.2	-0.253	-0.215	-0.283	-0.308	-0.723	-0.21	-0.116
	(40.91)**	(7.66)**	(7.82)**	(3.50)**	(6.21)**	(5.00)**	(3.94)**	(2.46)*
nb	-0.226	-0.24	-0.279	-0.127	-0.351	-0.294	-0.129	-0.149
	(41.55)**	(5.44)**	(8.56)**	-1.18	(5.33)**	(2.03)*	-1.86	(3.28)**
que	-0.154	-0.075	-0.112	-0.137	-0.097	-0.113	-0.091	0.236
	(45.63)**	(3.20)**	(5.79)**	(2.06)*	(2.38)*	-1.31	(2.19)*	(8.20)**
man	-0.152	-0.112	-0.123	-0.165	-0.113	-0.47	-0.153	-0.157
	(34.95)**	(7.29)**	(4.81)**	(3.67)**	(5.42)**	(4.18)**	(5.07)**	(7.00)**
sask	-0.131	-0.125	-0.13	-0.19	-0.126	-0.1	-0.155	-0.078
	(26.90)**	(6.80)**	(3.87)**	(3.23)**	(5.03)**	-0.65	(4.63)**	(3.10)**
alb	0.073	0.099	0.1	0.116	0.108	0.008	0.039	0.029
	(28.87)**	(7.04)**	(6.08)**	(2.85)**	(5.31)**	-0.09	-1.6	-1.26
bc	-0.039	-0.034	-0.011	0.01	-0.008	-0.128	-0.063	0.119
	(15.24)**	(2.23)*	-0.65	-0.23	-0.36	-1.12	(2.80)**	(5.90)**

ynnwt	0.15	0.14	0.189	0.243	0.259	-0.028	0.155	0.301
	(9.25)**	(5.64)**	(2.28)*	(2.27)*	(4.26)**	-0.34	(3.58)**	(2.35)*
(rural)								
city	0.068	-0.031	0.015	-0.014	-0.017	-0.096	-0.035	0.132
	(30.37)**	(2.92)**	-1.17	-0.43	-1.1	-1.68	-1.86	(7.79)**
(single)								
married	0.159	0.236	0.174	0.282	0.234	0.223	0.224	0.147
	(77.28)**	(20.84)**	(13.35)**	(8.34)**	(14.14)**	(7.51)**	(11.94)**	(9.78)**
divsep	0.074	0.12	0.051	0.085	0.145	0.12	0.074	0.087
	(24.69)**	(7.35)**	(2.76)**	-1.84	(6.05)**	-1.93	(2.81)**	(3.81)**
widow	0.057	0.022	0.021	0.404	0.066	-0.091	-0.034	-0.004
	(5.22)**	-0.34	-0.26	-1.81	-0.69	-0.78	-0.29	-0.06
(white)								
vismin	-0.31	0.155	-0.094	0.388	0	0	0	0.063
	(132.09)**	-0.98	(2.37)*	-1.08	(.)	(.)	(.)	-0.97
(english)								
french	-0.032	-0.087	-0.054	-0.093	-0.141	0.003	-0.013	-0.28
	(7.81)**	(2.65)**	(2.14)*	-1.04	(2.66)**	-0.02	-0.23	(7.20)**
biling	0.036	-0.002	0.058	-0.03	-0.021	0.143	0.007	0.043
	(12.52)**	-0.15	(3.71)**	-0.78	-1.11	(2.69)**	-0.23	-1.34
nolang	-0.346	0.069	0.468	0	0	-0.047	0.466	-0.166
	(30.93)**	-0.54	-1.01	(.)	(.)	-0.55	-1.8	-1.62
(less HS)								
hsgrad	0.099	0.13	0.122	0.094	0.116	0.237	0.12	0.137
	(36.21)**	(9.83)**	(7.68)**	(2.52)*	(5.98)**	(6.26)**	(5.54)**	(7.35)**
tradecert	0.179	0.214	0.161	0.212	0.197	0.221	0.208	0.164

	(61.73)**	(15.50)**	(9.63)**	(5.32)**	(9.85)**	(6.65)**	(8.97)**	(9.32)**
college	0.25	0.264	0.251	0.252	0.247	0.3	0.257	0.274
	(87.25)**	(17.64)**	(14.37)**	(5.71)**	(11.44)**	(7.62)**	(10.17)**	(14.31)**
ba	0.432	0.477	0.459	0.553	0.499	0.375	0.451	0.563
	(132.16)**	(20.70)**	(20.16)**	(7.06)**	(15.02)**	(4.16)**	(11.83)**	(17.45)**
aboveba	0.46	0.479	0.486	0.369	0.593	0.293	0.424	0.488
	(82.90)**	(9.53)**	(10.57)**	(2.05)*	(7.46)**	-1.35	(5.52)**	(7.57)**
masters	0.522	0.567	0.569	0.827	0.486	0.312	0.659	0.553
	(117.19)**	(13.26)**	(15.58)**	(6.61)**	(8.16)**	-1.69	(8.88)**	(7.64)**
phd	0.641	0.525	0.69	0.73	0.617	0.308	0.546	0.307
	(84.58)**	(5.64)**	(10.40)**	(2.77)**	(4.19)**	-1.06	(3.83)**	-1.94
(manage)								
bus/finance	-0.242	-0.166	-0.187	-0.117	-0.193	-0.136	-0.135	-0.139
	(79.81)**	(7.80)**	(8.61)**	-1.79	(6.35)**	(2.46)*	(3.73)**	(4.60)**
science	-0.091	0.001	-0.013	-0.102	-0.014	0.004	0.023	-0.023
	(30.91)**	-0.06	-0.63	-1.39	-0.43	-0.06	-0.58	-0.68
health	-0.197	-0.198	-0.188	-0.374	-0.209	-0.23	-0.192	-0.106
	(32.51)**	(4.59)**	(4.52)**	(2.76)**	(3.41)**	-1.27	(2.64)**	-1.8
govt. / educ	-0.279	-0.224	-0.244	-0.25	-0.302	-0.107	-0.168	-0.13
	(68.66)**	(8.48)**	(8.52)**	(2.61)**	(7.31)**	-1.69	(4.02)**	(5.01)**
recreation	-0.42	-0.301	-0.383	-0.27	-0.364	-0.294	-0.221	-0.107
	(66.01)**	(7.04)**	(9.05)**	-1.83	(5.45)**	(3.08)**	(3.35)**	-1.86
sales/service	-0.377	-0.294	-0.294	-0.267	-0.298	-0.45	-0.262	-0.233
	(133.41)**	(15.65)**	(15.01)**	(4.77)**	(11.04)**	(9.66)**	(8.21)**	(10.46)**
transport	-0.244	-0.146	-0.12	-0.089	-0.155	-0.316	-0.115	-0.119
	(93.00)**	(8.56)**	(6.67)**	-1.73	(6.44)**	(7.07)**	(3.88)**	(5.67)**

primary indus.	-0.433	-0.018	-0.198	0.002	-0.005	-0.343	-0.024	-0.198
	(81.32)**	-0.66	(6.27)**	-0.03	-0.14	(3.74)**	-0.5	(6.28)**
manufact	-0.205	-0.105	-0.101	-0.086	-0.104	-0.389	-0.078	-0.025
	(61.09)**	(4.92)**	(4.46)**	-1.34	(3.39)**	(4.17)**	(2.19)*	-0.82
Constant	8.969	8.774	8.748	8.791	8.871	9.273	8.523	8.411
	(783.78)**	(139.38)**	(123.44)**	(50.24)**	(97.79)**	(51.46)**	(80.29)**	(94.06)**
R-sq	0.2	0.2	0.24	0.22	0.21	0.24	0.2	0.16
N	785875	19715	14195	2480	9090	2675	7405	14700

** p = 0.01 * p=0.05

Table 2-7 Separate Ln Wage OLS Regressions, Females, 2006 (t-statistic in parenthesis)

	WHITE	AB IDENTITY	AB ORIGIN	ABNOAN	METIS	INUIT	NAINDIAN	ON RESERVE
lnwage	10.50685	10.36094	10.43165	10.3041	10.35869	10.53261	10.34636	10.16455
age	0.069	0.062	0.064	0.078	0.067	0.095	0.054	0.073
	(119.39)**	(18.08)**	(16.57)**	(7.07)**	(13.01)**	(11.60)**	(9.52)**	(17.12)**
age2	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001
	(99.12)**	(14.93)**	(13.40)**	(6.16)**	(10.71)**	(10.09)**	(7.73)**	(13.89)**
(ont)								
nfld	-0.214	-0.108	-0.126	-0.051	-0.031	-0.297	-0.193	0.242
	(31.25)**	(3.09)**	(3.48)**	-0.33	-0.5	(3.86)**	(2.48)*	(2.94)**
pei	-0.221	-0.045	-0.198	-0.023	0.234	0	-0.074	-0.095
	(18.62)**	-0.3	(2.12)*	-0.06	-0.53	(.)	-0.42	-0.64
ns	-0.208	-0.147	-0.204	-0.058	-0.132	-0.215	-0.136	-0.109
	(43.65)**	(4.12)**	(7.59)**	-0.52	(2.34)*	-1.67	(2.35)*	(2.65)**
nb	-0.226	-0.167	-0.214	-0.226	-0.257	0	-0.166	-0.114
	(42.58)**	(3.67)**	(6.97)**	-1.83	(2.90)**	(.)	(2.69)**	(3.06)**
que	-0.154	0.023	-0.089	0.065	0.015	0.104	-0.111	0.159
	(45.99)**	-0.93	(4.72)**	-0.8	-0.33	-1.39	(2.56)*	(6.20)**
man	-0.121	-0.122	-0.086	-0.124	-0.085	-0.105	-0.192	-0.082
	(26.97)**	(7.34)**	(3.14)**	(2.28)*	(3.59)**	-0.91	(6.43)**	(3.92)**
sask	-0.133	-0.089	-0.062	0.012	-0.1	-0.698	-0.084	-0.033
	(27.20)**	(4.54)**	-1.74	-0.18	(3.57)**	(2.33)*	(2.53)*	-1.42
alb	-0.022	0.003	0.032	-0.086	0.028	-0.215	-0.037	-0.115
	(8.12)**	-0.2	-1.77	-1.68	-1.23	(2.41)*	-1.44	(5.23)**
bc	-0.039	-0.059	-0.003	-0.062	-0.062	-1.014	-0.037	0.068
	(14.73)**	(3.57)**	-0.17	-1.17	(2.40)*	(8.23)**	-1.49	(3.42)**

ynnwt	0.255	0.36	0.303	0.212	0.375	0.166	0.318	0.215
	(15.50)**	(14.86)**	(3.92)**	-1.56	(6.61)**	(2.28)*	(7.80)**	-1.94
(rural)								
city	0.096	0.051	0.09	0.14	0.101	-0.004	0.014	0.045
	(40.74)**	(4.33)**	(6.42)**	(3.50)**	(5.87)**	-0.09	-0.68	(2.80)**
(single)								
married	-0.015	0.061	0.013	0.021	0.047	0.068	0.082	0.06
	(7.20)**	(4.85)**	-0.96	-0.46	(2.43)*	(2.41)*	(4.09)**	(4.22)**
divsep	-0.022	-0.014	0.013	-0.026	-0.004	0.13	-0.021	0.002
	(8.33)**	-0.93	-0.79	-0.5	-0.17	(2.64)**	-0.85	-0.1
widow	-0.065	-0.034	-0.128	-0.059	-0.047	0.17	-0.078	0.077
	(10.30)**	-0.92	(2.70)**	-0.54	-0.83	(2.29)*	-1.34	(2.24)*
(white)								
vismin	-0.187	-0.726	-0.004	-1.548	0	0	0	-0.028
	(79.11)**	(5.42)**	-0.09	(5.30)**	(.)	(.)	(.)	-0.52
(english)								
french	-0.045	-0.174	-0.05	-0.189	-0.21	-0.683	0.041	-0.197
	(11.09)**	(4.73)**	(2.00)*	-1.76	(3.40)**	(5.20)**	-0.69	(5.59)**
biling	0.065	-0.004	0.077	0.009	-0.012	0.029	0.025	0.005
	(23.80)**	-0.26	(5.05)**	-0.2	-0.56	-0.55	-0.83	-0.19
nolang	-0.214	0.059	0.148	0.32	0	-0.006	0.013	0.005
	(19.93)**	-0.36	-0.32	-0.21	(.)	-0.07	-0.01	-0.05
(less HS)								
hsgrad	0.151	0.147	0.169	0.053	0.165	0.268	0.136	0.102
	(47.18)**	(9.20)**	(8.38)**	-1.04	(6.83)**	(7.59)**	(5.09)**	(5.42)**
tradecert	0.136	0.094	0.13	0.08	0.079	0.141	0.116	0.125

	(37.17)**	(5.27)**	(5.82)**	-1.37	(2.94)**	(3.84)**	(3.88)**	(6.18)**
college	0.301	0.243	0.298	0.202	0.255	0.202	0.25	0.254
	(91.00)**	(14.47)**	(14.35)**	(3.62)**	(9.87)**	(6.04)**	(8.99)**	(14.43)**
ba	0.529	0.542	0.561	0.58	0.547	0.532	0.557	0.571
	(145.99)**	(25.05)**	(23.16)**	(7.86)**	(16.16)**	(9.68)**	(16.05)**	(23.52)**
aboveba	0.563	0.529	0.624	0.466	0.593	0.569	0.513	0.581
	(103.61)**	(12.26)**	(15.07)**	(3.30)**	(8.91)**	(3.72)**	(7.58)**	(13.21)**
masters	0.634	0.651	0.725	0.535	0.565	0.649	0.815	0.728
	(130.17)**	(16.17)**	(20.32)**	(3.86)**	(8.91)**	(4.15)**	(12.59)**	(12.95)**
phd	0.713	0.656	0.77	0.483	0.559	-0.091	0.813	0.208
	(71.97)**	(6.26)**	(9.44)**	-1.22	(3.21)**	-0.3	(5.45)**	-1.13
(manage)								
bus/finance	-0.188	-0.093	-0.102	-0.107	-0.055	-0.219	-0.108	-0.133
	(69.16)**	(5.14)**	(5.49)**	-1.7	(2.03)*	(5.04)**	(3.64)**	(5.99)**
science	0.018	0.16	0.094	0.047	0.21	-0.178	0.151	0.002
	(4.02)**	(4.63)**	(3.07)**	-0.38	(4.22)**	-1.84	(2.63)**	-0.02
health	-0.054	-0.018	-0.002	-0.153	0.088	-0.176	-0.119	-0.134
	(15.55)**	-0.75	-0.09	(2.00)*	(2.54)*	(2.28)*	(3.02)**	(4.33)**
govt. / educat.	-0.161	-0.118	-0.116	-0.122	-0.056	-0.247	-0.166	-0.176
	(48.80)**	(5.71)**	(5.06)**	-1.61	-1.71	(5.52)**	(5.04)**	(8.01)**
recreation	-0.261	-0.2	-0.157	-0.458	-0.234	-0.224	-0.224	-0.226
	(45.93)**	(4.86)**	(4.35)**	(3.01)**	(3.57)**	(3.38)**	(3.24)**	(3.83)**
sales/service	-0.476	-0.435	-0.378	-0.444	-0.377	-0.682	-0.471	-0.44
	(155.25)**	(22.73)**	(18.48)**	(6.78)**	(13.10)**	(14.51)**	(15.15)**	(19.14)**
transport	-0.277	-0.207	-0.147	-0.056	-0.149	-0.351	-0.24	-0.301
	(44.03)**	(6.23)**	(4.07)**	-0.55	(3.02)**	(2.76)**	(4.48)**	(6.58)**

primary indus.	-0.638	-0.474	-0.469	-0.513	-0.391	-0.644	-0.44	-0.648
	(62.51)**	(7.85)**	(6.67)**	(3.22)**	(4.55)**	-1	(4.47)**	(7.48)**
manufact	-0.315	-0.173	-0.187	-0.263	-0.123	-0.484	-0.183	-0.358
	(71.62)**	(5.71)**	(5.99)**	(2.86)**	(2.55)*	(3.38)**	(3.98)**	(6.87)**
Constant	8.8	8.875	8.761	8.594	8.695	8.563	9.071	8.396
	(716.80)**	(125.20)**	(110.98)**	(37.66)**	(82.27)**	(50.10)**	(76.84)**	(93.09)**
R-sq	0.27	0.23	0.28	0.21	0.24	0.35	0.22	0.2
N	532995	15870	10565	1815	6465	2440	6470	14355

** p = 0.01 * p=0.05

Table 2-8 Separate Ln Wage OLS Regressions, Males, 2001

	WHITE	AB IDENTITY	AB ORIGIN	ABNOAN	METIS	INUIT	NAINDIAN	ON RESERVE
Lnwage	10.58518	10.38797	10.49225	10.35544	10.39055	10.38811	10.38492	10.16895
age	0.069	0.072	0.085	0.058	0.076	0.058	0.07	0.063
	(109.39)**	(15.49)**	(15.51)**	(4.43)**	(10.67)**	(5.62)**	(9.31)**	(11.79)**
age2	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001
	(96.49)**	(13.51)**	(13.81)**	(3.79)**	(9.35)**	(4.81)**	(8.08)**	(10.65)**
(ont)								
Nfld	-0.212	-0.215	-0.197	-0.222	-0.163	-0.089	-0.268	0.143
	(25.76)**	(3.76)**	(3.42)**	-1.18	-1.47	-0.72	(2.67)**	-0.75
Pei	-0.317	-0.574	-0.172	-0.431	0.15	0	-0.808	-0.193
	(22.24)**	(2.84)**	-0.97	-0.79	-0.33	(.)	(3.41)**	-0.92
Ns	-0.208	-0.11	-0.205	-0.395	-0.014	0.771	-0.24	-0.352
	(38.03)**	-1.82	(4.94)**	-1.8	-0.13	(2.48)*	(2.87)**	(6.02)**
Nb	-0.228	-0.282	-0.146	-0.236	-0.184	-0.13	-0.454	-0.326
	(37.31)**	(4.65)**	(2.98)**	-1.36	-1.9	-0.49	(4.63)**	(5.43)**
Que	-0.141	-0.069	-0.054	-0.002	0.05	0.091	-0.218	0.101
	(37.25)**	(2.03)*	-1.87	-0.03	-0.82	-0.77	(3.73)**	(2.77)**
Man	-0.149	-0.156	-0.097	-0.083	-0.129	0.538	-0.158	-0.163
	(30.72)**	(7.24)**	(2.79)**	-1.34	(4.01)**	(3.53)**	(4.01)**	(6.08)**
Sask	-0.145	-0.154	-0.055	-0.083	-0.126	0.637	-0.188	-0.145
	(26.55)**	(6.05)**	-1.13	-1.12	(3.35)**	(3.75)**	(4.15)**	(4.70)**
Alb	-0.004	0.021	0.015	0.037	0.064	0.22	-0.023	-0.11
	-1.5	-1.02	-0.65	-0.59	-1.93	(2.17)*	-0.71	(3.85)**
Bc	-0.019	0.049	0.03	0.092	0.07	0.431	0.023	-0.053

	(6.43)**	(2.29)*	-1.22	-1.37	-1.9	(3.15)**	-0.74	(2.09)*
Ynnwt	0.102	0.113	0.237	0.108	0.291	0.271	0.025	0.285
	(5.24)**	(3.35)**	(2.02)*	-0.59	(3.40)**	(2.36)*	-0.44	-1.78
(rural)								
City	0.079	0.021	0.051	-0.024	0.028	-0.007	0.009	0.197
	(32.57)**	-1.41	(2.69)**	-0.54	-1.22	-0.08	-0.36	(9.89)**
(single)								
married	0.176	0.275	0.219	0.192	0.247	0.184	0.309	0.135
	(73.67)**	(16.40)**	(11.12)**	(3.77)**	(9.22)**	(5.15)**	(11.95)**	(7.38)**
Divsep	0.087	0.168	0.131	0.048	0.153	0.154	0.173	0.113
	(25.43)**	(7.01)**	(4.71)**	-0.7	(4.05)**	(2.16)*	(4.74)**	(4.01)**
Widow	0.119	-0.002	-0.123	-0.363	0.026	0.178	-0.071	-0.004
	(9.16)**	-0.02	-0.96	-1.13	-0.16	-1.09	-0.52	-0.06
(white)								
Vismin	-0.323	-0.397	-0.059	-0.207	0	0	0	-0.125
	(113.58)**	(2.09)*	-1.09	-0.68	(.)	(.)	(.)	-1.57
(english)								
French	-0.08	-0.151	-0.107	-0.165	-0.387	0.054	0.05	-0.105
	(17.05)**	(2.84)**	(2.55)*	-1.33	(4.11)**	-0.36	-0.6	(2.29)*
Biling	0.022	0.059	0.029	-0.019	0.003	0.086	0.186	0.029
	(6.66)**	(2.83)**	-1.29	-0.34	-0.09	-1.01	(4.37)**	-0.75
Nolang	-0.355	-0.055	0.367	0.056	-0.884	0.025	0.031	-0.267
	(27.28)**	-0.38	-0.55	-0.03	-1.06	-0.3	-0.04	(2.24)*
(less HS)								
Hsgrad	0.101	0.06	0.057	-0.019	0.057	0.074	0.048	0.102
	(33.59)**	(2.84)**	(2.29)*	-0.33	-1.79	-1.25	-1.44	(3.56)**

tradecert	0.189	0.155	0.137	0.247	0.146	0.243	0.139	0.098
	(64.02)**	(8.15)**	(5.75)**	(4.27)**	(5.05)**	(5.92)**	(4.48)**	(4.62)**
College	0.234	0.178	0.157	0.158	0.143	0.177	0.203	0.106
	(86.00)**	(9.65)**	(7.08)**	(2.82)**	(4.92)**	(4.41)**	(6.99)**	(5.08)**
Ba	0.496	0.454	0.422	0.528	0.441	0.527	0.453	0.451
	(144.95)**	(13.47)**	(12.32)**	(4.95)**	(8.28)**	(4.43)**	(8.89)**	(12.15)**
aboveba	0.499	0.508	0.487	0.693	0.567	0.258	0.458	0.727
	(72.53)**	(5.27)**	(6.42)**	(2.61)**	(3.81)**	-0.58	(3.02)**	(8.88)**
masters	0.579	0.483	0.601	0.692	0.506	0.503	0.474	0.753
	(113.51)**	(7.04)**	(9.73)**	(2.29)**	(4.90)**	-0.93	(4.55)**	(9.72)**
Phd	0.658	0.6	0.767	0.248	0.393	0.471	0.599	0.747
	(74.17)**	(3.88)**	(7.70)**	-0.43	-1.14	-1.12	(3.09)**	(3.19)**
(manage)								
bus/finance	-0.206	-0.141	-0.173	-0.127	-0.099	-0.252	-0.165	-0.153
	(59.39)**	(4.37)**	(5.30)**	-1.29	(2.00)**	(3.87)**	(3.17)**	(4.21)**
science	-0.043	0.016	0.022	0.096	0.009	0.001	0.042	-0.074
	(12.74)**	-0.48	-0.68	-0.9	-0.17	-0.01	-0.8	-1.8
health	-0.099	-0.099	-0.162	-0.056	-0.15	0.054	0.004	-0.042
	(14.71)**	-1.56	(2.60)**	-0.33	-1.57	-0.32	-0.04	-0.63
govt. / educat.	-0.239	-0.109	-0.245	-0.184	-0.08	-0.168	-0.118	-0.151
	(51.68)**	(2.92)**	(5.57)**	-1.37	-1.3	(2.14)**	(2.12)**	(5.00)**
recreation	-0.299	-0.289	-0.346	-0.198	-0.36	-0.363	-0.263	-0.286
	(41.09)**	(4.57)**	(5.71)**	-1	(3.20)**	(3.79)**	(2.78)**	(4.03)**
sales/service	-0.325	-0.263	-0.291	-0.443	-0.188	-0.439	-0.294	-0.225
	(103.85)**	(10.01)**	(10.27)**	(5.49)**	(4.55)**	(7.91)**	(7.15)**	(8.76)**
transport	-0.216	-0.121	-0.165	-0.133	-0.086	-0.313	-0.119	-0.172

	(74.30)**	(5.03)**	(6.22)**	-1.85	(2.29)*	(6.05)**	(3.11)**	(6.97)**
primary indus.	-0.402	0.012	-0.045	0.084	0.014	-0.137	0.06	-0.228
	(69.58)**	-0.31	-0.92	-0.78	-0.25	-1.28	-1.01	(5.76)**
manufact	-0.198	-0.083	-0.076	-0.077	-0.019	-0.114	-0.115	-0.118
	(55.23)**	(2.87)**	(2.40)*	-0.91	-0.43	-1.18	(2.55)*	(3.31)**
Constant	8.893	8.696	8.549	9.081	8.582	8.958	8.748	8.754
	(681.92)**	(93.52)**	(79.31)**	(34.36)**	(59.59)**	(40.29)**	(58.58)**	(78.30)**
R-sq	0.17	0.13	0.15	0.14	0.12	0.17	0.15	0.09
N	773545	15340	9970	1780	6700	2205	6005	12745

** p = 0.01 * p=0.05

Table 2-9 Separate Ln Wage OLS Regressions, Females, 2001

	WHITE	AB IDENTITY	AB ORIGIN	ABNOAN	METIS	INUIT	NAINDIAN	ON RESERVE
Lnwage	10.30088	10.13166	10.22984	10.13025	10.12182	10.25512	10.1251	10.03492
age	0.069	0.071	0.067	0.061	0.082	0.061	0.066	0.036
	(89.90)**	(12.99)**	(10.49)**	(3.83)**	(9.30)**	(4.37)**	(7.84)**	(6.21)**
age2	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	0
	(76.86)**	(11.23)**	(8.69)**	(3.35)**	(8.15)**	(3.75)**	(6.71)**	(5.05)**
(ont)								
Nfld	-0.221	-0.181	-0.167	-0.052	-0.112	-0.892	-0.084	0.097
	(24.97)**	(3.51)**	(2.84)**	-0.29	-1.08	(6.83)**	-0.97	-0.63
Pei	-0.237	-0.468	-0.286	-1.13	0.114	-0.248	-0.147	-0.093
	(15.58)**	(2.34)*	-1.62	(3.06)**	-0.23	-0.64	-0.52	-0.43
Ns	-0.207	-0.236	-0.161	-0.278	-0.436	-0.63	-0.037	-0.272
	(33.15)**	(3.63)**	(3.46)**	-1.12	(3.23)**	(3.63)**	-0.41	(4.90)**
Nb	-0.266	-0.422	-0.205	-0.941	-0.225	-0.556	-0.453	-0.479
	(38.64)**	(6.39)**	(4.05)**	(5.18)**	-1.9	-1.93	(4.81)**	(8.68)**
Que	-0.134	-0.031	-0.099	0.096	-0.093	-0.481	-0.047	0.043
	(31.30)**	-0.8	(3.22)**	-0.83	-1.13	(3.81)**	-0.77	-1.22
Man	-0.143	-0.166	-0.147	-0.212	-0.181	-0.516	-0.147	-0.131
	(25.38)**	(6.93)**	(3.84)**	(3.15)**	(4.71)**	-1.26	(3.73)**	(4.73)**
Sask	-0.153	-0.122	-0.173	-0.066	-0.123	0	-0.14	-0.147
	(24.48)**	(4.31)**	(3.37)**	-0.81	(2.76)**	(.)	(3.09)**	(4.87)**
Alb	-0.083	-0.098	-0.094	-0.159	-0.101	-0.166	-0.106	-0.185
	(23.27)**	(4.23)**	(3.49)**	(2.40)*	(2.59)**	-1.12	(2.94)**	(6.27)**
Bc	0.001	-0.057	0	-0.033	-0.033	-0.082	-0.084	-0.138
	-0.24	(2.31)*	0	74 -0.49	-0.75	-0.35	(2.46)*	(5.18)**

Ynnwt	0.17	0.221	0.184	0.169	0.102	-0.27	0.195	-0.167
	(8.00)**	(6.39)**	-1.65	-1.06	-1.16	(2.20)*	(3.60)**	-1.15
(rural)								
City	0.122	0.021	0.093	0.065	0.038	-0.453	0.017	0.12
	(40.82)**	-1.19	(4.21)**	-1.3	-1.37	(5.29)**	-0.64	(5.95)**
(single)								
Married	0.012	0.046	0.052	0.025	0.042	0.02	0.033	0.069
	(4.39)**	(2.44)*	(2.41)*	-0.41	-1.34	-0.45	-1.16	(3.78)**
Divsep	-0.003	0.048	0.008	-0.061	0.008	0.102	0.079	-0.006
	-0.95	(2.13)*	-0.32	-0.9	-0.21	-1.32	(2.31)*	-0.24
Widow	-0.015	-0.046	-0.056	-0.023	-0.011	0.293	-0.043	0.055
	-1.82	-0.82	-0.79	-0.16	-0.11	(2.31)*	-0.51	-1.19
(white)								
Vismin	-0.212	-0.127	-0.029	0.635	0	0	0	-0.091
	(65.86)**	-0.63	-0.53	(2.25)*	(.)	(.)	(.)	-0.79
(english)								
French	-0.09	-0.047	-0.021	-0.084	0.104	-0.511	-0.086	-0.093
	(16.96)**	-0.78	-0.48	-0.58	-0.84	(2.40)*	-0.96	(2.12)*
Biling	0.054	0.058	0.066	-0.006	0.041	0.298	0.066	0.025
	(15.24)**	(2.51)*	(2.68)**	-0.1	-1.2	(3.36)**	-1.55	-0.65
Nolang	-0.211	-0.084	-0.468	0	0.424	-0.041	0	0.14
	(15.72)**	-0.48	-0.85	(.)	-0.26	-0.36	(.)	-1.02
(less HS)								
Hsgrad	0.12	0.117	0.104	0.126	0.116	0.101	0.11	0.109
	(32.61)**	(4.54)**	(3.46)**	-1.79	(2.83)**	-1.39	(2.75)**	(3.57)**
Tradecert	0.131	0.12	0.112	-0.013	0.152	0.265	0.076	0.142

	(30.02)**	(4.51)**	(3.37)**	-0.18	(3.55)**	(4.33)**	-1.83	(5.43)**
College	0.254	0.224	0.242	0.176	0.222	0.34	0.21	0.21
	(75.49)**	(10.67)**	(9.14)**	(2.96)**	(6.50)**	(6.91)**	(6.49)**	(9.78)**
Ba	0.545	0.581	0.522	0.561	0.602	0.657	0.545	0.557
	(132.71)**	(18.01)**	(14.82)**	(5.79)**	(10.89)**	(6.48)**	(11.49)**	(17.72)**
Aboveba	0.57	0.667	0.59	0.595	0.505	0.239	0.782	0.747
	(78.47)**	(8.23)**	(8.89)**	(2.70)**	(3.90)**	-0.39	(6.63)**	(9.98)**
Masters	0.656	0.712	0.647	0.555	0.702	1.245	0.704	0.695
	(104.37)**	(10.55)**	(11.34)**	(2.89)**	(6.30)**	(4.30)**	(6.85)**	(8.53)**
Phd	0.739	1.054	0.695	0.773	0.972	0	1.076	1.351
	(50.82)**	(5.73)**	(5.57)**	(1.96)**	(3.34)**	(.)	(3.75)**	(8.76)**
(manage)								
bus/finance	-0.147	-0.007	-0.085	0.019	0.002	-0.132	-0.016	-0.127
	(42.87)**	-0.28	(3.00)**	-0.24	-0.04	-1.96	-0.38	(4.65)**
science	0.059	0.134	0.075	0.041	0.176	-0.063	0.087	-0.141
	(10.13)**	(2.58)**	-1.53	-0.27	(2.12)**	-0.39	-1.09	-1.53
health	-0.039	-0.009	-0.049	0.057	-0.022	-0.313	0.016	-0.006
	(8.80)**	-0.27	-1.29	-0.57	-0.4	(3.02)**	-0.29	-0.16
govt. / educat.	-0.127	-0.09	-0.127	0.082	-0.057	-0.255	-0.119	-0.181
	(29.40)**	(2.98)**	(3.55)**	-0.85	-1.1	(3.55)**	(2.60)**	(6.60)**
recreation	-0.169	-0.082	-0.058	0.177	0.071	-0.266	-0.152	-0.17
	(22.44)**	-1.42	-1.03	-1.01	-0.69	(2.53)**	-1.76	(2.44)**
sales/service	-0.405	-0.376	-0.382	-0.416	-0.391	-0.788	-0.329	-0.407
	(104.24)**	(13.20)**	(12.31)**	(5.00)**	(8.62)**	(10.40)**	(7.40)**	(14.02)**
transport	-0.291	-0.069	-0.217	0.02	-0.076	-0.406	-0.049	-0.23
	(37.24)**	-1.37	(3.53)**	-0.15	-0.97	(2.40)**	-0.62	(3.84)**

primary indus.	-0.561	-0.415	-0.453	-0.479	-0.333	-0.478	-0.538	-0.361
	(47.66)**	(3.74)**	(4.56)**	-1.74	(2.09)*	-0.77	(2.83)**	(2.99)**
manufact	-0.324	-0.186	-0.2	-0.085	-0.17	-0.52	-0.209	-0.185
	(61.48)**	(4.32)**	(4.24)**	-0.71	(2.41)*	(2.95)**	(3.28)**	(2.21)*
Constant	8.623	8.521	8.609	8.763	8.32	9.433	8.597	9.236
	(543.37)**	(77.62)**	(68.43)**	(26.79)**	(46.77)**	(32.30)**	(50.40)**	(78.04)**
R-sq	0.19	0.14	0.18	0.21	0.15	0.26	0.13	0.11
N	491275	12010	7005	1275	4610	1850	5125	11590

** p = 0.01 * p=0.05

Table 2-10 Separate Ln Wage OLS Regressions, Males, 1996

	WHITE	AB IDENTITY	AB ORIGIN	ABNOAN	METIS	INUIT	NAINDIAN	ON RESERVE
lnwage	10.47762	10.28212	10.42311	10.21275	10.26762	10.3291	10.28771	10.00168
age	0.072	0.064	0.087	0.056	0.05	0.069	0.073	0.046
	(110.79)**	(13.56)**	(14.02)**	(2.59)**	(5.25)**	(6.42)**	(12.13)**	(6.16)**
age2	-0.001	-0.001	-0.001	-0.001	0	-0.001	-0.001	0
	(97.00)**	(11.60)**	(12.19)**	(2.12)*	(4.10)**	(5.83)**	(10.72)**	(5.38)**
(ont)								
nfld	-0.152	0.024	-0.091	-0.039	0.006	0.064	0.159	0.109
	(19.97)**	-0.49	-1.42	-0.19	-0.06	-0.56	-1.73	-0.48
pei	-0.229	-0.086	-0.119	-0.106	0	0	-0.073	-0.024
	(16.38)**	-0.36	-0.75	-0.16	(.)	(.)	-0.33	-0.06
ns	-0.184	-0.044	-0.182	-0.346	0.055	0.33	-0.078	-0.163
	(35.20)**	-0.77	(4.09)**	-1.37	-0.25	-1.9	-1.33	(2.38)*
nb	-0.172	-0.342	-0.307	-0.57	-0.305	-0.543	-0.416	-0.472
	(29.63)**	(5.61)**	(4.90)**	(2.32)*	-1.52	-1.85	(6.41)**	(6.16)**
que	-0.107	-0.088	-0.102	-0.053	-0.188	0.128	-0.118	0.073
	(29.37)**	(2.99)**	(3.47)**	-0.42	(2.66)**	-1.11	(2.97)**	-1.49
man	-0.134	-0.168	-0.138	-0.189	-0.162	0.331	-0.142	-0.169
	(29.21)**	(7.74)**	(3.80)**	(1.97)*	(3.58)**	-1.34	(4.45)**	(5.16)**
sask	-0.121	-0.114	-0.176	0.032	-0.079	-0.179	-0.148	-0.273
	(23.63)**	(4.52)**	(3.70)**	-0.24	-1.54	-0.83	(4.13)**	(7.52)**
alb	-0.03	-0.06	0.028	-0.036	0.001	-1.149	-0.116	-0.146
	(10.06)**	(2.89)**	-1.08	-0.37	-0.03	(7.70)**	(4.11)**	(3.80)**

bc	0.045	0.047	0.035	0.03	0.054	0.534	0.057	-0.184
	(16.33)**	(2.30)*	-1.42	-0.31	-1.05	(3.54)**	(2.52)*	(4.22)**
ynnwt	0.197	0.156	-0.05	0.1	0.289	0.207	0.149	0.069
	(11.74)**	(5.20)**	-0.43	-0.42	(3.22)**	-1.87	(3.31)**	-0.74
(rural)								
city	0.065	0.028	0.03	0.006	0.006	0.196	0.035	-0.007
	(28.53)**	(1.99)*	-1.52	-0.09	-0.23	(2.21)*	(1.97)*	-0.2
(single)								
married	0.179	0.195	0.129	0.17	0.201	0.209	0.192	0.173
	(74.35)**	(11.82)**	(6.07)**	(2.18)*	(5.80)**	(5.51)**	(9.36)**	(6.72)**
divsep	0.094	0.106	0.03	0.095	0.123	0.112	0.093	0.108
	(27.21)**	(4.66)**	-0.99	-0.92	(2.63)**	-1.69	(3.30)**	(2.70)**
widow	0.112	0.21	0.079	0.349	0.303	0.112	0.151	-0.059
	(9.05)**	(2.47)*	-0.59	-0.83	-1.56	-0.81	-1.39	-0.65
(white)								
vismin	-0.296	-0.056	-0.148	-0.931	0	0	0	-0.069
	(97.11)**	-0.19	(2.47)*	-0.48	(.)	(.)	(.)	-0.31
(english)								
french	-0.088	-0.059	-0.109	-0.5	0.086	0.058	-0.072	-0.152
	(19.42)**	-1.3	(2.50)*	(2.84)**	-0.88	-0.34	-1.21	(2.19)*
biling	0.02	-0.005	0.012	0.146	-0.006	-0.498	0.06	0.098
	(6.36)**	-0.22	-0.49	-1.72	-0.17	(5.24)**	-1.79	-1.6
nolang	-0.305	-0.136	-0.159	0	-1.6	-0.105	0.042	-0.126
	(24.47)**	-1.57	-0.2	(.)	-1.45	-1.63	-0.24	-1.24
(less HS)								
hsgrad	0.125	0.106	0.144	0.079	0.115	0.086	0.094	0.161

	(43.43)**	(5.03)**	(5.52)**	-0.88	(2.80)**	-1.27	(3.45)**	(3.75)**
tradecert	0.174	0.126	0.157	0.074	0.124	0.172	0.114	0.159
	(62.10)**	(7.02)**	(6.29)**	-0.91	(3.50)**	(4.48)**	(4.86)**	(5.69)**
college	0.244	0.159	0.188	0.191	0.197	0.232	0.137	0.191
	(96.49)**	(9.29)**	(8.22)**	(2.32)*	(5.53)**	(5.95)**	(6.35)**	(7.15)**
ba	0.487	0.41	0.421	0.646	0.38	0.382	0.412	0.547
	(154.50)**	(12.36)**	(12.65)**	(3.70)**	(5.30)**	(3.05)**	(10.41)**	(8.87)**
aboveba	0.51	0.226	0.341	0.457	0.343	0.72	0.129	0.56
	(76.44)**	(3.05)**	(4.51)**	-1.59	(2.23)*	-1.04	-1.47	(3.70)**
masters	0.587	0.558	0.555	0.677	0.597	1.088	0.498	0.678
	(121.19)**	(8.39)**	(10.85)**	(2.03)*	(4.50)**	(3.94)**	(6.05)**	(4.99)**
phd	0.698	0.632	0.667	0	0.314	0	0.713	0.143
	(84.03)**	(4.55)**	(7.04)**	(.)	-0.86	(.)	(4.52)**	-0.18
(mgmt)								
pmind	-0.419	-0.227	-0.315	-0.065	-0.327	-0.029	-0.174	-0.19
	(66.39)**	(5.07)**	(4.96)**	-0.3	(3.59)**	-0.2	(3.14)**	(2.41)*
manutil	-0.022	-0.148	-0.04	-0.101	-0.227	-0.162	-0.089	-0.054
	(6.68)**	(5.67)**	-1.3	-0.79	(4.61)**	-1.86	(2.58)*	-0.85
trsport	-0.08	-0.207	-0.084	-0.03	-0.314	-0.085	-0.118	-0.109
	(21.50)**	(7.19)**	(2.50)*	-0.22	(5.87)**	-0.94	(3.06)**	-1.51
sersale	-0.298	-0.463	-0.316	-0.29	-0.586	-0.437	-0.356	-0.278
	(79.93)**	(15.83)**	(9.17)**	(2.07)*	(10.61)**	(4.96)**	(9.23)**	(4.08)**
fininc	-0.005	-0.261	-0.062	-0.366	-0.429	0.032	-0.191	-0.386
	-1.13	(5.72)**	-1.18	-1.66	(4.77)**	-0.31	(3.13)**	(2.86)**
govtserv	0	-0.11	0.003	0.079	-0.142	-0.033	-0.073	-0.119
	-0.05	(3.91)**	-0.09	-0.54	(2.51)*	-0.4	(2.01)*	-1.95

educat	-0.142	-0.304	-0.112	-0.288	-0.346	-0.127	-0.279	-0.14
	(29.74)**	(8.01)**	(2.33)*	-1.43	(4.42)**	-1.26	(5.81)**	(2.09)*
healthss	-0.163	-0.362	-0.15	-0.037	-0.493	-0.277	-0.281	-0.195
	(29.55)**	(9.10)**	(2.99)**	-0.19	(5.69)**	(2.56)*	(5.78)**	(2.87)**
hospit	-0.493	-0.672	-0.552	-0.455	-0.641	-1.11	-0.672	-0.24
	(86.63)**	(15.54)**	(10.26)**	(2.37)*	(7.72)**	(8.37)**	(11.97)**	(2.04)*
Constant	8.613	8.906	8.421	8.902	9.204	8.678	8.684	9.019
	(646.91)**	(95.72)**	(69.17)**	(20.63)**	(48.53)**	(34.75)**	(72.79)**	(56.95)**
R-sq	0.19	0.14	0.18	0.12	0.14	0.27	0.15	0.08
N	702435	13985	7445	1025	4005	1905	7760	5775

** p = 0.01 * p=0.05

Table 2-11 Separate Ln Wage OLS Regressions, Females, 1996

	WHITE	AB IDENTITY	AB ORIGIN	ABNOAN	METIS	INUIT	NAINDIAN	ON RESERVE
lnwage	10.18036	10.02435	10.13523	10.01678	9.965465	10.17378	10.04409	9.881915
age	0.069	0.063	0.068	0.057	0.062	0.069	0.062	0.045
	(86.86)**	(10.97)**	(8.88)**	(2.75)**	(5.60)**	(4.66)**	(8.13)**	(5.90)**
age2	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	0
	(75.28)**	(9.76)**	(7.75)**	(2.41)*	(5.04)**	(3.87)**	(7.32)**	(5.21)**
(ont)								
nfld	-0.206	-0.093	-0.367	-0.143	-0.002	-0.325	-0.235	-0.736
	(24.20)**	-1.52	(4.82)**	-0.61	-0.02	-1.91	(2.12)*	(3.89)**
pei	-0.236	-0.312	-0.178	-0.043	-1.859	0	0.005	-0.01
	(15.44)**	-1.8	-1.06	-0.09	(3.75)**	(.)	-0.02	-0.03
ns	-0.223	-0.188	-0.222	-1.295	-0.147	-0.145	-0.125	-0.314
	(36.21)**	(2.49)*	(4.14)**	(3.65)**	-0.65	-0.45	-1.47	(5.22)**
nb	-0.245	-0.225	-0.34	-0.285	-0.316	0	-0.219	-0.413
	(35.27)**	(3.27)**	(5.16)**	-1.48	-0.8	(.)	(2.94)**	(6.06)**
que	-0.126	-0.031	-0.097	-0.03	-0.144	-0.042	-0.063	0.054
	(29.49)**	-0.86	(2.88)**	-0.25	-1.63	-0.25	-1.31	-1.09
man	-0.161	-0.19	-0.224	-0.344	-0.16	-0.628	-0.201	-0.087
	(28.94)**	(7.54)**	(5.31)**	(4.12)**	(3.11)**	(2.65)**	(5.52)**	(2.65)**
sask	-0.177	-0.21	-0.184	-0.187	-0.201	0	-0.204	-0.183
	(28.98)**	(7.25)**	(2.88)**	-1.71	(3.45)**	(.)	(5.01)**	(5.15)**
alb	-0.104	-0.15	-0.126	-0.101	-0.1	-0.473	-0.175	-0.199
	(28.58)**	(6.12)**	(3.89)**	-1.12	-1.91	(2.64)**	(5.14)**	(5.43)**
bc	0.015	-0.104	-0.024	0.018	-0.036	-0.081	-0.129	-0.238
	(4.52)**	(4.34)**	-0.79	-0.22	-0.61	-0.31	(4.62)**	(5.28)**

ynnwt	0.213	0.232	0.246	0.318	0.431	-0.078	0.183	0.015
	(11.07)**	(7.07)**	-1.92	-1.57	(4.78)**	-0.49	(3.81)**	-0.16
(rural)								
city	0.106	0.051	0.111	-0.106	0.033	-0.04	0.072	0.035
	(35.85)**	(3.07)**	(4.38)**	-1.69	-0.98	-0.5	(3.37)**	-0.99
(single)								
married	0.002	0.065	0.059	-0.035	0.07	0.059	0.06	0.077
	-0.72	(3.41)**	(2.43)*	-0.47	-1.83	-1.26	(2.44)*	(3.30)**
divsep	0.002	0.019	0.026	0.008	-0.018	0.113	0.045	-0.004
	-0.53	-0.82	-0.86	-0.09	-0.4	-1.49	-1.46	-0.11
widow	-0.024	0.036	-0.165	-0.295	0.247	0.045	-0.058	0.008
	(3.13)**	-0.71	(2.00)*	-1.71	(2.20)*	-0.35	-0.93	-0.14
(white)								
vismin	-0.206	-0.659	-0.127	-0.212	0	0	0	-0.111
	(59.31)**	(1.96)*	-1.9	-0.24	(.)	(.)	(.)	-0.43
(english)								
french	-0.085	-0.22	-0.031	-0.509	0.221	-0.158	-0.257	-0.123
	(15.85)**	(3.88)**	-0.61	(3.24)**	-1.58	-0.32	(3.65)**	-1.9
biling	0.037	-0.02	0.02	-0.072	0.028	-0.154	-0.032	0.063
	(10.26)**	-0.75	-0.75	-0.91	-0.62	-1.33	-0.81	-0.96
nolang	-0.319	-0.274	0	0	-0.529	-0.281	-0.784	-0.292
	(24.84)**	(2.07)*	(.)	(.)	-0.37	(2.88)**	(2.32)*	(2.90)**
(english)								
hsgrad	0.151	0.159	0.141	0.213	0.145	0.226	0.174	0.243
	(43.27)**	(6.12)**	(4.22)**	(2.56)*	(3.01)**	(3.04)**	(4.87)**	(5.79)**
tradecert	0.146	0.097	0.129	0.133	-0.031	0.159	0.158	0.159

	(34.02)**	(3.69)**	(3.36)**	-1.46	-0.6	(2.58)**	(4.46)**	(5.01)**
college	0.289	0.271	0.213	0.145	0.287	0.297	0.264	0.261
	(91.27)**	(13.55)**	(7.34)**	(2.04)*	(7.23)**	(6.21)**	(10.01)**	(10.55)**
ba	0.558	0.554	0.484	0.524	0.504	0.609	0.599	0.622
	(139.51)**	(16.79)**	(12.47)**	(4.20)**	(7.50)**	(5.58)**	(14.08)**	(15.08)**
aboveba	0.6	0.524	0.547	0.721	0.603	-0.221	0.488	0.682
	(80.84)**	(7.19)**	(6.47)**	(2.91)**	(3.77)**	-0.45	(5.53)**	(7.35)**
masters	0.695	0.739	0.64	0.7	0.763	-3.204	0.754	0.815
	(108.20)**	(10.37)**	(10.05)**	(3.00)**	(4.76)**	(4.60)**	(8.74)**	(5.88)**
phd	0.771	1.078	0.62	0.889	1.169	0	0.568	0.487
	(50.05)**	(4.73)**	(3.85)**	-1.59	(3.76)**	(.)	-0.66	-1.24
(mgmt)								
pmind	-0.421	-0.31	-0.285	-0.462	-0.452	-0.088	-0.171	-0.045
	(41.80)**	(3.71)**	(2.59)**	-1.77	(3.20)**	-0.31	-1.41	-0.22
manutil	-0.02	-0.113	0.068	-0.169	-0.09	-0.016	-0.111	-0.448
	(4.38)**	(2.84)**	-1.6	-1.28	-1.24	-0.1	(2.07)*	(3.29)**
trsport	-0.034	-0.19	-0.038	-0.165	-0.095	-0.253	-0.28	-0.343
	(6.24)**	(4.05)**	-0.75	-1.13	-1.14	-1.53	(4.29)**	(2.21)*
sersale	-0.285	-0.38	-0.262	-0.344	-0.32	-0.452	-0.402	-0.532
	(62.08)**	(9.87)**	(6.13)**	(2.64)**	(4.55)**	(3.12)**	(7.68)**	(4.18)**
fininc	0.019	-0.039	-0.004	-0.124	0.066	0.049	-0.101	-0.312
	(3.93)**	-0.89	-0.09	-0.89	-0.82	-0.29	-1.67	-1.93
govtserv	0.102	-0.042	0.158	-0.121	0.058	0.131	-0.099	-0.222
	(19.70)**	-1.15	(3.51)**	-0.91	-0.82	-0.91	(2.02)*	-1.79
educat	0.047	-0.098	0.136	0.01	-0.121	0.016	-0.116	-0.199
	(9.03)**	(2.37)*	(2.69)**	-0.06	-1.48	-0.11	(2.14)*	-1.59

healthss	-0.034	-0.18	-0.018	-0.069	-0.156	-0.104	-0.206	-0.261
	(7.45)**	(4.89)**	-0.43	-0.53	(2.28)*	-0.71	(4.18)**	(2.09)*
hospit	-0.443	-0.587	-0.564	-0.474	-0.61	-0.392	-0.581	-0.58
	(73.26)**	(13.48)**	(10.53)**	(3.10)**	(7.88)**	(2.28)*	(9.71)**	(4.11)**
Constant	8.441	8.695	8.493	9.011	8.69	8.739	8.731	9.075
	(518.06)**	(74.60)**	(56.23)**	(20.81)**	(38.32)**	(26.48)**	(56.14)**	(48.00)**
R-sq	0.21	0.15	0.22	0.18	0.19	0.25	0.14	0.15
N	417745	10640	4815	895	2635	1245	6345	4790

** p = 0.01 * p=0.0

Table 2-12 Detailed Oaxaca Decomposition LnWages, Males 2006

	ABIDENTITY		AB		ABNOAN		METIS		INUIT		NAINDIAN		ON	
	Coeff.	Z	Coeff.	Z	Coeff.	Z	Coeff.	Z	Coeff.	Z	Coeff.	Z	Coeff.	Z
Differential														
LnW White	10.7714	1.20E+04	10.7714	1.20E+04	10.7714	1.20E+04	10.7714	1.20E+04	10.7714	1.20E+04	10.7714	1.20E+04	10.7714	1.10E+04
LnW ABGRP	10.6114	2086.33	10.679	1734.99	10.5664	676.27	10.6469	1371.89	10.6201	1337.8	10.5614	1194.01	10.2711	3311.53
Raw Diff.	0.16	30.94	0.0924	14.85	0.2049	13.09	0.1245	15.93	0.1513	18.93	0.21	23.61	0.5003	154.34
Explained														
age	0.0316	25	0.0317	21.46	0.0448	12.06	0.0324	17.61	0.0385	11.3	0.0305	15.13	0.0014	1.14
all prov	-0.0134	-11.28	0.0067	8.4	-0.0086	-4.28	-0.0061	-3.98	-0.0718	-9.71	-0.0174	-13.36	0.0113	10.47
city	0.0089	22.85	0.0037	14.01	0.0072	11.16	0.0089	19.7	0.0466	26.85	0.006	15.01	0.0394	27.97
married	0.0191	30.18	0.0156	22.08	0.0239	14.66	0.014	16.14	0.0225	14.39	0.0258	26.04	0.0152	21.92
divsep	-0.0011	-5.97	-0.0012	-5.72	-0.002	-3.89	-0.0008	-3.3	0.0042	11.73	-0.0018	-6.06	-0.0003	-1.5
widow	0	0.25	0.0001	1.84	0.0001	1.12	0	0.33	-0.0004	-2.64	0	0.65	-0.0003	-3.43
vismin	-0.0426	-106.52	-0.0376	-77.59	-0.0425	-93	-0.0429	-108.01	-0.0429	-108.01	-0.0429	-107.97	-0.0399	-88.91
french	-0.0023	-7.47	-0.0001	-1.24	-0.0018	-6.32	-0.0024	-7.35	-0.003	-7.11	-0.0021	-6.93	-0.0019	-7.16
biling	0.0016	9.17	-0.0029	-9.92	0	0.16	0.0004	2.85	0.0046	10.03	0.0031	9.82	0.005	10.7
nolang	-0.0012	-11.43	-0.0016	-20.44	-0.0017	-22.32	-0.0017	-22.33	0.0065	6.19	-0.0014	-10.15	-0.0003	-1.91

educ	0.0694	66.07	0.0396	32.39	0.0807	32.48	0.0652	46.37	0.1072	44.24	0.0712	44.96	0.0853	66.17
industry	0.028	32.01	0.0143	13.99	0.0341	15.1	0.0252	20.19	0.0356	15.19	0.0316	23.83	0.0319	28.07
Total	0.098	38.79	0.0681	23.2	0.1343	20.51	0.0922	25.93	0.1478	15.29	0.1026	26.93	0.1469	48.03
Unexplained														
age	-0.0351	-0.53	-0.1163	-1.45	0.0254	0.14	0.0269	0.26	0.2515	4.87	-0.2577	-2.29	0.0381	1.48
all prov	-0.0172	-2.01	-0.0176	-2.04	-0.0106	-0.53	-0.0212	-1.48	0.0957	2.49	0.0031	0.23	-0.1005	-29.27
city	0.0707	9.53	0.0418	3.7	0.06	2.35	0.0602	5.33	0.0257	5.91	0.0777	5.75	-0.0178	-12.96
married	-0.0367	-6.43	-0.0072	-1.02	-0.0548	-2.98	-0.0381	-3.84	-0.0287	-6.87	-0.028	-3.4	0.0063	3.09
divsep	-0.0055	-2.69	0.0028	1.17	-0.0014	-0.21	-0.0083	-2.68	-0.0022	-1.95	0	0	-0.0015	-2.06
widow	0.0002	0.47	0.0001	0.41	-0.0012	-2.3	0	-0.06	0.0018	3.75	0.0004	1.16	0.0006	2.89
vismin	-0.0004	-3.87	-0.0037	-4.92	-0.001	-1.8	0	-0.88	0	0.1	0	-2.29	-0.0036	-10.46
french	0.002	1.51	0.0021	0.76	0.0028	0.42	0.0037	1.6	-0.0004	-0.95	-0.0007	-0.27	0.0117	18.95
biling	0.0059	2.06	-0.0061	-1.27	0.0132	1.59	0.0107	2.47	-0.0076	-6.44	0.0033	0.51	-0.0003	-0.71
nolang	-0.0006	-3.95	-0.0001	-1.18	0	0.79	0	1.54	-0.0071	-6.81	-0.0007	-2.47	-0.0007	-4.93
educ	-0.0217	-2.55	-0.0071	-0.51	-0.0145	-0.59	-0.0129	-0.93	-0.0379	-7.24	-0.0153	-1.07	-0.0152	-5.2
industry	-0.0943	-4.9	-0.0848	-4.87	-0.1252	-2.66	-0.0862	-3.94	0.017	1.8	-0.1207	-2.71	-0.1218	-24.84
_cons	0.1948	2.68	0.2204	2.6	0.1778	0.96	0.0973	0.91	-0.3044	-4.69	0.446	3.36	0.5581	20.63
Total	0.062	12.79	0.0243	4.35	0.07065	4.93	0.0323	4.44	0.0035	0.38	0.1074	13.08	0.3534	126.12

Table 2-13 Detailed Oaxaca Decomposition LnWages, All Females 2006

	ABIDENTITY		AB		ABNOAN		METIS		INUIT		NAINDIAN		ON	
	Coeff.	Z	Coeff.	Z	Coeff.	Z	Coeff.	Z	Coeff.	Z	Coeff.	Z	Coeff.	Z
Differential														
LnW White	10.5069	1.10E+04	10.5069	1.10E+04	10.5069	1.10E+04	10.5069	1.10E+04	10.5069	1.10E+04	10.5069	1.10E+04	10.5069	1.00E+04
LnW ABGRP	10.3609	1906.41	10.4317	1578.98	10.3041	545.34	10.3587	1180.24	10.5326	1136.04	10.3464	1145.81	10.1646	3150.18
Raw Diff.	0.1459	26.41	0.0752	11.26	0.2027	10.72	0.1482	16.77	-0.0258	-2.76	0.1605	17.67	0.3423	101.3
Explained														
age	0.0277	19.21	0.0339	19.49	0.0283	6.29	0.0318	13.69	0.0504	13.26	0.0229	10.72	-0.0005	-0.4
all prov	-0.0183	-13.98	0.0128	15.36	-0.0041	-2.03	-0.0028	-1.81	-0.1313	-19.33	-0.022	-15.07	0.013	12.74
city	0.0139	27.11	0.0042	11.12	0.0109	10.6	0.0134	20.62	0.0667	33.9	0.009	16.12	0.0587	35.94
married	-0.0015	-5.71	-0.0015	-6.14	-0.0016	-5.32	-0.0012	-5.75	-0.0012	-5.01	-0.002	-5.86	-0.001	-5.8
divsep	0.0005	5.1	0.0007	5.45	0.0009	3.58	0.0005	3.73	-0.0021	-6.95	0.0007	4.83	-0.0007	-6.32
widow	0.0002	2.43	-0.0003	-3.34	0.0007	2.49	0.0001	0.53	0.0007	3.16	0.0002	2.01	0.0011	6.87
vismin	-0.0277	-64.66	-0.0243	-54.14	-0.0273	-56.15	-0.0279	-65.28	-0.0279	-65.21	-0.0279	-65.23	-0.0255	-59.28
french	-0.0039	-10.75	-0.0002	-1.73	-0.0029	-8.02	-0.004	-10.21	-0.0048	-10.22	-0.0034	-9.68	-0.0029	-10.07
biling	0.0029	12.32	-0.0081	-16.65	-0.0005	-0.75	0.0003	1	0.009	16.51	0.0053	14.24	0.0095	19.89
nolang	-0.001	-11.91	-0.0012	-14.37	-0.0012	-12.43	-0.0012	-15.03	0.0027	4.42	-0.0012	-14.72	-0.0005	-4.62

educ	0.0653	46.76	0.0275	16.03	0.0761	19.8	0.0678	33.16	0.1294	38.27	0.0573	26.78	0.0778	48.96
industry	0.0237	17.93	0.0076	4.88	0.0348	8.86	0.0215	10.55	0.0176	5.73	0.0275	13.39	0.0216	15.13
Total	0.0817	27.26	0.0511	14.76	0.114	13.63	0.0981	22.06	0.1093	11.29	0.0664	15.04	0.1506	43.67
Unexplained														
age	0.194	2.85	0.125	1.52	-0.0931	-0.43	0.0896	0.87	-0.4378	-7.93	0.3586	3.06	-0.114	-4.26
all prov	-0.0289	-3.42	-0.0337	-3.83	-0.0244	-0.88	-0.0354	-2.28	0.0151	0.45	-0.0045	-0.39	-0.0839	-27.36
city	0.0327	3.81	0.0052	0.37	-0.0323	-0.92	-0.003	-0.21	0.0172	4.44	0.0637	4.27	0.013	10.27
married	-0.0311	-6.38	-0.0116	-1.88	-0.0144	-0.71	-0.0268	-3.19	-0.0362	-9.23	-0.0366	-5.12	-0.0335	-18.71
divsep	-0.0015	-0.5	-0.007	-1.98	0.0008	0.07	-0.0034	-0.76	-0.0114	-8.49	-0.0003	-0.06	-0.0032	-4.4
widow	-0.0006	-0.91	0.0009	1.25	-0.0002	-0.06	-0.0003	-0.28	-0.0069	-7.28	0.0003	0.25	-0.0051	-12.35
vismin	0.0007	1.26	-0.0035	-3.74	0.0044	0.95	0	1.01	0	-1.01	0	-0.56	-0.0021	-4.63
french	0.0041	3.67	0.0005	0.17	0.0068	1.42	0.0044	2.38	0.0057	4.64	-0.0031	-1.38	0.0075	14.9
biling	0.0112	3.88	-0.0037	-0.7	0.012	1.07	0.0155	2.89	0.0025	2.13	0.005	1.04	0.0036	7.85
nolang	-0.0002	-2.32	0	-1	-0.0001	-0.45	0	1.55	-0.0038	-4.81	0	-0.38	-0.0007	-5.45
educ	0.022	1.77	-0.0122	-0.57	0.0616	1.78	0.0169	0.73	-0.0003	-0.05	0.0148	0.76	0.0196	5.1
industry	-0.0625	-3.69	-0.0744	-3.81	-0.0383	-0.56	-0.1123	-3.99	0.0838	9.35	-0.0324	-1.2	-0.0131	-2.62
_cons	-0.0757	-1.07	0.0386	0.45	0.2061	0.9	0.1049	0.99	0.2369	3.48	-0.2715	-2.23	0.4037	14.61
Total	0.0642	12.7	0.0241	4.1	0.0888	5.12	0.05	6.3	-0.1351	-15.62	0.0941	11.45	0.1917	68.13

Table 2-14 Detailed Oaxaca Decomposition LnWages, All Males 2001

	ABIDENTITY		AB		ABNOAN		METIS		INUIT		NAINDIAN		ON	
	Coeff.	Z	Coeff.	Z	Coeff.	Z	Coeff.	Z	Coeff.	Z	Coeff.	Z	Coeff.	Z
Differential														
LnW White	10.5852	1.00E+04	10.5852	1.00E+04	10.5852	1.00E+04	10.5852	1.00E+04	10.5852	1.00E+04	10.5852	1.00E+04	10.5852	1.00E+04
LnW ABGRP	10.388	1635.37	10.4923	1218.45	10.3554	501.67	10.3906	1008.72	10.3881	1301.61	10.3849	980.25	10.169	3230.24
Raw Diff.	0.1972	30.64	0.0929	10.72	0.2297	11.12	0.1946	18.8	0.1971	24.49	0.2003	18.81	0.4162	125.51
Explained														
age	0.0344	25.99	0.0322	20.07	0.0412	10.3	0.0339	17.09	0.0367	10.79	0.0351	17.32	0.0036	3.04
all prov	-0.0063	-4.86	0.0018	2.24	0.0025	1.28	0.0077	4.7	-0.0582	-8.32	-0.0173	-13.1	0.0125	10.8
city	0.0115	23.46	0.0033	9.54	0.0086	9.64	0.0118	19.59	0.0549	28.19	0.0071	14.04	0.0439	29.16
married	0.0195	25.09	0.0131	14.46	0.0261	12.3	0.0138	12.58	0.022	11.56	0.0262	21.7	0.0132	16.36
divsep	-0.0014	-5.92	-0.0015	-4.97	-0.0024	-3.44	-0.0012	-3.48	0.0043	9.06	-0.0022	-5.68	-0.0004	-1.84
widow	0	-0.7	0.0001	1.8	0.0001	0.51	0.0001	0.95	-0.0005	-2.17	-0.0002	-1.39	-0.0007	-4.98
vismin	-0.0364	-84.26	-0.0303	-52.64	-0.0355	-55.13	-0.0368	-86.2	-0.0368	-86.24	-0.0368	-86.21	-0.0336	-69.27
french	-0.0062	-14.54	-0.0031	-10.94	-0.0044	-8.78	-0.0067	-14.38	-0.0072	-13.82	-0.0057	-13.42	-0.0036	-12.32
biling	0.0013	6.07	-0.0015	-5.74	-0.0006	-2.59	0.0002	1.92	0.0037	6.05	0.0023	6.2	0.0031	6.03
nolang	-0.0009	-5.97	-0.0016	-15.38	-0.0016	-11.86	-0.0016	-14.57	0.0134	7.89	-0.0015	-13.57	-0.0001	-0.6

educ	0.069	56.58	0.0367	24.02	0.0865	27.46	0.07	40.55	0.095	36.4	0.0644	34.3	0.0684	48.75
industry	0.0297	32.18	0.0165	14.92	0.032	13.05	0.0301	22.55	0.0289	12.57	0.0297	21.18	0.0248	22.39
Total	0.114	40.56	0.0656	19.7	0.1525	19.7	0.1213	29.76	0.1562	16.26	0.1012	24.06	0.1311	40.21
Unexplained														
age	-0.0098	-0.11	-0.2629	-2.07	0.2734	1.2	-0.0982	-0.74	0.2658	4.2	0.0384	0.25	0.1733	5.14
all prov	-0.0191	-1.94	-0.0356	-3.02	-0.0505	-1.66	-0.0504	-2.41	-0.1982	-4.53	0.0127	0.99	-0.0076	-1.96
city	0.0397	4.13	0.0221	1.29	0.0747	2.54	0.0351	2.23	0.0118	2.86	0.0519	3.12	-0.0331	-17.95
married	-0.0508	-6.64	-0.0238	-2.07	-0.0075	-0.32	-0.0387	-2.87	-0.0043	-0.68	-0.0632	-5.62	0.0221	7.94
divsep	-0.0097	-3.87	-0.0053	-1.41	0.0052	0.59	-0.0079	-1.94	-0.0038	-2.71	-0.0112	-2.63	-0.0028	-3.25
widow	0.0006	1.58	0.0008	1.2	0.0018	1.12	0.0004	0.75	-0.0005	-1.74	0.0011	1.4	0.0013	3.92
vismin	0.0001	0.27	-0.0053	-4.03	-0.0005	-0.7	0	-1.61	0	2.67	0	-1.4	-0.002	-3.98
french	0.0017	1.23	0.0017	0.58	0.004	0.56	0.0057	2.48	-0.0016	-1.9	-0.0038	-1.54	0.0014	2.75
biling	-0.0056	-2.08	-0.0021	-0.31	0.0095	0.66	0.0037	0.72	-0.0022	-2.69	-0.017	-4.51	-0.0004	-0.78
nolang	-0.0006	-4.16	-0.0001	-1.09	-0.0001	-0.46	0.0001	0.78	-0.0161	-8.25	-0.0001	-1.07	-0.0004	-2.56
educ	0.0318	3.13	0.0466	2.69	0.0264	1	0.0432	2.54	0.0068	1.24	0.0309	1.87	0.0529	15.04
industry	-0.0922	-5.86	-0.0529	-2.61	-0.0708	-1.28	-0.1304	-4.64	0.0479	4.65	-0.0854	-3.55	-0.0589	-12.13
_cons	0.1972	2.25	0.3441	2.64	-0.1885	-0.76	0.3106	2.24	-0.0648	-0.98	0.1447	0.96	0.1393	4.12
Total	0.0832	13.58	0.0273	3.35	0.0772	3.94	0.0733	7.44	0.0409	4.49	0.0991	10	0.2852	90.83

Table 2-15 Detailed Oaxaca Decomposition LnWages, All Females 2001

	ABIDENTITY		AB		ABNOAN		METIS		INUIT		NAINDIAN		ON	
	Coeff.	Z	Coeff.	Z	Coeff.	Z	Coeff.	Z	Coeff.	Z	Coeff.	Z	Coeff.	Z
Differential														
LnW White	10.3009	8452.93	10.3009	8505.8	10.3009	8504.29	8504.29	8492.53	10.3009	8485.71	10.3009	8487.21	10.3009	8376.71
LnW ABGRP	10.1317	1423.16	10.2298	1086.17	10.1303	436.12	436.12	808.89	10.2551	798.31	10.1251	931.07	10.0349	2944.15
Raw Diff.	0.1692	23.43	0.071	7.48	0.1706	7.34	7.34	14.24	0.0458	3.55	0.1758	16.06	0.266	73.4
Explained														
age	0.0208	14.5	0.026	13.59	0.0078	1.84	1.84	9.96	0.0343	9.61	0.0191	9.02	0.0031	2.44
all prov	-0.0049	-2.76	0.0078	7.89	0.0021	0.85	0.85	8.33	-0.0953	-10.22	-0.0136	-7.88	0.0185	13.33
city	0.0177	25.23	0.0038	6.74	0.0119	7.95	7.95	17.92	0.0874	33.62	0.0122	15.18	0.0724	35.28
married	0.0013	4.16	0.0012	4.08	0.0008	3.03	3.03	3.86	0.0006	3.05	0.0016	4.01	0.0007	3.98
divsep	0.0001	0.65	0.0001	0.84	0.0003	0.91	0.91	0.84	-0.0003	-0.83	0.0001	0.68	-0.0001	-0.81
widow	0	1.19	0	-1.24	0.0002	1.33	1.33	-0.07	0.0001	1.28	0	0.88	0.0002	1.52
vismin	-0.0267	-49.81	-0.0219	-37.41	-0.0259	-38.27	-38.27	-50.34	-0.027	-50.35	-0.027	-50.31	-0.026	-48.68
french	-0.0075	-14.63	-0.0033	-9.33	-0.0049	-7.62	-7.62	-14.25	-0.0088	-14.2	-0.007	-13.66	-0.0042	-12.21
biling	0.0035	11.79	-0.0048	-10.88	0.0007	1.17	1.17	4.74	0.0083	12.9	0.005	11.88	0.0083	14.2
nolang	-0.0009	-6.93	-0.0012	-8.83	-0.0013	-9.16	-9.16	-9.03	0.006	5.45	-0.0013	-9.15	-0.0006	-4.56

educ	0.053	33.99	0.0181	8.42	0.0644	14.1	14.1	24.33	0.1025	29.3	0.0429	18.39	0.0513	30.47
industry	0.0147	10.99	0.0065	3.73	0.0211	5.21	5.21	8.14	0.0016	0.51	0.0142	7.19	0.0079	5.44
Total	0.071	20.94	0.0323	7.86	0.0772	8.3	8.3	19.36	0.1094	9.33	0.0462	10.04	0.1315	34.53
Unexplained														
age	0.0148	0.13	0.0678	0.48	0.2348	0.7	0.7	-0.98	0.2239	2.89	0.0987	0.57	0.7345	20.5
all prov	0.004	0.36	-0.01	-0.83	0.0079	0.22	0.22	0.56	0.4145	10.06	0.0058	0.4	0.0235	5.51
city	0.0717	6.41	0.0234	1.16	0.0429	1.27	1.27	3.08	0.0773	9.18	0.0789	4.8	0.0006	0.32
married	-0.0148	-2	-0.0178	-1.72	-0.0062	-0.26	-0.26	-1.02	-0.004	-0.58	-0.0085	-0.76	-0.0274	-11.08
divsep	-0.0105	-2.61	-0.0024	-0.38	0.0139	0.96	0.96	-0.33	-0.0081	-4.62	-0.0164	-2.64	0.0004	0.27
widow	0.0006	0.56	0.0006	0.52	0.0002	0.05	0.05	-0.04	-0.0079	-6.09	0.0005	0.4	-0.0023	-5.06
vismin	-0.0002	-0.3	-0.0045	-2.73	-0.0047	-2.57	-2.57	-1.34	0	-0.94	0	-2.23	-0.0006	-3.67
french	-0.0009	-0.76	-0.0047	-1.55	-0.0003	-0.05	-0.05	-1.75	0.0035	2.96	-0.0001	-0.05	0.0002	0.31
biling	-0.0006	-0.21	-0.0035	-0.47	0.0119	1	1	0.43	-0.0144	-7.96	-0.0014	-0.34	0.0018	3.32
nolang	-0.0002	-1.52	0.0001	0.62	0	1.64	1.64	-0.5	-0.0059	-4.01	0	0.22	-0.0011	-5.54
educ	0.0089	0.61	0.0124	0.51	0.0468	1.09	1.09	0.22	-0.057	-4.98	0.0233	0.99	0.0116	2.28
industry	-0.0765	-3.52	-0.0368	-1.58	-0.1138	-1.87	-1.87	-2.39	0.1238	9.35	-0.0776	-2.11	0.0064	1.02
_cons	0.1019	0.9	0.0141	0.1	-0.14	-0.38	-0.38	1.49	-0.8094	-8.68	0.0266	0.15	-0.6131	-15.86
Total	0.0983	14.48	0.0388	4.45	0.0934	4.34	4.34	6.85	-0.0637	-4.6	0.1296	12.56	0.1345	36.71

Table 2-16 Detailed Oaxaca Decomposition LnWages, All Males 1996

	ABIDENTITY		AB		ABNOAN		METIS		INUIT		NAINDIAN		ON	
	Coeff.	Z	Coeff.	Z	Coeff.	Z	Coeff.	Z	Coeff.	Z	Coeff.	Z	Coeff.	Z
Differential														
LnW White	10.4776	1.00E+04	10.4776	1.00E+04	10.4776	1.00E+04	10.4776	1.00E+04	10.4776	1.00E+04	10.4776	1.00E+04	10.4776	1.00E+04
LnW ABGRP	10.2821	1903.98	10.4231	1133.71	10.2128	333.94	10.2676	807.55	10.3291	1006.36	10.2877	1569.98	10.0017	2729.01
Raw Diff	0.1955	35.59	0.0545	5.89	0.2649	8.66	0.21	16.47	0.1485	14.4	0.1899	28.65	0.4759	125.23
Explained														
age	0.0352	24.82	0.0324	17.48	0.0309	5.9	0.0326	12.32	0.0428	11.18	0.0369	19.88	0.0137	6.98
all prov	-0.0115	-9.16	-0.0012	-1.44	0.0014	0.6	0.0133	7.1	-0.103	-15.62	-0.0203	-17.18	0.0289	17.56
city	0.0131	22.97	0.002	6.38	0.0063	6.63	0.0094	15.55	0.0476	25.33	0.0126	20.96	0.0468	25.75
married	0.0243	28.76	0.0127	12.25	0.0306	10.78	0.0208	14.38	0.02	9.7	0.0282	25.49	0.0121	10.29
divsep	-0.003	-10.04	-0.0018	-4.93	-0.0039	-3.76	-0.0033	-6.24	0.0029	5.08	-0.0037	-9.2	0.0002	0.65
widow	-0.0001	-1.59	0.0001	1.82	0	-0.12	0	0.22	-0.0009	-2.86	-0.0001	-1.13	-0.001	-4.77
vismin	-0.0267	-74.97	-0.0216	-40.06	-0.0268	-70.54	-0.0268	-75.85	-0.0269	-75.89	-0.0268	-75.88	-0.0262	-67.42
french	-0.0064	-16.08	-0.0035	-10.89	-0.0042	-6.24	-0.0064	-14.33	-0.0084	-15.91	-0.0063	-15.26	-0.0059	-14.41
biling	0.0014	5.71	-0.0016	-5.58	-0.0004	-1.6	0.0003	2.01	0.0034	5.86	0.0022	5.98	0.0033	5.95
nolang	0.0003	1.57	-0.0014	-14.79	-0.0014	-15.85	-0.0014	-13.38	0.0221	9.66	-0.0007	-4.32	0.0018	4.27

educ	0.0713	56.45	0.0235	12.68	0.0846	20.51	0.0786	36	0.0996	35.31	0.0627	37.69	0.0966	51.4
industry	-0.0027	-2.3	-0.0038	-2.53	0.0055	1.28	0.0001	0.05	-0.0139	-4.65	-0.0026	-1.7	-0.0132	-7.18
Total	0.0952	31.65	0.0359	9.15	0.1225	12.12	0.1171	21.57	0.0855	8.62	0.0819	21.54	0.1571	34.98
Unexplained														
age	0.2129	3.04	-0.2716	-2.18	0.3475	0.86	0.4454	2.63	0.1741	2.5	0.0454	0.55	0.601	17.93
all prov	0.0053	0.65	-0.0029	-0.25	0.0008	0.02	-0.0078	-0.29	-0.0862	-2.37	0.0113	1.41	0.058	11.58
city	0.0232	3.39	0.0278	1.67	0.0427	0.91	0.0398	2.18	-0.0118	-5.61	0.0192	2.57	0.0075	7.18
married	-0.0082	-1.2	0.0301	2.35	0.0048	0.13	-0.0118	-0.63	-0.0164	-3.04	-0.0067	-0.88	0.0038	1.06
divsep	-0.0016	-0.69	0.0077	1.91	-0.0002	-0.01	-0.0039	-0.7	-0.0012	-0.76	0.0002	0.08	-0.0014	-1.51
widow	-0.0006	-2.23	0.0001	0.25	-0.0012	-1.23	-0.0009	-1.29	0	0	-0.0002	-0.81	0.0024	5.08
vismin	-0.0001	-1.8	-0.0027	-1.87	0.0001	0.47	0	-2.41	0	1.12	0	-0.47	-0.0005	-2.71
french	-0.0008	-0.54	0.0013	0.44	0.0225	1.21	-0.0051	-1.64	-0.0011	-3.14	-0.0005	-0.19	0.0023	4.98
biling	0.0034	1.33	0.0024	0.41	-0.0287	-1.14	0.0051	0.76	0.0164	4.72	-0.004	-1.41	-0.003	-6.77
nolang	-0.001	-3.88	0	-0.71	0	0.33	0.0002	0.7	-0.0154	-7.13	-0.0008	-2.63	-0.0019	-5.34
educ	0.0408	5.73	0.0258	1.35	0.0341	0.82	0.029	1.82	0.0061	1.21	0.0544	6.05	0.0106	3.7
industry	0.1195	6.79	0.0086	0.27	0.0089	0.07	0.1943	6.16	0.0636	4.17	0.061	2.58	0.0454	2.29
_cons	-0.2924	-4.26	0.1921	1.54	-0.2891	-0.73	-0.5912	-3.62	-0.0649	-0.86	-0.0713	-0.88	-0.4054	-10.63
Total	0.1003	19.55	0.0187	2.19	0.1424	4.86	0.0929	7.8	0.0631	6.08	0.108	18.16	0.3188	79.74

Table 2-17 Detailed Oaxaca Decomposition LnWages, All Females 1996

	ABIDENTITY		AB		ABNOAN		METIS		INUIT		NAINDIAN		ON	
	Coeff.	Z	Coeff.	Z	Coeff.	Z	Coeff.	Z	Coeff.	Z	Coeff.	Z	Coeff.	Z
Differential														
LnW White	10.1804	8242.34	10.1804	8322.28	10.1804	8319.78	10.1804	8311.39	10.1804	8307.34	10.1804	8271.07	10.1804	8261.25
LnW ABGRP	10.0244	1548.3	10.1352	898.36	10.0168	354.19	9.9655	655.26	10.1738	874.19	10.0441	1240.87	9.8819	2225.09
Raw Diff.	0.156	23.67	0.0451	3.98	0.1636	5.78	0.2149	14.08	0.0066	0.56	0.1363	16.64	0.2984	64.75
Explained														
age	0.0183	12.88	0.0237	11.11	-0.0028	-0.62	0.0245	8.33	0.047	10.57	0.0141	7.96	0.0172	8.64
all prov	-0.007	-4.19	0.0036	3.04	0.0086	2.8	0.029	11.34	-0.1453	-17.73	-0.0145	-9.27	0.0488	23.51
city	0.0232	26.18	0.0024	4.18	0.0127	7.85	0.017	15.54	0.077	29.31	0.0239	24.08	0.0782	30.94
married	0.0003	0.93	0.0003	0.87	0.0001	0.6	0.0003	0.76	0.0002	0.68	0.0003	0.8	0.0001	0.76
divsep	-0.0001	-0.49	-0.0001	-0.54	-0.0001	-0.45	-0.0001	-0.42	0.0001	0.49	-0.0001	-0.53	0.0001	0.51
widow	0.0001	2.09	-0.0001	-2.05	0.0002	1.35	0	-0.19	0.0001	1.2	0.0002	2.26	0.0004	2.38
vismin	-0.0213	-47.51	-0.0172	-30.75	-0.0213	-43.7	-0.0215	-47.76	-0.0215	-47.79	-0.0215	-47.77	-0.0212	-46.25
french	-0.0067	-13.6	-0.0034	-8.68	-0.0035	-4.67	-0.0074	-12.85	-0.0088	-13.82	-0.006	-12.72	-0.0056	-11.97
biling	0.0029	8.97	-0.0042	-8.54	0	-0.01	0.0013	4.24	0.0061	9.37	0.0037	9.21	0.0063	9.72
nolang	-0.001	-5.44	-0.0021	-14.74	-0.0021	-14.71	-0.0021	-13.38	0.0156	6.78	-0.0018	-10.7	0.0011	2.36

educ	0.0505	29.4	0.0074	2.83	0.0656	11.48	0.0595	18.38	0.1063	24.2	0.0404	18.28	0.0713	26.93
industry	-0.0089	-5.45	0.0033	1.49	0.0052	0.97	0.0138	4.15	-0.0273	-6	-0.0206	-10.17	-0.0641	-29.7
Total	0.0503	13.82	0.0137	2.79	0.0626	5.56	0.1143	16.51	0.0498	3.95	0.0181	4.14	0.1327	24.5
Unexplained														
age	0.1961	2.22	0.0891	0.53	0.2885	0.79	0.2358	1.27	0.0499	0.6	0.2203	1.95	0.5612	16.12
all prov	0.023	2.32	0.0096	0.7	0.0177	0.42	-0.0001	0	0.1902	4.07	0.0366	3.84	0.0106	1.8
city	0.0345	4.48	-0.0044	-0.16	0.1539	4.34	0.0502	2.63	0.0173	5.97	0.0209	2.19	0.0077	7.72
married	-0.0289	-4.68	-0.0268	-1.96	0.0191	0.64	-0.0307	-2.07	-0.0269	-4.97	-0.0265	-3.69	-0.0395	-13.64
divsep	-0.0034	-0.93	-0.0049	-0.67	-0.0013	-0.1	0.0042	0.44	-0.0107	-5.67	-0.0082	-1.93	0.0006	0.61
widow	-0.0015	-1.5	0.002	0.91	0.0077	1.23	-0.0053	-3.79	-0.0018	-2.38	0.001	0.67	-0.0012	-2.2
vismin	0.0002	1.3	-0.0017	-0.84	0	0.05	0	-1.57	0	0.9	0	-0.58	-0.0001	-1.69
french	0.0038	2.63	-0.0035	-1.13	0.0271	2.56	-0.0052	-2.52	0.0002	1.14	0.0059	2.85	0.0015	2.87
biling	0.007	2.52	0.0052	0.61	0.0221	1.68	0.0014	0.16	0.0064	4.29	0.007	3.33	-0.0008	-2.05
nolang	-0.0001	-0.7	0	2.16	0	0.07	0	0.52	-0.0021	-1.17	0.0004	1.5	-0.0003	-0.95
educ	0.0125	1.03	0.0464	1.75	0.0398	0.87	0.0258	1	-0.0096	-1.14	0.0037	0.22	-0.0045	-1.1
industry	0.1172	5.8	-0.0274	-0.63	0.0967	1.63	0.0739	1.33	0.0417	1.05	0.1477	7.04	0.2649	10.53
_cons	-0.2546	-2.77	-0.0522	-0.31	-0.5703	-1.59	-0.2495	-1.33	-0.2978	-2.97	-0.2906	-2.42	-0.6345	-14.33
Total	0.1057	17.15	0.0314	3.05	0.101	3.8	0.1006	7.17	-0.0432	-4	0.1182	15.86	0.1657	35.71

2-18 Selection Corrected Earnings Differentials Summary Table, 2006

MALES		AB					ON
	ABIDENTITY	ORIGIN	ABNOAN	METIS	INUIT	NAINDIAN	RESERVE
DECOMPOSITION							
Amount attributable:	86.2	63.3	90.4	112.9	41.9	72.7	113.5
- due to endowments (E):	11.1	7.5	11.3	10.2	13.7	10.9	20.6
- due to coefficients (C):	75.1	55.7	79.2	102.7	28.1	61.8	92.9
Shift coefficient (U):	-137.4	-89.8	-140.8	-177.7	-45.9	-121	-200.5
Raw differential (R) {E+C+U}:	-51.2	-26.6	-50.4	-64.8	-4	-48.3	-87.1
Adjusted differential (D) {C+U}:	-62.3	-34.1	-61.6	-75	-17.8	-59.2	-107.6
Endowments as % total (E/R):	-21.6	-28.3	-22.4	-15.7	-339.2	-22.5	-23.6
Discrimination as % total (D/R):	121.6	128.3	122.4	115.7	439.2	122.5	123.6
FEMALES		AB					ON
	ABIDENTITY	ORIGIN	ABNOAN	METIS	INUIT	NAINDIAN	RESERVE
DECOMPOSITION							
Amount attributable:	25.8	-3.4	32.1	17	-30.1	56.7	48.3
- due to endowments (E):	12.9	8.2	12.8	14.2	15.9	10.5	23.8
- due to coefficients (C):	12.9	-11.6	19.4	2.9	-46	46.2	24.5
Shift coefficient (U):	-13.8	17.1	-39.3	-7.7	67	-52	-43.8
Raw differential (R) {E+C+U}:	12	13.7	-7.2	9.3	36.9	4.7	4.6
Adjusted differential (D) {C+U}:	-0.9	5.5	-19.9	-4.9	21	-5.8	-19.3

Endowments as % total (E/R):	107.4	59.7	-178.2	152.2	43.2	221.5	522.6
Discrimination as % total (D/R):	-7.4	40.3	278.2	-52.2	56.8	-121.5	-422.6

2-19 Selection Corrected Earnings Differentials Summary Table, 2001

MALES		AB					ON
	ABIDENTITY	ORIGIN	ABNOAN	METIS	INUIT	NAINDIAN	RESERVE
DECOMPOSITION							
Amount attributable:	67.2	44	76.5	49.1	46.2	74.6	94
- due to endowments (E):	17.4	8.6	16.9	17.4	18.9	16.9	25.2
- due to coefficients (C):	49.7	35.4	59.5	31.7	27.3	57.7	68.8
Shift coefficient (U):	-97.7	-67.5	-98.2	-79.6	-39.6	-106.2	-99
Raw differential (R) {E+C+U}:	-30.5	-23.5	-21.7	-30.4	6.7	-31.5	-5
Adjusted differential (D) {C+U}:	-47.9	-32.1	-38.6	-47.9	-12.3	-48.4	-30.2
Endowments as % total (E/R):	-57.1	-36.4	-78.1	-57.2	284	-53.5	-506.7
Discrimination as % total (D/R):	157.1	136.4	178.1	157.2	-184	153.5	606.7
FEMALES		AB					ON
	ABIDENTITY	ORIGIN	ABNOAN	METIS	INUIT	NAINDIAN	RESERVE
DECOMPOSITION							
Amount attributable:	30.4	14	66.6	20.6	3.1	45.9	28.1
- due to endowments (E):	14.8	7.2	14	17.5	16.3	12.1	25.1
- due to coefficients (C):	15.6	6.8	52.7	3	-13.2	33.7	3
Shift coefficient (U):	-10.3	-10.6	-68.3	-8.2	74.7	-32.3	58
Raw differential (R) {E+C+U}:	20.1	3.4	-1.7	12.3	77.7	13.6	86.2
Adjusted differential (D) {C+U}:	5.3	-3.9	-15.7	-5.2	61.5	1.5	61.1

Endowments as % total (E/R):	73.6	215.3	-822.5	142.1	20.9	89.3	29.1
Discrimination as % total (D/R):	26.4	-115.3	922.5	-42.1	79.1	10.7	70.9

2-20 Selection Corrected Earnings Differentials Summary Table, 1996

MALES		AB					ON
	ABIDENTITY	ORIGIN	ABNOAN	METIS	INUIT	NAINDIAN	RESERVE
DECOMPOSITION							
Amount attributable:	73.5	-19	104.5	93.6	-53.2	86.4	62.8
- due to endowments (E):	12.9	6.2	13.8	16	5.6	13.1	21.4
- due to coefficients (C):	60.6	-25.2	90.6	77.6	-58.9	73.3	41.4
Shift coefficient (U):	-70.9	31.4	-113.3	-87.8	97.7	-99.2	-5.3
Raw differential (R) {E+C+U}:	2.5	12.4	-8.9	5.9	44.4	-12.9	57.4
Adjusted differential (D) {C+U}:	-10.3	6.2	-22.7	-10.2	38.8	-26	36.1
Endowments as % total (E/R):	507.4	50.2	-155.7	273.1	12.7	-101.7	37.2
Discrimination as % total (D/R):	-407.4	49.8	255.7	-173.1	87.3	201.7	62.8
FEMALES		AB					ON
	ABIDENTITY	ORIGIN	ABNOAN	METIS	INUIT	NAINDIAN	RESERVE
DECOMPOSITION							
Amount attributable:	1.8	28.3	-41.1	42.9	-104	-10.9	57.5
- due to endowments (E):	11	6.4	9.2	17.3	10.2	8.9	19.9
- due to coefficients (C):	-9.3	21.9	-50.3	25.6	-114.2	-19.8	37.6
Shift coefficient (U):	43	-31.3	111.4	-20.7	197	67.7	-1.1
Raw differential (R) {E+C+U}:	44.8	-3	70.3	22.2	93	56.8	56.3
Adjusted differential (D) {C+U}:	33.7	-9.4	61.1	4.9	82.8	47.9	36.4

Endowments as % total (E/R):	24.6	-215.7	13.1	78	11	15.7	35.3
Discrimination as % total (D/R):	75.4	315.7	86.9	22	89	84.3	64.7

Table 2-21 Selection Corrected Earnings Equations White Males 1996 – 2006

	2006		2001		1996	
	Coeff.	Z	Coeff.	Z	Coeff.	Z
nety	-1.08E-06	-62.99	-2.04E-06	-70.57	-4.11E-06	-97.02
age	0.134061	188.56	0.136351	184.45	0.125616	157.96
age2	-0.00165	-197.85	-0.00167	-191.34	-0.00152	-162.3
nfld	-0.59052	-61.22	-0.62948	-65.86	-0.6	-64.18
pei	-0.30845	-17.23	-0.34113	-19.15	-0.41932	-23.67
ns	-0.19059	-26.24	-0.27085	-37.2	-0.30133	-42.06
nb	-0.24199	-30.68	-0.29107	-36.84	-0.32105	-40.97
que	-0.05882	-11.36	-0.06891	-13.11	-0.08148	-15.45
man	0.061762	8.85	0.011858	1.72	-0.00552	-0.81
sask	0.038266	5.04	-0.00908	-1.19	-0.01402	-1.85
alb	0.039307	9.68	-0.02635	-6.19	-0.06192	-13.97
bc	-0.13015	-33.7	-0.2371	-59.59	-0.19571	-49.3
ynnwt	0.01633	0.99	-0.08786	-6.24	-0.03189	-2.43
city	0.133278	40.68	0.122096	37.83	0.134442	42.86
married	0.281225	88.28	0.31248	94.43	0.360455	106.36
divsep	0.066048	14.66	0.056574	12.12	0.020266	4.21
widow	0.034489	2.29	0.001842	0.12	0.063873	3.97
vismin	-0.33137	-93.48	-0.30781	-79.26	-0.32206	-75.73
french	-0.02743	-4.4	-0.09315	-14.7	-0.16732	-26.61
biling	-0.01712	-3.86	-0.04049	-9	-0.04298	-9.47
nolang	-0.40319	-30.72	-0.44178	-31.58	-0.34995	-24.52
hsgrad	0.206167	53.72	0.196061	49.19	0.244969	62.25
tradecert	0.216761	52.27	0.21869	55.65	0.193603	50.51

college	0.293994	70.2	0.223351	61.25	0.332731	94.52
ba	0.283874	57.09	0.267252	54.27	0.534081	110.65
aboveba	0.179026	20.71	0.189366	18.61	0.481785	45.54
masters	0.205693	29.33	0.189011	25.14	0.55209	70.29
phd	0.399574	31.66	0.371411	27.32	0.723414	50.94
nocsB	-0.22499	-42.85	-0.2653	-48.47	-0.3666	-47.13
nocsC	-0.15851	-30.09	-0.23483	-43.32	-0.00564	-1.15
nocsD	-0.36592	-38.2	-0.34522	-34.4	0.129062	23.49
nocsE	-0.39521	-60.07	-0.41957	-61.35	0.007681	1.43
nocsF	-0.66155	-72.87	-0.68886	-73.14	0.229036	29.46
nocsG	-0.46056	-98.22	-0.48247	-101.52	0.251674	39.67
nocsH	-0.46008	-103.18	-0.52498	-116.2	-0.10895	-15.23
nocsI	-0.88305	-127.01	-0.90523	-130.99	0.009453	1.16
nocsJ	-0.2909	-52.3	-0.33716	-61.99	-0.18978	-26.15
_cons	-2.1191	-141.15	-2.03654	-133.1	-2.45053	-150.07
mills						
lambda	-0.29643	-21.53	0.032871	2.23	-0.1929	-17.52
rho	-0.4168		0.0434		-0.26876	
sigma	0.711184		0.757397		0.717759	
lambda	-0.29643		0.032871		-0.1929	

Table 2-22 Selection Corrected Earnings Equations White Females 1996 – 2006

	2006		2001		1996	
	Coeff.	Z	Coeff.	Z	Coeff.	Z
nety	-1.40E-06	-78.84	-2.06E-06	-92	-3.34E-06	-84.78
child	-0.63287	-163.75	-0.42534	-139.41	-0.43473	-136.29
age	0.114414	144.43	0.150126	172.99	0.149023	160.25
age2	-0.00138	-148.06	-0.00182	-171.59	-0.00179	-158.05
nfld	-0.12938	-12.98	-0.17698	-17.43	-0.15955	-15.5
pei	-0.1204	-6.84	-0.12684	-7.03	-0.17499	-9.4
ns	-0.06293	-8.56	-0.12189	-16.09	-0.14214	-18.36
nb	-0.04893	-6.02	-0.0928	-11.2	-0.16426	-19.16
que	-0.09249	-17.66	-0.09429	-17.5	-0.10478	-18.71
man	-0.00358	-0.51	-0.01732	-2.49	-0.05757	-8.14
sask	0.004679	0.63	-0.0279	-3.69	-0.03502	-4.56
alb	-0.04895	-11.74	-0.08312	-18.87	-0.06541	-13.96
bc	-0.21041	-53.13	-0.23346	-56.21	-0.20001	-46.85
ynnwt	0.152783	8.66	0.12637	8.38	0.143616	10.01
city	0.194998	57.21	0.195497	57.09	0.203548	58.59
married	-0.18666	-55.28	-0.14604	-40.34	-0.10769	-27.72
divsep	-0.04587	-10.58	-0.03334	-7.24	-0.05012	-10.12
widow	-0.18978	-20.71	-0.19786	-20.48	-0.16769	-17.22
vismin	-0.07187	-19.77	-0.03237	-8.03	-0.07161	-15.81
french	-0.07266	-11.6	-0.12295	-18.94	-0.16343	-24.4
biling	0.024859	5.78	0.011108	2.5	0.001099	0.24
nolang	-0.23279	-16.71	-0.13974	-9.42	-0.19639	-13.29
hsgrad	0.181974	40.66	0.11423	26.39	0.179647	41.93

tradecert	0.131937	25.57	0.113327	22.02	0.144964	27.5
college	0.236223	50.42	0.142304	36.13	0.223083	57.52
ba	0.278073	52.69	0.198442	39.43	0.37739	72.97
aboveba	0.287511	34.49	0.225581	24.07	0.46726	46.01
masters	0.290203	38.36	0.209674	25.51	0.50114	55.24
phd	0.483684	28.53	0.39246	19.18	0.756633	31.57
nocsB	-0.32249	-65.89	-0.34917	-69.66	-0.40795	-37.28
nocsC	-0.13461	-16.66	-0.19659	-23.01	0.149741	24.19
nocsD	-0.55667	-96.02	-0.56289	-93.32	0.115763	15.51
nocsE	-0.46194	-81.51	-0.48676	-81.79	-0.25716	-43.42
nocsF	-0.66128	-75.94	-0.67463	-72.6	0.275016	40
nocsG	-0.82068	-160.68	-0.8425	-161.16	0.25971	35.88
nocsH	-0.67049	-72.38	-0.65536	-69.69	-0.20997	-31.38
nocsI	-0.94766	-74.71	-0.95473	-80.75	-0.12914	-21.63
nocsJ	-0.41258	-57.73	-0.42255	-60.43	-0.38689	-53.94
_cons	-1.79709	-107.13	-2.33854	-134.36	-2.91674	-156.25
mills						
lambda	-0.1033	-17.77	0.121547	15.14	0.103722	13.98
rho	-0.17815		0.17021		0.15718	
sigma	0.579886		0.714084		0.659904	
lambda	-0.1033		0.121547		0.103722	

Table 2-23 Selection Corrected Earnings Equations Aboriginal Identity Males 1996 – 2006

	2006		2001		1996	
	Coeff.	Z	Coeff.	Z	Coeff.	Z
nety	-2.97E-06	-16.49	-4.08E-06	-15.1	-6.38E-06	-19.7
age	0.098802	27.25	0.09049	22.06	0.097529	23.38
age2	-0.0012	-26.78	-0.00108	-21.12	-0.0011	-21.32
nfld	-0.61094	-16.61	-0.80663	-19.19	-0.46721	-10.82
pei	-0.41551	-1.73	-0.39897	-1.76	-0.4544	-1.9
ns	-0.09023	-1.67	-0.34274	-4.63	-0.24449	-3.33
nb	-0.37381	-5.72	-0.53621	-8.4	-0.29736	-5.15
que	-0.13059	-4.41	-0.09279	-2.78	-0.15353	-5.17
man	-0.01465	-0.59	-0.10127	-3.9	-0.15707	-6.09
sask	-0.18539	-6.99	-0.27696	-9.88	-0.2723	-9.64
alb	0.030779	1.4	-0.11093	-4.54	-0.21233	-8.58
bc	-0.19142	-7.99	-0.30289	-11.24	-0.2621	-11.41
ynnwt	-0.17894	-7.61	-0.19261	-7.68	-0.07072	-2.92
city	0.216189	14.32	0.214655	13.61	0.202284	13.43
married	0.413694	26.16	0.4764	28.17	0.48154	29.61
divsep	0.056111	2.42	0.085713	3.42	0.032175	1.36
widow	0.051128	0.66	0.016087	0.2	-0.01561	-0.23
vismin	0.069941	0.26	0.306943	1.18	-0.2871	-0.98
french	0.009876	0.22	-0.02188	-0.38	-0.11356	-2.54
biling	0.043923	2	0.056429	2.31	0.125066	4.68
nolang	0.219509	2.5	0.000218	0	0.045317	0.78
hsgrad	0.378472	21.68	0.386664	16.83	0.396297	16.7
tradecert	0.286212	16.31	0.236582	12.58	0.213358	11.93

college	0.399521	19.41	0.229234	12.39	0.293254	16.87
ba	0.530934	13.84	0.555131	12.19	0.708171	15.22
aboveba	0.500627	5.76	0.459441	3.71	0.71904	6.19
masters	0.435187	5.97	0.388039	3.84	0.815918	7.38
phd	0.768488	4.57	0.337444	1.5	0.864433	3.35
nocsB	-0.18362	-5.28	-0.26567	-6.73	-0.67988	-18.4
nocsC	-0.24747	-6.61	-0.30523	-7.4	-0.08748	-2.99
nocsD	-0.3972	-5.86	-0.29017	-3.8	0.15603	4.69
nocsE	-0.3822	-9.8	-0.40913	-9.76	0.122763	3.76
nocsF	-0.61863	-11.29	-0.67332	-11.15	0.275643	5.12
nocsG	-0.51259	-17.83	-0.55872	-18.04	0.173332	5.78
nocsH	-0.50275	-18.71	-0.63884	-22.02	0.125757	3.16
nocsI	-0.98973	-28.93	-1.06317	-29.87	0.182375	4.34
nocsJ	-0.35266	-10.27	-0.43962	-12.31	-0.15627	-3.54
_cons	-1.82616	-23.89	-1.61032	-18.93	-2.57978	-30.53
mills						
lambda	-0.95035	-11.93	-0.51325	-5.61	-0.29587	-4.81
rho	-0.97388		-0.56698		-0.38189	
sigma	0.975837		0.905227		0.774734	
lambda	-0.95035		-0.51325		-0.29587	

Table 2-24 Selection Corrected Earnings Equations Aboriginal Identity Females 1996 – 2006

	2006		2001		1996	
	Coeff.	Z	Coeff.	Z	Coeff.	Z
nety	-1.40E-06	-78.84	-2.08E-06	-8.19	-2.64E-06	-8.46
child	-0.63287	-163.75	-0.30332	-18.38	-0.21352	-12.79
age	0.114414	144.43	0.12661	26.08	0.130634	26.24
age2	-0.00138	-148.06	-0.00146	-23.5	-0.00149	-23.51
nfld	-0.12938	-12.98	-0.22216	-5.26	-0.29833	-6.26
pei	-0.1204	-6.84	-0.25107	-1.11	0.070428	0.32
ns	-0.06293	-8.56	-0.17682	-2.34	-0.32554	-3.87
nb	-0.04893	-6.02	-0.28398	-3.96	-0.25895	-4.02
que	-0.09249	-17.66	0.076613	2.12	0.053338	1.6
man	-0.00358	-0.51	-0.00225	-0.08	-0.0037	-0.13
sask	0.004679	0.63	-0.04353	-1.47	-0.08306	-2.71
alb	-0.04895	-11.74	-0.0755	-2.88	-0.11332	-4.17
bc	-0.21041	-53.13	-0.26121	-9.08	-0.27144	-10.82
ynnwt	0.152783	8.66	0.03814	1.43	0.078136	2.96
city	0.194998	57.21	0.145676	8.65	0.093335	5.64
married	-0.18666	-55.28	0.074645	3.97	0.107253	5.64
divsep	-0.04587	-10.58	0.004619	0.19	-0.03932	-1.61
widow	-0.18978	-20.71	-0.12487	-2.45	-0.07369	-1.62
vismin	-0.07187	-19.77	0.092907	0.3	-0.27945	-0.91
french	-0.07266	-11.6	-0.29743	-4.75	-0.19101	-3.73
biling	0.024859	5.78	-0.01366	-0.52	0.000301	0.01
nolang	-0.23279	-16.71	-0.22696	-3.03	-0.29157	-4.2

hsgrad	0.181974	40.66	0.256515	10.25	0.378233	14.66
tradecert	0.131937	25.57	0.165417	6.72	0.271645	11.33
college	0.236223	50.42	0.20971	11.06	0.361125	19.82
ba	0.278073	52.69	0.411204	11.69	0.711105	19.53
aboveba	0.287511	34.49	0.34298	3.73	0.790832	8.37
masters	0.290203	38.36	0.431582	4.83	0.805786	8.05
phd	0.483684	28.53	0.635132	2.41	0.569447	1.81
nocsB	-0.32249	-65.89	-0.26884	-8.41	-0.66109	-9.53
nocsC	-0.13461	-16.66	-0.19293	-3	-0.03422	-0.71
nocsD	-0.55667	-96.02	-0.4929	-12.11	0.03575	0.62
nocsE	-0.46194	-81.51	-0.44512	-13.07	-0.20652	-4.6
nocsF	-0.66128	-75.94	-0.65036	-11.88	0.238708	4.21
nocsG	-0.82068	-160.68	-0.92852	-29.13	0.192983	4.37
nocsH	-0.67049	-72.38	-0.84317	-16.69	-0.07864	-1.71
nocsI	-0.94766	-74.71	-1.36655	-17.66	-0.01604	-0.36
nocsJ	-0.41258	-57.73	-0.69368	-14.13	-0.3716	-7.69
_cons	-1.79709	-107.13	-2.34705	-24.47	-3.16916	-31.21
mills						
lambda	-0.1033	-17.77	0.09591	1.33	0.293748	3.14
rho	-0.17815		0.1245		0.37526	
sigma	0.579886		0.770375		0.78278	
lambda	-0.1033		0.09591		0.293748	

Table 2-25 Selection Corrected Earnings Equations Aboriginal Origin Males 1996 – 2006

	2006		2001		1996	
	Coeff.	Z	Coeff.	Z	Coeff.	Z
nety	-3.39E-06	-15.25	-3.52E-06	-11.38	-3.43E-06	-10.83
age	0.107411	21.49	0.120613	19.51	0.109868	14.91
age2	-0.00134	-21.81	-0.00152	-19.63	-0.00134	-14.53
nfld	-0.59662	-10.29	-0.46596	-6.82	-0.78582	-10.74
pei	-0.68568	-4.6	-0.52269	-2.83	-0.52769	-2.51
ns	-0.19698	-4.38	-0.09313	-1.67	-0.28068	-4.79
nb	-0.34254	-6.85	-0.40855	-6.91	-0.40948	-5.2
que	-0.11529	-3.54	-0.08015	-2.04	-0.11785	-2.76
man	0.071582	1.63	0.02279	0.49	0.045276	0.88
sask	0.032946	0.6	-0.03807	-0.61	-0.0172	-0.25
alb	0.082791	2.92	0.022119	0.69	-0.03804	-1.01
bc	-0.08824	-3.13	-0.24901	-7.76	-0.17564	-5.09
ynnwt	-0.13526	-1.81	-0.10829	-1.46	-0.141	-1.64
city	0.161546	7.99	0.15416	6.51	0.150303	5.75
married	0.377629	17.22	0.411573	15.71	0.492647	17.09
divsep	0.075356	2.52	0.062534	1.75	0.066995	1.71
widow	-0.15512	-1.35	-0.13944	-0.91	0.128818	0.75
vismin	-0.17633	-2.8	-0.14636	-2.12	-0.23503	-3.02
french	0.043598	1.07	-0.04824	-0.89	-0.08362	-1.43
biling	0.022432	0.85	-0.00911	-0.3	0.040814	1.21
nolang	0.033778	0.08	-0.19288	-0.2	-0.53889	-0.7
hsgrad	0.267431	10.96	0.287744	9.2	0.327792	9.41
tradecert	0.227303	8.78	0.242557	7.97	0.228329	6.89
college	0.342664	12.16	0.291562	10.28	0.330708	10.78

ba	0.446586	11.06	0.335381	6.95	0.605037	11.85
aboveba	0.31884	3.82	0.502339	4.28	0.596503	5.06
masters	0.501379	7.1	0.297079	3.4	0.764042	8.64
phd	0.52542	4.13	0.427143	2.71	0.74195	4.64
nocsB	-0.15382	-3.7	-0.20942	-4.13	-0.57204	-8.15
nocsC	-0.05328	-1.25	-0.1612	-3.1	0.017862	0.41
nocsD	-0.32939	-4.38	-0.38098	-4.38	0.168081	3.46
nocsE	-0.25915	-4.84	-0.35948	-5.65	-0.01521	-0.32
nocsF	-0.71275	-10.89	-0.65262	-8.31	0.296141	3.55
nocsG	-0.42614	-11.96	-0.45505	-10.72	0.376909	7.02
nocsH	-0.43614	-12.95	-0.54259	-13.36	-0.11828	-1.71
nocsI	-0.80878	-17.32	-0.95455	-16.75	0.161125	2.19
nocsJ	-0.23808	-5.75	-0.34341	-7.19	-0.21	-3.34
_cons	-1.73832	-16.9	-1.91383	-15.49	-2.47028	-17.21
mills						
lambda	-0.80293	-11.1	-0.44912	-4.46	-0.11954	-1.45
rho	-0.95394		-0.5501		-0.17287	
sigma	0.841701		0.816432		0.691505	
lambda	-0.80293		-0.44912		-0.11954	

Table 2-26 Selection Corrected Earnings Equations Aboriginal Origin Females 1996 – 2006

	2006		2001		1996	
	Coeff.	Z	Coeff.	Z	Coeff.	Z
nety	-3.04E-06	-14.55	-3.47E-06	-10.9	-3.61E-06	-8.91
child	-0.65743	-26.76	-0.46356	-19.58	-0.50371	-18.44
age	0.095936	17.62	0.151621	21.6	0.151206	17.72
age2	-0.00116	-17.31	-0.00185	-20.6	-0.00184	-16.63
nfld	-0.11206	-2.02	-0.06756	-0.98	-0.33593	-4.22
pei	-0.16228	-1.15	-0.51495	-3.03	-0.44774	-2.12
ns	-0.07956	-1.85	-0.25138	-4.58	-0.233	-3.7
nb	-0.14702	-3.07	-0.09835	-1.63	-0.24004	-2.95
que	-0.1052	-3.38	-0.09844	-2.51	-0.1498	-3.39
man	0.004318	0.1	0.041329	0.87	0.030322	0.56
sask	-0.0113	-0.21	0.000312	0.01	-0.04843	-0.67
alb	-0.05433	-1.88	0.007703	0.23	-0.03509	-0.87
bc	-0.23794	-8.11	-0.21921	-6.52	-0.17581	-4.78
ynnwt	0.05615	0.67	0.142478	1.91	0.290577	3.24
city	0.225353	10.91	0.239632	9.63	0.208473	7.32
married	-0.09393	-4.2	-0.09026	-3.23	-0.04049	-1.24
divsep	-0.06617	-2.41	-0.07137	-2.11	-0.07907	-2.01
widow	-0.24612	-3.53	-0.10242	-1.16	-0.24962	-2.63
vismin	-0.14036	-2.34	-0.02745	-0.4	-0.08742	-1.07
french	-0.06308	-1.6	-0.13566	-2.53	-0.1555	-2.55
biling	0.050203	2.02	-0.04227	-1.41	0.092246	2.67
nolang	0.682182	1.33	0.754342	1.19	-5.59048	.
hsgrad	0.268783	9.51	0.195012	5.67	0.191217	4.91

tradecert	0.227468	7.16	0.167349	4.32	0.214538	4.77
college	0.377631	12.57	0.191375	6.29	0.255156	7.63
ba	0.500873	13.48	0.319932	7.29	0.51513	10.36
aboveba	0.447756	6.65	0.458339	5.14	0.473412	4.45
masters	0.576024	9.69	0.483402	5.94	0.620155	6.55
phd	0.656314	4.6	0.691934	3.69	0.926465	3.49
nocsB	-0.28712	-8.25	-0.31447	-7.54	-0.4413	-4.01
nocsC	-0.10784	-1.83	-0.11527	-1.58	0.219638	3.94
nocsD	-0.55545	-13.31	-0.54486	-10.64	0.114553	1.71
nocsE	-0.52875	-13.03	-0.47823	-9.67	-0.19468	-3.69
nocsF	-0.6331	-10.87	-0.59118	-8.1	0.255853	3.97
nocsG	-0.8225	-23.11	-0.87256	-20.62	0.394595	6.46
nocsH	-0.58374	-10.14	-0.82877	-11.45	-0.21297	-3.38
nocsI	-0.90319	-10.27	-0.96025	-9.58	-0.02411	-0.45
nocsJ	-0.45772	-8.85	-0.47299	-7.68	-0.41783	-6.87
_cons	-1.58998	-14.21	-2.47	-18.25	-3.15232	-19.28
mills						
lambda	-0.05843	-1.64	0.025087	0.4	-0.02098	-0.36
rho	-0.10546		0.03406		-0.03259	
sigma	0.554101		0.736629		0.643873	
lambda	-0.05843		0.025087		-0.02098	

Table 2-27 Selection Corrected Earnings Equations ABNOAN Males 1996 – 2006

	2006		2001		1996	
	Coeff.	Z	Coeff.	Z	Coeff.	Z
nety	-3.77E-06	-6.63	-3.19E-06	-3.88	-4.80E-06	-4.51
age	0.103135	10.02	0.0852	6.82	0.109676	6.74
age2	-0.0013	-10.36	-0.00111	-7.14	-0.00128	-6.39
nfld	-0.64196	-4.97	-0.66881	-4.46	-0.51807	-3.7
pei	-0.31753	-0.66	-0.24232	-0.46	-0.33382	-0.6
ns	0.093549	0.72	-0.15934	-0.79	-0.20218	-0.86
nb	-0.58782	-4.33	-0.67234	-4.35	-0.30138	-1.22
que	0.067183	0.75	0.009647	0.09	-0.22376	-1.85
man	-0.0325	-0.5	0.076477	1.1	-0.15128	-1.72
sask	-0.15176	-1.8	0.039038	0.44	-0.29821	-2.52
alb	0.136793	2.27	0.116509	1.64	-0.19081	-2.14
bc	-0.20591	-3.39	-0.31521	-4.33	-0.42165	-4.89
ynnwt	0.106267	1.1	-0.11783	-1.16	-0.03521	-0.29
city	0.207583	4.86	0.224941	4.79	0.137007	2.37
married	0.443236	8.97	0.560476	10.03	0.424505	6.29
divsep	-0.00658	-0.1	0.098459	1.34	-0.07788	-0.88
widow	-0.0225	-0.09	-0.04413	-0.15	-0.10808	-0.32
vismin	0.178845	0.36	0.342013	0.89	-1.1606	-1.87
french	-0.15134	-1.26	-0.0972	-0.71	-0.15681	-0.97
biling	0.011412	0.21	0.042192	0.68	0.15258	1.88
nolang	(omitted)		5.688891	.	(omitted)	
hsgrad	0.301938	6	0.337065	5.3	0.389151	4.86
tradecert	0.280145	5.12	0.171171	2.77	0.284108	3.89

college	0.26233	4.27	0.27196	4.39	0.39731	5.42
ba	0.41263	3.51	0.245305	1.82	0.522528	3.02
aboveba	0.3168	1.31	0.364995	1.27	1.153283	3.03
masters	0.549291	2.68	-0.25898	-0.86	0.530422	1.41
phd	0.803656	1.72	-0.61491	-1.21	-5.3037	.
nocsB	-0.21806	-2.08	-0.27264	-2.07	-0.4754	-3.13
nocsC	-0.20981	-1.82	-0.49301	-3.66	-0.03023	-0.27
nocsD	-0.49752	-2.53	-0.32503	-1.53	0.092842	0.76
nocsE	-0.6765	-5.07	-0.46117	-2.8	0.160564	1.32
nocsF	-0.76731	-3.92	-0.70552	-3.4	0.251716	1.17
nocsG	-0.47373	-5.41	-0.62598	-5.9	0.241385	1.84
nocsH	-0.43254	-5.31	-0.70188	-7.04	0.095833	0.52
nocsI	-0.92565	-9.06	-1.00677	-8.55	0.256496	1.37
nocsJ	-0.43931	-4.43	-0.45725	-4.01	-0.21476	-1.44
_cons	-1.70991	-7.89	-1.34425	-5.14	-2.61155	-8.01
mills						
lambda	-1.102	-5.12	-0.46905	-1.47	-0.48965	-1.46
rho	-1.03341		-0.52109		-0.48991	
sigma	1.06637		0.900126		0.999461	
lambda	-1.102		-0.46905		-0.48965	

Table 2-28 Selection Corrected Earnings Equations ABNOAN Females 1996 – 2006

	2006		2001		1996	
	Coeff.	Z	Coeff.	Z	Coeff.	Z
nety	-1.51E-06	-3.08	-2.89E-06	-3.93	-2.30E-06	-2.28
child	-0.55895	-8.55	-0.29989	-5.59	-0.29379	-4.81
age	0.085277	7.31	0.110934	7.29	0.132909	7.08
age2	-0.00101	-7.12	-0.00133	-6.95	-0.00156	-6.77
nfld	-0.36544	-2.53	-0.25559	-1.68	-0.45836	-2.92
pei	-0.00728	-0.02	-0.0563	-0.13	0.406534	0.7
ns	-0.26578	-1.96	-0.47413	-2.03	-0.5367	-1.92
nb	-0.04669	-0.31	-0.3804	-2.18	-0.282	-1.57
que	-0.08843	-0.91	-0.04552	-0.35	-0.04458	-0.36
man	0.088232	1.31	0.063841	0.83	0.15519	1.71
sask	0.122036	1.49	0.131562	1.43	0.079756	0.7
alb	0.052907	0.82	-0.04016	-0.53	-0.09187	-0.97
bc	-0.18241	-2.98	-0.19474	-2.55	-0.30616	-3.75
ynnwt	0.182157	1.77	0.168557	1.6	0.029458	0.24
city	0.203112	4.52	0.172908	3.33	0.128326	2.26
married	-0.03555	-0.65	0.160889	2.46	0.068068	0.87
divsep	-0.02172	-0.34	0.06417	0.84	-0.05023	-0.55
widow	-0.08393	-0.67	0.283368	1.77	-0.10161	-0.58
vismin	0.497708	1.24	0.146317	0.32	-0.46688	-0.76
french	-0.00234	-0.02	-0.12614	-0.78	-0.21981	-1.4
biling	0.057828	1.01	0.045351	0.66	0.053638	0.63
nolang	0.639799	0.87	(omitted)		-5.70814	.
hsgrad	0.26999	4.83	0.203529	2.78	0.324969	3.92
tradecert	0.198941	3.02	0.224779	2.81	0.296789	3.35

college	0.306999	4.83	0.288837	4.64	0.383645	5.56
ba	0.546928	6	0.281572	2.5	0.673654	5.32
aboveba	0.279445	1.55	0.253279	1.01	0.886344	3.25
masters	0.692017	3.44	0.478521	1.95	0.907959	3.53
phd	0.058631	0.15	0.830894	1.2	1.226004	1.81
nocsB	-0.21787	-2.54	-0.33293	-3.13	-0.53843	-2.24
nocsC	-0.05834	-0.34	-0.04837	-0.23	0.182022	1.24
nocsD	-0.40303	-3.95	-0.59849	-4.78	0.332841	1.95
nocsE	-0.35248	-3.51	-0.35344	-2.82	-0.03862	-0.28
nocsF	-0.47766	-2.7	-0.50606	-2.41	0.552103	3.31
nocsG	-0.73321	-8.61	-0.98576	-9.33	0.450728	3.08
nocsH	-0.48394	-3.89	-0.89163	-5.67	-0.14004	-0.9
nocsI	-0.77971	-4.57	-1.05524	-4.71	0.084149	0.61
nocsJ	-0.37485	-3.22	-0.79652	-5.56	-0.26091	-1.75
_cons	-1.6662	-6.79	-1.95581	-6.43	-3.26781	-8.49
mills						
lambda	-0.37355	-2.44	-0.11056	-0.58	0.577399	2.21
rho	-0.50237		-0.15403		0.69937	
sigma	0.743576		0.717817		0.825599	
lambda	-0.37355		-0.11056		0.577399	

Table 2-29 Selection Corrected Earnings Equations Métis Males 1996 – 2006

	2006		2001		1996	
	Coeff.	Z	Coeff.	Z	Coeff.	Z
nety	-2.42E-06	-9.78	-3.48E-06	-8.67	-6.66E-06	-10.76
age	0.102834	18.23	0.092313	14.49	0.096828	11.94
age2	-0.00127	-18.45	-0.00117	-14.75	-0.00114	-11.37
nfld	-0.78083	-12.61	-0.8838	-12.29	-0.5372	-6.5
pei	-0.06949	-0.13	-0.44748	-0.78	-5.74693	.
ns	-0.12503	-1.66	-0.248	-2.04	-0.11881	-0.48
nb	-0.37953	-4.05	-0.45849	-4.77	-0.14116	-0.61
que	-0.23806	-3.93	-0.12389	-1.73	-0.22161	-2.71
man	0.043118	1.29	-0.00644	-0.17	-0.11951	-2.36
sask	-0.12434	-3.37	-0.13949	-3.41	-0.23552	-4.33
alb	0.038628	1.22	-0.07653	-2.07	-0.21953	-4.29
bc	-0.16981	-4.6	-0.17235	-3.97	-0.02597	-0.43
ynnwt	0.121959	2.12	0.073404	1.34	0.150523	2.35
city	0.264977	12.36	0.248355	10.81	0.201368	7.26
married	0.393343	15.77	0.530401	19.59	0.528265	16.14
divsep	0.006846	0.2	0.131607	3.44	-0.04479	-1
widow	0.049491	0.39	-0.03231	-0.23	-0.04169	-0.28
vismin	(omitted)		(omitted)		(omitted)	
french	0.126323	1.63	-0.10007	-1.01	-0.02215	-0.2
biling	0.028422	0.95	0.067288	2	0.147069	3.46
nolang	-5.83988	.	-0.0502	-0.12	-0.10948	-0.23
hsgrad	0.340466	12.61	0.39816	11.57	0.406088	9.36
tradecert	0.315109	11.24	0.24863	8.52	0.244252	7.07
college	0.403037	12.54	0.24377	8.07	0.263251	7.4

ba	0.518759	9.15	0.503759	7.55	0.59841	6.89
aboveba	0.404856	3.2	0.392698	2.27	0.523607	2.55
masters	0.475177	4.65	0.218126	1.6	0.612405	3.36
phd	0.507984	2.15	-0.30859	-0.74	0.460599	0.96
nocsB	-0.19272	-3.57	-0.19353	-3.08	-0.71561	-10.68
nocsC	-0.23705	-4.2	-0.28185	-4.4	-0.07237	-1.5
nocsD	-0.48423	-4.94	-0.18018	-1.5	0.179026	3.27
nocsE	-0.49775	-7.54	-0.33677	-4.68	0.095976	1.74
nocsF	-0.60953	-6.21	-0.77838	-6.67	0.332687	3.12
nocsG	-0.50222	-11.2	-0.52256	-10.59	0.219217	4.02
nocsH	-0.45578	-11.08	-0.60585	-13.27	0.137344	1.73
nocsI	-0.90209	-17.72	-1.00118	-18.36	0.113957	1.3
nocsJ	-0.31815	-6.2	-0.38362	-7.08	-0.11184	-1.5
_cons	-1.88463	-15.88	-1.69162	-12.68	-2.45453	-14.77
mills						
lambda	-1.17617	-8.26	-0.52021	-3.21	-0.28534	-2.4
rho	-1.07821		-0.56264		-0.34877	
sigma	1.090853		0.92459		0.818137	
lambda	-1.17617		-0.52021		-0.28534	

Table 2-30 Selection Corrected Earnings Equations Métis Females 1996 – 2006

	2006		2001		1996	
	Coeff.	Z	Coeff.	Z	Coeff.	Z
nety	-1.82E-06	-7.16	-2.66E-06	-6.63	-2.47E-06	-4.27
child	-0.66837	-20.75	-0.36485	-13.39	-0.35293	-10.43
age	0.097035	15.35	0.122326	15.45	0.149608	14.76
age2	-0.00116	-14.9	-0.00143	-14.15	-0.00178	-13.67
nfld	-0.27964	-4.36	-0.36182	-4.85	-0.35965	-3.85
pei	-1.32766	-2.37	-0.01836	-0.03	1.045381	1.33
ns	-0.0031	-0.04	-0.2445	-1.86	-0.04889	-0.17
nb	-0.17656	-1.48	-0.22155	-1.77	-0.55211	-1.76
que	-0.10379	-1.59	-0.09287	-1.06	0.009881	0.1
man	0.095393	2.7	0.057453	1.36	0.062966	1.08
sask	0.085243	2.18	-0.00702	-0.15	0.002003	0.03
alb	0.047777	1.43	-0.0533	-1.28	-0.06536	-1.11
bc	-0.09688	-2.54	-0.15939	-3.26	-0.1096	-1.59
ynnwt	0.432502	7.11	0.264622	4.45	0.34468	4.81
city	0.223978	9.77	0.180181	7.04	0.15842	4.97
married	-0.03723	-1.33	0.030237	0.96	0.028983	0.73
divsep	-0.06328	-1.86	0.014105	0.36	-0.05652	-1.17
widow	-0.10017	-1.3	-0.26926	-3.04	-0.07773	-0.74
vismin	(omitted)		(omitted)		(omitted)	
french	-0.0363	-0.41	-0.16624	-1.35	-0.34626	-2.52
biling	0.034724	1.12	-0.02771	-0.74	-0.0171	-0.35
nolang	-5.88479	.	0.130199	0.18	-0.16582	-0.25
hsgrad	0.265831	8.61	0.198308	5.03	0.293211	6.07

tradecert	0.161191	4.62	0.155283	3.89	0.175645	3.67
college	0.305683	9.04	0.20017	6.2	0.196414	5.14
ba	0.445987	9.25	0.313469	5.47	0.568223	7.86
aboveba	0.421298	4.08	0.365229	2.4	0.647349	3.22
masters	0.537183	5.13	0.3036	2.22	0.628092	2.99
phd	0.732355	2.56	0.664989	1.6	0.836148	1.6
nocsB	-0.30637	-6.72	-0.33416	-6.56	-0.68656	-5.35
nocsC	-0.17924	-2.15	-0.23333	-2.25	0.020574	0.24
nocsD	-0.57549	-10.58	-0.5379	-8.47	0.126416	1.25
nocsE	-0.43916	-8.56	-0.42668	-7.47	-0.21158	-2.65
nocsF	-0.62903	-6.81	-0.79307	-7.23	0.282602	2.89
nocsG	-0.8568	-18.86	-0.92895	-18.33	0.18184	2.21
nocsH	-0.82105	-12.23	-0.79869	-10.06	-0.13968	-1.61
nocsI	-1.06435	-11.04	-1.39013	-12.57	-0.02837	-0.36
nocsJ	-0.69674	-10.1	-0.70165	-9.14	-0.36168	-4.28
_cons	-1.76983	-13.38	-2.15618	-13.68	-3.3685	-16.38
mills						
lambda	-0.18504	-3.5	0.000929	0.01	0.071286	0.62
rho	-0.31277		0.00119		0.10326	
sigma	0.591606		0.779248		0.690339	
lambda	-0.18504		0.000929		0.071286	

Table 2-31 Selection Corrected Earnings Equations Inuit Males 1996 – 2006

	2006		2001		1996	
	Coeff.	Z	Coeff.	Z	Coeff.	Z
nety	-1.99E-06	-4.41	-3.57E-06	-5.11	-6.59E-06	-7.43
age	0.088481	10	0.070395	6.99	0.106235	9.28
age2	-0.00092	-8.29	-0.00068	-5.38	-0.00112	-7.79
nfld	-0.54167	-2.52	-0.4436	-2.12	-0.31421	-1.24
pei	(omitted)		-5.25781	.	-5.98708	.
ns	0.080187	0.18	-0.46536	-0.89	0.083849	0.18
nb	-0.42942	-0.82	0.329002	0.62	-0.00346	0
que	-0.16895	-0.8	0.22219	1.09	0.163837	0.66
man	0.71596	2.05	1.050326	2.54	-0.8026	-1.62
sask	-0.21936	-0.49	0.595795	1.39	0.134457	0.29
alb	0.272045	1.17	0.370209	1.49	-0.11027	-0.32
bc	-0.16966	-0.59	0.499492	1.42	0.417708	1.17
ynnwt	-0.22375	-1.06	0.071902	0.36	-0.03309	-0.13
city	0.045172	0.3	-0.02186	-0.18	0.295189	1.93
married	0.282406	7.41	0.364075	8.96	0.392232	8.66
divsep	-0.03002	-0.38	0.095123	1.14	0.05738	0.67
widow	0.147099	0.89	-0.07639	-0.47	0.109888	0.7
vismin	(omitted)		(omitted)		(omitted)	
french	-0.05341	-0.36	0.118092	0.72	-0.13227	-0.7
biling	0.085555	1.19	-0.08369	-0.95	-0.1806	-1.61
nolang	0.119296	1.21	-0.16067	-1.93	-0.05329	-0.7
hsgrad	0.383154	7.94	0.358884	5.14	0.517566	5.82
tradecert	0.217226	5.39	0.234402	5.1	0.164349	3.43

college	0.396769	7.59	0.223531	5.18	0.215992	4.57
ba	0.407047	2.81	0.696463	3.71	0.909029	4.3
aboveba	0.239024	0.69	0.488348	0.87	0.10673	0.13
masters	1.215095	2.81	0.103586	0.16	0.735617	1.3
phd	1.489798	2.26	6.8132	.	(omitted)	
nocsB	-0.18291	-2.25	-0.18126	-2.01	-0.65258	-3.93
nocsC	-0.35282	-3.83	-0.21732	-2.2	-0.06454	-0.69
nocsD	-0.55062	-2.72	-0.24418	-1.26	0.201633	1.97
nocsE	-0.4935	-5.88	-0.49392	-5.36	0.260145	2.68
nocsF	-0.73435	-6.94	-0.52422	-4.91	0.31269	2.64
nocsG	-0.49835	-7.48	-0.48004	-6.74	0.391782	4.28
nocsH	-0.56722	-8.91	-0.60042	-8.9	0.003913	0.03
nocsI	-1.19318	-11.68	-0.95952	-9.11	0.155283	1.24
nocsJ	-0.88761	-7.19	-0.88229	-7.07	-0.20427	-1.41
_cons	-1.73567	-6.39	-1.75098	-6.16	-2.93383	-8.65
mills						
lambda	-0.41077	-1.79	-0.14514	-0.64	0.116542	0.9
rho	-0.58117		-0.20433		0.20027	
sigma	0.706794		0.710346		0.58192	
lambda	-0.41077		-0.14514		0.116542	

Table 2-32 Selection Corrected Earnings Equations Inuit Females 1996 – 2006

	2006		2001		1996	
	Coeff.	Z	Coeff.	Z	Coeff.	Z
nety	-1.45E-06	-3.28	-5.74E-07	-0.97	-1.78E-06	-2.19
child	-0.28578	-7.64	-0.20725	-4.8	-0.15683	-3.19
age	0.094246	9.61	0.138387	11.12	0.130397	9.34
age2	-0.00102	-8.11	-0.00152	-9.4	-0.00148	-8.15
nfld	-0.01096	-0.06	-0.17599	-0.78	0.353447	1.17
pei	-5.72318	.	6.488897	.	(omitted)	
ns	0.52409	1.6	0.492122	1.23	-0.31071	-0.45
nb	-6.16754	.	0.407431	0.49	-4.36952	.
que	0.259195	1.47	0.024186	0.11	0.58589	1.96
man	0.236984	0.75	-0.40505	-1.08	0.187163	0.37
sask	0.348987	0.62	-6.69707	.	-5.44352	.
alb	-0.26277	-1.1	-0.09618	-0.34	0.311236	0.8
bc	-0.31044	-1	-0.25126	-0.63	0.064119	0.14
ynnwt	0.160877	0.92	-0.12719	-0.59	0.631609	2.14
city	0.10291	0.87	-0.01779	-0.17	0.19076	1.64
married	0.226457	5.56	0.104319	2.35	0.093562	1.77
divsep	-0.01584	-0.22	0.035708	0.44	-0.0584	-0.67
widow	0.039645	0.4	-0.08825	-0.77	-0.03854	-0.3
vismin	(omitted)		(omitted)		(omitted)	
french	-0.1932	-1.17	-0.14523	-0.84	-0.75484	-2.08
biling	-0.08566	-1.2	-0.0465	-0.53	-0.16054	-1.25
nolang	-0.23447	-2.31	-0.18636	-2.1	-0.21953	-2.44
hsgrad	0.402204	8.32	0.428781	5.97	0.61708	7.27

tradecert	0.148906	3	0.259749	4.39	0.492891	7.04
college	0.344584	7.06	0.213376	4.84	0.387023	7.81
ba	0.658821	6.88	0.724576	5.63	0.880731	5.77
aboveba	0.306124	1.15	-0.29074	-0.63	0.400247	0.7
masters	0.633639	2.2	0.782858	1.24	0.721891	0.83
phd	0.308285	0.72	(omitted)		(omitted)	
nocsB	-0.25022	-3.41	-0.19647	-2.39	-0.66264	-2.04
nocsC	-0.53124	-2.87	-0.30959	-1.6	-0.16328	-0.94
nocsD	-0.83907	-7.55	-0.6048	-5.21	0.181905	0.96
nocsE	-0.55001	-7.54	-0.6464	-7.79	-0.03592	-0.22
nocsF	-0.78498	-8.3	-0.66529	-6.34	0.1256	0.64
nocsG	-0.98953	-13.5	-1.01348	-12.28	0.213059	1.3
nocsH	-1.10383	-7.33	-0.99011	-6.35	0.015037	0.09
nocsI	-1.84842	-3.66	-1.39538	-3.4	-0.07797	-0.47
nocsJ	-1.44688	-7.81	-1.16755	-7.08	-0.25904	-1.44
_cons	-2.00728	-7.69	-2.6609	-8.32	-3.89718	-9.53
mills						
lambda	0.189297	1.41	0.623157	2.23	0.740829	2.07
rho	0.31552		0.72221		0.81904	
sigma	0.599948		0.862852		0.904513	
lambda	0.189297		0.623157		0.740829	

Table 2-33 Selection Corrected Earnings Equations North American Indian Males 1996 – 2006

	2006		2001		1996	
	Coeff.	Z	Coeff.	Z	Coeff.	Z
nety	-4.42E-06	-13.04	-5.14E-06	-11.4	-6.33E-06	-14.58
age	0.101348	17.22	0.097341	14.58	0.097188	17.53
age2	-0.00126	-17.27	-0.00116	-13.85	-0.00109	-15.92
nfld	-0.52916	-6.92	-0.77273	-9.64	-0.53201	-6.55
pei	-0.55074	-1.95	-0.35221	-1.37	-0.31648	-1.24
ns	-0.09168	-1.1	-0.39402	-3.98	-0.25617	-3.2
nb	-0.25725	-2.55	-0.64692	-6.75	-0.3239	-5.33
que	-0.01638	-0.26	-0.04555	-0.6	-0.32141	-7.75
man	-0.21134	-4.91	-0.28857	-6.92	-0.25312	-7.23
sask	-0.32826	-7.94	-0.49773	-11.5	-0.3562	-9.27
alb	-0.04445	-1.31	-0.13902	-3.8	-0.25039	-7.77
bc	-0.21629	-6.56	-0.40207	-11.13	-0.29169	-11.41
ynnwt	-0.25936	-7.14	-0.26737	-7.06	-0.15474	-4.37
city	0.154145	6.47	0.162224	6.63	0.177168	9.25
married	0.452135	17.62	0.448078	16.56	0.473579	22.26
divsep	0.111501	3.11	0.058156	1.52	0.066032	2.16
widow	-0.04083	-0.32	0.049514	0.37	-0.05977	-0.68
vismin	(omitted)		(omitted)		(omitted)	
french	-0.08056	-0.97	0.049094	0.46	0.035086	0.6
biling	0.010454	0.22	0.011629	0.22	0.174031	4.09
nolang	-0.09347	-0.35	-0.4504	-1.7	-0.14259	-1.12
hsgrad	0.39516	14.28	0.343188	9.36	0.374076	12.06

tradecert	0.277887	9.73	0.202292	6.6	0.203586	8.54
college	0.378843	11.38	0.207569	7.11	0.328049	14.54
ba	0.575818	9.53	0.59247	8.37	0.751372	12.71
aboveba	0.588253	4.37	0.485034	2.37	0.847636	5.77
masters	0.340579	2.95	0.738426	4.33	0.997511	6.65
phd	0.92509	3.31	0.512395	1.75	1.033731	3.03
nocsB	-0.14771	-2.58	-0.38342	-5.98	-0.64691	-13.15
nocsC	-0.21978	-3.51	-0.36256	-5.4	-0.08835	-2.12
nocsD	-0.21335	-1.88	-0.3653	-3.02	0.13849	2.9
nocsE	-0.25351	-4.06	-0.41615	-6.36	0.114841	2.46
nocsF	-0.57732	-6.48	-0.75018	-7.42	0.267633	3.24
nocsG	-0.52814	-11.08	-0.6046	-12.07	0.139145	3.3
nocsH	-0.51497	-11.48	-0.68837	-14.58	0.185738	3.43
nocsI	-1.00805	-18.09	-1.14111	-20.22	0.228282	4.13
nocsJ	-0.30151	-5.49	-0.44393	-7.82	-0.16119	-2.63
_cons	-1.7828	-14.35	-1.57458	-11.5	-2.59386	-23.08
mills						
lambda	-0.93435	-9.28	-0.53576	-4.43	-0.42598	-5.05
rho	-0.96167		-0.58624		-0.52441	
sigma	0.971587		0.913895		0.812293	
lambda	-0.93435		-0.53576		-0.42598	

**Table 2-34 Selection Corrected Earnings Equations North American Indian Females 1996
– 2006**

	2006		2001		1996	
	Coeff.	Z	Coeff.	Z	Coeff.	Z
nety	-2.40E-06	-7.96	-2.15E-06	-5.4	-2.84E-06	-6.47
child	-0.50863	-17.46	-0.30389	-12.08	-0.15884	-7.27
age	0.094242	14.9	0.131216	17.5	0.125498	19.26
age2	-0.00111	-14.39	-0.00153	-16.01	-0.00141	-17.08
nfld	-0.09699	-1.2	-0.20915	-2.71	-0.24886	-2.83
pei	-0.17404	-0.62	-0.49583	-1.82	0.008719	0.04
ns	-0.22155	-2.7	-0.13788	-1.34	-0.342	-3.7
nb	0.0424	0.46	-0.39676	-4.13	-0.29783	-4.31
que	-0.16273	-2.55	-0.08226	-1.07	0.0783	1.73
man	-0.09979	-2.41	-0.0813	-1.92	-0.02093	-0.55
sask	-0.14076	-3.48	-0.06655	-1.52	-0.10038	-2.45
alb	-0.07945	-2.32	-0.08974	-2.34	-0.11629	-3.32
bc	-0.2866	-8.6	-0.32072	-8.53	-0.29963	-10.67
ynnwt	0.001129	0.03	0.037911	0.98	0.000563	0.02
city	0.104926	4.36	0.108018	4.28	0.039351	1.87
married	0.104992	3.98	0.100588	3.48	0.127005	5.17
divsep	-0.01265	-0.4	-0.0217	-0.61	-0.05053	-1.61
widow	-0.12088	-1.76	-0.05976	-0.76	-0.0957	-1.69
vismin	(omitted)		(omitted)		(omitted)	
french	0.041815	0.5	-0.11111	-1.03	-0.13926	-2.15
biling	0.101098	2.23	0.123845	2.4	0.069899	1.54
nolang	-0.77362	-1.42	-5.88704	.	-0.40896	-2.36

hsgrad	0.321472	10.77	0.274572	7.01	0.36416	10.51
tradecert	0.266199	7.81	0.143379	3.66	0.250998	7.97
college	0.368344	11.74	0.228179	7.77	0.407207	17.1
ba	0.513421	11.49	0.437393	8.45	0.728051	15.81
aboveba	0.397548	4.21	0.374935	2.99	0.900195	7.71
masters	0.655476	6.55	0.453933	3.5	0.803577	6.68
phd	0.386851	1.76	0.489724	1.38	0.119583	0.22
nocsB	-0.27033	-5.97	-0.22847	-4.61	-0.63854	-7.22
nocsC	-0.24672	-2.8	-0.13692	-1.44	-0.00976	-0.15
nocsD	-0.49679	-8.89	-0.39596	-6.27	-0.0625	-0.79
nocsE	-0.42994	-8.96	-0.35085	-6.68	-0.2457	-4.07
nocsF	-0.51265	-5.86	-0.60823	-6.7	0.233567	2.96
nocsG	-0.82159	-18.27	-0.87268	-17.62	0.174097	2.97
nocsH	-0.79105	-11.85	-0.81125	-10.71	-0.08754	-1.43
nocsI	-1.09252	-10.31	-1.31898	-10.89	-0.01032	-0.18
nocsJ	-0.51435	-7.83	-0.52858	-7.09	-0.39742	-6.09
_cons	-1.72179	-12.88	-2.46331	-16.64	-3.09517	-23.15
mills						
lambda	-0.21325	-3.21	0.022185	0.2	0.385622	2.5
rho	-0.32565		0.02868		0.46307	
sigma	0.65484		0.773416		0.83276	
lambda	-0.21325		0.022185		0.385622	

Table 2-35 Selection Corrected Earnings Equations On-Reserve Males 1996 – 2006

	2006		2001		1996	
	Coeff.	Z	Coeff.	Z	Coeff.	Z
nety	-2.26E-06	-8.59	-3.90E-06	-11.09	-5.84E-06	-9.57
age	0.087854	23.46	0.096557	22.96	0.104969	16.75
age2	-0.00093	-20.53	-0.00102	-19.86	-0.00108	-14.03
nfld	-0.89153	-9.68	-0.8113	-6.46	-0.06012	-0.28
pei	-0.02862	-0.18	-0.19625	-1.1	-0.37269	-1.18
ns	-0.37383	-8.24	-0.39321	-8.31	-0.40006	-6.46
nb	-0.41745	-9.72	-0.33904	-7.01	-0.37183	-5.39
que	-0.03855	-1.3	-0.06165	-1.94	0.090243	1.8
man	-0.2285	-10.29	-0.13427	-5.87	-0.25808	-8.26
sask	-0.31723	-13.16	-0.26258	-10.29	-0.30012	-8.83
alb	-0.01752	-0.76	-0.00537	-0.21	-0.0706	-1.92
bc	-0.28859	-13.94	-0.2792	-12.45	-0.21165	-5.31
ynnwt	-0.26213	-2.22	-0.09504	-0.8	-0.46594	-6.01
city	0.182611	10.38	0.210971	10.97	-0.00362	-0.1
married	0.325506	21.49	0.272587	17.19	0.384716	16.73
divsep	0.043992	1.86	-0.00547	-0.22	0.000257	0.01
widow	0.10663	1.66	0.042105	0.62	0.077325	0.91
vismin	0.084276	0.94	-0.02623	-0.23	-0.21337	-1.06
french	-0.03056	-0.78	0.050919	1.28	-0.33492	-5
biling	-0.0414	-1.24	0.010139	0.28	-0.04002	-0.63
nolang	0.183224	1.82	-0.23501	-2.62	-0.33641	-3.77
hsgrad	0.308171	16.61	0.314309	12.44	0.455689	11.37
tradecert	0.185806	10.89	0.204695	11.29	0.267989	10.13

college	0.411166	19.87	0.240795	13.12	0.310855	12.22
ba	0.5202	12.59	0.62292	14.08	0.840716	10.82
aboveba	0.480152	6	0.695211	6.43	0.748726	3.84
masters	0.493217	5.06	0.64983	6.12	0.949732	5.11
phd	0.238253	1.28	0.598667	1.97	-0.30785	-0.44
nocsB	-0.30416	-8.03	-0.20224	-4.92	-0.70958	-11.19
nocsC	-0.54253	-13.47	-0.50732	-11.75	-0.24018	-4.27
nocsD	-0.43342	-6.37	-0.3937	-5.71	0.079494	1.21
nocsE	-0.30236	-9.31	-0.34592	-10.71	0.236565	3.82
nocsF	-0.72675	-12.09	-0.72558	-11.69	0.112549	0.87
nocsG	-0.58654	-21.65	-0.55066	-20.32	0.154347	2.81
nocsH	-0.81647	-31.7	-0.88575	-34.78	0.244665	3.9
nocsI	-1.23342	-40.54	-1.34653	-43.08	0.450952	6.96
nocsJ	-0.39391	-11.27	-0.48236	-13.9	-0.36154	-3.87
_cons	-1.85368	-23.33	-2.03206	-23.41	-2.98954	-22.95
mills						
lambda	-1.35562	-7.8	-0.42431	-3.3	-0.04466	-0.33
rho	-1.00525		-0.45403		-0.05776	
sigma	1.348542		0.934548		0.773175	
lambda	-1.35562		-0.42431		-0.04466	

Table 2-36 Selection Corrected Earnings Equations On-Reserve Females 1996 – 2006

	2006		2001		1996	
	Coeff.	Z	Coeff.	Z	Coeff.	Z
nety	-3.06E-07	-1.87	-1.24E-06	-3.4	-2.49E-06	-3.82
child	-0.18992	-10.85	-0.10853	-6.38	-0.09927	-3.82
age	0.103126	24.72	0.121394	24.72	0.126436	16.4
age2	-0.00108	-21.5	-0.00128	-20.92	-0.00138	-13.86
nfld	-0.50603	-6.42	-0.51494	-4.38	0.286908	1.26
pei	-0.23883	-1.51	-0.16554	-0.88	-0.39077	-1.12
ns	-0.27638	-6.26	-0.18821	-3.85	-0.30555	-4.69
nb	-0.16146	-3.9	-0.06919	-1.42	-0.39108	-5.37
que	0.054833	1.84	0.159838	4.76	0.110612	1.99
man	-0.10024	-4.23	0.15551	6.13	-0.12769	-3.48
sask	-0.22386	-8.89	0.044684	1.61	-0.12949	-3.22
alb	-0.0683	-2.76	0.156576	5.57	0.055934	1.32
bc	-0.37702	-16.87	-0.20831	-8.35	-0.40052	-8.48
ynnwt	-0.27566	-2.34	0.165925	1.23	-0.55596	-6.17
city	0.068122	3.67	0.096797	4.64	-0.05639	-1.46
married	0.099904	6.19	0.08143	4.57	0.151023	5.57
divsep	-0.00741	-0.32	-0.0972	-3.77	-0.07083	-1.77
widow	0.020128	0.5	-0.00322	-0.07	-0.01407	-0.22
vismin	0.254593	2.8	-0.19328	-1.32	0.227853	0.7
french	-0.15154	-3.79	-0.03569	-0.86	-0.19764	-2.67
biling	-0.12335	-3.59	-0.1333	-3.47	-0.10051	-1.35
nolang	0.050475	0.46	-0.28538	-2.83	-0.231	-2.27
hsgrad	0.223064	11.38	0.274527	9.76	0.398805	9.02

tradecert	0.18614	8.55	0.213284	8.98	0.382099	10.82
college	0.343456	17.61	0.293065	15.23	0.454595	16.92
ba	0.506787	16.83	0.60768	18.06	0.860864	15.61
aboveba	0.497857	8.62	0.573572	6.55	0.861953	6.46
masters	0.377547	4.73	0.437838	4.69	1.039133	4.81
phd	0.047157	0.19	0.690037	2.05	1.566775	2.23
nocsB	-0.2774	-9.07	-0.30765	-9.5	-0.72401	-4.26
nocsC	-0.62843	-8.33	-0.73091	-8.39	0.011424	0.09
nocsD	-0.44066	-11.14	-0.47704	-10.87	-0.12544	-0.84
nocsE	-0.36287	-12.06	-0.42305	-13.2	0.051628	0.42
nocsF	-0.92779	-15.7	-0.87562	-14.03	0.283999	1.67
nocsG	-0.81205	-27.14	-0.93721	-29.52	0.335114	2.76
nocsH	-1.00563	-22.02	-1.13516	-22.45	0.21411	1.75
nocsI	-1.53498	-23.66	-1.61166	-20.63	0.290286	2.39
nocsJ	-0.60772	-9.74	-0.9055	-13.42	-0.32807	-2.46
_cons	-2.14042	-23.94	-2.63067	-26.55	-3.4525	-18.67
mills						
lambda	-0.45257	-3.67	0.5259	2.68	0.264725	1.15
rho	-0.56125		0.57443		0.37509	
sigma	0.806356		0.91551		0.705764	
lambda	-0.45257		0.5259		0.264725	

Table 2-37 RIF Regressions and Decomposition, Aboriginal Identity Males and Females, 2006

Percentile	MALES					FEMALES				
	10th	25th	50th	75th	90th	10th	25th	50th	75th	90th
Age	0.17 (16.56)**	0.129 (23.89)**	0.065 (19.74)**	0.037 (11.79)**	0.021 (6.07)**	0.103 (9.97)**	0.098 (16.24)**	0.059 (15.72)**	0.035 (8.93)**	0.021 (4.56)**
age2	-0.002 (15.72)**	-0.001 (21.81)**	-0.001 (16.64)**	0 (9.16)**	0 (3.92)**	-0.001 (9.01)**	-0.001 (14.13)**	-0.001 (12.46)**	0 (6.43)**	0 (2.80)**
nflid	-0.225 (2.35)*	-0.252 (4.32)**	-0.173 (4.24)**	-0.095 (2.16)*	-0.001 (-0.01)	-0.23 (2.61)**	-0.141 (2.58)**	-0.111 (2.75)**	-0.084 (2.08)*	-0.173 (5.18)**
pei	-0.569 (-1.32)	-0.327 (-1.18)	-0.554 (4.94)**	-0.185 (-1.39)	-0.201 (-1.64)	0.026 (-0.13)	-0.338 (-1.52)	0.027 (-0.22)	0.095 (-0.44)	-0.101 (-0.32)
ns	-0.338 (3.26)**	-0.335 (5.73)**	-0.23 (5.80)**	-0.152 (4.02)**	-0.161 (4.43)**	-0.133 (-1.52)	-0.12 (2.02)*	-0.157 (3.77)**	-0.133 (3.04)**	-0.114 (2.14)*
nb	-0.214 (-1.57)	-0.207 (2.27)*	-0.304 (5.77)**	-0.209 (4.83)**	-0.168 (4.59)**	-0.062 (-0.56)	-0.245 (3.17)**	-0.282 (6.04)**	-0.238 (6.12)**	-0.16 (3.35)**
que	-0.035 (-0.64)	-0.161 (4.15)**	-0.104 (3.84)**	-0.049 (-1.87)	-0.047 (-1.48)	0.035 (-0.71)	-0.047 (-1.21)	-0.01 (-0.37)	0.055 (-1.7)	0.002 (-0.04)
man	-0.068 (-1.7)	-0.128 (4.87)**	-0.129 (7.02)**	-0.139 (7.91)**	-0.128 (7.19)**	-0.142 (3.29)**	-0.124 (4.27)**	-0.128 (6.48)**	-0.104 (5.26)**	-0.076 (3.38)**

sask	-0.199	-0.201	-0.11	-0.082	-0.056	-0.097	-0.09	-0.115	-0.056	-0.12
	(3.74)**	(6.28)**	(5.15)**	(3.81)**	(2.29)*	(2.03)*	(2.76)**	(5.16)**	(2.40)*	(4.88)**
alb	0.053	0.078	0.086	0.105	0.165	-0.01	-0.02	-0.023	0.027	0.059
	-1.52	(3.47)**	(5.09)**	(5.87)**	(7.50)**	-0.27	-0.79	-1.24	-1.35	(2.46)*
bc	-0.099	-0.09	-0.02	-0.021	-0.016	-0.021	-0.068	-0.051	-0.038	-0.081
	(2.41)*	(3.42)**	-1.07	-1.13	-0.74	-0.53	(2.49)*	(2.53)*	-1.81	(3.54)**
ynnwt	0.084	0.104	0.126	0.193	0.204	0.151	0.267	0.326	0.518	0.54
	(2.02)*	(3.69)**	(6.10)**	(8.46)**	(7.20)**	(4.32)**	(10.41)**	(16.35)**	(20.50)**	(15.08)**
city	-0.025	-0.058	-0.068	-0.017	0.018	0.051	0.065	0.041	0.024	0.022
	-0.91	(3.25)**	(5.27)**	-1.28	-1.21	-1.75	(3.27)**	(3.01)**	-1.69	-1.34
married	0.243	0.273	0.235	0.178	0.129	0.064	0.064	0.048	0.038	0.059
	(8.38)**	(13.78)**	(16.91)**	(13.61)**	(9.09)**	(2.33)*	(3.18)**	(3.24)**	(2.38)*	(3.22)**
divsep	0.133	0.157	0.122	0.067	0.059	-0.046	-0.015	0.004	0.001	0.006
	(3.33)**	(5.60)**	(5.88)**	(3.30)**	(2.55)*	-1.25	-0.59	-0.22	-0.06	-0.29
widow	0.189	0.055	0.058	0.003	-0.126	0.045	-0.072	-0.086	-0.014	-0.018
	-1.25	-0.43	-0.7	-0.04	(2.23)*	-0.58	-1.1	(2.08)*	-0.32	-0.38
vismin	0.21	0.435	0.37	-0.267	-0.084	-0.216	-0.3	-0.336	-0.272	-0.189
	-0.82	(2.92)**	(2.55)*	(3.37)**	-0.68	-0.41	-1.01	(2.41)*	(2.26)*	-1.76
french	-0.055	-0.063	-0.054	-0.083	-0.073	-0.118	-0.144	-0.183	-0.195	-0.124

	-0.61	-1.06	-1.39	(2.34)*	-1.88	-1.43	(2.35)*	(4.53)**	(4.88)**	(2.65)**
biling	0.013	0.053	0.021	-0.021	0.026	-0.021	0.031	0.016	0.046	0.031
	-0.34	(2.22)*	-1.22	-1.26	-1.28	-0.58	-1.35	-0.95	(2.32)*	-1.26
no lang	-0.089	0.093	0.145	0.064	0.13	0.236	0.298	0.117	-0.094	0.032
	-0.59	-1.04	-1.96	-0.55	-0.72	-1.38	(2.07)*	-1.15	-0.88	-0.23
hsgrad	0.222	0.192	0.13	0.112	0.071	0.115	0.204	0.153	0.123	0.099
	(5.51)**	(8.15)**	(8.52)**	(8.31)**	(4.89)**	(2.62)**	(7.08)**	(8.60)**	(7.71)**	(6.26)**
tradecert	0.279	0.248	0.216	0.212	0.141	0.075	0.162	0.095	0.05	0.055
	(7.43)**	(10.34)**	(13.13)**	(13.68)**	(8.16)**	-1.54	(5.00)**	(4.68)**	(2.75)**	(3.00)**
college	0.294	0.3	0.274	0.274	0.18	0.217	0.325	0.253	0.231	0.189
	(7.28)**	(11.83)**	(15.41)**	(15.54)**	(9.00)**	(5.13)**	(11.07)**	(13.27)**	(12.66)**	(9.79)**
ba	0.436	0.45	0.502	0.488	0.431	0.337	0.502	0.556	0.664	0.561
	(8.84)**	(13.42)**	(18.92)**	(16.03)**	(10.82)**	(7.27)**	(15.20)**	(24.23)**	(23.81)**	(15.31)**
aboveba	0.402	0.468	0.473	0.617	0.496	0.223	0.417	0.528	0.741	0.651
	(4.29)**	(7.35)**	(8.14)**	(8.62)**	(5.04)**	(2.64)**	(7.66)**	(12.53)**	(12.18)**	(6.69)**
masters	0.449	0.449	0.528	0.694	0.76	0.252	0.456	0.582	0.898	1.056
	(6.47)**	(9.09)**	(12.06)**	(12.08)**	(8.81)**	(2.64)**	(8.09)**	(14.72)**	(15.50)**	(10.87)**
phd	0.26	0.457	0.489	0.758	0.813	0.392	0.34	0.524	0.856	1.222
	-1.25	(4.57)**	(5.06)**	(6.35)**	(3.95)**	(6.39)**	(3.18)**	(7.14)**	(7.23)**	(5.32)**

nocsB	0.104	-0.085	-0.194	-0.267	-0.361	0.103	0.058	-0.055	-0.273	-0.407
	(2.09)*	(2.55)*	(7.81)**	(10.28)**	(11.04)**	(2.86)**	(2.12)*	(2.61)**	(10.85)**	(11.95)**
nocsC	0.19	0.106	0.053	-0.05	-0.233	0.178	0.211	0.224	0.144	-0.048
	(4.07)**	(3.45)**	(2.06)*	-1.61	(5.74)**	(3.55)**	(5.20)**	(6.41)**	(2.65)**	-0.64
nocsD	0.141	-0.081	-0.202	-0.256	-0.36	0.04	0.038	-0.025	-0.084	-0.155
	-1.92	-1.25	(4.00)**	(4.77)**	(5.87)**	-0.88	-1.09	-0.92	(2.55)*	(3.40)**
nocsE	-0.014	-0.099	-0.163	-0.305	-0.523	-0.008	-0.032	-0.077	-0.188	-0.367
	-0.26	(2.71)**	(5.56)**	(9.27)**	(12.54)**	-0.21	-1.05	(3.33)**	(6.57)**	(9.17)**
nocsF	-0.052	-0.218	-0.248	-0.418	-0.521	-0.045	-0.081	-0.153	-0.246	-0.326
	-0.46	(2.86)**	(4.67)**	(8.92)**	(13.88)**	-0.5	-1.28	(3.31)**	(4.70)**	(4.93)**
nocsG	-0.316	-0.35	-0.228	-0.22	-0.336	-0.577	-0.565	-0.382	-0.369	-0.403
	(6.36)**	(11.83)**	(10.60)**	(9.32)**	(11.06)**	(11.77)**	(17.07)**	(17.53)**	(14.71)**	(12.05)**
nocsH	0.044	-0.066	-0.106	-0.218	-0.327	-0.285	-0.22	-0.137	-0.197	-0.339
	-1.06	(2.61)**	(5.34)**	(9.97)**	(11.29)**	(2.93)**	(3.62)**	(3.39)**	(4.52)**	(6.95)**
nocsI	-0.023	-0.056	0.006	0.022	-0.028	-0.684	-0.293	-0.243	-0.313	-0.451
	-0.31	-1.2	-0.18	-0.6	-0.55	(3.40)**	(2.44)*	(3.07)**	(4.82)**	(9.03)**
nocsJ	0.126	-0.04	-0.092	-0.176	-0.249	-0.005	-0.126	-0.165	-0.262	-0.291
	(2.36)*	-1.2	(3.62)**	(6.58)**	(7.22)**	-0.07	(2.28)*	(4.39)**	(6.81)**	(5.99)**
Constant	5.967	7.399	9.15	10.152	10.865	7.34	7.724	8.986	9.923	10.637

	(27.28)**	(66.68)**	(137.49)**	(161.13)**	(153.60)**	(34.36)**	(61.10)**	(118.87)**	(126.03)**	(115.81)**
R-squared	0.1	0.18	0.19	0.15	0.11	0.11	0.21	0.24	0.23	0.15
DECOMPOSITION										
mean lnwage	9.812426	10.29391	10.7029	11.05013	11.32847	9.620201	10.03876	10.43869	10.7958	11.09226
raw diff	0.2081459	0.1454783	0.121786	0.1327503	0.1810605	0.1782539	0.1583039	0.1128454	0.1088588	0.1205199
explained	0.0971122	0.081874	0.084414	0.1027358	0.1195313	0.0956686	0.0954387	0.0754144	0.07907	0.071024
unexplained	0.1110337	0.0636042	0.037372	0.0300146	0.0615291	0.0825852	0.0628652	0.037431	0.0297889	0.0494959

Table 2-38 RIF Regressions and Decomposition, Aboriginal Identity Males and Females, 2001

Percentile	MALES					FEMALES				
	10th	25th	50th	75th	90th	10th	25th	50th	75th	90th
Age	0.138 (10.20)**	0.106 (16.76)**	0.058 (14.61)**	0.032 (8.90)**	0.024 (5.94)**	0.106 (6.89)**	0.079 (11.32)**	0.057 (12.96)**	0.04 (9.47)**	0.027 (5.58)**
age2	-0.002 (9.93)**	-0.001 (15.43)**	-0.001 (11.71)**	0 (6.29)**	0 (3.98)**	-0.001 (6.38)**	-0.001 (9.90)**	-0.001 (11.00)**	0 (7.34)**	0 (3.64)**
nfld	-0.321 (2.58)**	-0.281 (4.20)**	-0.194 (3.78)**	-0.207 (4.41)**	-0.146 (3.11)**	-0.178 (1.69)	-0.179 (3.14)**	-0.18 (4.51)**	-0.106 (2.65)**	-0.136 (2.92)**
pei	-1.087 (1.77)	-0.464 (2.17)*	-0.405 (2.48)*	-0.278 (6.08)**	-0.282 (6.08)**	-0.255 (0.44)	-0.628 (2.61)**	-0.211 (1.51)	-0.016 (0.1)	-0.269 (4.59)**
ns	0.092 (0.72)	-0.171 (1.99)*	-0.094 (1.6)	-0.113 (2.21)*	-0.076 (1.21)	-0.286 (1.71)	-0.217 (2.51)*	-0.175 (3.19)**	-0.04 (0.68)	-0.125 (1.84)
nb	-0.177 (1.24)	-0.251 (3.04)**	-0.191 (3.13)**	-0.15 (2.86)**	-0.151 (3.48)**	-0.615 (3.20)**	-0.322 (3.80)**	-0.311 (5.66)**	-0.14 (2.39)*	-0.187 (2.69)**
que	-0.1 (1.38)	-0.054 (3.22)**	-0.098 (3.22)**	-0.03 (1.04)	0.002 (0.06)	0.039 (0.52)	0.014 (0.35)	0.002 (0.05)	0.022 (0.65)	-0.003 (0.07)
man	-0.215 (4.05)**	-0.183 (6.41)**	-0.186 (9.13)**	-0.115 (6.17)**	-0.083 (4.07)**	-0.094 (1.65)	-0.178 (5.91)**	-0.198 (9.29)**	-0.124 (5.93)**	-0.138 (5.93)**

sask	-0.203 (3.27)**	-0.189 (5.54)**	-0.152 (6.17)**	-0.109 (4.80)**	-0.058 (2.28)*	-0.101 -1.55	-0.08 (2.55)*	-0.13 (5.33)**	-0.085 (3.38)**	-0.118 (4.15)**
alb	-0.074 -1.61	-0.058 (2.24)*	0.021 -1.07	0.038 (2.02)*	0.101 (4.45)**	-0.043 -0.81	-0.097 (3.39)**	-0.12 (5.60)**	-0.071 (3.35)**	-0.068 (2.83)**
bc	-0.02 -0.42	-0.009 -0.34	0.049 (2.35)*	0.037 -1.7	0.041 -1.69	-0.056 -0.96	-0.035 -1.2	0.024 -1.05	0.013 -0.56	-0.034 -1.23
ynnwt	-0.053 -1.06	0.02 -0.73	0.109 (5.23)**	0.134 (6.51)**	0.14 (6.12)**	0.05 -0.88	0.151 (5.60)**	0.245 (11.96)**	0.397 (17.58)**	0.408 (13.45)**
city	0.004 -0.12	-0.011 -0.59	0.006 -0.44	-0.014 -0.98	0.017 -1.04	0.002 -0.06	0.054 (2.62)**	0.041 (2.79)**	0.033 (2.26)*	0.045 (2.62)**
married	0.287 (7.78)**	0.308 (13.80)**	0.243 (15.12)**	0.172 (12.01)**	0.136 (9.12)**	0.062 -1.57	0.051 (2.35)*	0.031 -1.93	0.022 -1.33	0.028 -1.44
divsep	0.152 (2.82)**	0.173 (5.43)**	0.168 (7.08)**	0.08 (3.62)**	0.02 -0.85	0.071 -1.51	0.034 -1.3	0.045 (2.22)*	0.009 -0.45	-0.03 -1.29
widow	-0.002 -0.01	0.035 -0.26	-0.099 -1.19	0.022 -0.29	-0.053 -0.76	-0.155 -0.89	0.01 -0.13	0.01 -0.2	-0.018 -0.36	-0.136 (2.72)**
vismin	-0.866 -1.56	-0.405 -1.65	-0.118 -0.75	-0.051 -0.36	-0.024 -0.12	-0.818 -1	-0.058 -0.2	0.123 -0.7	0.489 -1.91	0.817 -1.7
french	-0.083 -0.083	-0.086 -0.086	-0.053 -0.053	-0.06 -0.06	-0.102 -0.102	-0.05 -0.05	-0.12 -0.12	-0.08 -0.08	-0.046 -0.046	-0.018 -0.018

	-0.62	-1.19	-1.07	-1.29	(2.40)*	-0.37	-1.73	-1.6	-0.89	-0.24
biling	0.054	0.047	0.046	-0.001	0.039	0.048	0.049	0.025	0.044	0.092
	-1.2	-1.83	(2.42)*	-0.05	-1.75	-0.97	-1.87	-1.27	(2.09)*	(3.33)**
no lang	0.284	-0.059	-0.264	-0.257	-0.163	-0.213	-0.079	-0.06	-0.156	-0.201
	-1.92	-0.65	(4.49)**	(5.34)**	(2.98)**	-0.9	-0.7	-0.81	(2.24)**	(2.79)**
hsgrad	0.147	0.092	0.055	0.056	0.03	0.113	0.118	0.107	0.094	0.066
	(2.68)**	(3.16)**	(2.80)**	(3.24)**	-1.59	-1.71	(3.59)**	(4.76)**	(4.45)**	(3.19)**
tradecert	0.195	0.169	0.11	0.129	0.077	0.161	0.104	0.072	0.044	0.046
	(4.52)**	(6.92)**	(6.07)**	(7.56)**	(3.99)**	(2.42)*	(2.98)**	(3.09)**	(2.10)*	(2.20)*
college	0.221	0.205	0.143	0.148	0.075	0.221	0.214	0.186	0.143	0.138
	(4.97)**	(8.56)**	(8.27)**	(9.14)**	(4.15)**	(4.29)**	(7.97)**	(10.28)**	(8.46)**	(7.80)**
ba	0.393	0.376	0.376	0.385	0.325	0.407	0.411	0.482	0.569	0.561
	(6.42)**	(10.61)**	(12.30)**	(11.27)**	(7.21)**	(6.53)**	(12.36)**	(18.08)**	(18.49)**	(12.76)**
aboveba	0.424	0.452	0.525	0.521	0.379	0.285	0.379	0.559	0.694	0.698
	(7.56)**	(11.59)**	(10.36)**	(6.03)**	(3.02)**	-1.51	(4.74)**	(9.47)**	(8.54)**	(5.36)**
masters	0.178	0.303	0.412	0.575	0.609	0.33	0.368	0.554	0.745	1.026
	-1.5	(5.59)**	(8.22)**	(8.16)**	(5.15)**	(2.98)**	(6.93)**	(13.56)**	(11.67)**	(8.72)**
phd	0.249	0.34	0.462	0.724	0.904	0.527	0.446	0.625	1.013	1.937
	-1.59	(4.66)**	(8.34)**	(5.00)**	(3.12)**	(7.60)**	(11.23)**	(20.78)**	(11.24)**	(10.76)**

nocsB	-0.009	-0.011	-0.115	-0.189	-0.231	0.156	0.091	-0.011	-0.186	-0.284
	-0.13	-0.29	(3.92)**	(6.65)**	(6.40)**	(2.84)**	(3.02)**	-0.44	(7.18)**	(8.47)**
nocsC	0.068	0.122	0.102	0.004	-0.051	0.178	0.083	0.172	0.138	-0.195
	-1.09	(3.52)**	(3.43)**	-0.11	-1.13	-1.95	-1.51	(3.95)**	(2.45)*	(2.99)**
nocsD	0.12	0.002	-0.052	-0.137	-0.258	0.059	0.066	-0.016	-0.035	-0.119
	-1.13	-0.02	-0.92	(2.45)*	(4.37)**	-0.8	-1.72	-0.5	-0.97	(2.46)*
nocsE	0.101	0.071	-0.024	-0.189	-0.347	-0.001	0.022	-0.024	-0.156	-0.294
	-1.73	-1.95	-0.72	(5.19)**	(7.88)**	-0.02	-0.67	-0.91	(5.36)**	(7.58)**
nocsF	-0.208	-0.14	-0.263	-0.289	-0.264	0.079	-0.04	-0.12	-0.157	-0.25
	-1.3	-1.69	(4.66)**	(5.57)**	(4.12)**	-0.72	-0.59	(2.58)**	(3.04)**	(3.80)**
nocsG	-0.285	-0.24	-0.186	-0.174	-0.265	-0.392	-0.408	-0.285	-0.274	-0.284
	(4.75)**	(7.29)**	(7.69)**	(7.26)**	(8.79)**	(5.62)**	(11.34)**	(11.30)**	(10.44)**	(8.46)**
nocsH	0.033	0.01	-0.063	-0.135	-0.221	-0.102	-0.038	-0.03	-0.05	-0.16
	-0.65	-0.34	(2.83)**	(5.93)**	(7.40)**	-0.88	-0.6	-0.62	-0.95	(2.69)**
nocsI	-0.04	0.067	0.046	0.039	0.017	-0.511	-0.276	-0.246	-0.096	-0.257
	-0.44	-1.38	-1.26	-1.07	-0.35	-1.41	-1.76	(3.12)**	-1.16	(3.22)**
nocsJ	0.019	-0.042	0.036	-0.025	-0.146	-0.048	-0.087	-0.191	-0.281	-0.263
	-0.3	-1.15	-1.33	-0.92	(4.25)**	-0.45	-1.47	(4.78)**	(7.82)**	(5.92)**
Constant	6.687	7.731	9.065	10.025	10.554	7.101	8.092	8.979	9.689	10.264

	(24.01)**	(60.84)**	(116.89)**	(143.39)**	(134.06)**	(22.76)**	(57.93)**	(101.96)**	(115.69)**	(109.24)**
R-squared	0.06	0.16	0.18	0.13	0.09	0.06	0.17	0.21	0.19	0.15
DECOMPOSITION										
mean lnwage	9.667271	10.14417	10.52582	10.86042	11.11921	9.442668	9.921162	10.29849	10.61584	10.87084
raw diff	0.2375254	0.178763	0.1408951	0.1668326	0.196564	0.1974578	0.1277679	0.0944755	0.1181166	0.1589142
explained	0.0813103	0.0698767	0.1073659	0.0935201	0.1412263	0.0690691	0.082999	0.0612945	0.0744598	0.0776305
unexplained	0.1562151	0.1088863	0.0335292	0.0733125	0.0553377	0.1283887	0.044769	0.033181	0.0436568	0.0812838

Table 2-39 RIF Regressions and Decomposition, Aboriginal Identity Males and Females, 1996

Percentile	MALES						FEMALES					
	10th	25th	50th	75th	90th		10th	25th	50th	75th	90th	
Age	0.114 (7.46)**	0.109 (13.58)**	0.068 (14.12)**	0.044 (9.59)**	0.028 (5.81)**		0.086 (4.69)**	0.084 (8.75)**	0.05 (9.71)**	0.044 (9.06)**	0.035 (6.07)**	
age2	-0.001	-0.001	-0.001	0	0		-0.001	-0.001	-0.001	0	0	
nfld	-0.042 (7.18)**	0.047 (12.50)**	-0.024 (11.94)**	-0.081 (7.05)**	-0.036 (3.87)**		-0.177 (4.38)**	-0.175 (7.81)**	-0.046 (8.11)**	-0.155 (7.53)**	-0.058 (4.68)**	
pei	-0.39 (7.18)**	-0.84 (12.50)**	-0.49 (11.94)**	-1.58 (7.05)**	-0.62 (3.87)**		-1.15 (4.38)**	-1.93 (7.81)**	-0.92 (8.11)**	-0.394 (7.53)**	-0.293 (4.68)**	
ns	-0.225	-0.037	-0.035	-0.107	-0.125		-0.003	-0.057	-0.186	-0.206	-0.231	
nb	-1.06 (3.40)**	-0.339 (3.40)**	-0.186 (2.92)**	-1.79 (1.79)**	-0.16 (2.46)**		-0.02	-0.56 (2.87)**	-0.39 (6.67)**	-0.301 (6.87)**	-0.175 (2.83)**	
que	-0.065	-0.054	-0.128	-0.031	-0.015		-0.083	0.032	-0.025	-0.037	-0.051	
man	-0.218 (3.45)**	-0.217 (6.22)**	-0.162 (7.06)**	-0.12 (5.57)**	-0.096 (4.31)**		-0.186 (2.88)**	-0.183 (4.56)**	-0.188 (7.40)**	-0.178 (7.62)**	-0.133 (4.99)**	

sask	-0.268	-0.158	-0.114	-0.061	-0.051	-0.253	-0.26	-0.229	-0.185	-0.132
	(3.64)**	(3.99)**	(4.22)**	(2.25)*	-1.68	(3.13)**	(5.73)**	(8.38)**	(6.98)**	(4.15)**
alb	-0.076	-0.069	-0.085	-0.032	-0.014	-0.334	-0.204	-0.15	-0.1	-0.035
	-1.3	(1.98)*	(3.60)**	-1.38	-0.57	(4.93)**	(5.20)**	(5.94)**	(3.99)**	-1.13
bc	0.02	0.016	0.039	0.102	0.041	-0.148	-0.054	-0.045	-0.024	-0.026
	-0.38	-0.52	-1.77	(4.35)**	-1.57	(2.49)*	-1.52	-1.91	-0.92	-0.84
ynnwt	0.031	0.07	0.124	0.235	0.266	-0.013	0.12	0.192	0.386	0.539
	-0.64	(2.35)*	(5.82)**	(10.15)**	(9.91)**	-0.25	(3.63)**	(9.04)**	(15.85)**	(14.43)**
city	0.063	0.055	0.012	0.003	0.038	0.087	0.116	0.087	0.032	0.027
	-1.7	(2.61)**	-0.84	-0.17	(2.36)*	(1.97)*	(4.64)**	(5.71)**	(2.22)*	-1.5
married	0.303	0.258	0.17	0.137	0.105	0.061	0.063	0.05	0.031	0.041
	(6.65)**	(9.69)**	(9.63)**	(8.38)**	(6.46)**	-1.31	(2.20)*	(2.76)**	-1.72	(1.97)*
divsep	0.242	0.119	0.085	0.042	0.041	0.07	0.03	0.042	0.028	0.037
	(3.97)**	(3.20)**	(3.38)**	-1.76	-1.63	-1.2	-0.85	-1.82	-1.18	-1.3
widow	0.525	0.166	0.118	0.102	0.022	-0.003	0.002	0.042	-0.022	-0.013
	(4.79)**	-1.36	-1.47	-1.09	-0.18	-0.02	-0.03	-0.85	-0.51	-0.23
vismin	-0.079	0.169	-0.45	-0.056	-0.276	-1.324	-0.445	-0.229	-0.043	0.025
	-0.27	-1.25	-1.47	-0.16	(5.86)**	-1.15	-1.5	-1.05	-0.3	-0.2
french	-0.054	-0.038	0.021	-0.021	-0.055	-0.142	-0.272	-0.24	-0.091	-0.053

	-0.39	-0.51	-0.42	-0.43	-1.11	-0.78	(2.71)**	(4.76)**	(2.11)*	-1.05
biling	-0.071	0.013	0.02	0.062	0.039	-0.055	-0.104	-0.034	-0.016	0.043
	-1.21	-0.39	-0.87	(2.57)*	-1.43	-0.82	(2.58)**	-1.4	-0.64	-1.22
no lang	0.021	-0.141	-0.155	-0.219	-0.134	-0.282	-0.253	-0.115	-0.135	-0.173
	-0.2	-1.9	(3.07)**	(3.06)**	-1.05	-1.33	(2.36)*	-1.75	(2.01)*	(2.13)*
hsgrad	0.139	0.099	0.125	0.122	0.075	0.137	0.219	0.114	0.104	0.063
	(2.20)*	(2.88)**	(5.69)**	(5.65)**	(3.40)**	-1.73	(5.23)**	(4.64)**	(4.56)**	(2.89)**
tradecert	0.123	0.148	0.134	0.121	0.102	0.053	0.152	0.102	0.06	0.053
	(2.55)*	(5.44)**	(7.10)**	(6.42)**	(4.87)**	-0.65	(3.45)**	(4.03)**	(2.86)**	(2.55)*
college	0.171	0.162	0.123	0.125	0.108	0.35	0.305	0.2	0.177	0.16
	(3.63)**	(6.00)**	(6.73)**	(7.03)**	(5.66)**	(6.08)**	(9.42)**	(10.40)**	(10.12)**	(8.43)**
ba	0.346	0.333	0.355	0.434	0.325	0.425	0.451	0.486	0.639	0.744
	(5.50)**	(7.95)**	(10.83)**	(10.83)**	(6.54)**	(6.49)**	(10.99)**	(17.52)**	(18.87)**	(13.15)**
aboveba	0.07	0.276	0.37	0.473	0.336	0.24	0.366	0.367	0.644	0.754
	-0.35	(2.86)**	(4.88)**	(4.76)**	(2.89)**	-1.49	(3.37)**	(5.52)**	(7.82)**	(5.22)**
masters	0.301	0.297	0.466	0.602	0.634	0.31	0.362	0.46	0.816	1.387
	(2.87)**	(3.72)**	(7.76)**	(6.47)**	(4.53)**	(2.72)**	(6.26)**	(11.72)**	(12.54)**	(9.18)**
phd	0.374	0.415	0.504	0.643	0.717	0.431	0.397	0.498	0.957	2.222
	(4.86)**	(7.18)**	(3.08)**	(3.00)**	(2.53)*	(4.72)**	(7.48)**	(15.54)**	(17.82)**	(23.05)**

nocsB	-0.473 (3.41)**	-0.293 (4.01)**	-0.202 (4.12)**	-0.184 (3.43)**	-0.163 (2.35)*	-0.583 -1.88	-0.649 (3.98)**	-0.214 (2.77)**	-0.154 (2.35)*	-0.09 -0.98
nocsC	-0.057	-0.058	-0.097	-0.197	-0.253	-0.121	-0.036	0.023	0.003	-0.111
	-0.86	-1.4	(3.17)**	(5.61)**	(5.87)**	-1.39	-0.58	-0.52	-0.06	-1.9
nocsD	-0.124	-0.115	-0.192	-0.297	-0.32	-0.187	-0.227	-0.098	-0.101	-0.149
	-1.63	(2.50)*	(5.79)**	(8.08)**	(7.21)**	-1.69	(2.92)**	-1.86	(1.97)*	(2.33)*
nocsE	-0.627	-0.478	-0.401	-0.446	-0.375	-0.574	-0.573	-0.259	-0.196	-0.17
	(6.98)**	(9.65)**	(12.11)**	(12.68)**	(8.73)**	(5.94)**	(9.09)**	(6.29)**	(4.76)**	(3.13)**
nocsF	-0.16	-0.228	-0.224	-0.338	-0.203	0.067	0.067	-0.041	-0.091	-0.086
	-1.28	(3.06)**	(4.45)**	(6.60)**	(3.06)**	-0.78	-1	-0.83	-1.88	-1.35
nocsG	0.064	0.04	-0.058	-0.272	-0.318	-0.099	0.062	0.097	0.005	-0.062
	-0.97	-0.99	-1.86	(7.58)**	(7.28)**	-1.32	-1.17	(2.49)*	-0.12	-1.1
nocsH	-0.097	-0.123	-0.281	-0.417	-0.447	-0.131	0.015	0.039	-0.061	-0.123
	-1.14	(2.24)*	(7.11)**	(9.84)**	(9.17)**	-1.63	-0.26	-0.95	-1.39	(1.98)*
nocsI	-0.133	-0.176	-0.399	-0.496	-0.467	-0.225	-0.044	-0.057	-0.107	-0.14
	-1.36	(2.80)**	(8.82)**	(11.54)**	(10.14)**	(2.84)**	-0.8	-1.42	(2.59)**	(2.47)*
nocsJ	-1.278	-0.843	-0.511	-0.437	-0.347	-0.966	-0.938	-0.431	-0.255	-0.181
	(7.38)**	(11.02)**	(13.63)**	(11.87)**	(7.84)**	(6.82)**	(12.72)**	(10.39)**	(6.30)**	(3.37)**
Constant	7.156	7.674	8.928	9.803	10.433	7.698	7.991	8.984	9.468	9.848

	(23.40)**	(47.04)**	(92.63)**	(109.72)**	(111.92)**	(21.59)**	(41.80)**	(85.19)**	(98.13)**	(87.09)**
R-squared	0.08	0.17	0.19	0.16	0.09	0.07	0.21	0.23	0.22	0.18
DECOMPOSITION										
mean lnwage	9.569837	10.05341	10.41349	10.74211	11.00442	9.333405	9.807851	10.18046	10.48507	10.72149
raw diff	0.2212769	0.1607984	0.1782609	0.1471202	0.1695449	0.1800521	0.1209976	0.1044543	0.1111381	0.1397142
explained	0.0944597	0.0878897	0.0716302	0.0949046	0.121106	0.0944522	0.0427901	0.0299187	0.0442777	0.0656527
unexplained	0.1268172	0.0729087	0.1066308	0.0522156	0.0484389	0.0855999	0.0782075	0.0745356	0.0668604	0.0740615

Chapter 3

Labour Force Participation and Unemployment: An Empirical Analysis of Aboriginal and Non-Aboriginal Canadians, 2008-2009

I. Introduction

The reasons for the persistent unemployment among Aboriginal Canadians, coupled with relatively high and increasing levels of labour force participation, are not well understood. These questions provide the subject for important policy discussions, especially considering the growth in the Aboriginal population over the last two decades. “The growth in the Aboriginal Population is one of the most significant demographic trends in Canada today, and most decidedly, an important consideration in the development of future employment policies and programs” (Ciceri and Scott, 2006 p. 2). This paper attempts to shed some light on these issues by empirically examining labour force participation and unemployment among Aboriginal persons as compared to non-Aboriginal persons in Canada. Using data from the 2008 and 2009 Labour Force Survey for a number of Aboriginal and non-Aboriginal groups, the study first estimates the probability that an individual is a labour force participant and second, conditional on labour force participation, that an individual is unemployed. The results of the study suggest that the downturn in economic activity experienced from 2008 to 2009 had a disproportionately large effect on Aboriginal males, especially males ages 15 to 25 as measured by the reduction in the probability of labour force participation and the increase in the probability of unemployment. The probability of labour force participation fell from 2008 to 2009 for all groups in the study, with the exception of Aboriginal females. Also, Aboriginal persons typically had notably lower

rates of labour force participation and higher rates of unemployment than their non-Aboriginal counterparts.

The paper begins by setting the theoretical framework employed in the study and provides an overview of the small body of literature that empirically examines Aboriginal labour force participation and unemployment in Canada to date. Results are presented following a discussion of the data and methodology. The paper concludes by highlighting the importance of this research to policy considerations directed towards improving the labour market position of marginalized groups in Canada.

II. Previous Literature and Theoretical Framework

The fact that Aboriginal people experience notably higher unemployment rates than non-Aboriginals is a well-documented reality, but as noted in the opening paragraph, the reasons for this are not commonly examined in the empirical literature. Numerous reports detail various descriptive statistics related to Aboriginal employment and labour force participation. Among the most recent publications, Zietsma (2010) notes that the unemployment rate among Aboriginal people living off-reserves in 2009 was 13.9% as compared with the 8.1% unemployment rate experienced by non-Aboriginal Canadians that same year. A convergence of labour force participation rates between the two groups began in the 1990's, increasing from 57.4% in 1991 to 61.4% in 2001 for Aboriginal persons, while the total labour force participation rate in Canada in 1991 and 2001 dropped to 68% and 66.4% respectively (Mendelson, 2004). Participation rates among the 'core working age' population in 2009 were relatively high for both Aboriginal and non-Aboriginal persons at 77.6% and 86.7% respectively (Zietsma, 2010).

Discussions of labour force activity draw from a well-established theoretical framework. As explained in White et al., (2003), for example, accounts of labour force participation and employment can be grouped into two main categories: those that emphasize individual attributes and those that focus on the structural features of a society in which an individual lives. Of the explanations of labour force behaviour focused on the individual, human capital theory (Becker, 1964) is most frequently cited as it posits that individuals embody various observable and unobservable wage-determining characteristics; for example, education, and differences in these endowments can help explain the variance in labour market outcomes across individuals and groups (See, for example, Benjamin et al., 2007). Differences in education between Aboriginal and non-Aboriginal Canadians have been widely cited as one of the most important explanatory factors contributing to large wage disparities between the two groups and large wage gaps influence an individual's incentive to participate in the labour market (George and Kuhn, 1994). Differences in educational attainments between Aboriginal and non-Aboriginal persons also greatly affect access to various labour market opportunities (George and Kuhn, 1994; Ciceri and Scott, 2006 and White et al., 2003). Aboriginal Canadians, in particular Aboriginal women, have made notable gains in improving their educational attainments over the past two decades. The problem, however, is the rate at which non-Aboriginals are investing in education has far surpassed even the enhanced growth in Aboriginal educational investment (Ciceri and Scott, 2006).

In addition to education, there are a number of other supply-side factors that may influence an individual's decision to participate in the paid labour market. According to economic theory, an individual will enter the labour market if the market wage is greater than his/her reservation wage - the inherent value of his/her time when it is spent on activities outside

of the labour market. There are various factors that may influence an individual's reservation wage. Having children or providing care for other family members, for example, most often means that a caregiver, typically the female parent is needed in the home, thus increasing the value of the reservation wage. Additional factors such as an individual's overall health, access to alternate sources of income aside from paid employment, or the level of family income also play an important role in influencing labour force activity. Specifically, reservation wages are higher for individuals who are disabled, experience poor health or have other sources of familial wealth.

Issues of fertility are especially important to the discussion of female Aboriginal labour force participation. Recent estimates suggest that, although the number of Aboriginal births is falling, the decline is at a much slower rate as compared to any other ethnic population in the country or the overall national average, which has been relatively constant over the past twenty-plus years (Ram, 2004). The fertility rate among Aboriginal persons from 1996 to 2001, for example, was 2.6%, as compared to the national average of 1.56% over the same period (Ram, 2004). Recent estimates by Statistics Canada reveal that the Aboriginal population has grown 20.1% from 2001 to 2006 in part due to higher rates of fertility as well as an increase in the number of individuals identifying as Aboriginal persons (HRSDC, 2011). The importance of the growth in the Aboriginal population was noted earlier, with some projections suggesting a 33.4% increase in Canada's Aboriginal population by the year 2017 (Sharpe et al., 2007). Aboriginals also have among the highest incidence of lone parenthood (Mendelson, 2004; White et al., 2003). Relatively higher levels of education among Aboriginal women as well as high levels of labour force participation are somewhat surprising realities given the higher rates of Aboriginal fertility. In Western countries where women tend to be fairly highly educated, families tend to have fewer children since a woman receives higher returns to her time in the

labour market as opposed to the income she would have to forgo in favour of staying home to raise children. On the other hand, in less developed countries where women tend to have fewer educational opportunities, families tend to have more children with the hope that the children, once able to work, will enter the labour force and support the family (Schultz, 1990). It is possible that the less educated Aboriginal women are having disproportionately higher numbers of children, or that there are additional factors such as the availability of community support and the presence of grandparents in the home that may help explain the combination of higher fertility rates, higher levels of education and higher labour force participation observed among Canadian Aboriginal women (White et al., 2003).

On the demand side, in addition to the cyclical ebbs and flows in the labour market, the structural characteristics of a society and its implications for labour market opportunities are of particular interest to discussions involving Aboriginal peoples. Modernization theory suggests that important ideological differences exist between certain groups within a society and the mainstream cultural norms that may prevent or hinder the economic development of such groups (e.g. Peredo et al, 2004). As noted in White et al. (2003), Peters and Rosenberg (1995) suggest that differences in language and culture may have important implications for the labour force outcomes of Aboriginal peoples in Canada. It is imperative to understand that factors such as wages and employment outcomes have important implications for the incentive to participate in the labour force, the primary focus of this analysis. White et al. (2006) extend this argument to suggest that many Aboriginal peoples may be at a disadvantage in terms of social capital in that they lack inclusion in mainstream social and informal networks that prove valuable in assisting individuals achieve positive labour market outcomes, and hence in discouraging labour force participation.

Discrimination is an important societal characteristic that may pose a very significant barrier to labour market entry and career progression for many groups in Canada including Aboriginal peoples. In a qualitative account of her experience as a Mi'kmaq female lawyer, Doyle-Bedwell (2008) recounts the discrimination she encountered throughout her working life and asserts that prejudice in the labour market remains a large hurdle that many Aboriginal people are forced to overcome. Additionally, related to the structural differences between the two cultures, Doyle-Bedwell writes of the difference between the mainstream, largely individualist Canadian values in contrast with the more collectivist ideologies of many First Nations. Specifically, the author suggests that many Aboriginal people do not place the same emphasis on work-centrality (Hofstede, 1980) as do other non-Aboriginal Canadians, which may be a detriment in a very competitive labour market in a country that ranks work as a central focus (Doyle-Bedwell, 2009).

Aside from numerous reports that provide a statistical snapshot of the labour market position of Aboriginal people in Canada at a given point in time, there are very few quantitative studies to examine the correlates of labour force participation or unemployment.

Levesque et al (2001) combined both quantitative data with qualitative measures obtained by interviewing Aboriginal female participants in employment training and job-placement-type programs. The study finds that employment programs specifically designed for Aboriginal women had positive effects in assisting participants to secure employment by reducing some of the barriers discussed earlier in this paper, however, the duration of the study was relatively short, from October of 1997 to March of 1999, and focused only on women living in Quebec (Levesque et al., 2001).

An earlier study conducted by Drost (1994) applying human capital theory examines the role of persistent and markedly lower levels of education among Aboriginal people as a particularly important barrier to obtaining employment. Specifically, the study looks at different types of educational attainments, general education versus vocational training, and their relationship to the probability that an individual is unemployed (Drost, 1994). The study is based on a sample of Aboriginal labour force participants between the ages of 15-54 years taken from the 1986 public-use version of the Canadian Census; non-Aboriginals are not included in the paper. Although the public-use files do not explicitly include an 'on-reserve' indicator, the author was able to construct a variable to denote on-reserve status using a methodology proposed by Wright (1993). In addition to a set of human capital variables, geographic controls and indicators of family structure, Drost includes a measure of welfare dependency in his models, which is coded '1' if an individual receives any form of transfer payment from the government. The descriptive statistics presented in the paper reveal that 58% of the sample had not completed high school. There were no major differences between the educational attainments of Aboriginal men versus Aboriginal women; more women had high school or university education, while more men possessed trade school designations (Drost, 1994).

As expected, Drost (1994) finds that the probability an Aboriginal person is unemployed decreases as education increases. Moving from incomplete elementary or junior high school to completed high school, for example, translates to a drop in the probability of unemployment by 50% all else held constant. An interesting finding of this study was that Aboriginals with high school as their highest level of educational attainment had the same probability of unemployment as those with trade school, the implication being that the benefit to post-secondary education for Aboriginal peoples is only realized if they reach university completion. The author offers a

possible explanation for this finding to be the poor employment opportunities available on many reserves, stating, “The possession of trades school or college increase the probability of unemployment on reserves for Aboriginal males by 22% for trades school and 16% for college” (Drost, 1994 pp 58). The variable for social assistance had a significant effect on increasing the probability of unemployment, however, this is endogenous since unemployment insurance or welfare benefits are received precisely because an individual is unemployed.

In a more recent study, White et al. (2003) compare the labour force activity of Aboriginal and non-Aboriginal women in Canada using data from the 1996 public-use file of the Canadian Census. The authors divide the sample into three groups: Registered Indians, other Aboriginals and non-Aboriginals. Using multinomial logistic regressions, the study estimates whether a women is either employed, unemployed or not in the labour force (White et al., 2003).

The results suggest that on a continuum of female labour force participation and employment, Registered Indian women are by far the worst off, while non-Aboriginal women fair the best and the group ‘other Aboriginal’ women sit between the two extremes. Specifically, the study finds Registered Indian women to be 60% less likely to be employed than non-Aboriginal women, while other Aboriginal women are only 13% less likely to be employed compared to their non-Aboriginal counterparts (White et al., 2003). The presence of young children in the home as well as being a lone parent were shown as significantly, negatively related to the probability of employment across all three groups. The problem, however, and an important policy consideration, is that there is a disproportionately higher incidence of single parenthood among both the other Aboriginal and Registered Indian groups. Finally, with respect to education, non-Aboriginal women were more likely to find employment if they were at the lower ends of the educational distribution as compared to Aboriginal women, whereas at the

highest levels of education, the difference in the probability of employment between the groups was negligible (White et al., 2003).

The most recent study to empirically examine labour force participation and employment among Aboriginal people is conducted by Ciceri and Scott (2006). The authors use the 2001 public-use file of the Canadian Census to compare the probability of labour force participation between Aboriginals and non-Aboriginals. The study looks at three primary Aboriginal groups: First Nations, Métis and Inuit. The findings of this study echo quite closely those of White et al. (2003) in that, overall, Aboriginal people are 43% less likely to be employed than non-Aboriginals (Ciceri & Scott, 2006). The authors find, however, that once education variables are added to the models, Aboriginal people with higher levels of education actually experience an increased likelihood of obtaining employment (Ciceri & Scott, 2006). The authors extend their analysis to include an interesting question of job-skills match; specifically, whether or not an individual's job is appropriate given his/her education as outlined in the National Occupational Classification System. Controlling for other observable characteristics, the study finds that Aboriginals are 20% less likely to hold an appropriate job (i.e. have a job-skills match), as compared to non-Aboriginals (Ciceri & Scott, 2006).

III. Data and Methodology

The data for this study comes from the 2008 and 2009 master files of the Labour Force Survey (LFS). The LFS is a nationally representative survey, distributed to households across Canada on a monthly basis (Statistics Canada, 2009). Although the LFS does collect data for individuals living in the Yukon, Nunavut and Northwest Territories and on Indian Reserves, a different sampling frame is used as compared to the methodology employed for data collection

throughout the rest of Canada, thus individuals in the Territories and on-Reserves are not included in national totals (Zietsma, 2010). Therefore, these individuals are excluded from this study. In addition to the large sample sizes afforded by this dataset (914,000 respondents in total in the final sample used in this study for 2008, and 936,112 respondents in the final sample for 2009 respectively), there are two features that make time periods 2008 and 2009 in the LFS particularly interesting for analysing Aboriginal issues. As highlighted by Zietsma (2010), it was not until 2007 that an Aboriginal indicator was included in the LFS questionnaire and in 2008 a unique Aboriginal weight was added to the data to improve the representativeness of the Aboriginal sample (Statistics Canada, 2008). A second feature is the fact that the period ranging from 2008 to 2009 captures the beginning of the economic downturn in 2009, which allows one to observe whether Aboriginal groups are disproportionately affected by worsening economic conditions as compared to non-Aboriginals (Zietsma, 2010).

The sample is restricted to males and females between the ages of 15 and 65 who are not in school. An individual is defined as a labour force participant if he/she is either employed or unemployed but actively seeking employment. Although the LFS does contain a detailed Aboriginal group indicator (i.e. North American Indian, Métis and Inuit), due to the fact that the data does not include the Territories, where approximately 60% of the Inuit population reside, and the Métis population alone is also relatively small to support unique models for Métis males and females, the study uses only a simple indicator of whether or not the respondent is an Aboriginal person.

Separate logistic regressions are first run for Aboriginals and non-Aboriginals, males and females, on the probability that an individual is a labour force participant (LFP) based on a number of observable characteristics. In keeping with the theoretical framework described in the

beginning sections of this paper, and given the availability of measures in the LFS, the models include both supply and demand side variables in estimating the probability of labour force participation. On the supply side, the model includes age and age-squared (as proxy measures for labour market experience), several education categories, variables for marital status, two variables that denote the presence of young children in the home and several measures of family characteristics including spouse's employment status and education and mother's education. Although the LFS does not include a visible minority indicator, a variable is included in the model to denote immigrant status. Differences in LFP that may be due to the accessibility of labour markets may be captured by the variable CMA, which is coded '1' if an individual lives in a Census Metropolitan Area and zero otherwise. On the demand side, CMA may also capture some rural-urban difference in labour market conditions. To account for regional disparities in economic activity, control variables are added for province of residence, and, recognizing that the demand for labour is not uniform across all sectors, control variables are also added for occupation taken from the 2002 North American Industry Classification System.

The estimates from the separate logistic regression models are then decomposed using the Oaxaca (1973) decomposition extended for non-linear models by Fairlie (2003, 1999) to separate the difference in LFP between Aboriginals and non-Aboriginals into two components: an "explained" component that is attributable to differences in the various observable endowments of each group, and an "unexplained" component that is attributable to the differences in the returns to those endowment characteristics. The endowment portion of the gap often referred to as the "explained" portion, can be further broken down to reveal the unique contribution of each of the variables in the model to the explained component of the difference in labour force participation between the two groups (Fairlie, 2003, 1999).

The aforementioned methodology is repeated to estimate the probability that an individual is unemployed, conditional on the fact that he/she is in the labour force. Separate models are once again run for Aboriginals and non-Aboriginals, males and females, as well as youth ages 15-25 and older workers ages 50 plus.

In discussing the barriers that many Aboriginal people may face in entering the labour force and subsequently sustaining long-term gainful employment, as well as the potential societal consequences of these barriers, White et al. (2003) stated:

“From this perspective, the Aboriginal worker is restricted from entry to the primary labour market segment because of race or lower human capital, and this restriction subjects the worker to the vagaries of the secondary segments including part-time-part-year work, lay-offs, job-loss, poor pay and lack of challenging work. Such conditions both marginalize and discourage the worker and can produce less labour force involvement” (White et al., 2003 pp 396).

To examine the suggestion of White et al. (2003) the final part of this analysis involves estimating whether being an Aboriginal person increases the probability of: (a) being a discouraged worker and/or b) of an individual having to work involuntary part-time (i.e. part-time employment because he/she is unable to obtain desired full-time work). To answer these questions, unconditional logistic regression models containing an Aboriginal indicator is run on the entire sample. Not all non-labour force participants are discouraged workers, some individuals choose not to participate in the paid labour market because they are retired, full-time care-givers, etc., while others may be unable to participate in paid work due to illness or disability. Discouraged workers may be understood as those individuals who would be otherwise capable of working, but have dropped out of the labour market in response to adverse labour market conditions or poor employment prospects. The LFS contains a variable that details an individual's labour force activity with two categories for discouraged worker labelled as those

individuals who were able to work, but were discouraged for at least some part of the previous year.

The second question is answered using a similar methodology, however, the sample includes all those who are in the labour force and the outcome is a variable named INVOLPT. An involuntary part-time worker, as noted earlier, is an individual who is working part-time because he/she is unable to find or sustain full-time employment. Separate models are estimated for both males and females, however, pooled models must be used in these last cases since the entire sample size of discouraged workers and/or part-time (both involuntary and voluntary) is too small to estimate separate models by gender.

IV. Summary Statistics

A detailed table of selected summary statistics describing the sample population from 2008 and 2009 can be found in Table 3-1 at the end of the paper. As noted earlier, the entire sample, after age restrictions and excluding students, was 914,000 people in 2008 and 936,112 people in 2009 respectively⁸. The mean age of the sample in both years was approximately 42 years. Females comprised approximately 49.5 percent of the sample in both 2008 and 2009. In 2008, the weighted total of Aboriginal persons in the sample was approximately 20,675 individuals, representing about 2.3 percent of the total sample population. In 2009, the sample included approximately 22,902 Aboriginal persons, representing 2.4 percent of the sample. In

⁸ The sample sizes of the individual sub-samples listed in the appendix does not sum to the total sample of the pooled model since in some cases certain variables perfectly predicted the outcome for some individual cases. These cases were dropped from the estimation.

2008 4.7 percent of the sample was unemployed; by 2009 6.4 percent of the study's population was unemployed.

V. Empirical Results

Beginning with the pooled models for the probability that an individual is a labour force participant, detailed regression output for each model can be found in table 3-2 at the end of the paper. All results are in marginal effects. From the pooled model for 2009, the probability that a man between the ages of 15 to 65 years, who is not currently in school, is a labour force participant is 0.9483. The effect of Aboriginal identity, all else constant, is to decrease the probability of labour force participation by approximately 1.63%. For females in 2009, the results of the pooled model suggest the probability of labour force participation is 0.8910. Aboriginal identity lowers the probability of labour force participation by approximately 2.4% among females, controlling for all other observable characteristics.

Table 3-3 displays a summary of the results from 2008 and 2009 from estimating separate models for the probability of labour force participation for each group: non-Aboriginal males, non-Aboriginal females, Aboriginal males and Aboriginal females.

The estimates for labour force participation, particularly among males, appear quite high; however, this result is most likely due to the age restriction (15-65 years) as well as the fact that the sample excludes any individual who is currently in school. In both years, the probability that an Aboriginal person is a labour force participant is less than that for a non-Aboriginal person. From the above table it is evident that as economic conditions worsened from 2008 to 2009, the probability of LFP decreased for non-Aboriginal males, Aboriginals males and non-Aboriginal females. The change was largest for the Aboriginal males where the probability of LFP

decreased by nearly 2 percentage points. Interestingly, the probability that an Aboriginal female is a labour force participant actually rose in the face of an economic downturn, slightly increasing by about 1 percentage point from 2008 to 2009. This suggests the dominance of an added worker effect (i.e. more individuals are entering the labour force) over a discouraged worker effect for Aboriginal females.

The detailed output from models estimated for the separate groups in the study can be found in tables 3-4 and 3-5 at the end of the paper. With respect to the individual explanatory variables, being married increases the probability of LFP for both Aboriginal and non-Aboriginal males, while married non-Aboriginal females are less likely than their single counterparts to participate in the labour force. The coefficient sign is positive among married Aboriginal women; however, this finding is not statistically significant. The presence of young children ages 0 to 5 years decreases the probability of LFP among all groups. The presence of older children ages 6 to 12 years is negatively related to the probability of LFP among both Aboriginal and non-Aboriginal women, but is positively related to the probability of LFP among non-Aboriginal males; the relationship between this variable and Aboriginal males is negative, albeit statistically insignificant. As expected, all levels of educational attainment increase the probability that an individual in any of the aforementioned groups is a labour force participant as compared to the omitted reference category of those whose highest level of education is less-than-high-school. An unemployed spouse increases the probability of LFP for males and females, Aboriginal and non-Aboriginal alike; however, this result is only statistically significant for non-Aboriginals. Finally, comparing Aboriginals to non-Aboriginals, there does not appear to be a differential effect of any of the occupational categories on the probability of LFP between the two groups.

Table 3-6 at the end of the paper presents a summary of the estimates for the probability of unemployment across various groups for 2008 and 2009. These results are obtained from estimated separate logistic regressions for each of the Aboriginal and non-Aboriginal groups outlined in the study. The findings presented in table 3-6 show an increase in the probability of unemployment across all groups from 2008 to 2009. In every case the probability of unemployment increased more among Aboriginals than it did among non-Aboriginals, supporting the finding of Zietsma (2010) and others that Aboriginal people are disproportionately burdened by a downturn in economic activity. The worst-off of the groups in this study were Aboriginal male youths, who endured an increase in the probability of unemployment of 7.4 percentage points from 2008 to 2009 as compared with the 5.0 percentage point increase experienced by their non-Aboriginal youth counterparts.

As indicated in Tables 3-7 and 3-8, the relationships of each of the independent variables with the probability of unemployment mirror very closely the relationships discussed above with respect to labour force participation. Married individuals across all groups, for example, are less likely to be unemployed than single persons. The relationship between the presence of young children ages 0 to 5 years in the home and unemployment is statistically insignificant for all groups. On the other hand, having an older child in the home aged 6 to 12 years, decreases the probability that a white male is unemployed and increases the probability that either an Aboriginal or non-Aboriginal female is unemployed. The relationship between the presence of older children and unemployment among Aboriginal males is statistically insignificant. Not surprisingly, each level of educational attainment beyond less-than-high-school reduces the probability of unemployment across all groups in the study. Interestingly, the effect of a spouse having a bachelor's degree decreases the probability of unemployment among both non-

Aboriginal males and females, but this relationship is statistically insignificant among Aboriginal men and women. If a spouse has a graduate degree, this lowers the probability of unemployment among white males and Aboriginal females, while it increases the probability of unemployment among non-Aboriginal females. The effect is statistically insignificant among Aboriginal males.

Two variables relating to the level of education of the respondent's mother were included in the models since it has been well-established that a mother's level of education is highly related to a number of variables that may contribute to an individual's success in the labour market. A mother's level of education, for example, may influence the level of educational attainment of her children. Since the models have controlled for the respondents' various levels of educational attainment, mother's education may act as a proxy for other important, unobservable characteristics that may relate to an individual's labour market activity. For example, a mother's education may subsequently influence a child's various attitudes towards employment. The effect of a mother having a bachelor's degree on the probability of the respondent being unemployed was statistically insignificant among all females and non-Aboriginal males. The fact that a mother had a BA did, however, decrease the probability that an Aboriginal male was unemployed by about 5 percent, holding all other variables constant. Interestingly, the effect of a mother having a graduate degree as her highest level of education was statistically insignificant for all groups except non-Aboriginal males where highly educated mothers were positively related to unemployment in 2009. In 2008, however, 'momgrad' was statistically significantly and inversely related to the probability of unemployment for both Aboriginal and non-Aboriginal males (the variable was statistically insignificant for females). A reasonable explanation for this could be, since it is a well-established reality that highly educated

women typically marry high-earning men, the variable ‘momgrad’ here could be acting as a proxy for familial wealth which may reduce the urgency of the need to find employment if an individual has other means of support. This argument seems plausible given that the sign on the coefficient of ‘momgrad’ for non-Aboriginal males changed from negative to positive from 2008 to 2009 when the economy entered into recession.

Tables 3-9 and 3-10 display the results of the Fairlie decompositions for the difference in the probability of labour force participation (Table 3-9) and the difference in the probability of unemployment (Table 3-10) between Aboriginal and non-Aboriginal persons. The estimates of the probability of both labour force participation and unemployment from the Fairlie models are slightly different from the results of the logistic regressions displayed in Tables 3-3 and 3-6. These differences may be attributed to the different weighting procedure employed in the Fairlie methodology.

Looking at the results in Table 3-9, it is apparent that a sizable proportion of the difference in the probability of labour force participation for both Aboriginal males and females as compared to their non-Aboriginal counterparts is “explained” by the observable characteristics that have been included in the models. The detailed output of these models is included in Table A10 in the appendix of the paper. The magnitude of the contribution of each variable to explaining the explained portion of the difference in probabilities is relatively small, however, both age and age-squared emerge as the most salient explanatory factors, followed by the education variables, in particular those for post-secondary education.

Table 3-10 illustrates the difference between the probabilities of unemployment estimated for Aboriginal and non-Aboriginal males and females in 2008 and 2009. From these results it is

evident that a relatively small proportion of the difference in Pr (unemployed) is attributable to the observable endowment characteristics that have been included in the model, particularly for males in 2008 where less than 1% of the gap is “explained”. The contributions of each of the endowment characteristics can be found in the detailed model output presented in Table A11 in the appendix of the paper. Since the explained portion of the gap is so small in magnitude no one predictor appears to be salient in contributing to the explained portion of this difference despite the fact that many of the factors have statistical significance.

The final questions in this study relate to the possibility raised by White et al. (2003) cited earlier in the paper that Aboriginals, as a result of important human capital characteristics such as lower levels of educational attainment and certain structural features of society such as discrimination in labour markets, may be confined to less-desirable, peripheral types of employment and subsequently may be more likely to be discouraged from participating in the labour force altogether. To further examine these issues this paper estimates the effect of being an Aboriginal person on the probability of being a discouraged worker and, separately, the probability of being employed part-time because an individual was unable to secure fulltime employment. The results of a pooled model estimated separately for all males and females who were not in the labour force for both 2008 and 2009 can be found in Table 3-11 at the end of the paper. In 2008, all else being equal, the effect of Aboriginal identity increased the probability of being a discouraged worker by 0.06% (i.e. six-tenths of one percentage point) for males and females, an effect that is statistically significant for both groups, despite being small in magnitude. Although the magnitude of this result is small, when interpreted relative to the mean of the dependant variable (0.0006), being an Aboriginal person means that an individual is twice as likely to be a discouraged worker as compared to a non-Aboriginal person. In 2009 when the

economy had worsened, the effect of Aboriginal identity increased the probability of being a discouraged worker by 0.08% for males and 0.07% for females. With respect to the probability that an individual is confined to part-time employment because he/she is unable to secure preferable full-time work, being an Aboriginal male increased the likelihood of INVOLPT by 0.23% in 2008 as compared to non-Aboriginal males in that same year. The effects of Aboriginal identity on the probability of INVOLPT were statistically insignificant for females in 2008. This relationship was statistically insignificant for both males and females in 2009. The detailed results of the pooled models for INVOLPT can be found in Table 3-12 at the end of the paper.

VI. Summary and Conclusions

This is one of the few and most recent studies to empirically examine the correlates of labour force participation and unemployment comparing Aboriginal and non-Aboriginal peoples in Canada. Using data taken from the 2008 and 2009 Canadian Labour Force Survey and employing a series of logistic regression models, the study estimates the probability of being in the labour force, of being unemployed, of being a discouraged worker and of being an involuntary part-time worker for several Aboriginal and non-Aboriginal groups. The study also estimates the difference between the probability of labour force participation and, separately, unemployment among Aboriginal and non-Aboriginal, males and females, and decomposes these gaps into two components: that which can be explained by the different endowments of characteristics included in the model and that which is attributed to the different returns to those endowment characteristics.

Before highlighting the primary contributions of this paper, a few important limitations of the current study bear mention. The first limitation is that the Labour Force Survey does not

include individuals from Indian Reserves or those living in the Yukon, Nunavut or the North West Territories in the national totals and thus these individuals are not a part of the sample under analysis. Since a number of studies have documented that economic conditions facing many Aboriginal persons living on Reserves and in some Northern communities are often worse than those in other parts of the country, it is possible that the disparities between the probability of labour force participation and unemployment comparing Aboriginal and non-Aboriginal Canadians stated here underestimate the true magnitude of the problem.

Given that the results of the decomposition of the difference in probabilities of being unemployed between the two ethnicities reveal that a very small proportion of this gap is attributable to differences in the endowment characteristics included in the models, it is worth highlighting the choice of variables available in the LFS somewhat limits the observable characteristics that can be included in the models. It is worth noting that there are datasets available that do contain more detailed information related to individual labour force behaviour, the Survey of Labour and Income Dynamics (SLID), in particular. The problem with using the SLID to analyze questions pertaining to Aboriginal peoples, however, is that the sampling framework does not over-sample the Aboriginal population and thus there is concern regarding the representativeness of the Aboriginal sample contained in the SLID as reflective of the national population (SLID, 2005).

This study has demonstrated that moving from a period of positive economic growth in 2008 to a period of negative economic growth in 2009, Aboriginal Canadians were disproportionately burdened by the decline in economic activity as seen in both the decline in the probability of labour force participation and the increase in the probability of unemployment as compared to non-Aboriginals. The worst-off in terms of unemployment were male Aboriginal

youth, who faced a probability of unemployment in 2009 of 17.9%, a difference of 4.3 percentage points higher than their non-Aboriginal counterparts in that same year. The difference between the probability of unemployment comparing older Aboriginal and non-Aboriginal workers was less pronounced. Interestingly, Aboriginal women appeared to fare far better than Aboriginal men in terms of both labour force participation and the probability of unemployment. When Pr LFP declined in 2009 for all males and non-Aboriginal females, the probability that an Aboriginal woman was a labour force participant actually increased approximately 1.0 percentage point as compared to 2008. The probability of unemployment among Aboriginal women in 2009 was 7.2%, 3.0 percentage points higher than that of non-Aboriginal women. What might account for the fact that Aboriginal women were proportionally less negatively affected by the downturn in economic activity than their Aboriginal male counterparts? There are a few possible explanations for this finding. The first is that, compared to their male counterparts, Aboriginal women have notably higher levels of post-secondary educational attainment. Secondly, as noted by Zietsma (2010) the sectors in which the largest proportions of Aboriginal people are employed is Health Care and Social Assistance. These largely public sector careers often have a higher proportion of female employees, potentially higher rates of union coverage and are likely more stable types of employment in the face of cyclical ebbs and flows in economic activity as compared to other sectors in the labour market.

Perhaps the most intriguing finding in this study is the fact that such a small proportion of the difference in the probability of unemployment between Aboriginal and non-Aboriginal persons can be 'explained' by the endowment characteristics included the model. This suggests that there are important unobservable factors that contribute to an individual's prospects of employment that are not captured in the current data. Differences in cultural norms between the

two groups, or possibly alternative perspectives in the way that Aboriginal and non-Aboriginal persons view employment relationships, may also influence an individual's labour market activity. Recalling Doyle-Bedwell's (2009) account of her labour market experience as an Aboriginal professional, she suggests significant differences in the way the two cultures view values such as work centrality.

The argument that the unexplained difference in the probability of unemployment between Aboriginal and non-Aboriginal persons is a supply-side issue is, however, greatly weakened by the finding that a large proportion of the difference in the probability of labour force participation between the two groups is explained by the differences in the endowment characteristics included in the models. While labour force participation and subsequent employment are both influenced by labour demand and supply considerations, the argument can be made that individuals have greater control over their decision to supply their labour (i.e. participate in the labour force), than they do over their employment status (i.e. to be employed an individual must be hired). The fact that much of the difference in the probability of unemployment between the two groups was 'unexplained' may suggest one of the significant barriers facing Aboriginal persons in the labour market is discrimination. This argument is strengthened by the finding that Aboriginal persons have a higher probability of being discouraged workers relative to non-Aboriginal persons. The prevalence of discrimination in labour markets towards individuals from various minority groups is not a revolutionary argument. Discrimination manifests in various ways, and while there are laws prohibiting direct forms of discrimination in the labour market, greater care must be taken to examine various social and workplace policies for potential systemic discriminatory effects.

The results of this study that highlight the persistent economic disparity of Canada's Aboriginal peoples have important implications for future research and policy discourse aimed at improving labour force participation and employment levels among marginalized groups in the country. Given the rapid projected growth in the Aboriginal population, plans to make formal post-secondary education and training opportunities more accessible, combined with job creation and job placement programs, as well as studies that quantitatively monitor the success of such efforts similar to the research of Levesque et al (2001) are important initiatives for the entire labour market in Canada.

VII. References

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VIII. Tables

Table 3-1 Select Summary Statistics for Entire Sample, 2008 – 2009

	2008	2009
Mean age (years)	42	42
% of Sample		
females	49.5	49.5
males	51.5	51.5
non-cma	23.6	22.5
cma	76.4	77.5
nfld	1.6	1.6
pei	0.4	0.4
ns	2.9	2.9
nb	2.3	2.3
que	27.7	23.4
mb	3.2	3.4
sask	2.6	2.8
alb	10.5	11.3
bc	12.4	13.3
ont	36.4	38.6
married	66	65.4

divsep	8	8.2
widow	1.4	1.5
single	24.6	24.9
< high school	14.8	14.1
hsgrad	20.6	21.4
somepse	7.1	7.2
tradecert	12.7	11.6
college	22.9	23
ba	15.1	15.8
aboveba	6.8	6.9
native-born	79.8	78.7
immigrant	20.2	21.3
mining	2	2.1
construction	6.5	6.4
agriculture	2.1	1.9
wholetrade	3.2	3.2
retail	8.8	8.9
transport	4.3	4.2
information	1.9	1.9

finance	3.9	3.7
realestate	1.3	1.5
profscience	5.6	5.8
enterprise mgmt	<1	<1
educat	5.6	5.6
healthcare	9.4	9.3
entertain	1.6	1.8
hospitality	4.8	4.7
otherservice	3.6	3.9
public admin	21.7	21.7
manufacture	19.3	12.4

Table 3-2 Pooled Models, Determinants of PR Labour Force Participation of Males and Females,
2008-2009

	2008				2009			
	Males		Females		Males		Females	
PR (LFP)	0.9553		0.8914		0.9483		0.891	
	dy/dx	z	dy/dx	z	dy/dx	z	dy/dx	z
aborig	-0.0163	-6.63	-0.0157	-3.9	-0.0163	-6.64	-0.0238	-5.68
(ontario)								
pei	0.0069	4.25	0.0443	18.6	0.0129	8.04	0.0413	16.95
ns	-0.0175	-10.62	-0.0101	-3.59	-0.006	-3.97	-0.0063	-2.34
nb	-0.0119	-7.1	-0.0099	-3.47	-0.0076	-4.78	-0.0084	-2.92
que	0.0001	0.07	0.0142	7.97	-0.0004	-0.4	0.0053	2.78
mb	0.0106	9.8	0.0118	4.93	0.0123	11.74	0.0132	6.1
sask	0.0156	16.38	0.0146	6.36	0.0184	18.53	0.0167	7.7
alb	0.0098	8.91	-0.0204	-7.41	0.012	10.44	-0.0153	-6.03
bc	-0.0051	-4.32	-0.0317	-12.47	-0.0058	-4.62	-0.025	-10.72
cma	0.0156	18.51	0.0196	12.58	0.0099	11.62	0.0266	16.96
age	0.0095	46.59	0.0193	46.59	0.0097	45.43	0.0213	50.9
age2	-0.0001	-57.06	-0.0003	-56.6	-0.0001	-56.29	-0.0003	-61.27
(can. born)								

imgrnt	-0.0115	-9.2	-0.0441	-19.29	-0.0069	-5.65	-0.0347	-16.08
(single)								
married	0.0342	26.61	-0.0148	-7	0.03	22.05	-0.0142	-6.42
divsep	0.0175	17.39	0.0373	16.89	0.0146	12.34	0.0185	7.05
widow	0.0157	6.92	-0.0245	-4.85	0.0091	3.04	-0.0131	-2.72
(no children)								
child0to5	-0.0116	-6.26	-0.133	-33.87	-0.0058	-3.33	-0.1322	-34.45
child6to12	0.0031	2.41	-0.0263	-10.99	0.0046	3.51	-0.0283	-12.09
(less than hs)								
hschool	0.0167	20.61	0.0553	36.66	0.0212	24.1	0.0541	34.92
somepse	0.0219	24.19	0.0653	39.61	0.0216	20.43	0.0573	31.58
tradecert	0.0252	32.69	0.0513	31.18	0.0252	29.16	0.0589	36.34
college	0.0404	58.44	0.1025	70.03	0.044	57.04	0.0965	63.79
badegree	0.0364	49.51	0.1051	79.87	0.0428	55.12	0.0995	71.69
aboveba	0.0371	52.7	0.1015	85.66	0.0428	56.35	0.0994	82.98
(mom > ba)								
momba	-0.0221	-4.13	-0.0464	-3.62	-0.0087	-1.82	0.0004	0.04
momgrad	-0.0184	-2.27	-0.0358	-2.01	-0.0228	-2.33	-0.0228	-1.21
(spouse >ba or no spouse)								

spouseba	0.0088	7.13	0.0015	0.57	0.0068	5.06	-0.0142	-5.18
spgrad	0.0115	6.54	-0.0453	-9.71	0.0051	2.43	-0.0395	-9.36
(spouse employ or no spouse)								
spunemp	0.0044	1.64	0.0265	6.45	0.0122	5.44	0.0273	8.54
(manufacture)								
agricult	-0.0092	-3.68	-0.0524	-5.86	-0.0021	-0.85	-0.0282	-3.53
mining	-0.005	-1.61	0.0082	0.7	-0.0054	-1.68	-0.0438	-3.65
construct	-0.0074	-3.65	0.015	2.18	-0.0088	-4.16	-0.0204	-2.35
wholetrade	0.0154	6.89	0.0274	4.05	0.0256	12.65	0.0187	2.59
retail	0.0022	1.03	-0.0117	-2.36	0.0111	5.7	-0.0005	-0.12
transport	0.0054	2.61	0.0226	3.54	0.0102	4.87	0.0079	1.13
informat	-0.0035	-0.67	0.0065	0.74	-0.0014	-0.27	0.0191	2.47
finance	0.0096	2.62	0.0365	7.1	0.014	3.45	0.0325	6.33
realest	0.0189	6.16	0.0002	0.03	0.0215	6.56	0.0148	1.77
profscienc	0.0058	2.1	0.0043	0.69	0.0101	3.87	0.0065	1.1
manage	0.0337	3.05					0.0985	9.41
admin	-0.0222	-6.44	-0.0209	-3.05	-0.0134	-4	-0.0397	-5.31
educat	-0.0417	-9.37	-0.0732	-10.34	-0.0375	-8.3	-0.0744	-10.66
hlthcare	-0.0097	-2.43	0.0137	3.21	0.0093	2.89	0.0252	6.45

entertain	-0.0289	-5.84	-0.0563	-5.73	-0.0331	-6.22	-0.0434	-4.74
hospitality	-0.0174	-5.25	-0.0363	-6.09	-0.0122	-3.74	-0.0366	-6.17
othrsrvce	0.0089	3.27	0.0042	0.75	0.0131	5.13	0.0181	3.6
pubadmin	-0.5596	-88.92	-0.6966	115.92	-0.5296	-89.19	-0.6835	110.41
N	450818		463805		465105		470971	
Wald chi2(47)	59892.01		81108.93		61511.64		81431.39	
Prob > chi2	0		0		0		0	
Pseudo R2	0.5322		0.5416		0.4912		0.5346	

Table 3-3 Summary Estimates of Probability of LFP, 2008-2009

Pr(LFP)	2008	2009	Δ 2009-2008
Non-Aboriginal Males	0.9562	0.9494	- 0.0068
Aboriginal Males	0.9134	0.8947	- 0.0187
Non-Aboriginal Females	0.8934	0.8931	- 0.0003
Aboriginal Females	0.7994	0.8096	+ 0.0102

Table 3-4 Determinants of PR Labour Force Participation, Males 2008-2009

	2008				2009			
	Non-Aboriginal		Aboriginal		Non-Aboriginal		Aboriginal	
PR (LFP)	0.9562		0.9134		0.9494		0.8947	
	dy/dx	z	dy/dx	z	dy/dx	z	dy/dx	z
(ontario)								
pei	0.0066	4.08	0.0672	5.98	0.9494	7.81	0.0883	7.21
ns	-0.0173	-10.49	-0.0258	-1.64	-0.006	-3.97	-0.0107	-0.65
nb	-0.0116	-6.99	-0.0084	-0.39	-0.0078	-4.92	0.0421	3.68
que	0.0001	0.1	0.0309	3.34	-0.0004	-0.37	0.0103	0.69
mb	0.0112	10.15	0.0194	2.79	0.0116	10.75	0.0372	5.33
sask	0.0162	17.1	0.0213	2.93	0.0187	18.53	0.0262	3.33
alb	0.0101	9.25	0.0179	1.99	0.012	10.51	0.0148	1.36
bc	-0.0055	-4.56	0.0207	2.46	-0.0054	-4.32	-0.0179	-1.63
(non cma)								
cma	0.0161	18.86	-0.001	-0.16	0.0104	12	-0.0026	-0.37
age	0.0094	45.42	0.0133	9.1	0.0096	44.45	0.0134	8.2
age2	-0.0001	-55.66	-0.0002	-10.76	-0.0001	-55.08	-0.0002	-10.21
(can born)								
imgrnt	-0.0115	-9.27	0.0682	5.48	-0.0068	-5.66	-0.1644	-2.42

(single)								
married	0.0336	25.87	0.0476	5.59	0.0294	21.49	0.0549	5.49
divsep	0.0167	16.37	0.046	6.04	0.0144	12.13	0.0218	1.76
widow	0.016	7.21	-0.0511	-1.19	0.0085	2.78	0.0179	0.91
(no child)								
child0to5	-0.0116	-6.18	-0.002	-0.18	-0.0052	-2.98	-0.0271	-1.93
child6to12	0.0034	2.62	-0.0136	-1.27	0.0049	3.66	-0.0157	-1.42
(less than hs)								
hschool	0.0163	19.88	0.0442	7.44	0.0206	23.21	0.0511	7.28
somepse	0.0216	23.89	0.0359	4.2	0.0211	19.89	0.0528	6.49
tradecert	0.0244	31.35	0.0577	10.12	0.0244	27.86	0.0702	10.55
college	0.0395	56.79	0.0911	18.56	0.0429	55.18	0.0999	17.68
badegree	0.0357	48.35	0.0738	14.45	0.0419	53.92	0.0845	12.62
aboveba	0.0364	51.87	0.0656	9.24	0.0419	55.36	0.0883	12.37
(mom < ba)								
momba	-0.0227	-4.15	0.0124	0.76	-0.008	-1.68	-0.1125	-2.49
momgrad	-0.0189	-2.31	0.0119	0.36	-0.024	-2.43	0.0512	1.58
(spouse < ba or no spouse)								
spouseba	0.0082	6.64	0.0481	4.79	0.0064	4.75	0.0386	3.15

spgrad	0.0113	6.44	0.041	2.01	0.0049	2.37	0.0027	0.07
(souse employ or no spouse)								
spunemp	0.004	1.48	0.0228	1.46	0.0123	5.51	0.0005	0.03
(manufacture)								
agricult	-0.0089	-3.55	-0.0412	-1.52	-0.0003	-0.14	-0.1074	-2.82
mining	-0.0062	-1.95	0.0317	1.95	-0.0045	-1.4	-0.0179	-0.67
construct	-0.0069	-3.38	-0.0232	-1.37	-0.0084	-3.94	-0.0131	-0.77
wholetrade	0.0145	6.43	0.0721	7.62	0.025	12.38	0.0463	2.38
retail	0.0021	0.99	0.0001	0	0.0107	5.46	0.0315	1.76
transport	0.005	2.43	0.0162	1.01	0.0094	4.43	0.0489	3.04
informat	-0.0038	-0.74	0.0061	0.14	-0.0013	-0.26	-0.0167	-0.39
finance	0.0089	2.45			0.0131	3.25	0.0793	2.89
realest	0.0184	5.98	0.0545	3.07	0.0214	6.54	0.032	1.03
profscienc	0.0052	1.87	0.0634	4.89	0.0097	3.72	0.0285	0.78
manage	0.033	3.03						
admin	-0.0204	-5.93	-0.0707	-2.46	-0.0126	-3.74	-0.055	-1.83
educat	-0.0415	-9.3	-0.0682	-1.64	-0.0386	-8.44	0.0137	0.52
hlthcare	-0.0099	-2.46	0.0077	0.3	0.009	2.78	0.0061	0.19
entertain	-0.0294	-5.84	-0.0236	-0.8	-0.0326	-6.1	-0.0304	-0.75

hospitality	-0.0168	-5.08	-0.0458	-1.53	-0.0127	-3.85	0.0074	0.36
othrsrvce	0.0089	3.23	-0.0134	-0.51	0.0123	4.76	0.0619	4.33
pubadmin	-0.5592	-87	-0.5934	-22.14	-0.5288	-89.26	-0.5561	-20.53
N	436326		14424		448624		16480	
Wald chi2(47)	57653.32		2436.73		58980.6		2722.51	
Prob > chi2	0		0		0		0	
Pseudo R2	0.5347		0.4606		0.4929		0.4376	

Table 3-5 Determinants of PR Labour Force Participation, Females 2008-2009

	2008				2009			
	Non-Aboriginal		Aboriginal		Non-Aboriginal		Aboriginal	
PR (LFP)	0.8934		0.7994		0.8931		0.8096	
	dy/dx	z	dy/dx	z	dy/dx	z	dy/dx	z
(ontario)								
pei	0.0428	17.97	0.1441	8.86	0.0408	16.93	0.1116	3.27
ns	-0.0109	-3.85	0.0284	1.28	-0.0061	-2.27	-0.0246	-1.08
nb	-0.0105	-3.67	0.0663	3.13	-0.0094	-3.24	0.0547	2.23
que	0.0138	7.8	0.0412	1.97	0.0047	2.47	0.0479	2.59
mb	0.0151	6.3	-0.0066	-0.45	0.0129	5.84	0.0349	3.06
sask	0.0152	6.54	0.0267	1.95	0.0191	8.74	0.0001	0.01
alb	-0.0198	-7.12	-0.028	-1.61	-0.0157	-6.12	0.0112	0.75
bc	-0.0323	-12.54	0.0005	0.03	-0.0257	-10.89	0.0101	0.72
(non-cma)								
cma	0.0208	13.15	-0.0117	-1.12	0.0279	17.45	-0.0074	-0.79
age	0.0192	45.59	0.0206	7.42	0.0212	49.9	0.0245	9.08
age2	-0.0003	-55.42	-0.0003	-8.94	-0.0003	-60.11	-0.0004	-10.74
(can born)								
imgrnt	-0.0437	-19.28	-0.0221	-0.29	-0.0344	-16.09	-0.0909	-1.98

(single)								
married	-0.0156	-7.31	0.0174	1.27	-0.0152	-6.79	0.0107	0.82
divsep	0.0378	17.03	0.0121	0.66	0.0179	6.73	0.0334	2.06
widow	-0.025	-4.89	-0.0528	-1.47	-0.0128	-2.63	-0.0426	-1.32
(no child)								
child0to5	-0.1325	-33.1	-0.1408	-6.96	-0.1304	-33.37	-0.1879	-10.03
child6to12	-0.0261	-10.81	-0.0193	-1.24	-0.0285	-11.99	-0.0238	-1.74
(less than hs)								
hschool	0.0543	35.55	0.093	8.52	0.053	33.76	0.0789	7.82
somepse	0.0635	37.73	0.1327	12.28	0.0559	30.2	0.0965	8.64
tradecert	0.0501	30.24	0.099	7.74	0.0573	34.81	0.1137	11.13
college	0.1001	67.46	0.2015	21.42	0.0945	61.76	0.1624	16.95
badegree	0.1032	77.59	0.1899	22.88	0.0973	69.16	0.1828	24.69
aboveba	0.0998	83.93	0.1679	16.1	0.0975	80.7	0.1644	19.4
(mom < ba)								
momba	-0.0504	-3.79	0.0771	3.02	-0.0007	-0.07	0.0536	0.97
momgrad	-0.0332	-1.89	-0.1454	-0.81	-0.0203	-1.09	-0.2428	-0.87
(spouse < ba or no spouse)								
spouseba	0.0015	0.57	0.0665	2.92	-0.0141	-5.18	0.0417	1.7

spgrad	-0.0443	-9.56	0.0267	0.57	-0.0381	-9.11	-0.0062	-0.15
(spouse employ or no spouse)								
spunemp	0.0266	6.4	0.0126	0.52	0.0274	8.49	0.0227	1.13
(manufacture)								
agricult	-0.053	-5.87	-0.0084	-0.13	-0.0238	-3.05	-0.284	-3.03
mining	0.0069	0.57	0.0713	1.31	-0.041	-3.37	-0.0605	-0.94
construct	0.0138	1.97	0.069	1.83	-0.0188	-2.16	-0.0475	-0.78
wholetrade	0.0276	4.1	0.0121	0.19	0.0184	2.54	0.0331	0.67
retail	-0.0114	-2.29	-0.013	-0.35	-0.0011	-0.23	0.0455	1.58
transport	0.0203	3.13	0.156	5.11	0.0117	1.7	-0.0806	-1.33
informat	0.0057	0.63	0.0397	0.89	0.0201	2.58	0.0008	0.02
finance	0.0352	6.82	0.0984	2.31	0.0304	5.86	0.1566	7.71
realest	0.0022	0.24	-0.116	-1.81	0.0165	2.01	-0.0418	-0.55
profscienc	0.0031	0.5	0.0726	1.52	0.0059	0.99	0.0261	0.56
manage					0.0965	9.35		
admin	-0.0214	-3.07	0.0195	0.52	-0.0394	-5.21	-0.0215	-0.51
educat	-0.0737	-10.27	-0.0456	-0.98	-0.0744	-10.58	-0.0637	-1.38
hlthcare	0.014	3.27	0.0144	0.46	0.0239	6.09	0.092	3.79
entertain	-0.0582	-5.77	0.0346	0.93	-0.045	-4.8	0.0298	0.75

hospitality	-0.0353	-5.87	-0.0468	-1.23	-0.0328	-5.53	-0.094	-2.29
othrsrvce	0.0027	0.48	0.0826	2.9	0.0187	3.74	0.016	0.43
pubadmin	-0.6976	113.74	-0.6625	-24.57	-0.6845	108.54	-0.6229	-20.16
N	447303		16501		451608		19363	
Wald chi2(47)	77866.37		3632.97		78016.05		3568.55	
Prob > chi2	0		0		0		0	
Pseudo R2	0.5438		0.4749		0.5372		0.4571	

Table 3-6 Probability of Unemployment for Various Groups, 2008-2009

Pr(Unemployed)	2008	2009	Δ 2009-2008
White Males	0.0402	0.0641	0.0239
Aboriginal Males	0.0702	0.1105	0.0403
White Females	0.0314	0.0415	0.0101
Aboriginal Females	0.0584	0.0718	0.0134
White Male Youth	0.0866	0.1361	0.0495
Aboriginal Male Youth	0.1059	0.1794	0.0735
White Female Youth	0.0626	0.0782	0.0156
Aboriginal Female Youth	0.0845	0.1315	0.0470
White Male 50+	0.0341	0.0530	0.0189
Aboriginal Male 50+	0.0352	0.0764	0.0412
White Female 50+	0.0297	0.0351	0.0054
Aboriginal Female 50+	0.0298	0.0361	0.0063

Table 3-7 Determinants of PR Unemployment, Males 2008-2009

	2008				2009			
	Non-Aboriginal		Aboriginal		Non-Aboriginal		Aboriginal	
PR (UNEMP)	0.0402		0.0702		0.0641		0.1105	
	dy/dx	z	dy/dx	z	dy/dx	z	dy/dx	z
(ont)								
pei	0.0230	9.87	0.0182	0.59	0.0172	6.4	-0.0026	-0.08
ns	0.0113	7.05	-0.0166	-1.39	0.0026	1.38	0.0223	1.17
nb	0.0228	12.48	0.0332	1.39	0.0008	0.43	0.017	0.78
que	0.0066	6.74	-0.0084	-0.7	-0.0061	-5	-0.032	-2.36
mb	-0.0220	-24.4	-0.0247	-4.24	-0.0383	-37.16	-0.0463	-6.51
sask	-0.0228	-27.4	-0.0032	-0.45	-0.0391	-38.39	-0.0044	-0.45
alb	-0.0251	-29.8	-0.0215	-3.03	-0.025	-21.03	-0.0012	-0.11
bc	-0.0172	-19.2	-0.0146	-1.99	-0.0119	-9.15	0.0004	0.04
(non-cma)								
cma	-0.0058	-7.13	-0.033	-5.15	-0.0104	-9.6	-0.0371	-5.07
age	-0.0027	-13.9	-0.0007	-0.46	-0.0039	-15.23	-0.008	-4.18
age2	0	14.0	0	-0.2	0	12.94	0.0001	3.41
(can born)								
imgrnt	.0230	16.5	-0.0363	-1.49	0.0368	21.4	0.168	1.77

(single)								
married	-0.0479	-30.0	-0.0524	-5.92	-0.0505	-28.85	-0.0748	-7.1
divsep	-0.0136	-12.2	-0.0381	-4.95	-0.0138	-8.14	-0.002	-0.14
widow	-0.0219	-8.31	-0.0309	-1.61	-0.0124	-2.63	0.1495	2.73
(no child)								
child0to5	0.0051	3.23	0.0008	0.09	0.0035	1.94	0.0265	2.01
child6to12	-.0028	-2.29	0.0215	2.19	-0.0073	-4.91	0.0069	0.62
(< hschool)								
hschool	-0.0163	-19.6	-0.034	-6.43	-0.0214	-18.98	-0.0354	-4.77
somepse	-0.0193	-21.4	-0.0185	-2.18	-0.025	-19.01	-0.0382	-4.19
tradecert	-0.0121	-13.9	-0.0252	-3.99	-0.0193	-15.85	-0.0429	-5.55
college	-0.0310	-39.3	-0.0541	-9.48	-0.0395	-35.94	-0.0522	-5.96
badegree	-0.0293	-33.4	-0.0562	-8.52	-0.0462	-39.36	-0.1008	-16.74
aboveba	-0.0234	-19.9	-0.0485	-3.94	-0.0436	-32.24	-0.0933	-8.82
(mom < ba)								
momba	0.0049	1.56	0.0204	0.8	0.0037	0.97	-0.0521	-2.26
momgrad	0.0186	3.09	-0.0602	-5.27	0.0358	4.27	-0.045	-1.39
(spouse < ba or no spouse)								
spouseba	-0.0069	-4.46	-0.03	-2.72	-0.0094	-4.91	-0.0031	-0.16

spgrad	-0.0059	-2.61	-0.0238	-1.39	-0.0147	-5.28	-0.0294	-0.83
(spouse employ or no spouse)								
spunemp	0.0666	15.0	0.1149	4.46	0.0899	17.83	0.0793	2.91
(manufacture)								
agricult	0.0075	3.63	0.0195	1.11	-0.0085	-4.03	0.014	0.72
mining	-0.0032	-1.53	-0.0137	-1.21	-0.0015	-0.62	-0.0261	-1.92
construct	0.0155	10.2	0.017	1.55	0.0039	2.33	-0.0028	-0.23
wholetrade	-0.0166	-10.3	-0.0054	-0.29	-0.0303	-17.24	-0.0378	-2.25
retail	-0.0125	-9.68	-0.0132	-1.1	-0.0289	-20.58	-0.0687	-7.63
transport	-0.0194	-15.9	-0.0258	-2.67	-0.0267	-17.11	-0.0572	-5.81
informat	-0.0021	-0.68	-0.0329	-1.44	-0.0373	-16.02	-0.084	-6.81
finance	-0.0236	-11.7	-0.034	-1.21	-0.0407	-18.09	-0.0777	-3.69
realest	-0.0128	-4.30	-0.0097	-0.54	-0.0291	-9.77	-0.0695	-5.12
profscienc	-0.0141	-8.17	-0.0241	-1.49	-0.0236	-11.91	-0.0579	-3.64
manage					0.0744	1.11		
admin	0.0146	6.25	0.0329	1.78	-0.0032	-1.42	-0.0305	-2.16
educat	-0.0138	-7.01	-0.0509	-5.54	-0.0287	-12.57	-0.0816	-8.32
hlthcare	-0.0250	-16.1	0.0003	0.02	-0.0483	-30.55	-0.0856	-7.92
entertain	0.0046	1.56	-0.0155	-0.89	-0.0175	-5.94	-0.0399	-2.18

hospitality	0.0003	0.19	0.0284	1.65	-0.0209	-11.02	-0.0605	-6.26
othrsrvce	-0.0095	-5.21	-0.0218	-1.81	-0.0228	-11.35	-0.0403	-2.58
pubadmin	0.1598	34.1	0.2625	8.7	0.1746	39.62	0.1645	7.05
N	369540		11489		379663		12890	
Wald chi2(47)	13379.31		619.78		15322.45		791.78	
Prob > chi2	0		0		0		0	
Pseudo R2	0.1426		0.136		0.1249		0.1247	

Table 3-8 Determinants of PR Unemployment, Females 2008-2009

	2008				2009			
	Non-Aboriginal		Aboriginal		Non-Aboriginal		Aboriginal	
PR (UNEMP)	0.0314		0.0584		0.0415		0.0718	
	dy/dx	z	dy/dx	z	dy/dx	z	dy/dx	z
(ontario)								
pei	0.0157	7.91	0.0357	1.39	0.0102	4.79	0.0483	0.97
ns	0.0043	3.18	-0.0159	-1.68	0.0027	1.77	0.0049	0.31
nb	0.0065	4.68	-0.011	-0.81	0.0034	2.21	0.02	0.94
que	-0.002	-2.35	-0.0078	-0.84	-0.0033	-3.22	-0.0383	-4.39
mb	-0.0133	-14.54	-0.0216	-3.9	-0.0176	-17.52	-0.0275	-4.71
sask	-0.0126	-13.74	-0.0069	-1.07	-0.0206	-21.06	-0.0173	-2.53
alb	-0.0122	-13.71	-0.0169	-2.53	-0.0095	-8.65	-0.0048	-0.6
bc	-0.0073	-8.07	0.0001	0.02	-0.0056	-5.05	0.0221	2.27
(non-cma)								
cma	-0.0063	-8.12	-0.0099	-1.94	-0.0086	-9.22	-0.0033	-0.63
age	-0.0024	-12.42	-0.0014	-0.95	-0.003	-13.1	-0.0024	-1.65
age2	0	9.66	0	0.03	0	9.78	0	0.41
(can born)								
imgrnt	0.0276	20.44	0.1432	2.74	0.0341	23.7	-0.0146	-0.54

(single)								
married	-0.0155	-13.53	-0.0285	-3.87	-0.0165	-12.29	-0.0373	-5.11
divsep	-0.0058	-5.05	0.0099	0.99	0.0007	0.44	-0.0087	-0.99
widow	-0.0072	-3.2	-0.0067	-0.28	-0.0048	-1.73	0.0197	0.81
(no child)								
child0to5	0.0025	2.29	0.009	1.31	-0.0011	-0.87	0.0157	1.96
child6to12	0.0051	4.88	0.0006	0.1	0.0065	5.41	0.0168	2.16
(< hschool)								
hschool	-0.0129	-16.1	-0.0295	-6.08	-0.0196	-21.56	-0.0388	-7.08
somepse	-0.0133	-14.94	-0.0345	-6.99	-0.0183	-18.11	-0.037	-6.33
tradecert	-0.0123	-12.93	-0.0334	-6.3	-0.0161	-14.57	-0.0317	-4.61
college	-0.023	-27.13	-0.06	11.69	-0.0318	-32.44	-0.0547	-8.85
badegree	-0.0259	-33.8	-0.0414	-7.98	-0.0342	-37.62	-0.0744	-17.28
aboveba	-0.0227	-28.3	-0.0582	15.83	-0.0338	-39.33	-0.0492	-6.49
(mom < ba)								
momba	0.0021	0.7	-0.0156	-1.02	-0.001	-0.31	0.0257	1.03
momgrad	0.0006	0.14	-0.0305	-2.01	0.0112	1.83	0.0114	0.25
(spouse < ba or no spouse)								
spouseba	-0.0014	-1.03	-0.0325	-3.91	-0.0043	-2.75	-0.0179	-1.44

spgrad	0.0077	3.51	-0.0026	-0.09	0.0121	4.56	-0.0605	-6.1
(spouse employ or no spouse)								
spunemp	0.0544	14.32	0.097	3.82	0.0579	16.94	0.1072	5.11
(manufacture)								
agricult	0.0128	4.27	0.1809	2.55	-0.0002	-0.09	-0.0538	-7
mining	-0.0068	-2.23	-0.0236	-1.22	-0.0131	-4.86	-0.0362	-3.13
construct	0.0072	2.49	0.0276	1.07	-0.008	-3.26	-0.0354	-3.14
wholetrade	-0.0131	-7.92	-0.0489	-6.52	-0.0167	-8.25	-0.0647	-13.54
retail	-0.0141	-13.5	-0.0069	-0.58	-0.0226	-20.44	-0.0595	-8.74
transport	-0.016	-10.85	-0.0389	-3.92	-0.015	-7.84	-0.0628	-10.31
informat	-0.0094	-4.36	-0.0365	-2.41	-0.0166	-7.63	-0.0703	-17.13
finance	-0.0243	-24.21	-0.0185	-1.2	-0.0317	-28.32	-0.0555	-6.72
realest	-0.0161	-8.51	0.0467	0.98	-0.0228	-11.52	-0.0654	-12.74
profscienc	-0.0125	-8.45	0.0626	1.6	-0.0208	-14.91	-0.0508	-6.57
manage	-0.0275	-6.89						
admin	0.0033	1.63	0.03	1.48	-0.0026	-1.27	-0.0386	-4.39
educat	0.0004	0.21	0.05	2.23	-0.0129	-8.62	-0.0533	-7.72
hlthcare	-0.0258	-26.12	-0.0352	-3.8	-0.0409	-40.59	-0.0895	-11.92
entertain	0.0024	0.97	-0.0188	-1.16	-0.0102	-4.75	-0.0474	-5.83

hospitality	-0.0106	-9.1	0.0017	0.13	-0.0162	-13.03	-0.0524	-7.56
othrsrvce	-0.0177	-15.35	-0.0152	-1.12	-0.0251	-21.46	-0.0488	-6.38
pubadmin	0.1206	23.4	0.2782	6.93	0.1257	26.61	0.0773	3.5
N	337366		11106		340760		13026	
Wald chi2(47)	11087.43		833.89		14289.84		1069.94	
Prob > chi2	0		0		0		0	
Pseudo R2	0.1489		0.2011		0.1551		0.201	

Table 3-9 Summary Results of Fairlie Decomposition on Pr (LFP)

<u>2009</u>		
	<u>MALES</u>	<u>FEMALES</u>
Pr(LFP) White	0.8562	0.7684
Pr (LFP) ABORIG	0.7908	0.6903
Raw Difference	0.0654 (100%)	0.0782 (100%)
Explained	0.0436 (67%)	0.0585 (75%)
Unexplained	0.0218 (33%)	0.0197 (25%)
<u>2008</u>		
	<u>MALES</u>	<u>FEMALES</u>
Pr(LFP) White	0.8571	0.7663
Pr (LFP) ABORIG	0.8052	0.6900
Raw Difference	0.0519 (100%)	0.0767 (100%)
Explained	0.0294 (57%)	0.0633 (83%)
Unexplained	0.0225 (43%)	0.0134 (17%)

Table 3-10 Summary Results of Fairlie Decomposition on Pr (Unemployed)

<u>2009</u>		
	<u>MALES</u>	<u>FEMALES</u>
Pr(Unemployed) White	0.0893	0.0650
Pr (Unemployed) ABORIG	0.1481	0.1207
Raw Difference	0.0589 (100%)	0.0558 (100%)
Explained	0.0106 (18%)	0.0098 (18%)
Unexplained	0.0483 (82%)	0.0460 (82%)
<u>2008</u>		
	<u>MALES</u>	<u>FEMALES</u>
Pr(Unemployed) White	0.0628	0.0503
Pr (Unemployed) ABORIG	0.1006	0.0990
Raw Difference	0.0378 (100%)	0.0487 (100%)
Explained	0.00005 (<1%)	.0097 (20%)
Unexplained	0.03775 (>99%)	0.0390 (80%)

Table 3-11 Pooled Models, Determinants of PR Discouraged Worker, Males and Females, 2008-
2009

	2008				2009			
	Males		Females		Males		Females	
	dy/dx	z	dy/dx	z	dy/dx	z	dy/dx	z
PR (DISCRG)	0.0006		0.0006		0.0012		0.0011	
(non-aborig)								
aborig	0.0006	3.64	0.0006	3.31	0.0008	2.93	0.0007	2.94
(ontario)	0		0		0		0	
pei	0.0001	0.39	-0.0001	-1.05	-0.0004	-2.4	-0.0002	-0.84
ns	-0.0001	-1.53	0	0.16	-0.0004	-3.28	-0.0002	-1.4
nb	0	0.42	-0.0001	-1.22	-0.0002	-1.13	0.0001	0.59
que	-0.0002	-2.62	-0.0004	-5.48	-0.0005	-4.15	-0.0003	-3.11
mb	-0.0003	-4.26	-0.0005	-7.88	-0.0007	-6.54	-0.0006	-6.15
sask	-0.0004	-5.48	-0.0003	-4.41	-0.0008	-7.88	-0.0004	-4.04
alb	-0.0003	-3.68	-0.0004	-5.28	-0.0008	-6.79	-0.0003	-2.81
bc	-0.0003	-3.62	-0.0002	-2.85	-0.0004	-3.04	-0.0002	-1.75
(non-cma)								
cma	-0.0008	-7.44	-0.0013	-10.11	-0.001	-7.58	-0.0015	-9.65
age	0	0.62	0	0.42	0	-1.72	0	0.52

age2	0	-0.92	0	-1.05	0	1.76	0	-1.29
(can born)								
imgrnt	0.0001	1.12	0.0004	3.03	0.0003	1.85	0.0006	3.57
(single)								
married	-0.0005	-4.52	-0.0002	-1.95	-0.0008	-4.99	0	0.37
divsep	0	0.33	-0.0001	-0.58	-0.0007	-5.57	0	-0.09
widow	-0.0002	-0.96	-0.0001	-0.94	-0.0004	-2.18	0.0006	1.61
(no child)								
child0to5	0	-0.13	-0.0003	-4.26	-0.0006	-4.18	-0.0006	-5.39
child6to12	-0.0002	-1.64	0	-0.42	0	-0.14	0	-0.3
(less than hs)								
hschool	-0.0003	-4.32	-0.0002	-2.33	-0.0006	-5.79	-0.0004	-4.56
somepse	-0.0002	-2.72	-0.0002	-2.37	-0.0005	-3.38	-0.0006	-5.27
tradecert	-0.0001	-1.87	-0.0003	-3.48	-0.0005	-4.31	-0.0004	-3.43
college	-0.0005	-6.4	-0.0003	-4.1	-0.0008	-6.67	-0.0007	-6.57
badegree	-0.0003	-3.03	-0.0003	-3.76	-0.0005	-3.42	-0.0009	-7.38
aboveba	-0.0001	-0.69	-0.0004	-4.21	-0.0008	-4.83	-0.0006	-3.97
(mom < ba)								
momba	-0.0001	-0.64	0.0006	1.42	-0.0004	-1.04	0.0001	0.22

momgrad	-0.0002	-0.48	0.0004	0.72	-0.0003	-0.76	0.0006	0.7
(spouse < ba or no spouse)								
spouseba	-0.0001	-0.65	0.0001	0.62	-0.0002	-0.7	0.0003	1.32
spgrad	-0.0003	-1.47	0.0004	1.4	-0.0001	-0.27	0.0004	1.03
(spouse employ or no spouse)								
spunemp	0.0003	1.05	0.0011	3.28	0.0002	0.57	0.0002	0.81
(manufacture)								
agricult	0.0007	2.77	0.0003	1.17	0.0005	1.55	-0.0001	-0.19
mining	-0.0002	-1.1	-0.0005	-4.75	-0.0006	-2.64	-0.0008	-4.95
construct	0.0002	1.1	-0.0003	-2.51	0	-0.19	0.0001	0.22
wholetrade	-0.0001	-0.51	-0.0004	-2.7	-0.0009	-4.4	-0.0009	-7.08
retail	-0.0003	-2.43	-0.0003	-2.92	-0.0006	-3.75	-0.0007	-4.98
transport	-0.0005	-5.15	-0.0005	-4.26	-0.0003	-1.62	-0.0005	-1.84
informat	-0.0003	-0.75	0	-0.01	-0.0008	-2.96	-0.0005	-1.41
finance	-0.0006	-6.99	-0.0007	-11.51	-0.0009	-2.65	-0.0008	-3.81
realest	0	-0.12	-0.0006	-8.94	-0.0012	-12.59	0	
profscienc	-0.0005	-4.1	-0.0003	-2.76	-0.0005	-1.64	-0.0008	-5.5
admin	-0.0001	-0.44	-0.0004	-5.57	-0.0002	-0.82	0.0002	0.47

educat	0	-0.08	-0.0002	-1.27	-0.0003	-0.96	-0.0006	-3.27
hlthcare	-0.0004	-2.06	-0.0006	-7.62	-0.0008	-2.86	-0.0009	-7.15
entertain	0.0016	2.13	0.0002	0.55	0.0001	0.29	-0.0001	-0.45
hospitality	0.0003	1.1	0	-0.36	-0.0001	-0.44	-0.0003	-1.77
othrsrvce	-0.0004	-3.74	-0.0002	-1.36	-0.0005	-1.87	-0.0006	-4.09
pubadmin	0.0017	5.33	0.0006	3.45	0.0018	5.58	0.0011	3.72
N	450743		463805		465105		465300	
Wald chi2(47)	912.68		753.88		822.44		883.72	
Prob > chi2	0		0		0		0	
Pseudo R2	0.097		0.0982		0.0799		0.0823	

Table 3-12 Pooled Models, Determinants of PR Involuntary Part-Time, Males and Females,
2008-2009

	2008				2009			
	Males		Females		Males		Females	
	dy/dx	z	dy/dx	z	dy/dx	z	dy/dx	z
PR (INVOLPT)	0.0035		0.0053		0.0055		0.007	
	dy/dx	z	dy/dx	z	dy/dx	z	dy/dx	z
aborig	0.0023	3.47	0.0007	1.13	0.0001	0.15	-0.0006	-1.15
(ontario)								
pei	0.0009	1.98	0.0004	0.93	-0.0009	-1.94	0.0003	0.54
ns	0.0001	0.25	-0.0003	-0.98	-0.0009	-2.7	-0.0016	-4.96
nb	-0.0008	-3.12	-0.0018	-6.63	-0.0022	-6.97	-0.0026	-8.6
que	-0.0008	-3.81	-0.002	-8.09	-0.001	-3.88	-0.0032	-11.72
mb	-0.0017	-8.53	-0.0014	-5.06	-0.0024	-9.3	-0.0021	-7.26
sask	-0.002	-10.39	-0.0016	-6.29	-0.0029	-11.29	-0.0028	-9.85
alb	-0.0028	-14.81	-0.0037	-15.98	-0.002	-7.57	-0.0038	-14.27
bc	-0.0011	-5.32	-0.0015	-6.2	-0.0007	-2.36	-0.0012	-4.13
(non-cma)								
cma	-0.0002	-0.99	-0.0014	-5.77	0	-0.12	-0.0008	-3.09
age	-0.0003	-6.41	-0.0001	-2.63	-0.0004	-7.78	-0.0004	-5.81
age2	0	5.1	0	-0.22	0	6.04	0	2.79
(can born)								
imgrnt	0.0025	7.53	0.0019	5.52	0.003	8.08	0.0028	7.53
(single)								
married	-0.003	-8.29	-0.0023	-6.85	-0.0033	-8.34	-0.0028	-7.54
divsep	-0.0004	-1.13	0.0007	1.73	-0.0007	-1.57	0.0011	2.16

widow	-0.0027	-6.56	0.0008	0.82	-0.0016	-1.57	-0.002	-2.52
(no child)								
child0to5	0	-0.02	-0.0023	-9.03	0.0002	0.56	-0.0028	-9.48
child6to12	0.0002	0.65	0.0008	2.46	0.0002	0.62	0.0011	3.21
(less than hs)								
hschool	0.0002	0.74	0.0008	1.93	-0.0003	-1.09	0.0001	0.22
somepse	0.0006	1.63	0.0017	3.16	0	0.06	0.0006	1.16
tradecert	-0.0001	-0.36	0.0011	2	-0.0006	-1.67	0.001	1.66
college	0.0013	3.47	0.0004	0.91	-0.0002	-0.45	0.0009	2.05
badegree	0.0008	2.01	0.0006	1.3	-0.0008	-1.98	0.0012	2.1
aboveba	0.0006	1.04	-0.0003	-0.51	-0.0022	-4.95	0.0009	1.24
(mom < ba)								
momba	0.0011	1.76	-0.0007	-1.01	0.0008	1.24	-0.0014	-2.14
momgrad	0.0023	1.91	-0.0004	-0.36	0.0003	0.25	0.0038	2.22
(spouse < ba or no spouse)								
spouseba	0.0003	0.7	-0.0006	-1.47	-0.0002	-0.51	-0.0009	-2.01
spgrad	0.0016	2.27	0.0011	1.58	0	0.03	-0.0013	-2.28
(spouse employ or no spouse)								
spunemp	0.0027	2.86	0.0049	4.85	0.0024	2.53	0.0044	4.91
(manufacture)								
agricult	0.0042	3.08	0.0106	3.3	0.0016	1.51	0.0064	2.55
mining	-0.0021	-4.12	-0.002	-1.8	-0.0027	-3.84	-0.0033	-2.27
construct	0.0061	4.85	0.0019	1.19	0.0078	6.56	0.0103	3.45
wholetrade	0.0026	1.99	0.0065	2.69	0.001	0.93	0.0038	1.85

retail	0.0162	6.75	0.0221	6.96	0.0214	9.55	0.022	7.59
transport	0.0126	5.78	0.0218	4.93	0.0142	7.26	0.0153	4.77
informat	0.0107	4.21	0.0121	3.74	0.0122	4.64	0.0083	3.43
finance	-0.001	-1.35	0.0013	1.12	-0.0006	-0.52	0	-0.03
realest	0.0108	3.77	0.0262	4.5	0.0161	4.75	0.0073	2.99
profscienc	0.0049	3.68	0.0117	4.65	0.0106	6.13	0.007	3.89
admin	0.0265	6.74	0.0261	6.04	0.0307	9.1	0.0236	6.48
educat	0.0228	6.25	0.0205	6.32	0.0254	7.35	0.0186	6.78
hlthcare	0.0152	5.2	0.0153	6.8	0.0231	7.29	0.0108	6.27
entertain	0.0249	5.36	0.0343	5.57	0.0352	7.79	0.0286	6.23
hospitality	0.0291	6.87	0.0249	6.67	0.0319	9.2	0.0202	6.87
othrsrvce	0.013	4.85	0.0158	5.35	0.0097	5.31	0.0148	5.78
pubadmin	-0.0021	-4.5	-0.0048	-8.2	-0.0061	-16.97	-0.0103	-17.96
Number of obs	450743		463805		465105		470922	
Wald chi2(47)	2255.87		2310.9		2978.2		3054.49	
Prob > chi2	0		0		0		0	
Pseudo R2	0.1107		0.0936		0.1034		0.1031	

VIII. APPENDIX

Table A1 Determinants of PR Labour Force Participation, Youth Males 2008-2009

	2008				2009			
	Non-Aboriginal		Aboriginal		Non-Aboriginal		Aboriginal	
PR (LFP)	0.9395		0.8955		0.9286		0.887	
	dy/dx	z	dy/dx	z	dy/dx	z	dy/dx	z
(ontario)								
pei	0.0123	2.12	0.0847	4.5	0.0047	0.7	0.1077	10.68
ns	-0.0282	-4.7	0.0127	0.33	-0.0046	-0.85	-0.1261	-1.6
nb	-0.0014	-0.29	-0.0189	-0.31	-0.0186	-3.29	-0.0554	-0.97
que	0.0047	1.44	0.0144	0.38	0.0019	0.54	0.0531	2.27
mb	0.0111	2.93	0.0405	2.37	0.0246	6.96	0.0265	1.51
sask	0.0157	4.49	0.0106	0.49	0.017	4.41	0.0272	1.47
alb	0.0051	1.4	0.0478	2.33	0.008	2	-0.0137	-0.56
bc	-0.0087	-2.17	0.0071	0.31	-0.017	-3.51	0.0072	0.29
(non-cma)								
cma	0.0008	0.32	0	0	0.002	0.7	-0.0199	-1.51
age	0.0069	1.22	0.0064	0.18	0.0363	5.64	0.1083	3.22
age2	0	-0.23	0	-0.04	-0.0007	-4.69	-0.0023	-2.85

(can born)								
imgrnt	-0.0221	-4.04			-0.0156	-2.83	-0.5778	-1.98
(single)								
married	0.0015	0.33	0.0609	3.38	-0.0021	-0.39	0.0271	1.03
divsep	-0.0267	-0.78	-0.1691	-1.16	0.0549	8.33	-0.0123	-0.08
widow	0.0494	4.55	0		0.0413	2.44		
(no child)								
child0to5	-0.0052	-0.61	0.0117	0.43	-0.0215	-2.3	-0.1131	-1.86
child6to12	0.0082	0.49	-0.0823	-1.15	-0.0404	-1.81	0.0654	2.42
(less than hs)								
hschool	0.0309	11.85	0.0693	4.31	0.0332	10.89	0.0516	3.54
somepse	0.033	12.83	0.0402	2.3	0.0348	11.55	0.061	3.48
tradecert	0.0372	11.93	0.065	3.75	0.0488	15.18	0.1271	11.81
college	0.0683	30.21	0.1119	11.33	0.0622	22.4	0.0897	6.33
badegree	0.0434	13.86	0.0917	6.42	0.0515	14.76	0.0792	2.91
aboveba	0.0452	6.8			0.0472	7.19		
(mom < ba)								
momba	-0.0263	-4.21	-0.0014	-0.06	-0.0115	-1.9	-0.0628	-1.31
momgrad	-0.0357	-3.26	-0.0118	-0.24	-0.0411	-3.04	0.0346	0.76

(spouse < ba or no spouse)								
spouseba	0.041	6			0.0079	0.56	-0.1552	-0.91
spgrad	0.0308	1.49			0.036	0.92	-0.3064	-1
(spouse employ or no spouse)								
spunemp	-0.0226	-1.02	-0.0693	-0.7	0.0481	6.13	0.0762	2.78
(manufacture)								
agricult	-0.0384	-3.62	-0.0473	-0.64	-0.0216	-2.19	-0.049	-0.81
mining	-0.0058	-0.52	-0.1522	-1.66	0.0107	1.04	-0.0015	-0.03
construct	-0.0075	-1.23	-0.0914	-1.77	-0.0143	-1.95	0.0216	0.64
wholetrade	-0.0116	-1.05	0.0338	0.63	0.025	2.73	0.0652	2.16
retail	-0.0148	-2.29	-0.0601	-1.15	0.0033	0.52	0.0689	2.72
transport	0.0038	0.44	-0.1036	-1	0.0238	2.82	0.059	1.62
informat	-0.0002	-0.02	-0.0931	-0.53	-0.0214	-1.28	0.0531	1.26
finance	0.0271	2.15			0.0461	4.29	0.032	0.39
realest	0.0003	0.02	0.071	1.9	-0.0053	-0.28	0.0733	2.01
profscienc	0.0182	1.92	0.0776	2.39	0.0034	0.28		
admin	-0.0365	-3.71	-0.3305	-3.28	-0.0194	-2.09	0.0634	2.29
educat	-0.113	-4.5	-0.1318	-0.88	-0.042	-2.2		

hlthcare	-0.0157	-1.02	-0.1339	-1.05	-0.0081	-0.55	0.0617	1.45
entertain	-0.0534	-4	-0.1175	-1.52	-0.0513	-3.58	-0.0303	-0.5
hospitality	-0.0225	-3	-0.1136	-1.78	-0.0236	-2.77	0.0614	2.52
othrsrvce	0.0103	1.18	-0.1214	-1.4	-0.0111	-0.97	0.0663	2.4
pubadmin	-0.5003	-29.11	-0.7363	-13.94	-0.4681	-25.61	-0.3273	-4.6
N	56784		2882		58412		3255	
Wald chi2(47)	6141.05		554.9		6687.39		623.12	
Prob > chi2	0		0		0		0	
Pseudo R2	0.3341		0.3859		0.3259		0.3217	

Table A2 Determinants of PR Labour Force Participation, Youth Females 2008-2009

	2008				2009			
	Non-Aboriginal		Aboriginal		Non-Aboriginal		Aboriginal	
PR (LFP)	0.9102		0.801		0.906		0.741	
	dy/dx	z	dy/dx	z	dy/dx	z	dy/dx	z
(ontario)								
pei	0.0143	1.79	0.1525	4.61	0.0255	3.28	-0.2615	-0.97
ns	0.0175	2.99	-0.0153	-0.21	0.0093	1.53	-0.0996	-1.46
nb	0.0039	0.6	0.0911	1.09	0.0108	1.81	-0.1758	-1.48
que	0.0187	4.27	-0.0009	-0.02	0.0018	0.37	-0.1187	-1.29
mb	0.0102	1.82	-0.0767	-2.02	0.0091	1.79	-0.0247	-0.71
sask	0.0053	0.98	-0.0477	-1.22	-0.008	-1.31	-0.059	-1.42
alb	-0.0117	-2.18	-0.0151	-0.43	-0.0164	-2.81	-0.0388	-0.87
bc	-0.0093	-1.64	-0.0359	-0.93	-0.0055	-1.03	0.0319	0.81
(non-cma)								
cma	0.0162	4.38	-0.0389	-1.8	0.0036	1.03	-0.0532	-2
age	0.022	2.72	-0.0075	-0.14	0.0348	4.13	0.0719	1.16
age2	-0.0004	-2.02	0.0005	0.43	-0.0007	-3.28	-0.0016	-1.08
(can born)								
imgrnt	-0.05	-6.39	0.015	0.11	-0.0401	-5.45	0.1143	1.43

(single)								
married	-0.0035	-0.76	-0.0089	-0.33	-0.0118	-2.28	-0.0198	-0.72
divsep	0.0058	0.35	-0.2022	-1.54	0.0095	0.65	0.0205	0.26
widow	-0.0239	-0.46			0.0197	0.48		
(no child)								
child0to5	-0.1901	-16.59	-0.2949	-8.39	-0.1873	-17.11	-0.3191	-9.11
child6to12	-0.0093	-0.74	-0.1024	-1.73	0.0145	1.4	0.1097	2.9
(less than hs)								
hschool	0.0474	12.99	0.078	3.5	0.0384	10.07	0.0902	3.15
somepse	0.0489	12.99	0.1379	6.48	0.0459	11.46	0.123	3.96
tradecert	0.0671	19.04	0.0365	0.89	0.0579	12.64	0.172	5.21
college	0.0813	21.81	0.1943	11.49	0.0821	21.92	0.1082	2.96
badegree	0.0646	15.49	0.2107	15.8	0.069	16.39	0.1884	6.1
aboveba	0.0754	16.37			0.0636	9.25	0.1812	3.61
(mom < ba)								
momba	-0.0426	-4.31	0.039	1.08	-0.0019	-0.23	-0.0299	-0.3
momgrad	-0.0154	-1.16	-0.1899	-1.16	-0.0122	-0.86	-0.104	-0.36
(spouse < ba or no spouse)								
spouseba	0.017	1.64	-0.2147	-1.88	0.0229	2.3	0.0734	0.82

spgrad	-0.0957	-2.36			-0.059	-2.52		
(spouse employ or no spouse)								
spunemp	0.0236	1.9	0.0378	0.68	-0.0056	-0.5	0.098	2.21
(manufacture)								
agricult	-0.0984	-3.76	-0.0024	-0.02	-0.0567	-2.67	-0.4357	-3.41
mining	-0.0138	-0.53	0.1662	5.92	-0.0206	-0.79		
construct	0.0008	0.05	0.1752	6.44	-0.0219	-1.02	0.091	0.78
wholetrade	0.0276	1.96	0.1625	4.12	-0.0146	-0.66		
retail	0.0028	0.26	0.1986	5.66	0.0085	0.81	0.0333	0.4
transport	0.0038	0.21	0.1607	4.07	0.0124	0.64	-0.097	-0.38
informat	0.0231	1.42	0.1916	10.01	0.0146	0.84	0.0524	0.53
finance	0.0409	3.46	0.1268	1.94	0.0424	3.72		
realest	-0.02	-0.95	0.07	1.18	-0.0301	-1.11	0.0959	0.94
profscienc	0.0394	3.46			0.0148	1.02	0.0788	0.69
admin	-0.029	-1.84	0.1497	4.49	-0.0468	-2.67	-0.0138	-0.14
educat	-0.079	-3.42	-0.013	-0.13	-0.0452	-2.35	-0.1875	-1.25
hlthcare	0.0334	3.67	0.0691	1.24	0.0418	4.92	0.1275	2.05
entertain	-0.0477	-2.57	0.1049	2.23	-0.0306	-1.83	-0.037	-0.32
hospitality	0.0001	0.01	0.1444	3.39	-0.0073	-0.65	-0.1196	-1.24

othrsrvce	-0.0169	-1.16	0.176	7.38	0.0139	1.2	-0.1087	-0.94
pubadmin	-0.5545	-21.97	-0.4008	-4.52	-0.5102	-19.95	-0.5938	-7.85
N	50511		3107		52101		3418	
Wald chi2(47)	6844.95		889.54		7245		802.32	
Prob > chi2	0		0		0		0	
Pseudo R2	0.3991		0.4452		0.3743		0.3518	

Table A3 Determinants of PR Labour Force Participation, Older Males 2008-2009

	2008				2009			
	Non-Aboriginal		Aboriginal		Non-Aboriginal		Aboriginal	
PR (LFP)	0.8687		0.8261		0.872		0.7074	
	dy/dx	z	dy/dx	z	dy/dx	z	dy/dx	z
(ont)								
pei	0.0339	5.84	0.1606	10.69	0.0415	8.36	0.1843	2.06
ns	-0.0091	-1.68	0.0311	1.1	0.0071	1.61	0.0899	2.3
nb	-0.0178	-2.82	0.0573	0.8	-0.0019	-0.38	-0.0035	-0.07
que	-0.0156	-3.97	0.0236	0.78	-0.0145	-3.83	-0.0738	-0.98
mb	0.0236	4.73	0.0277	0.97	0.022	5.6	0.1318	4.75
sask	0.0428	10.14	0.0842	3.63	0.0407	11.03	0.0893	2.69
alb	0.0566	14.88	-0.0034	-0.08	0.0389	9.92	0.0453	0.83
bc	-0.0021	-0.46	0.0476	1.58	-0.0044	-1.1	0.013	0.34
(non-cma)								
cma	0.048	14.07	0.0273	1.27	0.0212	7.31	0.0265	0.94
age	0.0382	4.18	0.0391	0.6	0.0138	1.7	0.2424	2.91
age2	-0.0005	-6.65	-0.0006	-1.1	-0.0003	-4.19	-0.0023	-3.15
(can born)								
imgrnt	-0.0152	-3.47	0.1382	3.74	0.0025	0.69	-0.0364	-0.45

(single)								
married	0.0943	16.1	0.0773	2.09	0.0623	12.03	0.1657	3.5
divsep	0.0486	11	0.1154	4.83	0.028	6.24	0.0698	1.21
widow	0.0522	7.03	-0.2	-2.01	0.0186	2.04	0.1075	2.05
(no child)								
child0to5	-0.0838	-2.98	-0.4398	-3.16	0.0091	0.53	-0.0107	-0.07
child6to12	0.0501	6.82	0.0887	2.91	0.0119	1.52	0.1282	2.95
(< hschool)								
hschool	0.0277	7.5	0.128	6.85	0.0395	11.89	0.139	4.08
somepse	0.0478	10.62	0.0103	0.22	0.0325	6.86	-0.0371	-0.6
tradcert	0.0434	11.98	0.0959	4.64	0.0393	11.54	0.0896	2.5
college	0.0702	21.95	0.1759	10.85	0.0701	23.72	0.1897	6.36
badegree	0.0784	22.66	0.1403	7.19	0.0778	25.42	0.2007	6.03
aboveba	0.0898	26.85	0.0902	2.68	0.094	32.28	0.0809	0.86
(mom < ba)								
momba	-0.6636	-6.25			0.0471	1.09		
momgrad					-0.1532	-2.49		
(spouse < ba or no spouse)								
spouseba	0.0164	3.09	-0.0038	-0.09	-0.0062	-1.22	-0.1024	-1.27

spgrad	0.0316	4.47	-0.0277	-0.27	0.0078	1.12	-0.1924	-1.85
(spouse employ or no spouse)								
spunemp	0.0345	3.83	0.1144	4.61	0.0498	7.32	0.0588	0.9
(manufacture)								
agricult	0.0254	3.58	0.0255	0.38	0.0419	6.95	-0.1073	-1.14
mining	-0.0325	-2.71	0.1865	11.73	-0.0269	-2.36	0.2449	5.85
construct	0.0213	3.24	0.1262	4.7	0.0006	0.1	-0.017	-0.27
wholetrade	0.0615	8.04	0.1682	8.39	0.0742	12.75	0.0056	0.05
retail	0.0496	7.17	0.0811	1.45	0.0646	12.02	0.1056	0.95
transport	0.0108	1.38	0.0425	1.01	0.0223	3.35	0.1426	2.49
informat	-0.0133	-0.62			-0.0065	-0.38	0.0373	0.18
finance	-0.0029	-0.2			0.0356	2.97	0.165	1.68
realest	0.081	10.03	0.1517	5.8	0.07	8.07		
profscienc	0.0261	2.83	0.1399	3.9	0.0298	3.94	0.1373	1.71
admin	0.0114	1.12	-0.0397	-0.48	0.033	3.92	0.0234	0.28
educat	-0.0915	-7.29	-0.0012	-0.02	-0.0901	-7.44	-0.0447	-0.47
hlthcare	-0.0081	-0.64	0.174	10.1	0.0191	1.9	-0.0643	-0.56
entertain	-0.0274	-1.72	0.0955	1.86	-0.0205	-1.5	0.0316	0.31
hospitality	0.0214	1.82	-0.0416	-0.3	0.0286	2.86	-0.0588	-0.43

othrsrvce	0.0455	4.99	0.0606	1.06	0.0595	9.28	0.2376	4.26
pubadmin	-0.7206	-112.73	-0.6695	-19.25	-0.6751	101.86	-0.6969	-21.87
N	157558		3528		161995		4211	
Wald chi2(47)	28622.41		837.6		29296		890.97	
Prob > chi2	0		0		0		0	
Pseudo R2	0.592		0.5638		0.5417		0.5035	

Table A4 Determinants of PR Labour Force Participation, Older Females 2008-2009

	2008				2009			
	Non-Aboriginal		Aboriginal		Non-Aboriginal		Aboriginal	
PR (LFP)	0.71289		0.6394		0.7422		0.6394	
	dy/dx	z	dy/dx	z	dy/dx	z	dy/dx	z
(ont)								
pei	0.1092	12.21	0.2692	5.68	0.1004	12.54	0.3221	10.14
ns	-0.0483	-4.91	0.1388	2.19	-0.0049	-0.58	0.0647	1.06
nb	-0.0493	-4.84	-0.0651	-0.67	-0.0303	-3.12	-0.0647	-0.77
que	-0.0063	-0.95	0.0987	1.76	-0.0076	-1.18	0.1432	2.94
mb	0.0201	2.17	0.0651	1.43	0.0539	7.55	0.1837	5.72
sask	0.0136	1.5	0.1146	2.53	0.0537	7.65	0.0874	1.98
alb	-0.0044	-0.46	0.1053	2.15	0.0159	1.99	0.0873	1.92
bc	-0.0642	-7.67	0.0824	1.83	-0.0365	-4.99	0.0693	1.62
(non-cma)								
cma	0.0229	4.37	-0.0267	-0.79	0.0607	11.9	0.0341	1.19
age	-0.0029	-0.2	0.1741	1.62	0.1028	7.2	0.4165	4.26
age2	-0.0002	-1.71	-0.0018	-1.94	-0.0012	-9.45	-0.004	-4.63
(can born)								
imgrnt	-0.0362	-5.51	0.2297	1.6	-0.0121	-2	-0.2015	-2.23

(single)								
married	-0.0591	-6.68	0.2459	3.5	-0.0796	-9.09	-0.0934	-1.95
divsep	0.1439	17.93	0.2088	3.54	0.0147	1.38	0.0429	0.73
widow	-0.059	-4	0.2095	3.54	-0.0708	-4.57	-0.1523	-2.27
(no child)								
child0to5	-0.2485	-2.67	0.3568	18.8	-0.4605	-7.96	-0.1813	-1.05
child6to12	0.0124	0.57	0.0354	0.18	0.0167	0.92	0.0195	0.18
(< hschool)								
hschool	0.1371	24.3	0.1238	2.91	0.1232	22.89	0.1657	4.9
somepse	0.1687	25.36	0.2254	5.45	0.135	19.8	0.1923	4.29
tradecert	0.0735	10.66	0.0637	1.05	0.1139	18.59	0.2815	9.42
college	0.2252	44.78	0.2959	9.36	0.1656	31.54	0.3442	14.76
badegree	0.2102	38.75	0.3607	18.16	0.1628	28.83	0.3377	16.83
aboveba	0.2303	44.39	0.3152	6.43	0.2035	40.85	0.3278	14.86
(mom < ba)								
momba	0.2199	4.56			0.1058	1.81		
momgrad					-0.2614	-2.62		
(spouse < ba or no spouse)								
spouseba	0.0067	0.73	0.0752	0.73	-0.0327	-3.75	-0.1941	-2.36

spgrad	-0.0383	-2.9	-0.4259	-4.28	-0.0353	-2.98	0.196	4.52
(spouse employ or no spouse)								
spunemp	0.1136	8.64	0.1182	1.78	0.0737	6.4	0.0157	0.25
(manufacture)								
agricult	-0.0605	-2.39	-0.0211	-0.12	0.0131	0.6	0.2668	2.55
mining	-0.0682	-1.24	-0.2274	-1.3	-0.1898	-4.9	-0.3031	-1.72
construct	0.0609	2.49	0.2499	2.08	-0.0077	-0.29	-0.4746	-4.81
wholetrade	0.0979	3.8	-0.1802	-0.94	0.0345	1.34	0.0015	0.01
retail	0.0164	1.03	-0.0256	-0.19	0.0387	2.73	-0.0324	-0.24
transport	0.0678	3.06			-0.0039	-0.17	-0.4131	-3.46
informat	-0.0091	-0.28	0.2498	2.59	0.0377	1.38	-0.4244	-3.94
finance	0.0251	1.19			-0.0217	-1.06		
realest	0.0817	3.29	-0.1571	-0.55	0.0769	3.29	-0.4539	-4.16
profscienc	0.0111	0.5	0.2179	1.7	0.0132	0.69	0.0824	0.44
manage					0.1817	2.55		
admin	0.035	1.72	0.1903	1.82	0.0014	0.07	0.1499	1.3
educat	-0.1983	-10.26	-0.0852	-0.56	-0.1454	-7.87	-0.1457	-0.95
hlthcare	-0.032	-1.99	0.1852	1.87	0.0127	0.9	0.0858	0.75
entertain	-0.0722	-2.44	0.2795	3.97	-0.0219	-0.82	0.0504	0.3

hospitality	-0.0124	-0.66	-0.1068	-0.67	-0.0166	-0.9	-0.184	-1.24
othrsrvce	0.0422	2.28	0.1146	0.91	0.0768	5.03	0.1014	0.77
pubadmin	-0.8125	-136.62	-0.8197	-19.42	-0.8016	-131.99	-0.8478	-22.75
N	159738		3933		165738		5036	
Wald chi2(47)	35886.45		1210.4		33799.63		1269.55	
Prob > chi2	0		0		0		0	
Pseudo R2	0.6003		0.6397		0.6021		0.6007	

Table A5 Pooled Models, PR Unemployment of Males and Females, 2008-2009

	2008				2009			
	Males		Females		Males		Females	
N	381029		348473		392554		353786	
Wald chi2(47)	13859.29		11890.08		15991.56		15264.83	
Prob > chi2	0		0		0		0	
Pseudo R2	0.1419		0.1515		0.1253		0.1573	
PR (UNEMP)	0.04092259		0.031943		0.0650287			
	dy/dy	z	dy/dy	z	dy/dy	z	dy/dy	z
aborig	0.0281905	10.62	0.025614	10.64	0.0377079	11.69	0.03342	11.78
(ontario)								
pei	0.0232552	9.92	0.016122	8.1	0.0174409	6.46	0.011055	5.08
ns	0.0106247	6.69	0.003707	2.8	0.0028528	1.54	0.002571	1.71
nb	0.0227989	12.48	0.00626	4.55	0.0008667	0.48	0.003729	2.39
que	0.0067294	6.8	-0.00205	-2.35	-0.00621	-5.05	-0.003543	-3.46
mb	-0.0217526	-25.11	-0.01329	-15.28	-0.038096	-38.53	-0.017941	-19.01
sask	-0.0212095	-25.48	-0.01176	-13.28	-0.037584	-37.14	-0.019968	-20.99
alb	-0.0250039	-30.05	-0.01231	-14.08	-0.024654	-20.91	-0.009366	-8.66
bc	-0.0172081	-19.36	-0.00712	-7.92	-0.011869	-9.23	-0.004777	-4.34

cma	-0.0065298	-8.04	-0.00642	-8.37	-0.010875	-10.15	-0.008141	-8.96
age	-0.0026707	-14.02	-0.00236	-12.6	-0.003989	-15.67	-0.002972	-13.33
age2	0.000033	14.01	2.25E-05	9.69	0.0000417	13.27	2.71E-05	9.84
imgrnt	0.0235002	16.52	0.028138	20.53	0.0376398	21.56	0.03449	23.63
(single)								
married	-0.0479978	-30.58	-0.01566	-13.93	-0.051003	-29.5	-0.017009	-12.91
divsep	-0.0143004	-12.95	-0.00533	-4.62	-0.013527	-8.05	0.000521	0.33
widow	-0.0218797	-8.29	-0.00719	-3.18	-0.007761	-1.6	-0.004588	-1.67
child0to5	0.0051106	3.29	0.002606	2.43	0.0039443	2.22	-0.000734	-0.61
child6to12	-0.0022462	-1.83	0.005098	4.97	-0.007148	-4.83	0.006843	5.75
(less than hs)								
hschool	-0.0166845	-20.4	-0.01325	-16.94	-0.021707	-19.54	-0.020218	-22.81
somepse	-0.0193618	-21.44	-0.01367	-15.74	-0.025206	-19.42	-0.018842	-19.08
tradcert	-0.012419	-14.46	-0.01273	-13.72	-0.019809	-16.54	-0.016708	-15.49
college	-0.0316181	-40.45	-0.02372	-28.51	-0.039878	-36.61	-0.032564	-33.9
badegree	-0.0298502	-34.12	-0.02631	-34.85	-0.046873	-40.22	-0.035243	-39.59
aboveba	-0.0238328	-20.1	-0.02326	-29.35	-0.044239	-32.67	-0.034446	-40.55
momba	0.0052113	1.67	0.00166	0.56	0.0035387	0.92	-0.001003	.
momgrad	0.0177602	2.97	0.000214	0.05	0.0348801	4.19	0.010621	1.75

spouseba	-0.0074431	-4.87	-0.00171	-1.25	-0.00933	-4.88	-0.004501	-2.86
spgrad	-0.0063112	-2.79	0.007769	3.53	-0.01494	-5.32	0.012027	4.51
spunemp	0.0681701	15.53	0.05549	14.75	0.0900462	18.1	0.059162	17.49
(manufacture)								
agricult	0.0073446	3.6	0.013936	4.56	-0.008263	-3.94	-0.001154	-0.45
mining	-0.0034381	-1.69	-0.00748	-2.51	-0.001935	-0.81	-0.013168	-5
construct	0.015609	10.33	0.007349	2.57	0.0040795	2.47	-0.007954	-3.3
wholetrade	-0.0165913	-10.28	-0.01365	-8.26	-0.030596	-17.45	-0.017785	-8.97
retail	-0.0126863	-9.85	-0.01414	-13.52	-0.02962	-21.27	-0.023179	-21.37
transport	-0.0196726	-16.15	-0.01644	-11.2	-0.027295	-17.76	-0.01611	-8.64
informat	-0.0022472	-0.73	-0.00999	-4.68	-0.038124	-16.39	-0.017808	-8.42
finance	-0.0239433	-11.75	-0.02443	-24.16	-0.041422	-18.37	-0.032025	-28.58
realest	-0.0127161	-4.27	-0.01559	-7.94	-0.029835	-10.12	-0.023919	-12.48
profscienc	-0.0143255	-8.22	-0.01213	-8.07	-0.024246	-12.23	-0.021315	-15.42
manage			-0.02793	-6.8	0.0754116	1.11		
admin	0.0149105	6.41	0.003559	1.75	-0.003846	-1.73	-0.003247	-1.62
educat	-0.0142301	-7.25	0.000823	0.48	-0.02986	-13.24	-0.01355	-9.21
hlthcare	-0.0247248	-15.73	-0.02613	-26.5	-0.049036	-31.24	-0.04171	-42.21
entertain	0.0042343	1.44	0.00131	0.54	-0.017633	-6.06	-0.010785	-5.15

hospitality	0.0007778	0.4	-0.01061	-9.13	-0.021668	-11.59	-0.016738	-13.68
othrsrvce	-0.0099164	-5.48	-0.01786	-15.5	-0.023219	-11.67	-0.025441	-22.09
pubadmin	0.1618842	34.9	0.123148	23.95	0.1743558	40.23	0.125195	26.8

Table A6 PR Unemployment, Male Youth 2008-2009

	2008				2009			
	Non-Aboriginal		Aboriginal		Non-Aboriginal		Aboriginal	
N	50000		2325		50723		2610	
Wald chi2(47)	3014.98		283.01		3709.31		340.95	
Prob > chi2	0		0		0		0	
Pseudo R2	0.1421		0.2092		0.1384		0.1692	
PR (UNEMP)	0.0865961		0.105879		0.1361231		0.179353	
	dy/dy	z	dy/dy	z	dy/dy	z	dy/dy	z
pei	0.0295286	3.33	-0.01151	-0.16	0.0342541	3.04	-0.07417	-1.01
ns	0.0074855	1.25	-5.1E-05	0	0.023965	2.84	0.15561	1.97
nb	0.0210416	3.23	0.007583	0.16	-0.013115	-1.82	-0.13177	-3.65
que	-0.0163171	-4.1	-0.07696	-3.41	-0.026025	-5.06	-0.1072	-3.46
mb	-0.0408266	-10.83	-0.06403	-4.6	-0.076467	-17.23	-0.06673	-3
sask	-0.0539846	-17.28	-0.03035	-1.74	-0.084042	-20.66	-0.02559	-0.9
alb	-0.0509699	-14.87	-0.06419	-3.99	-0.056248	-11.62	-0.01569	-0.51
bc	-0.0340755	-9.05	-0.04729	-2.73	-0.021507	-3.74	0.012726	0.39
cma	-0.0001349	-0.04	-0.06127	-3.8	-0.001389	-0.32	-0.04245	-2.11
age	0.0709077	8.1	0.064929	1.76	0.0248903	2.21	0.004803	0.08

age2	-0.001908	-8.95	-0.00161	-1.78	-0.000709	-2.6	-0.00043	-0.31
imgrnt	0.0273954	4.17			0.0636367	7.43		
married	-0.0171405	-3.04	-0.08666	-3.84	-0.073272	-12.95	-0.06846	-2.23
divsep	0.0307303	0.85	-0.02313	-0.23	-0.068033	-3.97	-0.1406	-2.83
widow	-0.0663089	-4.11			-0.05372	-1.26		
child0to5	0.0303003	2.51	0.027534	0.56	0.0340966	2.45	0.204208	3.06
child6to12	0.0555588	1.93	0.086351	0.99	0.0807797	2.28	0.074497	0.88
hschool	-0.0355463	-10.1	-0.0729	-4.81	-0.048528	-10.15	-0.06908	-3.28
somepse	-0.0529509	-15.82	-0.05334	-3.1	-0.066802	-13.94	-0.12233	-5.63
tradecert	-0.0358691	-8.27	-0.05681	-3.18	-0.052245	-9.21	-0.11131	-4.93
college	-0.084185	-25.18	-0.04894	-2.2	-0.089571	-18.73	-0.07395	-2.46
badegree	-0.0515707	-10.8	-0.10718	-11.43	-0.101093	-18.9	-0.08439	-1.49
aboveba	-0.0633015	-7.61			-0.104646	-15.13		
momba	0.0010212	0.15	0.079072	1.61	-0.008711	-1.06	-0.12216	-3.52
momgrad	0.0218133	1.72	-0.09832	-6.12	0.0502657	3.01	-0.0256	-0.26
spouseba	-0.0336625	-2.44			-0.0022	-0.1	0.115872	0.48
spgrad	-0.0100953	-0.47	0.274272	0.84	0.1686667	1.9		
spunemp	0.0077757	0.47	-0.03858	-0.94	0.1165364	3.84	0.031226	0.41
agricult	0.0094069	1.04	0.038842	0.63	-0.009379	-0.92	-0.01884	-0.33

mining	0.0143738	1.27	0.018466	0.41	0.0387333	2.72	-0.01687	-0.37
construct	-0.0044517	-0.78	0.050512	1.32	0.0067299	0.89	-0.07701	-2.37
wholetrade	-0.0385447	-5.26	-0.03379	-0.81	-0.072364	-8.34	-0.13527	-4.57
retail	-0.0235093	-4.48	0.008068	0.23	-0.031185	-4.64	-0.17339	-7.94
transport	0.0025141	0.26	0.042773	0.77	-0.007748	-0.68	-0.07462	-1.96
informat	-0.0142737	-1.19	0.16468	0.97	-0.058948	-4.64		
finance	-0.0141302	-0.9	0.093374	0.52	-0.068299	-4.79	0.037108	0.32
realest	-0.0054298	-0.39	0.066879	0.89	-0.040805	-2.37	-0.17826	-13.11
profscienc	-0.0289997	-3.18	0.033864	0.5	-0.018174	-1.53	-0.08109	-1.51
admin	0.043932	4.57	0.183582	2.61	0.0189158	1.89	-0.07773	-1.93
educat	0.0499661	2.38	0.008365	0.11	0.0104246	0.54	-0.16284	-8.08
hlthcare	-0.0447128	-4.52	0.316118	2.53	-0.072969	-6.86	-0.1375	-5.13
entertain	0.032365	2.45	0.003024	0.06	-0.0262	-2.34	-0.01127	-0.19
hospitality	0.0022541	0.34	0.067181	1.46	-0.04064	-5.86	-0.14436	-7.02
othrsrvce	-0.0190607	-2.42	0.000847	0.02	-0.000651	-0.06	-0.12387	-4.78
pubadmin	0.3897263	22.8	0.707846	11.8	0.4610614	29.82	0.239795	3.75

Table A7 PR Unemployment, Female Youth 2008-2009

	2008				2009			
	Non-Aboriginal		Aboriginal		Non-Aboriginal		Aboriginal	
N	41742		2106		42727		2212	
Wald chi2(47)	2788.79		329.07		3338.58		416.52	
Prob > chi2	0		0		0		0	
Pseudo R2	0.1766		0.2923		0.1843		0.3054	
PR (UNEMP)	0.0625879		0.084515		0.0782063		0.131469	
	dy/dy	z	dy/dy	z	dy/dy	z	dy/dy	z
pei	0.0151273	1.84	0.269501	1.81	-0.010781	-1.53	0.390612	1.34
ns	-0.0070587	-1.43	0.058848	0.9	-0.007094	-1.32	0.095975	1.19
nb	-0.0006276	-0.12	-0.0437	-1.44	-0.008549	-1.51	0.287356	2.05
que	-0.0045777	-1.18	-0.0591	-3.58	-0.011982	-2.86	-0.05071	-1.5
mb	-0.0350854	-10.56	-0.0116	-0.64	-0.041548	-11.72	-0.06896	-3.17
sask	-0.0327614	-10.01	0.014669	0.67	-0.042657	-11.51	-0.01525	-0.54
alb	-0.0306898	-9.05	-0.02526	-1.41	-0.021111	-4.82	-0.02073	-0.64
bc	-0.0167818	-4.42	-0.02353	-1.21	-0.025749	-6.48	-0.01515	-0.53

cma	-0.0024979	-0.78	-0.0196	-1.43	0.004347	1.25	0.02139	1.12
age	0.0117337	1.57	-0.02647	-0.66	0.0104494	1.2	0.074885	1.45
age2	-0.0004091	-2.23	0.000468	0.46	-0.0004	-1.89	-0.00194	-1.53
imgrnt	0.0363968	5.38	0.037186	0.44	0.0473241	6.52	0.091157	0.53
married	-0.026882	-7.45	-0.01807	-1.07	-0.022308	-4.99	-0.0657	-3.11
divsep	-0.0153432	-1.15	0.046126	0.76	-0.022538	-1.53	-0.05087	-1.52
widow	0.0968705	0.75			-0.064923	-4.7		
child0to5	0.0262612	4.09	0.046781	1.83	0.0305053	3.94	0.099264	2.77
child6to12	0.0525468	2.68	0.06298	0.73	0.0837101	3.5	-0.01003	-0.23
hschool	-0.0246886	-7.01	-0.01736	-1.18	-0.034412	-8.84	-0.11986	-5.93
somepse	-0.0283985	-7.88	-0.07406	-6.72	-0.031317	-7.4	-0.08387	-4.25
trdecert	-0.0241165	-4.92	-0.07274	-5.25	-0.032066	-5.95	-0.07293	-2.28
college	-0.0350409	-8.78	-0.04409	-2.06	-0.058546	-	-0.1189	-7.31
						14.02		
badegree	-0.0436552	-11.04	-0.08045	-7.75	-0.048244	-	-0.12971	-7.89
						10.52		
aboveba	-0.0404929	-7.18	-0.0572	-2.63	-0.041374	-5.29	-0.10013	-5.71
momba	-0.0005862	-0.09	-0.0226	-0.91	0.0008559	0.12	-0.00908	-0.17
momgrad	-0.0093758	-1.02	-0.03013	-0.87	0.0173055	1.43	-0.05478	-1.1
spouseba	0.0421591	2.36			-0.012149	-0.97		

spgrad	0.1610302	2.89			0.0438415	1.28		
spunemp	0.0599122	3.49	0.390522	3.44	0.103326	5.44	0.0801	1.29
agricult	0.0417435	2.45	-0.00564	-0.07	-0.012526	-1.16	-0.08614	-1.7
mining	0.0294222	1.5			-0.041974	-3.84	0.019824	0.15
construct	0.0343126	2.02	0.085274	0.68	0.0048446	0.33	-0.04357	-0.52
wholetrade	-0.0078342	-0.66	-0.0352	-0.73	0.0021584	0.13	-0.09669	-2.42
retail	-0.0110076	-1.73	0.042489	0.68	-0.035321	-5.39	-0.04011	-0.5
transport	-0.0282095	-2.95	0.015935	0.18	-0.022902	-1.89	0.056179	0.31
informat	-0.0131924	-1.28	0.032745	0.27	-0.001957	-0.15	-0.114	-3.63
finance	-0.0381516	-5.76	0.13972	1.03	-0.054072	-8.55	0.165728	0.85
realest	-0.0025756	-0.18	0.061405	0.56	-0.005329	-0.32	-0.07841	-1.44
profscienc	-0.0168092	-1.92	-0.03002	-0.61	-0.023651	-2.7	-0.09366	-2.23
manage	0.1877906	0.84						
admin	0.0398297	3.18	0.139326	1.24	0.0000958	0.01	0.071218	0.54
educat	0.0113923	0.98	0.429649	2.4	-0.018121	-2.01	-0.12114	-4.74
hlthcare	-0.0271082	-4.51	-0.05292	-1.61	-0.057877	-10.83	-0.09358	-1.79
entertain	0.0024905	0.25	-0.02922	-0.67	-0.022437	-2.68	-0.0391	-0.5
hospitality	-0.0204524	-3.51	0.05902	0.87	-0.020643	-2.88	-0.04016	-0.5
othrsrvce	-0.01309	-1.68	0.047994	0.57	-0.029583	-4.03	-0.01258	-0.13

pubadmin	0.3731732	13.57	0.728201	7.1	0.3465728	13.46	0.587527	3.45
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Table A8 PR Unemployment, Older Males 2008-2009

	2008				2009			
	Non-Aboriginal		Aboriginal		Non-Aboriginal		Aboriginal	
N	113690		2242		118681		2639	
Wald chi2(47)	5130.96		277.08		4301.39		183.18	
Prob > chi2	0		0		0		0	
Pseudo R2	0.1813		0.2628		0.1224		0.1536	
PR (UNEMP)	0.0341073		0.035167		0.0530076		0.07644	
	dy/dy	z	dy/dy	z	dy/dy	z	dy/dy	z
pei	0.0217818	5.53	0.142965	1.7	0.0164832	3.79	0.018953	0.26
ns	0.0019897	0.86	0.054489	1.59	-0.003574	-1.3	0.030636	0.89
nb	0.0218764	6.95	0.019969	0.72	0.0053224	1.79	0.29437	3.58
que	0.0173994	9.99	0.022229	1.19	-0.003891	-1.97	0.064799	1.61
mb	-0.0201562	-13.71	-0.01669	-1.89	-0.033185	-20.05	0.004737	0.27
sask	-0.0195365	-14.04	0.007717	0.53	-0.034182	-21.21	0.049135	1.85
alb	-0.0234516	-16.5	0.029343	1.68	-0.017528	-8.22	0.070916	2.24
bc	-0.0168879	-11.64	0.033417	1.78	-0.004442	-2.05	0.039516	1.63
cma	-0.0037082	-2.94	-0.03057	-3.16	-0.014814	-8.26	-0.03774	-2.79
age	-0.0015922	-0.42	0.073193	2.9	-0.006096	-1.25	-0.03212	-0.86

age2	0.0000191	0.58	-0.00066	-2.93	0.000063	1.48	0.000309	0.94
imgrnt	0.0167245	7.95			0.0278264	11.04	0.09976	0.85
married	-0.0910522	-25.12	-0.06167	-3.69	-0.046707	-13.19	-0.03912	-1.79
divsep	-0.0227068	-21.07	-0.02835	-4.12	-0.01453	-6.19	0.022752	0.76
widow	-0.0258135	-15.69	-0.02749	-3.29	-0.01225	-2.75	0.162278	1.9
child0to5	-0.0052847	-0.8	-0.02105	-1.76	0.0037325	0.49	0.029275	0.5
child6to12	0.0067727	1.85	0.090185	1.94	0.0043799	1.05	-0.02312	-0.92
hschool	-0.0107564	-6.71	-0.02152	-2.94	-0.017885	-9.78	-0.00994	-0.62
somepse	-0.0106714	-5.04	-0.02269	-2.73	-0.016704	-6.63	-0.02578	-1.29
tradecert	0.0137897	7.2	-0.02221	-3.01	-0.012939	-6.8	-0.00628	-0.39
college	-0.0143457	-8.98	-0.02195	-2.97	-0.023677	-12.75	-0.02817	-1.88
badegree	-0.0174309	-10.31	-0.02863	-3.84	-0.03031	-15.27	-0.07639	-9.27
aboveba	-0.0117124	-5.33			-0.037901	-18.95	0.011549	0.18
momba	0.2529605	0.78			0.0026356	0.09		
momgrad	0.258417	1.94						
spouseba	-0.0013766	-0.54	0.012081	0.57	-0.008977	-3.16	0.090595	1.51
spgrad	-0.0045532	-1.37	-0.01505	-1.25	-0.018203	-4.75		
spunemp	0.0651332	9.64	0.096413	2.09	0.0923816	11.29	0.062461	1.41
agricult	0.0101404	3.03	0.003778	0.22	-0.015897	-5.99	0.006737	0.26

mining	-0.0116416	-4.44	-0.02554	-3.07	-0.010908	-3.12	-0.02921	-1.39
construct	0.0325308	10.87	0.030468	1.6	0.0065227	2.37	0.021444	0.99
wholetrade	-0.0155923	-6.27	-0.02371	-2.03	-0.022011	-7.54	0.143622	2.26
retail	-0.0141581	-6.65	-0.01387	-0.87	-0.032523	-16.03	-0.02239	-1.02
transport	-0.0199933	-10.99	-0.0368	-5.39	-0.025803	-12.13	-0.06449	-5.72
informat	0.0064818	0.92	-0.02392	-1.65	-0.034649	-10.68	-0.03779	-1.29
finance	-0.0264184	-12.01			-0.030136	-7.8	-0.0621	-3.21
realest	-0.0204162	-6.58			-0.036502	-11.82	-0.0568	-2.79
profscienc	-0.014516	-5.68			-0.025361	-9.11	-0.00867	-0.22
admin	0.0073659	1.73	-0.0309	-4.05	-0.017722	-5.74	-0.07088	-6.77
educat	-0.0186492	-8.6	-0.03155	-3.93	-0.035567	-13.85	-0.05437	-3.43
hlthcare	-0.0214446	-9.28	-0.0213	-1.97	-0.04334	-20.67	-0.07206	-5.7
entertain	0.0020109	0.41	-0.0227	-1.38	-0.006574	-1.12	0.020092	0.45
hospitality	0.0051295	1.09	0.113584	2.18	-0.020968	-6.08	0.082328	1.51
othrsrvce	-0.0213457	-11.6	-0.02617	-2.81	-0.029445	-11.59	-0.06399	-5.76
pubadmin	0.1140749	15.82	0.169576	3.31	0.1437202	20.42	0.064358	1.85

Table A9 PR Unemployment, Older Females 2008-2009

	2008				2009			
	Non-Aboriginal		Aboriginal		Non-Aboriginal		Aboriginal	
N	94011		2063		102012		2677	
Wald chi2(47)	2540.13		242.12		3494.29		238.4	
Prob > chi2	0		0		0		0	
Pseudo R2	0.1244		0.3165		0.1375		0.2199	
PR (UNEMP)	0.0296571		0.02978		0.0351322		0.036103	
	dy/dy	z	dy/dy	z	dy/dy	z	dy/dy	z
pei	0.0160085	4.55	0.110733	1.39	0.0235477	5.67	-0.0097	-0.5
ns	0.0102015	3.72	-0.01747	-2.09	0.0025289	1.02	-0.03148	-5.88
nb	0.0054444	2.17	0.05695	1.14	0.0048846	1.81	0.053902	1.14
que	-0.0011149	-0.67	0.024497	1.16	0.0001056	0.06	0.028034	1.28
mb	-0.0139055	-8.38	-0.02513	-3.96	-0.014032	-8.13	-0.00684	-0.82
sask	-0.0136922	-8.58	-0.02761	-4.7	-0.018931	-12.19	-0.01029	-1.13
alb	-0.0115926	-6.6	-0.00304	-0.23	-0.012283	-6.92	-0.02609	-3.93
bc	-0.0069402	-4.03	0.011988	1.07	-0.001498	-0.76	0.008135	0.78
cma	-0.003986	-2.91	-0.00028	-0.04	-0.010343	-6.56	-0.02299	-3.16
age	0.0297778	6.91	0.043305	1.61	0.00551	1.31	-0.00329	-0.15

age2	-0.0002646	-6.97	-0.00039	-1.64	-4.89E-05	-1.31	3.18E-05	0.16
imgrnt	0.0142397	6.89	0.191609	1.76	0.0199726	9.6	-0.01344	-0.58
married	-0.0073728	-2.92	-0.03923	-2.31	-0.006487	-2.46	0.001215	0.1
divsep	-0.0044737	-1.89	-0.00424	-0.37	0.0084906	2.69	0.015845	1.04
widow	-0.0022692	-0.68	-0.01842	-2.18	-0.001699	-0.48	0.027209	1.09
child0to5	-0.0173884	-2.76			-0.018395	-2.61		
child6to12	0.0146988	2.16	0.418833	3	-0.012384	-3.31	0.020057	0.5
hschool	-0.0084164	-5.21	-0.02223	-3.27	-0.017984	-11.62	0.01249	1.06
somepse	-0.0061082	-2.75	-0.01385	-1.61	-0.019203	-11.66	-0.00425	-0.33
tradecert	-0.0069981	-3.58	-0.00867	-0.99	-0.0092	-4.84	0.048805	1.92
college	-0.0173185	10.66	-0.03636	-4.2	-0.021275	-13.03	-0.00602	-0.64
badegree	-0.0157364	-9.23	-0.02671	-4.67	-0.024988	-15.98	-0.01224	-1.21
aboveba	-0.0131333	-5.92	-0.02926	-5.26	-0.024647	-15.5	0.009895	0.4
momba	-0.022694	-2.45			-0.002179	-0.09		
spouseba	-0.0046572	-2.03	-0.01764	-1.77	-0.003778	-1.46	0.031701	1.23
spgrad	-0.0068823	-2.43	0.1646	1.91	0.011897	2.89		
spunemp	0.0592823	8.18	0.170871	2.25	0.0677653	10.91	0.062447	2.06
agricult	-0.0023675	-0.67	0.383073	2.63	0.0029896	0.73	-0.02756	-3.8
mining	-0.0162122	-4.13			-0.008291	-1.68		

construct	0.0074139	1.43	0.175517	1.64	-0.016092	-5.5	-0.03125	-5.17
wholetrade	-0.0083905	-2.46			-0.017675	-6.55	-0.03923	-8.05
retail	-0.0221852	15.7	-0.00127	-0.06	-0.02158	-12.87	-0.04683	-7.3
transport	-0.0201941	10.78	-0.00048	-0.02	-0.014504	-5.36	-0.01614	-1.05
informat	-0.016987	-5.59			-0.013882	-3.62	-0.02304	-1.76
finance	-0.0252811	16.65	0.018015	0.45	-0.031106	-21.68		
realest	-0.0167383	-6.02	-0.00327	-0.11	-0.023405	-10.22	-0.03247	-4.89
profscienc	-0.0149704	-6.52	0.048833	0.92	-0.023328	-12.49	-0.00653	-0.4
admin	-0.0100635	-3.99	-0.01899	-1.9	-0.010621	-3.83	-0.04447	-8.42
educat	-0.0105781	-4.79	-0.01154	-0.66	-0.013694	-6.48	-0.02788	-3.5
hlthcare	-0.0295553	17.64	-0.01381	-0.89	-0.039955	-25.07	-0.07203	-6.29
entertain	-0.0030562	-0.75	-0.02985	-4.17	0.0005839	0.12	-0.03698	-7.57
hospitality	-0.0088571	-4.13	0.021271	0.65	-0.00838	-3.45	-0.02215	-2.64
othrsrvce	-0.0238242	16.95	0.069399	1.18	-0.020785	-11.08	-0.02293	-2.91
pubadmin	0.0669226	10.07	0.207998	2.36	0.0800648	12.29	0.010762	0.58

Table A10 Fairlie Detailed Decomposition PR LFP Males and Females, 2008-2009

	2008				2009			
	Males		Females		Males		Females	
N	436326		447303		448624		451608	
Wald chi2(47)	57653.33		77866.36		58980.59		78016.05	
Prob > chi2	0		0		0		0	
Pseudo R2	0.5347		0.5438		0.4929		0.5372	
pei	0.0000363	3.87	0.000106	14.76	0.0000712	6.99	0.000119	13.96
ns	0.0000265	6.91	1.97E-05	3.58	9.40E-07	0.58	-1.49E-06	-0.97
nb	-0.000139	-7.45	-9.9E-05	-3.8	-0.000104	-5.23	-7E-05	-3.35
que	0.0000269	0.1	0.002229	7.59	-8.82E-05	-0.37	0.000618	2.45
mb	-0.0014545	-9.36	-0.00126	-5.98	-0.001475	-10.09	-0.0012	-5.61
sask	-0.0011391	-15.18	-0.00092	-6.23	-0.001419	-16.65	-0.001	-8.18
alb	-0.0004875	-8.79	0.001296	7.45	-0.000484	-9.79	0.00082	6.37
bc	0.0003839	4.78	0.001312	13.61	0.0003981	4.48	0.00068	11.56
cma	0.0030309	19.51	0.002502	13.49	0.0018843	12.26	0.003138	18.08
age	0.1500982	59.17	0.143302	55.96	0.1513585	54.35	0.143679	67.69
age2	-0.1568719	-62.3	-0.15077	-63.52	-0.153044	-56.81	-0.14982	-76.45
imgrnt	-0.0023808	-9.86	-0.00651	-21.06	-0.00142	-5.83	-0.00563	-17.29

married	0.004309	28.91	-0.00184	-7.21	0.0053138	23.31	-0.00164	-6.7
divsep	-0.0011161	-13.02	-6.5E-05	-4.31	-0.000919	-10.37	-3.47E-06	-0.69
widow	-0.0001374	-6.15	3.35E-05	4.78	-0.000109	-2.58	0.000055	2.68
child0to5	-0.000237	-6.49	0.006761	45.88	-0.000255	-3.06	0.005644	48.22
child6to12	0.0001008	2.6	0.000198	11.61	0.0002892	3.6	0.000666	13.32
hschool	0.0007885	13.61	0.002123	24.06	0.0008349	14.29	0.002148	23.32
somepse	0.0003278	13.24	-0.00159	-30.48	0.0002916	12.28	-0.00081	-23.93
tradecert	0.0000701	3.45	0.001317	23.77	-0.00044	-18.15	0.0006	20.83
college	0.0071239	51.13	0.006159	51.48	0.0063009	49.28	0.006105	50.52
badegree	0.0060736	39.18	0.012759	57.73	0.007169	43.67	0.011054	51.34
aboveba	0.0037864	37.84	0.006046	50.61	0.0041936	38.47	0.005305	48.95
momba	-0.0000333	-3.59	2.14E-06	0.45	-5.64E-05	-1.73	-2.61E-06	-0.07
momgrad	-0.0000396	-2.42	9.55E-06	1.55	-4.67E-05	-2.55	-1.5E-05	-1.11
spouseba	0.000687	6.26	8.91E-05	0.57	0.0006061	4.56	-0.00068	-5.35
spgrad	0.0005358	5.78	-0.00146	-10.57	0.0002023	2.28	-0.00141	-10.04
spunemp	7.75E-08	0.03	-6.9E-05	-5.67	0.0000984	4.57	-0.00017	-7.85
agricult	0.0000387	2.76	-1.3E-05	-1.52	-7.21E-07	-0.14	-4.1E-05	-3.45
mining	0.0001184	1.94	-2.2E-05	-0.57	0.0000362	1.36	7.42E-05	3.01
construct	0.0002331	3.17	-5.3E-05	-2.05	0.0002705	3.65	8.50E-06	1.23

wholetrade	0.000069	5.47	2.85E-05	2.64	0.0001026	8.44	7.21E-06	1.18
retail	-3.27E-06	-0.77	0.000105	1.91	-6.77E-05	-4.66	8.04E-06	0.22
transport	-0.0000486	-2.29	6.60E-06	1.39	-8.98E-05	-4.05	-3.3E-05	-1.7
informat	-0.0000244	-0.74	-9.92E-06	-0.63	-6.85E-06	-0.26	-1.6E-05	-2.22
finance	0.0000809	2.45	0.000132	5.56	0.0000956	3.24	0.000125	4.84
realest	-0.0000149	-4.2	1.02E-06	0.22	-5.08E-05	-5.56	-6.04E-07	-0.29
profscienc	0.0000861	1.87	2.44E-05	0.5	0.0001879	3.71	6.47E-05	0.98
manage	1.02E-06	3.04	0		0		5.89E-07	9.01
admin	0.0000966	5.62	0.00014	3.04	8.30E-06	1.41	3.27E-05	3.17
educat	-0.000751	-9.45	-0.00177	-11.03	-0.000323	-7.57	-0.00168	-11.36
hlthcare	-0.0000734	-2.41	-7.7E-05	-2.26	-2.35E-05	-2.32	-0.00015	-3.56
entertain	-0.0000543	-4.27	0.000174	6.2	-2.97E-05	-2.96	0.000134	5.2
hospitality	0.0000187	1.55	0.000344	8.45	-1.51E-05	-1.41	0.000545	7.25
othrsrvce	-0.0000358	-2.58	1.15E-05	0.49	-9.27E-06	-1.23	-7.68E-06	-0.65
pubadmin	0.0163651	97.76	0.042635	167.01	0.0242768	115.29	0.041252	173.64

Table A11 Fairlie Detailed Decomposition PR UNEMP Males and Females, 2008-2009

	2008				2009			
	Non-Aboriginal		Aboriginal		Non-Aboriginal		Aboriginal	
PR (UNEMP)	0.0402		0.0702		0.0641		0.1105	
	dy/dx	z	dy/dx	z	dy/dx	z	dy/dx	z
(ont)								
pei	0.0182	0.59	0.0182	0.59	0.0172	6.4	-0.0026	-0.08
ns	-0.0166	-1.39	-0.0166	-1.39	0.0026	1.38	0.0223	1.17
nb	0.0332	1.39	0.0332	1.39	0.0008	0.43	0.017	0.78
que	-0.0084	-0.7	-0.0084	-0.7	-0.0061	-5	-0.032	-2.36
mb	-0.0247	-4.24	-0.0247	-4.24	-0.0383	-37.16	-0.0463	-6.51
sask	-0.0032	-0.45	-0.0032	-0.45	-0.0391	-38.39	-0.0044	-0.45
alb	-0.0215	-3.03	-0.0215	-3.03	-0.025	-21.03	-0.0012	-0.11
bc	-0.0146	-1.99	-0.0146	-1.99	-0.0119	-9.15	0.0004	0.04
(non-cma)								
cma	-0.033	-5.15	-0.033	-5.15	-0.0104	-9.6	-0.0371	-5.07
age	-0.0007	-0.46	-0.0007	-0.46	-0.0039	-15.23	-0.008	-4.18
age2	0	-0.2	0	-0.2	0	12.94	0.0001	3.41
(can born)								
imgrnt	-0.0363	-1.49	-0.0363	-1.49	0.0368	21.4	0.168	1.77

(single)								
married	-0.0524	-5.92	-0.0524	-5.92	-0.0505	-28.85	-0.0748	-7.1
divsep	-0.0381	-4.95	-0.0381	-4.95	-0.0138	-8.14	-0.002	-0.14
widow	-0.0309	-1.61	-0.0309	-1.61	-0.0124	-2.63	0.1495	2.73
(no child)								
child0to5	0.0008	0.09	0.0008	0.09	0.0035	1.94	0.0265	2.01
child6to12	0.0215	2.19	0.0215	2.19	-0.0073	-4.91	0.0069	0.62
(< hschool)								
hschool	-0.034	-6.43	-0.034	-6.43	-0.0214	-18.98	-0.0354	-4.77
somepse	-0.0185	-2.18	-0.0185	-2.18	-0.025	-19.01	-0.0382	-4.19
tradedcert	-0.0252	-3.99	-0.0252	-3.99	-0.0193	-15.85	-0.0429	-5.55
college	-0.0541	-9.48	-0.0541	-9.48	-0.0395	-35.94	-0.0522	-5.96
badegree	-0.0562	-8.52	-0.0562	-8.52	-0.0462	-39.36	-0.1008	-16.74
aboveba	-0.0485	-3.94	-0.0485	-3.94	-0.0436	-32.24	-0.0933	-8.82
(mom < ba)								
momba	0.0204	0.8	0.0204	0.8	0.0037	0.97	-0.0521	-2.26
momgrad	-0.0602	-5.27	-0.0602	-5.27	0.0358	4.27	-0.045	-1.39
(spouse < ba or no spouse)								
spouseba	-0.03	-2.72	-0.03	-2.72	-0.0094	-4.91	-0.0031	-0.16

spgrad	-0.0238	-1.39	-0.0238	-1.39	-0.0147	-5.28	-0.0294	-0.83
(spouse employ or no spouse)								
spunemp	0.1149	4.46	0.1149	4.46	0.0899	17.83	0.0793	2.91
(manufacture)								
agricult	0.0195	1.11	0.0195	1.11	-0.0085	-4.03	0.014	0.72
mining	-0.0137	-1.21	-0.0137	-1.21	-0.0015	-0.62	-0.0261	-1.92
construct	0.017	1.55	0.017	1.55	0.0039	2.33	-0.0028	-0.23
wholetrade	-0.0054	-0.29	-0.0054	-0.29	-0.0303	-17.24	-0.0378	-2.25
retail	-0.0132	-1.1	-0.0132	-1.1	-0.0289	-20.58	-0.0687	-7.63
transport	-0.0258	-2.67	-0.0258	-2.67	-0.0267	-17.11	-0.0572	-5.81
informat	-0.0329	-1.44	-0.0329	-1.44	-0.0373	-16.02	-0.084	-6.81
finance	-0.034	-1.21	-0.034	-1.21	-0.0407	-18.09	-0.0777	-3.69
realest	-0.0097	-0.54	-0.0097	-0.54	-0.0291	-9.77	-0.0695	-5.12
profscienc	-0.024	-1.49	-0.0241	-1.49	-0.0236	-11.91	-0.0579	-3.64
manage					0.0744	1.11		
admin	0.0329	1.78	0.0329	1.78	-0.0032	-1.42	-0.0305	-2.16
educat	-0.0509	-5.54	-0.0509	-5.54	-0.0287	-12.57	-0.0816	-8.32
hlthcare	0.0003	0.02	0.0003	0.02	-0.0483	-30.55	-0.0856	-7.92
entertain	-0.0155	-0.89	-0.0155	-0.89	-0.0175	-5.94	-0.0399	-2.18

hospitality	0.0284	1.65	0.0284	1.65	-0.0209	-11.02	-0.0605	-6.26
othrsrvce	-0.0218	-1.81	-0.0218	-1.81	-0.0228	-11.35	-0.0403	-2.58
pubadmin	0.2625	8.7	0.2625	8.7	0.1746	39.62	0.1645	7.05
N	369540		11489		379663		12890	
Wald chi2(47)	13379.31		619.78		15322.45		791.78	
Prob > chi2	0		0		0		0	
Pseudo R2	0.1426		0.136		0.1249		0.1247	

Chapter 4

Why Are There So Many Aboriginal Dropouts?

A Comparative Analysis of the Determinants of High School Dropout among Aboriginal Canadians Living On-and-Off-Reserve

I. Introduction

In a society that places a high economic and social premium on education, Canada's Aboriginal people are at marked disadvantage, exhibiting the highest rates of dropout and lowest rates of post secondary enrollment in the country (i.e. Ciceri & Scott, 2006). The lack of educational attainment is quite often given as one of the primary explanatory factors in explaining the large earnings disparity observed between many Aboriginal persons and their non-Aboriginal counterparts.⁹ Despite this reality, there is evidence to suggest that Aboriginals who do graduate from high school and go on to post secondary education generally do better in terms of returns to their investment than non-Aboriginals (i.e. Walters, White and Maxim, 2004). Given the positive returns to education, the question arises: why are there so many Aboriginal dropouts; what barriers are preventing Aboriginal young people from graduation? Despite the social, political and economic importance of these questions, few studies have probed the underlying causes of the problem specifically with respect to Aboriginal people.

The purpose of this analysis is to address this void in the current literature on Aboriginal education and examine the correlates of dropout among Aboriginal peoples. The paper begins with a theoretical discussion of determinants of dropout drawn from a wide body of literature on

⁹ A detailed review of the literature on Aboriginal-non-Aboriginal wage differentials can be found in Lamb (2011).

the subject. Using data from the 2001 Aboriginal Peoples Survey, the paper estimates the probability that an Aboriginal person has dropped out of high school based on a vector of observable characteristics. Separate models are estimated for males and females and persons living on-reserves and off-reserves. The results of the estimates of the probability of dropout among on-and-off-reserve persons are compared and the gap decomposed to determine how much of the difference in probability of dropout can be attributed to difference in endowments between the two groups and how much of this gap can be attributed to differences in the propensity to dropout when they have the same characteristics. A brief discussion follows the presentation of the results and the paper concludes by briefly citing some foreseeable limitations and policy implications of this research.

II. Background Information

i. Theoretical Reasons why Youth Drop Out of High School

A large body of literature exists that examines an array of possible reasons to explain why individuals might choose to drop out of school. Traditional human capital theory suggests that individuals will invest in education up to the point where the anticipated present value of the returns to schooling are equal to the present value of the costs associated with education (Becker, 1964). Since, for the majority of individuals in North America high school education is publicly funded and the fact that teenagers generally cannot command a very high wage in the labour market, both the direct costs and the opportunity costs of attending high school are quite low (i.e. Oreopoulos, 2006). In one study, Oreopoulos (2006), comparing 17 year old males who dropped out of school to those who remained in school for an additional year, the dropouts experienced a monetary loss of between one to two times their peak level of yearly earnings. Given this reality, the decision to drop out of school would appear illogical, however, many students still fail to

complete high school (Oreopoulos, 2006). Rumberger (1987) provides a possible explanation for the apparently irrational behavior of many high school dropouts by speaking to the ‘psychic’ costs of education, which are difficult to quantify in monetary terms, but may play a significant role in an individual’s decision to pursue further education. Psychic costs may include factors such as an individual’s like or dislike for school, academic aptitude or motivation, and fear of failure (Becker, 1964). Several authors explain that individuals who are not “getting anything out of school” and consequently drop out are rationally maximizing their utility by spending their time on non-school related activities, in particular, in acquiring work experiences (Eckstein & Wolpin, 1999; Rumberger, 1987).

Numerous studies have demonstrated that the most important economic factor contributing to an individual’s decision to leave high school is socioeconomic status (i.e. Rumberger, 1987). Students living in lower income households are significantly more likely to drop out of high school than similar students from higher income families, and are also more likely to report leaving school to assist their families financially as a key reason for failing to complete secondary education (Rumberger, 1987). Campolieti, Fang and Gunderson (2007) find more dropouts when youth unemployment rates are low reflecting that some students leave school to pursue immediate job opportunities. The authors also find the number of dropouts to be higher in periods of high adult unemployment, likely resulting from more students leaving school to work in order to augment household income. This finding is consistent with the aforementioned Rumberger study where dropouts report family financial hardship as their reason for leaving school. An earlier study by the same authors finds no significant net effect of increasing minimum wages on high school completion since such changes are also accompanied by a significant decrease in the level of teenage employment, thereby reducing the number of

minimum wage jobs available to teenagers (Campolieti, Fang & Gunderson, 2005). Students who work part-time while attending school though they may not initially intend to drop out, are at higher risk of not completing high school since it has been demonstrated that working and going to school is related to lower academic performance and low academic performance is further related to dropping out (e.g. Eckstein & Wolpin, 1999). Studying the school-to-labour market transitions of youth in Canada, Parent (2006) finds a causal relationship between working while attending high school and an increased probability of dropping out. The study finds that male students are more responsive to labour market conditions than female students, and the particular types of jobs in which high-school men are usually employed; occupations such as, sales, janitors and cleaners, further increase the risk of dropout (Parent, 2006).

In addition to important economic factors that may lead an individual to drop out of school, the vast literature on the subject also highlights several key social and psychological correlates of the decision drop out. Rumberger (1987), for example, suggests the importance of peer effects among high school dropouts; in that individuals who have failed to complete high school tend to have numerous friends who also dropped out. Among female dropouts, marriage and pregnancy were found to be important reasons for leaving school (i.e. Rumberger, 1987). Further, high school dropouts are more likely to have children out of marriage (Sharpe, Arsenault & Lapointe, 2007).

In their examination of high school dropouts, Eckstein and Wolpin (1999) employ a comprehensive structural statistical model that captures the unobserved heterogeneity among individuals' attitudes and preferences for school. The authors find distinctively different traits among students who drop out of school as compared to those who complete secondary education. In particular, it was found that students who dropped out of high school generally

displayed lower academic ability and/ or motivation, lower expectations for their future, and placed greater value on leisure (Eckstein & Wolpin, 1999). To further demonstrate the importance of an individual's ability, motivation and preferences for school as factors in the decision to drop out, Eckstein & Wolpin examine several hypothetical scenarios and their subsequent effects on the rate of high school completion. The authors find that adding an additional mandatory year of schooling would lower the dropout rate by 13 percent, while aligning the ability and motivation of dropouts with those of graduates would decrease the dropout rate by 9 percent (Eckstein & Wolpin, 1999). If, however, one is able to address a student's ability, motivation and perceived utility of graduation, Eckstein and Wolpin suggest that the dropout problem would be eradicated completely (Eckstein & Wolpin, 1999). The final message of this study was that policy initiatives aimed at reducing the number of dropouts should be aimed at modifying the traits such as ability, motivation and preferences before a student even enters high school (Eckstein & Wolpin, 1999).

Pagani, Vitaro, Tremblay, McDuff, Japel and Larose (2008) identify several important sociological risk factors that they empirically demonstrate increase a student's likelihood of dropping out of school. These risk factors include: living in a lone-parent household; having a mother with a low level of educational attainment; early childhood underachievement; and repeating a grade in elementary school (Pagani et al., 2008). There were also a significant number of students who did not possess any of the aforementioned risk factors, but still failed to complete high school. The authors also examine a number of potential behavioral causes that might lead an individual to drop out of school and find poor attention span, low levels of parental supervision and sleep patterns in early childhood as important predictors of dropping out later on in youth (Pagani et al., 2008). In a related study, Janosz, Archambault, Morizot and Pagani

(2008) find a positive relationship between student engagement and high school completion. Not surprisingly, students who are less engaged in their academics are the most likely to drop out (Janosz et al., 2008). The multidimensional construct of engagement here includes variables such as “behavioral compliance, motivation, perceptions and feelings about school as an institution and its related tasks” (Janosz et al., 2008). Higher levels of student engagement are also associated with better academic achievement and a greater likelihood of degree completion at the post secondary level as well (Pike & Kuh, 2005).

A final possible correlate of the decision to drop out of school is perceived discrimination. Kunz et al. (2000) suggest that many youths report facing discrimination at the individual and institutional levels from teachers and peers and a curriculum that is largely Euro-centric (Kunz et al., 2000). Davies and Guppy (1998) comment that due to the increasing level of diversity in Canadian schools, “educational disadvantages are a reality for Aboriginals, but less so for other visible minorities” (Kunz et al., 2000 p. 10). It is logical that perceived discrimination would have an important effect on altering a student’s preferences for school, behaviour, motivation, attendance and aspirations for the future, which may in turn increase the likelihood that that individual will drop out of school altogether.

A number of studies on dropouts have found overwhelmingly negative individual and community effects of this decision that potentially carry on throughout the individual’s entire life. Dropouts typically have significantly lower wages, a lower likelihood of being employed and a more difficult time finding long-term stable employment (Camoplieti, Fang & Gunderson, 2007). The increased probability that dropouts will experience lower levels of socioeconomic status also makes them more vulnerable to social dependence, poorer health (Rumberger, 1987), and more likely to become involved in crime as compared to those students who completed high

school (Lochner & Moretti, 2004). Many authors further cite several important societal consequences of large numbers of students failing to complete high school, which include; a large loss in potential national income, lost tax revenues, higher costs of social services and increased levels of crime (Rumberger, 1987). One must also, however, note the important unobservable effects of failing to complete high school on an individual's sense of self esteem and overall well being, factors which may have inspired the decision to drop out in the first place (Rumberger, 1987).

It is clear from the important implications of high school completion for both individuals and society why the topic has received so much scholarly and public attention. In a related discussion, the proceeding section will examine some of the reasons why students may fail to complete post secondary education programs.

ii. Theoretical Reasons why Individuals Drop Out of Post Secondary School

The previous discussion focused primarily on the many factors associated with the likelihood of dropping out of high school. While the particular data set used in the present study does not allow for the analysis to be extended to compare the post-secondary dropout rates of persons living on-and-off-reserves (namely due to an insufficient sample size of post secondary dropouts to support reliable estimates), it is important to acknowledge that barriers exist that prevent individuals from completing post secondary education which may in turn influence an individual's likelihood of completing high school. Many fail to complete post secondary education particularly because of the high costs required to pursue further schooling. Engagement is similarly important to post secondary students (Pike & Kuh, 2005). Personal characteristics, academic performance and the degree to which a student is able to assimilate into

the college atmosphere are further linked to the likelihood that a student will graduate (Tinto, 1993). In an interesting study Wohlgenuth et al. (2007) find that visible minority students are much more likely to drop out of university than their non-visible minority counterparts. The authors find that, despite programs for visible minority students at the university from which the sample was drawn, they had little effect on improving the retention rates of minority students or addressing the integration of these students into a predominately non-minority campus (Wohlgenuth et al., 2007).

A number of studies have also examined the geographical effect of living near to a university (i.e. Card, 1995). Frenette (2003), for example, finds that students who live beyond commuting distance from a university are far less likely to attend university, but would attend college instead if access to college was within close proximity to their residence. The author further finds this effect to be significantly moderated by family income, which is to say that distance from a university only appears to be a barrier for lower income students (Frenette, 2003). The explanation given for this finding is the extra cost of commuting or living in residence is insurmountable for certain students. An additional factor not included in Frenette's analysis would be to test the effect of ethnicity after controlling for socioeconomic status. It is possible that, aside from the increased cost associated with attending a university or college beyond commutable distance, cultural factors may make university attendance far from home even more difficult for minority students.

The most important set of variables influencing a student's decision to enroll and continue in a post secondary program are financial factors including the cost of education and the student's ability to sustain sufficient income to support them while in school. High school graduates of lower socioeconomic status are once again at higher risk of dropping out of college

or university because they do not have the familial or individual resources to absorb the costs of education. Similar to the arguments discussed in the preceding section, these students may be more likely to have to work in addition to attending school, which may in turn have negative effects on their grades or level of engagement in school putting them at further risk of being unable to complete their program.

For these reasons the role of financial aid to post secondary students has received a significant amount of attention in the literature and media.¹⁰ Wohlgemuth et al. (2007) find that increasing the amount of loans available to third and fourth year students was positively related to retention and graduation rates. The authors explain that in the latter years of study students may be more willing to increase their borrowing because they may have more realistic salary expectations when they complete their programs and thus can better gauge their ability to repay these loans. The authors further suggest that “students who take out loans may be more compelled to complete their degrees to ensure access to higher earnings” (Wohlgemuth et al., 2007 p 471-72). Finally, Wohlgemuth and his colleagues find support for the efficacy of work-study programs as a means of augmenting income thereby improving enrollment and graduation rates (Wohlgemuth et al., 2007).

Linsenmeier, Rosen and Rouse (2006) examine the effect of a change in funding policies on the enrollment of low income students. Funding packages were changed from a mixture of student loans, on-campus employment and grants to an entirely grant-based program. The authors anticipated the removal of loans and work commitments to have a large positive effect

¹⁰ A detailed review of the previous literature on financial aid and enrolment in post secondary institutions can be found in Linsenmeier, Rosen and Rouse, 2006.

on the enrolment and graduation of lower income students and were surprised to find that the effect, although positive, was statistically insignificant (Linsenmeir et al., 2006). Interestingly, however, they find that the change in funding policy did have a significantly positive effect for visible minority students in that university by raising enrolment rate among this group by between eight and ten percentage points (Linsenmeir et al., 2006). The authors of this study do not attribute the differential findings for visible minority students to the correlation between ethnicity and socioeconomic status because the empirical models include controls for family income as well as the fact that the mean student income of minority students was not drastically lower than that of non-minority individuals in the low income bracket (Linsenmeir et al., 2006). An alternate explanation offered reflects a few key limitations of the study in that it looked at a cohort of students from only one university and could not account for possible confounding effects of policy changes at neighbouring schools, as well as the possibility that the policy intervention made this particular university a more attractive choice for visible minority students (Linsenmeir et al., 2006).

iii. Issues Related Specifically to Aboriginal Educational Attainment

One of the most prominent findings of the small body of empirical literature to examine Aboriginal-non-Aboriginal wage differentials is that the majority of the persistent and wide earnings gap between the two groups can be attributed to differences in educational attainments. Sharpe et al. (2007) find no significant difference between the average incomes of individuals who completed high school and those who entered post secondary school but who dropped out at that level. This is an important point to bear in mind as it further adds to the 'economic irrationality' of the decision to drop out of school since any investments in time or money is not likely to be recuperated unless the degree is completed (Sharpe et al., 2007).

An interesting issue that has been raised by several authors with respect to Aboriginal education is questions concerning the quality of education received by Aboriginal students particularly at the secondary level. Although this paper does not seek to empirically address any issues of education quality directly, it is pertinent to provide a brief overview of this discussion in that poorer quality education may itself directly increase the likelihood that a student drops out of high school, or may be manifest through other known correlates of dropout discussed above such as student engagement or academic ability. A low quality of education received at the high school level can also provide another barrier to pursuing or completing post secondary studies even for high school graduates.

Using data from the first and second cycles of the older cohort of the Youth in Transition Survey, Thiessen (2009) examines the educational pathways of a number of cultural groups in Canada, including First Nations. Although Thiessen's analysis primarily focuses on post secondary educational (PSE) attainment, a number of the barriers the author finds which impede the probability that an Aboriginal youth will enter and successfully complete PSE are in place long-prior to this decision and as such are pertinent to this discussion of high school completion as well. For instance, Thiessen finds that Aboriginal youths exhibit numerous risk factors that jeopardize the probability of success in PSE, such as low socioeconomic status, low levels of parental education, having a larger number of siblings and failing to live with both biological parents in childhood. The study also reports that there is an apparent lack of support or enthusiasm among some First Nations families and important peer influences may also act as deterrents for Aboriginal youth to pursue higher education (Thiessen, 2009). "First Nations youth are least likely to report that it is very important to their parents that they pursue PSE and they have fewer friends who plan to pursue PSE" (Thiessen, 2009 p. 16). Finally, the study

suggests that among the most important predictors of PSE, academic achievement, Aboriginal youth rank the lowest on the various dimensions of academic performance included in the analysis (Thiessen, 2009).

The majority of the literature that examines differences in school quality uses data from British Columbia since this province is currently the only one in Canada to provide data on student test scores that compare Aboriginal and non-Aboriginal youths (i.e. include an individual Aboriginal indicator in the testing instrument) (Richards & Vining, 2004). In one study looking at the average test scores across all grades (measurements taken at grades 4, 7 and 10) the researchers find that 60.1 percent of all Aboriginal students fall into the category of ‘meet or exceed provincial expectations,’ whereas 81.8 percent of non-Aboriginal students fall into this category (Richards & Vining, 2004). More than twice the proportions of Aboriginal students as compared to non-Aboriginals are ‘not meeting provincial standards’ and only 1.7 percent of Aboriginal students have test scores that ‘exceed expectations’ as compared with 7 percent of non-Aboriginal students in this category (Richards & Vining, 2004). The authors offer an important caveat to these findings in that the results should be interpreted with some degree of caution because the Aboriginal sample is much smaller than the non-Aboriginal sample particularly for the grade 10 cohort largely due to high dropout rates among Aboriginal students (Richards & Vining, 2004).

It is not surprising that Richards and Vining (2004) find significant disparities between Aboriginal and non-Aboriginal students at the individual level given the important differences that exist in familial, socioeconomic and cultural characteristics between the two groups. What is perhaps one of the most interesting findings to come out of this study is that there are prominent school-level effects which seem to moderate the academic performance of Aboriginal

students. The proportion of Aboriginals who fall into the meet or exceed provincial standards category in top-ranking schools is only 3 percent less than non-Aboriginals in the same school, whereas this gap widens dramatically to 26.1 percent fewer Aboriginals than non-Aboriginals meeting standards in lower ranking schools (Richards & Vining, 2004). In interpreting these results, one must be aware of several possible selection effects. Firstly, it is possible that the higher achieving students regardless of ethnicity will seek out and attend the top schools looking for the best education. A second possibility discussed by Richards and Vining (2004) is that the better schools tend to be located in higher income neighbourhoods. Family income in this particular dataset is only available at the neighbourhood level rather than for every individual household; however, it is likely that schools in wealthier neighbourhoods receive better funding and that the majority of students have similar access to more academic resources from better educated parents, or the ability to access tutoring, etc. Once again, the key issue here seems to be one of socioeconomic status and not ethnicity; it just happens to be the reality that a disproportionate number of Aboriginals occupy the lower income levels in British Columbia and indeed across the entire country.

In a related study, Friesen and Krauth (2007) also study the academic achievement of Aboriginal and non-Aboriginal students in British Columbia. The authors come to similar findings regarding the achievement gap; however, draw somewhat different conclusions from the aforementioned Richards and Vining (2004) paper. Friesen and Krauth (2007) use the same provincial school data from British Columbia but in longitudinal form so they have two observations for each student, one in grade 4 and another in grade 7. In this study the authors follow a well established methodology for examining peer effects, in this case the effect of attending school with a higher proportion of Aboriginal students or attending a predominately

non-Aboriginal school, and Aboriginal student performance. On the topic of peer effects, Richards and Vining (2004) suggest that Aboriginal students likely do better in the higher ranking schools where there are more non-Aboriginal students because they tend to try and assimilate with their higher achieving non-Aboriginal peers. Friesen and Krauth (2007), however, find little support for this notion. On the other hand, the authors suggest that Aboriginal students may derive greater benefit from attending schools with a higher proportion of Aboriginal peers. The logic for this assertion lies in the reality that Aboriginals are nearly twice as likely to have identified special needs (i.e. learning disabilities) than non-Aboriginal students (Friesen & Krauth, 2007). Since the BC government provides significant amount of funding on a per student basis for individuals with special needs through the provincial Individual Education Plan (IEP), a greater number of Aboriginal students in a school means that school is likely to receive a larger aggregate amount of funding through the IEP program. This funding may in some ways offset students' access to additional resources limited by family since predominately Aboriginal schools are often in lower income neighbourhoods and would consequently receive less funding through taxes alone (Friesen & Krauth, 2007). It is unfortunate that similar datasets are not currently available for other provinces across Canada; however, school quality and its implications for high school dropouts and post secondary enrollment is an important issue to bear in mind for future studies on Aboriginal education, should the appropriate data become available.

Richards (2011), focusing on the Aboriginal dropout problem specifically in Quebec finds that although the Aboriginal population has echoed the trend toward improved levels of educational attainment among younger generations (in Quebec and across Canada), there is still a wide gap between the dropout rates of Aboriginal and non-Aboriginal youth. "The overall

Quebec Aboriginal dropout rate in the age 20-24 is 43 percent, three percentage points higher than the Aboriginal dropout rate in the rest of Canada” and a notable leap from the average dropout rate of approximately 15 percent for non-Aboriginal 20-24 year old Quebecers (Richards, 2011 p. 10). In his analysis Richards makes several recommendations for policy interventions to address the dropout problem among Aboriginal people in Quebec advocating such measures as, for example: access to early childhood education programs in Aboriginal communities; structural changes to the on-reserve school system to better ensure students are receiving a quality of education comparable to that in the provincial system; and fostering cooperation between Aboriginal leaders and educational board members to introduce a greater emphasis on Aboriginal culture and history into the mainstream curriculum (Richards, 2011).

Finally, White, Spence and Maxim (2006) discuss the role of social capital in Aboriginal educational attainment and provide evidence of both successful and failed applications of social capital theory in addressing the education issue among indigenous populations in New Zealand, Australia and Canada. While a comparative analysis of the educational outcomes of the three international Aboriginal groups is outside the scope of this particular analysis, White and his colleagues do provide some general lessons about social capital as applied to Aboriginal education that may assist with the present understanding of the high school dropout problem among Aboriginal youth living on-and-off reserves in Canada. The authors highlight a generally positive relationship between levels of social capital and educational attainment in a given community; however, they caution that the role of social capital as a predictor of academic success is limited as such outcomes require a number of other factors to be in place (for example other forms of capital such as human and financial) (White et al., 2006). The role of norms as a part of social capital contribute, at least in part, to understanding the intergenerational nature of

the dropout problem among many Aboriginal peoples, especially those living on-reserves or in communities that are relatively isolated from the rest of society. If an individual family is relatively uneducated and/or places a low value on education, then it is not surprising that children of that family will adopt the same attitudes. If a community contains a number of families who share these values, with little interaction with the opposing ideologies of mainstream society, then these negative norms towards education will simply be continually reinforced (White et al., 2006). The authors suggest the need for Aboriginal cultures to, in some cases, become more open and create broader social capital networks with society at large as a way of reducing the cycle of enforcing negative norms. Echoing the thoughts of several other studies, White and his colleagues also advocate encouraging a greater number of Aboriginal teachers so that the teacher may provide a positive role model with whom a student may culturally identify to counter-balance the anti-education messages children may be receiving from other sources (White et al., 2006).

III. Data and Methodology

The data for this study is taken from the master file of the 2001 Aboriginal Peoples Survey (APS). The APS is a nation-wide, post-censal survey that includes Aboriginal persons living both on-and-off-reserves. There is a more recent cycle of APS data that followed the 2006 Census, however, this latest version of the survey does not include the on-reserve population and thus is unsuitable for on-off-reserve comparisons. For the purpose of this study, individuals under the age of fifteen years and anyone currently in school (i.e. engaged in any type of formal academic instruction) is excluded from the analysis. (Since the focus of this study is the probability of dropping out from high school, the outcome variable of interest is whether or not an individual has completed secondary school). The variable, DROP, for 'dropout,' is coded 1 if

an individual began high school but failed to complete his/her secondary education. Individuals who completed high school either through the traditional school system or by obtaining a GED at a later point in time would be assigned a value of '0' for this variable.

Selected summary statistics can be found in Table 4-1 at the end of the paper. The total number of respondents in the sample was 54,040 with 46.2 percent being male and 53.8 percent female. The large majority of respondents lived off-reserve (90.9 percent) while only 9.1 percent of the sample lived on-reserve. These proportions are weighted as Statistics Canada does not permit the release of un-weighted results. Most of the respondents in the sample were North American Indians (40.3 percent) followed by Métis (25.5 percent). The sample contained relatively few Inuit (3.1 percent) and individuals reporting multiple Aboriginal identities (3.6 percent). The remaining 27.5 percent of the sample identified themselves as Aboriginal persons, but did not identify with any specific Aboriginal group. The Aboriginal Peoples Survey does not contain any non-Aboriginal respondents. The mean age of the sample was 38.8 years old.

The analysis begins by estimating separate, pooled logistic regression models for males and females controlling for individual identification with various Aboriginal groups and living on-reserve or off-reserve, also separate for males and females. Separate logistic regressions are then estimated for those living on-reserve and off-reserve, the results of which are then decomposed using a methodology proposed by Fairlie (2003, 1999) to determine what proportion of the difference in the probability of dropout between on-and-off-reserve persons can be attributed to differences in observable endowments between the two groups and what proportion can be attributed to different propensities to dropout when they have the same observable characteristics.

The models also contain variables to control for geography (province of residence and CMA) and a number of variables that control for individual characteristics (age, marital status, language, presence of children, overall health and employment status). The ability to speak or understand a given language is not necessarily a measure of an individual's proficiency in that language. Interactions between speaking an Aboriginal language and an individual's knowledge of either official language were used to create two language proficiency variables, ENGPROF to measure proficiency in English and FRENPROF to measure proficiency in French.¹¹ Several variables are included in the models that reflect the respondent's educational experience throughout primary and secondary school: whether the respondent ever had an Aboriginal teacher (ABTCHR); whether the respondent was ever taught courses in an Aboriginal language (TCHABLANG); if the respondent ever learned an Aboriginal language in school (ABULRN); and if the respondent was taught the history of Aboriginal peoples as part of the school curriculum (ABHIST). There are two variables included in the model that denote the physical proximity of the respondent's school to his/her community: the respondent's elementary / high school was located in his/her community (ESINCOM) and (HSINCOM) respectively. The dummy variable NOMOVE represents individuals who did not move from their current community during the tenure of their education. The variable ATTENDRESSCH is coded '1' if the respondent ever attended a residential school him/herself, the variable is assigned a value of '0' otherwise. Similarly, a variable, FAMRESSCH, is included denoting if a member of the respondent's family ever attended a residential school. Finally, several variables are added to the models that act as proxies that will hopefully capture the resources of the family: total family

¹¹ These variables were added to the pooled model, but were statistically insignificant thus they were not used in subsequent estimates of the separate regressions for males and females living on-reserves and off-reserves.

income (FAMINC), whether the respondent has access to a computer in the home (COMPHOME) and whether that computer in the home is connected to the internet (WEBATHOME). The latter two variables, having easy access to a home computer with internet, also may denote how connected an individual is to the mainstream society and may signal a preference away from a more traditional lifestyle.

IV. Results

The following Table 4-2 presents a summary of the probability of dropout or ‘DROP’ for each of the four groups considered in the study: males living off-reserve, females living off-reserve, males living on-reserve and females living on-reserve. From these results it is evident that the probability of dropout is notably higher among males both on-and-off-reserve, and the dropout problem is dramatically worse on-reserves for both males and females than it is for Aboriginal persons living off-reserves, results which echo the trend described in the previous studies noted here.

Pooled Regression Models

The results of the pooled models are in Table 4-3 at the end of the paper. The results displayed are marginal effects. Despite the large difference in the probabilities of dropout between individuals living-on-and-off-reserve noted in the above Table 4-2 the results of the pooled model suggest that, controlling for all other observable characteristics, the effect of living on-reserve on the probability of high school dropout is relatively small, increasing Pr (DROP) by 5.25 percentage points and 1.04 percentage points for females and males respectively as compared with individuals living off-reserve. Another interesting finding is the difference in the probability of high school dropout among different Aboriginal identity groups. Small sample

sizes prohibit separate models to be run for each Aboriginal identity group, however, all else being equal, Inuit males and females have the highest probability of dropout among the four Aboriginal groups; North American Indian, Métis, Inuit and multiple Aboriginal identities, increasing Pr (DROP) by 32.06 percentage points and 13.98 percentage points for females and males respectively as compared with an Aboriginal individual who does not identify him/herself with any Aboriginal group, holding constant all other observable characteristics. The effect of identifying as a North American Indian increases the probability of dropout by 11.35 percentage points for females and 9.15 percentage points for males respectively. Identifying as Métis increases the probability of dropout by 11.95 percentage points for females and 6.10 percentage points for males, whereas identifying with multiple Aboriginal groups increases the Pr (DROP) by 13.16 percentage points for females and 9.61 percentage points for males. Note that the omitted reference category here, individuals who do not identify with any of the four Aboriginal classifications, are respondents who were flagged as Aboriginal persons at the time of the 2001 Census most likely because they indicated having Aboriginal origins, thus they were appropriate candidates to participate in the Aboriginal People's Survey despite the fact that they do not presently identify as an Aboriginal person.

Separate Regressions for On-Reserve, Off-Reserve, Males and Females

Models comparing the probability of dropout between individuals living off-reserves with those living on-reserves can be found in Tables 4-4 and 4-5. Living in a city reduces the probability of dropout by about 7 percentage points as compared to males living in rural areas, but only for males, this result is not statistically significant for females. The likelihood that an individual did not complete high school increases with age, suggesting that younger Aboriginal men and women are more likely to have a high school diploma than members of older

generations. Not surprisingly, indicators of socioeconomic status, family income and employment status are negatively related to Pr (DROPP). There appears to be no significant relationship between marital status and failure to complete high school among Aboriginal men or women living off-reserve. Women who have young children between the ages of 0 to 14 years living in the home are 6.3 percentage points more likely to have dropped out of high school than comparable females with no children in the home. The relationship between the Pr (DROPP) and the presence of young children in the home is not statistically significant for males. Speaking an Aboriginal language is not statistically significantly related to the probability of dropout for neither males nor females; however, speaking either or both official languages is actually positively related to Pr (DROPP) as compared to an individual who speaks neither French nor English. The quality of a respondent's overall health is positively related to the Pr (DROPP) for both males and females, suggesting that healthier individuals are more likely to have dropped out of high school.

Considering the policy variables included in the study that speak to issues such as curriculum design and location of schools, again, some interesting findings emerge. There was no significant relationship between either the respondent attending a residential school, or the family member of the respondent having attended a residential school and the probability of dropout. Having an Aboriginal teacher or being taught in an Aboriginal language was also not statistically significant. Learning an Aboriginal language in school actually increases the probability that a female will drop out of high school by approximately 10 percentage points, but this relationship is not statistically significant among Aboriginal males. Learning about Aboriginal history as part of the regular school curriculum is strongly and negatively related to Pr (DROPP) for both males and females, decreasing the probability of dropout among males by

approximately 13 percentage points and females by approximately 12 percentage points respectively, a finding that is statistically significant for both groups. Attending an elementary school located in the respondent's community is positively related to dropping out, while attendance at a high school located in the respondent's community is negatively related to the Pr (DROP) for both males and females. Finally, having a computer in one's home as well as access to the internet from home are both negatively related to the likelihood that a male or a female would have dropped out of high school.

Looking at the models for Aboriginal males and females living on-reserve, there is no statistically significant relationship between age and the probability that an individual does not finish high school suggesting that, unlike the situation among the off-reserve group, the dropout trend is not declining nor is it concentrated among older cohorts of the population on-reserves. Similar to the off-reserve population, indicators of higher SES are negatively related to the Pr (DROP) for both males and females. Interestingly, the presence of young children between the ages of 0 to 14 years in the home does increase the probability that an individual did not finish high school; however, this finding is only statistically significant for males and not statistically significant for females. The relationships between the various language variables as well as the indicator of overall health and Pr (DROP) are similar to what was found among the off-reserve population. Also similar was the finding that being taught in an Aboriginal language was not statistically significantly related to the likelihood that an individual would drop out of high school. Interestingly, however, among the on-reserve population having an Aboriginal teacher lowers the Pr (DROP) by about 9 percentage points for males and about 12 percentage points for females, all else constant. Similarly, while the results reveal no statistically significant impact of learning an Aboriginal language in school, there is, however, a significant and negative

relationship between the Pr (DROPP) and learning about Aboriginal history, reducing the Pr(DROPP) by approximately 6 percentage points and 8 percentage points for males and females on-reserve respectively. Among the on-reserve population, a male or female respondent who attended a residential school is more likely to have dropped out of high school, while there is no significant relationship between Pr (DROPP) if a respondent's family member attended a residential school. Just as was found among the off-reserve community, attending an elementary school located in one's community is positively related to the Pr (DROPP) while attending a high school in the community is negatively related to the Pr (DROPP) for both males and females. A male living on-reserve who has never moved from his current community is more likely to have dropped out of high school than a similar male living on-reserve who has moved at least once throughout his lifetime. There is no statistically significant impact of moving for females on-reserve or males or females living off-reserve. Finally, just as was the case among the off-reserve population, access to a computer and the internet at home are both negatively related to the probability that an individual has dropped out of high school for both males and females living on-reserves.

Decomposition Analysis

The final component in this analysis is the Fairlie (1999) decomposition of the difference between the probabilities of dropping out of high school comparing Aboriginal Persons living on-and-off-reserves separating for males and females. A summary of the decomposition results is given in Table 4-6 and the full decomposition results can be found in Table 4-7.

Before discussing difference in Pr(DROPP) between the two groups, on-and-off-reserve and which factors are largely responsible for explaining this apparent gap, it bears mention that

the slightly different estimates of the probabilities of high school dropout obtained by the Fairlie models as compared to those obtained from the logistic regressions are most likely a result of fact that the Fairlie procedure employs a unique weighting technique (see Fairlie 2003, 1999) which is different from the bootstrap weighting methodology provided by Statistics Canada that accompanies the survey (APS, 2001).

As seen in the above Table 4-6, virtually all of the difference in the Pr (DROP) between males and females living on-and-off-reserves can be attributed to differences in endowments; this is, approximately 97 percent and 93 percent of the respective male and female 'probability gaps' can be explained by the observable characteristics that have been included in the models.

For the females, among the most notable variables to add to the 'explained' portion of the gap are the language variables, including speaking an Aboriginal language as well as whether the respondent learned an Aboriginal language in school and lived in a city, the coefficient sign on each of these variables was negative for both males and females. In addition to these factors, for the males, whether the respondent was taught in an Aboriginal language in school and whether he had access to a computer and internet in the home, were among the most salient explanatory variables in understanding the difference in Pr (DROP) between the on-and-off-reserve populations. The coefficient signs on both of these variables were also negative. In the context of the separate models presented earlier, some of the aforementioned variables did not appear to be significantly related to the Pr(DROP). For example, speaking an Aboriginal language was statistically insignificant across all four groups. These variables; however, do provide important information about how the on-and-off-reserve populations differ from each other and thus become useful in contributing to understanding the different probabilities of high school dropout between the two groups.

V. Discussion

This study has estimated the probability that an Aboriginal person between the ages of 15 and 65 years has dropped out of high school and compared the probabilities of dropout between Aboriginal peoples living on-reserves to those living off reserves using data from the 2001 version of the Aboriginal Peoples Survey. Consistent with the trend documented by a number of other studies, the results of this analysis find that probability of dropout among Aboriginal persons living off reserve to be quite high at nearly 46 percent for males and 40 percent for females. The dropout problem on-reserve is even worse, with rates as high as 72 percent for males and 65 percent for females.

Before discussing some of the key findings of this analysis in greater detail and some of the implications of this research for policy makers, there are a few important limitations of this study that bear mention. Firstly a cautionary note is always necessary when using data on Canada's Aboriginal Peoples. As noted, the APS is a post censual survey and the response rate for respondents flagged in the census as Aboriginal and subsequently contacted for participation in APS was high (APS, 2001). However, since the 2001 census was used as the sampling mainframe for the APS, the fact that some Aboriginal communities and reserves refused participation in the census must be acknowledged as this could raise potential concerns over the representativeness of the sample in the data. Secondly, the data used is from the 2001 version of the APS because the more recent, 2006 file does not sample from the on-reserve population. Thirdly, the variables in the data are individual level factors and thus more macro, group characteristics which may add important dimensions to the understanding of the dropout problem, in particular the effect of peer-group composition (i.e. the number of peers in an individual's community that have also dropped out of school) are unable to be captured with this

data. Finally, there were an insufficient number of college or university dropouts in the sample to extend this analysis to estimating the dropout problem at post secondary levels of education.

The findings of this study further our understanding of the dropout problem among Aboriginal Canadians. A few results were somewhat surprising, in particular, the presence of small children did not appear to be as strongly linked to the probability of dropout as one might expect. Perhaps this is because, as authors such as Ciceri and Scott (2006) have also suggested, there exist strong family networks in many Aboriginal communities that often assist with child rearing duties, a promising factor in issues of educational attainment and labour force involvement especially for young Aboriginal women. Secondly, it is interesting that fluency in either official language would increase the probability of dropout for both males and females in both the on-and-off-reserve groups. A possible explanation for this is that proficiency in either English or French allows the respondent to access greater labour market opportunities and consequently diminishes the value of education. Finally, attendance at a residential school did not appear to have as significant a relationship to the probability of high school dropout as originally anticipated. Attendance at a residential school increases the probability of dropout, but this result was only statistically significant for males living on-reserves. This may be reflective of the relatively small number of respondents who attended residential schools and/or the variance in experience at such institutions.

Perhaps the most significant contribution of this study is that it empirically demonstrates a statistically significant correlation between emphasis on Aboriginal history and culture in academic curriculum and a lower probability of dropout. The framework used in this analysis cannot support the causality of this relationship, future research aimed at providing evidence of a

direct causal link between curriculum content and lower rates of dropout among Aboriginal students would be useful for policy makers and educators alike.

White et al. (2006) write that making Aboriginal issues a greater part of mainstream curriculum is an effective way of creating an appreciation for Aboriginal culture and bridging existing gaps between the two societies (White et al., 2006). Furthermore, an effort by provincial governments to work in cooperation with Aboriginal leaders to introduce a greater emphasis on Aboriginal history and culture in the school system may be seen as a profound reconciliatory gesture that would go a long way to repairing some of the “scepticism among many Aboriginal students toward formal education,” which Richards acknowledges as a significant roadblock in Aboriginal educational attainment (Richards, 2011 p 12).

Several studies have noted that Aboriginal persons with similar educational credentials fair as well, or even better, than their non-Aboriginal counterparts on various measures of labour market success (i.e. Ciceri and Scott, 2006; Richards, 2011). The challenge for Aboriginal people is not achieving returns to their educational investments, rather the difficulty seems to be in removing the barriers so that more Aboriginal Canadians are investing in formal education so they can subsequently enjoy the rewards. Further research is needed to examine the effects of initiatives that introduce a greater emphasis on Aboriginal history and culture in educational curriculum on improving the engagement, achievement and ultimately the dropout rates of Aboriginal students. Future studies should continue to examine effective strategies to address the dropout problem among Aboriginal Canadians and carefully measure the implementation and success of such initiatives on an ongoing basis.

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VIII. Tables

Table 4-1 Selected Summary Statistics

Sample N	54040
mean age (years)	38.8
mean overallhth (5 pt. scale)	2.4
VARIABLE	% of sample
on reserve	9.1
off-reserve	90.9
male	46.2
female	53.8
naindian	40.3
metis	25.5
inuit	3.1
manyabid	3.6
city	66.9
non-cma	30.1
nfld	2.4
pei	0.2
ns	2.6

nb	2.3
que	13.2
man	11
sask	8.5
alb	15.1
bc	16.2
ynwt	3.5
ont	25
speakab	24.8
do not speakab	75.2
married	38.6
widivsep	18.2
single	43.2
abtchr	16
tchablang	8
abulrn	8
abhist	52.5
attndressch	6.3
famressch	30.1

Table 4-2 Summary of Probability (DROP), 2001 APS

	Pooled Model	OFF-RESERVE	ON-RESERVE
MALES	0.4844	0.4531	0.7547
FEMALES	0.4033	0.3779	0.6789

Table 4-3 Determinants of the Probability of Dropout (DROP): Pooled Model, Marginal Effects

	FEMALES			MALES		
y =Pr(DROP)	0.4033			0.4844		
	dy/dx	Std. Err.	z	dy/dx	Std. Err.	z
(off res)						
on res	0.0525	0.0215	2.44	0.0104	0.0239	0.44
(not NA Ind)						
NA Indian	0.1135	0.0292	3.88	0.0915	0.0305	3
(not Métis)						
Métis	0.1195	0.027	4.42	0.0608	0.0267	2.28
(not Inuit)						
Inuit	0.3206	0.0386	8.32	0.1398	0.0386	3.62
(not many AB)						
many AB ID	0.1316	0.0372	3.54	0.0961	0.0404	2.38
(ont)						
nfld	-0.0509	0.0388	-1.31	-0.1107	0.0386	-2.86
pei	0.0571	0.0626	0.91	-0.0336	0.0818	-0.41
ns	0.0021	0.0476	0.04	0.0384	0.0561	0.68
nb	0.0422	0.0495	0.85	-0.0348	0.0502	-0.69
que	-0.0088	0.0386	-0.23	0.0068	0.0411	0.17

man	0.033	0.0284	1.16	0.0584	0.03	1.95
sask	0.012	0.0259	0.46	0.0264	0.0287	0.92
alb	0.0668	0.0285	2.34	0.053	0.0313	1.69
bc	0.0188	0.0301	0.63	-0.0032	0.0325	-0.1
ynwt	0.1068	0.0335	3.19	0.0668	0.034	1.96
(rural)						
city	-0.0342	0.0197	-1.74	-0.0692	0.0199	-3.48
(don't speak AB)						
age	0.0059	0.0008	7.28	0.0035	0.0009	3.99
speak AB	0.1886	0.2108	0.89	0.332	0.137	2.42
(single)						
married	-0.0052	0.0202	-0.26	0.0266	0.0251	1.06
widivsep	0.05	0.0271	1.84	-0.0032	0.0338	-0.09
family inc	0	0	-5.11	0	0	-6.8
(no child)						
child0to14	0.0602	0.0182	3.31	0.0328	0.0223	1.47
(neither lang)						
english	0.5571	0.0557	10.01	0.645	0.0443	14.57
french	0.6818	0.0668	10.2	0.651	0.0449	14.5

biling	0.5495	0.0227	24.24	0.4709	0.0171	27.59
Eng Profic	-0.1426	0.1876	-0.76	-0.3105	0.1328	-2.34
French Profic	-0.0608	0.2112	-0.29	-0.2571	0.1243	-2.07
healthy (5)	0.0541	0.008	6.78	0.0514	0.0092	5.62
(unemployed)						
employ	-0.1447	0.0162	-8.94	-0.0936	0.0198	-4.72
(no AB teacher)						
AB teacher	-0.0392	0.0222	-1.77	-0.0308	0.0259	-1.19
(not taught AB)						
Taught AB	0.0172	0.0371	0.46	0.0741	0.0378	1.96
(did not learn AB lang)						
Learn AB lang	0.0866	0.0326	2.66	0.0569	0.0364	1.56
(did not learn AB hist)						
Learn AB hist	-0.1213	0.0172	-7.06	-0.1272	0.0188	-6.75
(did not attend RES school)						
Residential school	0.0603	0.0235	2.56	0.0393	0.0333	1.18
(family did not						

attnd res school)						
Family res school	0.0225	0.0194	1.16	0.022	0.0217	1.01
(elementary sch not in community)						
Elementary in community	0.0843	0.0211	4	0.1767	0.0246	7.17
(HS not in community)						
HS in community	-0.0847	0.0201	-4.21	-0.1468	0.0214	-6.85
(no computer)						
Computer in home	-0.1411	0.026	-5.43	-0.1938	0.0297	-6.54
(no internet)						
Internet in home	-0.0814	0.0281	-2.9	-0.089	0.0307	-2.9
(did not move0						
Moved from community	0.0073	0.0165	0.44	0.0082	0.0206	0.4

Table 4-4 Determinants of the Probability of Dropout (DROP): Off-Reserve, Marginal Effects

	MALES			FEMALES		
y = Pr(DROP)	0.4531			0.3779		
	dy/dx	Std. Err.	z	dy/dx	Std. Err.	z
(not NA Ind)						
NA Indian	0.0903	0.031	2.91	0.1125	0.0296	3.81
(not Métis)						
Métis	0.0608	0.0271	2.25	0.1192	0.0271	4.4
(not Inuit)						
Inuit	0.1504	0.0422	3.57	0.3327	0.0412	8.08
(not many AB)						
many AB ID	0.0977	0.0421	2.32	0.1385	0.0387	3.58
(ont)						
nfld	-0.1147	0.0393	-2.92	-0.0507	0.0389	-1.31
pei	-0.0447	0.0869	-0.51	0.0475	0.0665	0.71
ns	0.0431	0.0616	0.7	0.009	0.0511	0.18
nb	-0.045	0.0519	-0.87	0.0421	0.0514	0.82
que	-0.0029	0.0456	-0.06	-0.0181	0.0413	-0.44
man	0.0525	0.0329	1.6	0.0225	0.0301	0.75
sask	0.0125	0.0318	0.39	0.0033	0.0274	0.12

alb	0.0516	0.0334	1.55	0.0674	0.0303	2.23
bc	-0.0014	0.0342	-0.04	0.0207	0.0311	0.67
ynwt	0.0541	0.0363	1.49	0.0995	0.0345	2.88
(rural)						
city	-0.0698	0.021	-3.33	-0.0317	0.0204	-1.55
age	0.0038	0.001	3.92	0.0063	0.0009	7.22
(don't speak AB)						
speak AB	0.015	0.0311	0.48	0.0401	0.021	1.91
(single)						
married	0.0289	0.0279	1.03	-0.0113	0.0218	-0.52
widivsep	-0.0006	0.0364	-0.02	0.052	0.0286	1.82
family inc	0	0	-8	0	0	-7.07
(no child)						
child0to14	0.031	0.0246	1.26	0.063	0.0199	3.16
(neither lang)						
english	0.5798	0.0274	21.19	0.5308	0.0268	19.84
french	0.629	0.0322	19.57	0.6888	0.0354	19.44
biling	0.4821	0.0328	14.72	0.575	0.0326	17.66
healthy (5)	0.05	0.01	5.01	0.0537	0.0085	6.34
(unemployed)						

employ	-0.0934	0.0223	-4.19	-0.1373	0.0176	-7.82
(no AB teacher)						
AB teacher	-0.0252	0.029	-0.87	-0.0293	0.0248	-1.18
(not taught AB)						
Taught AB	0.0972	0.0485	2.01	0.0086	0.0472	0.18
(did not learn AB lang)						
Learn AB lang	0.0773	0.0479	1.61	0.1045	0.0431	2.43
(did not learn AB hist)						
Learn AB hist	-0.1298	0.0201	-6.45	-0.1194	0.0181	-6.61
(did not attend RES school)						
Residential school	0.0201	0.0437	0.46	0.056	0.0289	1.94
(family did not attnd res school)						
Family res school	0.0246	0.0245	1.01	0.0211	0.0212	0.99
(elementary sch not in community)						
Elementary in community	0.1651	0.0274	6.04	0.0686	0.0233	2.95
(HS not in community)						
HS in community	-0.1564	0.0236	-6.62	-0.0846	0.0217	-3.9
(no computer)						

Computer in home	-0.2022	0.0327	-6.18	-0.1376	0.0281	-4.9
(no internet)						
Internet in home	-0.0806	0.0331	-2.43	-0.0767	0.0297	-2.58
(did not move)						
Moved from community	0.006	0.0226	0.26	0.009	0.0181	0.5

Table 4-5 Determinants of the Probability of Dropout (DROP): On-Reserve, Marginal Effects

	MALES			FEMALES		
y =Pr(DROP)	0.7547			0.6789		
	dy/dx	Std. Err.	z	dy/dx	Std. Err.	z
(ont)						
nfld	0.0006	0.0492	0.01	0.0418	0.048	0.87
pei	0.1059	0.0629	1.68	0.1332	0.069	1.93
ns	0.0054	0.0414	0.13	-0.015	0.0434	-0.35
nb	0.0194	0.0442	0.44	-0.0098	0.0475	-0.21
que	0.0601	0.034	1.77	0.0663	0.0372	1.78
man	0.0739	0.0201	3.68	0.0655	0.0236	2.78
sask	0.0538	0.0177	3.04	0.0361	0.0218	1.65
alb	0.0398	0.0213	1.87	0.0456	0.0249	1.83
bc	-0.0237	0.0213	-1.11	0.0093	0.0247	0.38
ynwt	0.1212	0.042	2.89	0.1399	0.0774	1.81
(rural)						
city	-0.0044	0.0234	-0.19	-0.0462	0.0269	-1.72
(don't speak AB)	-0.0008	0.0006	-1.43	0.0001	0.0007	0.19
age						
speak AB	0.0214	0.0142	1.5	0.0315	0.0166	1.9

(single)						
married	-0.0138	0.0178	-0.77	0.0536	0.0181	2.95
widivsep	-0.0241	0.0228	-1.06	-0.0364	0.0243	-1.5
family inc	0	0	-4.61	0	0	-6.51
(no child)						
child0to14	0.0429	0.0135	3.17	0.0255	0.0157	1.62
(neither lang)						
english	0.4387	0.0575	7.63	0.4813	0.0411	11.72
french	0.2241	0.0182	12.3	0.1767	0.1133	1.56
biling	0.2154	0.0182	11.81	0.2438	0.0344	7.09
healthy (5)	0.051	0.0064	8.03	0.0421	0.0071	5.89
(unemployed)						
employ	-0.0613	0.0138	-4.45	-0.1446	0.0158	-9.12
(no AB teacher)						
AB teacher	-0.0876	0.0185	-4.74	-0.1246	0.0211	-5.9
(not taught AB)						
Taught AB	0.0034	0.0245	0.14	0.0272	0.027	1.01
(did not learn AB lang)						
Learn AB lang	-0.0183	0.0253	-0.72	-0.0111	0.0259	-0.43
(did not learn AB hist)						

Learn AB hist	-0.0564	0.0151	-3.74	-0.0782	0.0171	-4.59
(did not attend RES school)						
Residential school	0.0924	0.0153	6.03	0.101	0.02	5.05
(family did not atnd res school)						
Family res school	0.005	0.0145	0.34	0.0237	0.0158	1.49
(elementary sch not in community)						
Elementary in community	0.1593	0.016	9.97	0.161	0.0176	9.13
(HS not in community)						
HS in community	-0.0292	0.0154	-1.9	-0.0656	0.0174	-3.77
(no computer)						
Computer in home	-0.0715	0.0245	-2.92	-0.1372	0.0262	-5.24
(no internet)						
Internet in home	-0.1397	0.0318	-4.4	-0.1038	0.0295	-3.51
(did not move0						
Moved from community	0.0404	0.015	2.7	0.0044	0.0148	0.3

Table 4-6 Fairlie Decomposition Pr (DNF) On-and-Off-Reserves, Males and Females

PR (DROP)	MALES	FEMALES
Off-Reserve	0.4577	0.4013
On-Reserve	0.7242	0.6517
Difference	0.2665 (100%)	0.2504 (100%)
Explained	0.2592 (≈97%)	0.2335 (≈93%)
Unexplained	0.0073 (3%)	0.0169 (7%)

Table 4-7 Fairlie Decomposition Detailed Output

	MALES		FEMALES		
	Std. Err.	z	Coef.	Std. Err.	z
nfld	0.0006	-2.63	-0.0003	0.0006	-0.55
pei	0	-0.37	0	0	0.21
ns	0.0002	-0.41	0	0.0001	0.33
nb	0.0005	-1.03	0.0001	0.0003	0.38
que	0.0013	-0.21	-0.0009	0.0012	-0.72
man	0.0025	-1.63	-0.0024	0.0022	-1.11
sask	0.0041	-0.36	-0.0011	0.0033	-0.33
alb	0.0006	-1.48	-0.0015	0.0006	-2.48
bc	0.0009	-0.08	0.0006	0.0008	0.72
ynwt	0.0009	2.26	0.0047	0.0008	5.59
city	0.0105	-3.27	-0.0221	0.0099	-2.23
age	0.0006	3.28	0.0023	0.0004	5.16
speak AB	0.0147	-1.07	-0.0318	0.0094	-3.4
married	0.0011	0.88	-0.0002	0.0004	-0.5
widivsep	0.0013	-0.03	0.0027	0.0014	1.91

family inc	0.0021	-7.54	-0.0119	0.0017	-6.98
child0to14	0.0019	-1.54	-0.0075	0.0021	-3.56
english	0.0048	-15.1	-0.0816	0.0047	-17.36
french	0.0034	22.04	0.0824	0.0041	20.24
biling	0.0013	-3.19	-0.0033	0.0013	-2.56
healthy (5)	0.0012	-4.9	-0.0079	0.0012	-6.53
employ	0.0039	-4.08	-0.0191	0.0025	-7.66
AB teacher	0.0057	0.82	0.0049	0.0059	0.82
Taught AB	0.0082	-2.26	-0.0057	0.0091	-0.63
Learn AB lang	0.0086	-1.94	-0.0262	0.009	-2.91
Learn AB hist	0.0021	-6.35	-0.0086	0.0012	-6.97
Residential school	0.0053	-0.42	-0.0071	0.0031	-2.29
Family res school	0.0075	-1.63	-0.0108	0.0063	-1.71
Elementary in community	0.0053	5.94	0.0126	0.0044	2.85
HS in community	0.0059	-6.76	-0.0213	0.0052	-4.14
Computer in home	0.0104	-6.5	-0.0426	0.0085	-5.01
Internet in home	0.0101	-2.45	-0.0244	0.0084	-2.9
Moved from community	0.0055	-0.44	-0.0057	0.0058	-0.98

Chapter 5

Conclusion

This dissertation has provided an up-to-date empirical overview of the socioeconomic position of Canada's Aboriginal peoples in the labour market by examining fundamental issues of Aboriginal-non-Aboriginal wage differentials; differences in the probabilities of labour force participation and unemployment; and differences in the probabilities of high school dropout for a number of Aboriginal and non-Aboriginal groups living both on-and-off-reserves. This brief final chapter will summarize the key contributions of each of the three studies comprising this dissertation as well as highlight some of the important limitations of this analysis. The chapter will conclude by discussing some possible directions for future research related to Aboriginal peoples in the Canadian labour market.

The first study examining Aboriginal-non-Aboriginal wage differentials using data from the master file of the Canadian census for the years 1996, 2001 and 2006 finds that Aboriginal people living off-reserve in 2006 experience an earnings disadvantage of about 16 percent for males and 14 percent for females respectively. The wage disparity experienced by an Aboriginal person living on-reserve as compared to a non-Aboriginal person is far greater in magnitude, at 50 percent for males and 35 percent for females. The contribution of this study to existing literature is to provide a current estimate of the Aboriginal-non-Aboriginal wage differential in Canada for a number of different Aboriginal groups living both on-and-off-reserves. Using the Oaxaca decomposition technique to separate the wage differential into an 'explained' portion and an 'unexplained' portion, and to further sub-decompose the contributions of the individual variables in the model to each of the aforementioned categories, the results reveal differences in

educational attainments between the two groups to be among the most salient explanatory factors contributing to the sizable wage gap between Aboriginal and non-Aboriginal Canadians. Gains in levels of educational attainment among the Aboriginal identity population living off-reserve over the past decade most likely account for the narrowing of the wage gap over the three census periods considered in the study, a decrease in the Aboriginal-non-Aboriginal wage differential of approximately 4 percentage points for males and 2 percentage points for females. Inter-temporal comparisons should be made with some degree of caution as the Aboriginal population is particularly subject to issues of under-enumeration; this concern is discussed in greater detail in the second chapter. Finally, using Re-centered Influence Functions, a methodology employing unconditional quantile regressions, the study estimates the Aboriginal-non-Aboriginal wage differential at various points along the earnings function for all groups considered in the analysis in all three census periods. In 2006, Aboriginal identity males living off-reserve experienced the largest wage gap at either end of the income distribution: the lowest 10th percentile and the highest 90th percentile. For males living on-reserve as well as for females living both on-and-off-reserves, the wage differential was dramatically larger at the lowest 10th percentile than at any other point on the earnings distribution. The detailed analysis of the wage disparity experienced by Aboriginal Canadians afforded in this study provides a comprehensive framework for further analysis on the labour market behaviour of Aboriginal peoples, specifically research directed at developing a better understating of the employment patterns among this population so as investigate strategies aimed at closing the aforementioned earnings gaps. Accordingly, the second study in this dissertation examines issues more closely related to employment among Aboriginal people as it estimates the probability of labour force participation and unemployment comparing a number of Aboriginal and non-Aboriginal groups.

Using data from the 2008 and 2009 master file of the Canadian Labour Force Survey the second study finds that Aboriginal males and females had lower rates of labour force participation and higher rates of unemployment as compared to their non-Aboriginal counterparts in both 2008 and 2009. What is distinctive about this particular study is that it takes advantage of the fact that 2008 was the first year that Statistics Canada added an additional weighting instrument to the survey specifically designed to ensure that the Aboriginal sample in the dataset is more representative of the national off-reserve Aboriginal population. Also, the period from 2008 to 2009 captures a change in economic activity from positive to negative GDP growth (Zietsma, 2010). This is relevant in that it highlights that Aboriginal peoples were disproportionately burdened by a downturn in economic activity looking at the change in the probability of unemployment between 2008 and 2009. For non-Aboriginal males the probability of unemployment from 2008 to 2009 increased by just over 2 percentage points, for Aboriginal males, this increase was approximately 4 percentage points. The change in the probability of unemployment among females was smaller with non-Aboriginal females experiencing a 1 percentage point increase from 2008 to 2009, whereas Aboriginal females experienced a 1.3 percentage point increase in the probability of unemployment over the two years considered in the study. Similar to the methodology used in the preceding chapter, this study employs an extension of the Oaxaca decomposition adapted for non-linear models Fairlie (2003, 1999) to decompose the differences in the probabilities of labour force participation and the probabilities of unemployment between Aboriginal and non-Aboriginal peoples into an ‘explained’ portion and an ‘unexplained’ portion. The results of this decomposition reveal that while the majority of the difference in the probability of labour force participation between Aboriginal and non-Aboriginal Canadians can be attributed to the differences in endowment characteristics, only a

very small proportion of the difference in the probability of unemployment between the two groups can be similarly 'explained' by the observable characteristics included in the models. This suggests the possibility of discrimination in labour markets as a potentially significant barrier facing Aboriginal Canadians and the need for greater research and policy discourse to further investigate and address this issue.

Finally, the third study in this dissertation uses data from the 2001 master file of the Aboriginal Peoples Survey to estimate the probability of high school dropout comparing Aboriginal peoples living off-reserves to those living on-reserves. The probability of dropout among Aboriginals living off-reserve is 0.45 for males and 0.38 for females. Among those living on-reserves, the probability of high school dropout is much higher at 0.75 and 0.68 for males and females respectively. Perhaps the most interesting contributions to come out of this study are the relationships between some of the key explanatory variables and the probability of dropout. In particular, the results suggest a statistically significant and negative correlation between a greater emphasis on Aboriginal history in elementary and secondary school courses, as well as the presence of an Aboriginal teacher in the classroom and the probability of dropout. While this particular analysis does not demonstrate causality, the strength of the relationships between these variables and the probability of dropout does provide impetus for future research on the efficacy of culturally sensitive, relevant changes to core curriculum on the educational outcomes of Aboriginal youth in Canada.

Overall, one of the primary limitations of this dissertation, and in general of other studies that empirically focus on Aboriginal peoples, is the fairly restrictive choice of nationally representative datasets that contain a sufficient sample of Aboriginal people. Due to the sample sizes, national representation and access to both the on-and-off-reserve populations, the master

file or long-form of the Canadian Census has been the choice dataset for many empirical studies on Aboriginal peoples (Saku, 1999). A major concern when using census data to examine questions related to Aboriginal peoples is the issue of under or incomplete enumeration of certain reserves and/or Northern communities where census information collection was either not permitted or interrupted before data collection was complete. In 2006, 22 reserves were incompletely enumerated, a decrease from 30 in 2001 and 77 in 1996 (Statistics Canada, 2008). As discussed in the first study, Statistics Canada provided an adjustment for this so that inter-temporal comparisons between Census years from 1996 through to 2006 could be made. Adjusting for incompletely enumerated reserves made only a small difference in the magnitude of the Aboriginal-non-Aboriginal wage differential.

A second problem with census data is the somewhat limited choice of variables. While the data does provide a comprehensive list of demographic and income characteristics, specific variables related to labour market behaviour, health and wellbeing, and education (beyond educational attainment), for example, are beyond the scope of the census. There are government datasets that do encompass these and other important topics in sufficient detail (i.e. the Survey of Labour and Income Dynamics, the Canadian Community Health Survey, or the National Graduates Survey, to name a few). The problem; however, is that these surveys do not necessarily contain a sufficient sample of Aboriginal persons, or the appropriate sampling weights to make them nationally representative (such is the case, for example, with SLID). Furthermore, aside from the census, secondary data sources rarely contain an on-reserve indicator and often do not include populations from the Yukon, Nunavut and the Northwest Territories.

Saku (1999) identifies a more systemic flaw in census data with respect to Aboriginal peoples commenting that the entire basis for the census questionnaire is focused on a Western market-based economy, which is incompatible with the lifestyle and value system of many indigenous peoples. Census questionnaires do not make any reference to activities such as hunting, gathering or fishing, which still provide a source of sustenance for many Aboriginal peoples (Saku, 1999). Statistics Canada's response to this criticism was to introduce the post censual Aboriginal Peoples Survey first in 1991, which focused solely on Aboriginal people. The questions were specifically designed to better address Aboriginal culture and lifestyle and the dataset provided a rich source of information on Canada's Aboriginal population. Data collection, however, was very time consuming and expensive and since the survey contained only Aboriginal peoples, it was difficult to establish non-Aboriginal benchmarks for comparison purposes (Saku, 1999).

The need for ameliorated sources of data on Aboriginal peoples in Canada is good segue into the final section of this dissertation: possible directions of future research. Given the recent changes to the 2011 census, an interesting research project would be to examine how this move to abandon the traditional long-form of the census in favour of the new voluntary National Household Survey will affect the Aboriginal population at least in terms of statistical representation.

With respect to possible directions for further research, given that each of the three studies comprising this dissertation has underscored the importance of education, a key area of future research related to Aboriginal people in Canada should be focused on better understanding the barriers preventing Aboriginal youth from graduating from high school and post secondary education and investigating what can be done to remove such obstacles so that graduation rates

among First Nations populations will increase. The benefit of research on Aboriginal education extends far beyond the target population, as one study estimates “\$71.1 billion will be added to Canada’s economy if Aboriginal people attain the same educational levels as other Canadians” (Laboucane, 2010).

The results of the third study in this dissertation speak to the magnitude of the dropout problem among Aboriginal peoples, particularly on-reserves. Currently the 518 First Nation schools located on-reserves across Canada, under the jurisdiction of the federal government, are grossly under-funded. “In 2006, the Elementary/Secondary Education Program supported 120,000 students, 518 schools and 45 post-secondary institutions with a budget of \$1.2 billion, which is on average \$2,000 less per student than provincial student funding” (Laboucane, 2010). Clearly funding for Aboriginal education is paramount and research on how best to deliver and administer such funds, an important corollary, but the ‘crisis’ in Aboriginal education extends far beyond what can be solved through mere financial considerations. Comprehensive interdisciplinary research is needed to examine the structure and governance of education systems on First Nations reserves in Canada. Peters and White (2009), for example, suggest greater emphasis on self-governance of First Nations schools perhaps through the establishment of regional Aboriginal school boards. Issues regarding the design and implementation of culturally-relevant, yet contemporary curriculum must also be investigated. Additionally, research into the creation and efficacy of various adult education and training programs as a way to mitigate a lack of earlier education are important research questions in addressing levels of educational attainment among Aboriginal adults and the subsequent implications for labour market opportunities and career progression.

Understanding labour market issues as they relate to Indigenous peoples in Canada is complicated by the fact that Aboriginal peoples are a heterogeneous group that differ in various ways: on-reserve vs. off-reserve; urban vs. rural; traditional vs. Western cultural ideologies, or a mix of both perspectives. Additionally, the history of hardships and often unspeakable injustices that many Aboriginal communities have undergone, as well as the unfortunate current reality that many Aboriginal Canadians face discrimination in the labour market (i.e. Doyle-Bedwell, 2008), must also be acknowledged. Further research on these issues would ideally be conducted in collaboration with Aboriginal scholars and leaders whenever possible to ensure that the work is culturally relevant. The current and historical context as well as the diversity of the Aboriginal population must be taken into account when providing evidence-based policy making recommendations in this important area.

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