

Labour Market Outcome of Immigrants in Canada: A Comparative Analysis of
Immigrants' Earnings in the Major vs Non-Major Immigrant Destinations.

by

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Submitted in partial fulfilment of the requirements
for the degree of Master of Development Economics

at

Dalhousie University

Halifax, Nova Scotia

April 2023

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ABSTRACT

The Federal and Provincial Governments' initiative to ensure equal distribution of immigrants in Canada has resulted in a growing number of immigrants residing in the Non-major immigrant destination (NMID) Provinces. Yet, little is known about their labour market outcomes compared to immigrants who live in the Major immigrant destination (MID) Provinces. National trends often mask regional trends, which are equally crucial for understanding immigrants' labour market integration. Using data from the 2016 Canadian Census, this thesis examines this question by comparing the wages of immigrants between the destinations. The Heckman Two-step is employed to study the impacts of educational attainment, language proficiency, foreign credential, and visible minority status on immigrants' wages separately for females and males. Also, the Oaxaca-Blinder decomposition method is employed to examine the extent of racial discrimination faced by visible minority immigrants between the destinations. Findings suggest that immigrants in NMID earn slightly more than their counterparts in MID. Also, varying effects of explanatory variables suggest better economic prospects for immigrants in the NMID provinces. Finally, results highlight the persistence of racial discrimination in the labour markets of both destinations. This paper discusses the implications of findings for policies related to the immigrant settlement.

Keywords Wage gap, racial discrimination, immigrants, educational attainment, language proficiency, foreign credential, and visible minority status, NMID, MID.

LIST OF ABBREVIATIONS USED

NMID	Non-Major Immigrant Destination
MID	Major Immigrant Destination
VM	Visible Minority
PNP	Provincial Nominee Program
CMA	Census Metropolitan Areas
OLS	Ordinary Least Squares
RQ	Research Question
ROC	Rest of Canada

ACKNOWLEDGEMENT

I would like to express my sincere gratitude to several individuals who have played a significant role in completing this thesis. Firstly, I am deeply indebted to my supervisor, Professor Daniel Rosenblum, for his invaluable guidance and support throughout the process. His constructive feedback, insightful comments, and expert knowledge have been instrumental in shaping the direction and quality of this research.

I would also like to thank my readers, Professor Lars Osberg and Professor Weina Zhou, for their valuable feedback and insightful comments on this thesis. Their expertise and guidance have been instrumental in helping me refine and improve the quality of this work.

In addition, I would like to extend my appreciation to Professor Jonathan Amoyaw for his mentorship. He kept me balanced and sane during my academic journey. Also, special thanks to my friend, Enoch Tetteh Ahuakesey, who has constantly motivated and supported me throughout the process. At times, this thesis was just as much an emotional challenge as it was intellectual. And their encouragement has been fundamental in helping me stay motivated and focused throughout the process.

Finally, I owe endless gratitude to my family, especially my parents and uncle, Mr. Yaw Bimpeh, for their unwavering love and support. I am incredibly fortunate to have them.

CHAPTER 1: INTRODUCTION

For well over a century, Canada has been a nation mostly composed of immigrants and the descendants of immigrants. In 2016, over one-fifth of Canadians were foreign-born, and the country continues to welcome thousands of individuals from around the world annually (Statistics Canada, 2016). The immigration flows to Canada have averaged approximately 300,000 arrivals per year since 2016 (refer to Figure 1 in Appendix B). Immigrants are deemed crucial to the nation's prosperity; as a result, Canada's immigration policies have endeavoured to attract and retain large and steady inflows of immigrants primarily to offset its ageing population and boost its economy. Like those who migrate to Canada permanently, many individuals migrate to stay temporarily (i.e., whether as visitors, international students, or temporary foreign workers). Regardless of their pathway into Canada, they contribute meaningfully to its economy. Over the decade, most immigrants and recent immigrants to Canada have traditionally clustered in the larger provinces such as Ontario, British Columbia and Quebec. However, recent trends suggests that the share of immigrants going to these destinations have decreased. For example, in 2016, Ontario received about 39% of recent immigrant population compared to 41.6% in 2011. Similarly, British Columbia saw a decline, receiving 11.7% of recent immigrants, compared to 13.8% in 2011. Finally, Quebec received 17.1%, compared to 19.7% in 2011 (Statistics Canada, 2017)¹. There are a lot of studies suggesting the reasons for the concentration of immigrants in the larger provinces. One reason is that immigrants, like native-born Canadians, are drawn to the major provinces because jobs are more readily available (Bonikowska, Hou and Picot, 2016). But, again, large concentrations of immigrants already residing in some areas also act as a magnet for new immigrants (McDonald, 2004). Although there are prospects of enhanced well-being, the accretion of immigrants in these provinces has subsided in recent years. Instead, there has been an emergence and rapid growth of new immigrant destinations.

¹ While this thesis primarily focuses on the distribution of recent immigrants among the provinces, it is important to note that the experiences of immigrants can differ significantly depending on whether they settle in urban or rural areas. As stated earlier, these three provinces have naturally attracted a larger share of immigrants. But urban centres such as Toronto, Montreal and Vancouver serve as popular destinations due to their ability to support distinct ethnic communities and provide economic opportunities. However, Northern Ontario has historically not attracted much immigration due to its rural nature and limited economic opportunities. This disparity highlights the importance of distinguishing between urban and rural areas in immigration discussions, as the challenges and opportunities immigrants face in these regions can differ significantly. Although this is not the primary focus of this thesis, policymakers must consider the unique circumstances of each area when designing and implementing immigration policies. By doing so, they can ensure that immigrants have access to the resources and support necessary to successfully settle and integrate into their new communities, regardless of whether they settle in urban or rural areas.

As new immigrants to Canada continue to settle primarily in these larger provinces, the Federal and Provincial Governments have become increasingly concerned with the unequal distribution of immigrants across the country. Hence various attempts have been made to attract and retain immigrants to the other provinces. For example, Canada's ex-Federal Immigration Minister, Monty Solberg, urged immigrants to think seriously about living outside Canada's traditional immigrant destinations (Haan, 2008). Also, the active participation of Provincial Governments in the Provincial Nominee Programs (PNPs) and the Atlantic Immigration Pilot has resulted in a shift of immigrants away from central provinces towards the smaller provinces like Atlantic Canada and the Prairies (Seidle, 2013). Moreover, recent studies have emphasized the role of PNP in redistributing new immigrants (Carter, Morrish and Amoyaw, 2008). Over the 2000s, the PNPs substantially increased the number of immigrants going to provinces that historically received few immigrants. As a result, the percentage of new immigrants admitted under the PNP was much higher in the new destinations than in the central provinces. According to Statistics Canada (2017), about 50% of recent immigrants living in Prince Edward Island, New Brunswick, Manitoba, and Saskatchewan were admitted under the PNP. However, only 1.9% were admitted in British Columbia and 0.2% in Ontario. Aside from that, the relative changes in provincial economic performances likely contributed to this. They reduced the share of immigrants to the larger provinces (refer to Figures 2,3, and 4 in Appendix B for the trend in immigrant flow to provinces). For example, between 2011-2016, Alberta experienced the most considerable employment growth (Statistic Canada, 2016), attracting the largest share of new immigrants in the new immigrant destinations.

1.2: Problem statement

Given the significant number of immigrants in the larger provinces, most studies on their economic outcomes have focused on these provinces and have overlooked those in the new destinations. Meanwhile, whether their experiences are similar across Canada or vary by destination is uncertain. As a result, Radford (2007) called for examining immigrants' experiences outside Canada's larger provinces. With the emergence of new destinations, research on the outcomes of immigrants settled in such places is much needed. Also, literature has established that immigrants' human capital² and demographic backgrounds are related to the labour market prospects available in the choice of destination (Haan, 2008; Laryea, 2002; McDonald, 2004). If anything, labour markets may differ

² In labour economics, Human capital is defined as the economic value of the qualities and abilities of an individual that influences their productivity. This includes ones education, experience, health, language skills etc.

across provinces. Thus, immigrants to the smaller provinces may be required to have different skill sets to successfully integrate into the labour markets than those headed for the larger provinces (Syed, 2010). For example, while Proficiency in English or French may be an essential determinant of the earnings of immigrants in the larger provinces, for the new destinations, less attention may be given to this. This is crucial to explore as the relationship between immigrants' demographic and human capital features on earnings can differ across provinces. Furthermore, it has been well documented that racial characteristics can shape the economic activities of groups (Pendakur and Pendakur, 1998; Anisef et al., 2003 etc.), and there is a prevalence of racial hierarchies in the labour markets of provinces with large immigrant populations (Dion and Kawakami, 1996). Although visible minority immigrants encounter disadvantages in the Canadian labour market, there is limited information on how racial discrimination experienced by visible minority immigrants may differ across provinces.

1.3: Thesis objectives

This study aims to analyze the labour market experiences of immigrants in Non-major immigrant destinations (NMID) relative to their counterparts in Major immigrant destinations (MID) in Canada. It compares the earnings of immigrants in NMID (i.e., Prairies and Atlantic Canada) to that in MID (i.e., Ontario and British Colombia). Specifically, it seeks to address the following research questions:

1. How do immigrants fare relative to Canadian-born counterparts in both destinations? And are there earning variations among immigrants between destinations?
2. Are the effects of immigrants' human capital (specifically educational attainment, language proficiency and foreign credential) and demographic characteristic on earnings significantly different between destinations?
3. How do visible minority immigrants fare in both destinations? Is racial discrimination more pronounced in MID than in NMID?

1.4: Thesis contribution

Although there is growing research on the redistribution of immigrants across different geographical areas in other countries, scholarly attention to this emerging study in Canada is minimal. To my knowledge, only Akbari (2011) and Fong et al. (2015) attempted this. Yet these studies qualitatively describe immigrants' experiences; hence it is difficult to make inferences using their findings. Therefore, the analysis presented in this study contributes to the literature in several ways:

First, it provides empirical evidence on the economic outcome of immigrants in the new immigrant destinations in Canada. This helps to understand immigrant adaption beyond the major immigrant destinations. Also, both studies used the 2006 census of Canada data. Although applicable, this thesis uses more recent data; the 2016 census of Canada, to update existing literature and analyze whether the patterns discussed by the present studies persist.

Second, few studies have analyzed how the demographic and Human capital background is related to the economic outcome of immigrants in the new immigrant destination. This study recognizes that the impact of immigrants' characteristics on earnings can vary between destinations; hence it compares this relationship between NMID and MID. Studying this is vital as it will provide information on factors driving the decisions of recent immigrants to settle in NMID.

Finally, the study will explore the labour market racial discrimination faced by visible minority immigrants between the destinations. When examining the earning patterns of immigrants, it is also essential to differentiate them by race, given that most immigrants to Canada increasingly belong to the visible minority group. Comparing the labour market discrimination faced by visible minorities between the destinations allows us to identify the destination that provides better prospects for visible minority immigrants.

1.5: Thesis organization

This thesis has seven chapters. The remainder of the paper is organized as follows: In Chapter 2, I review the relevant literature on the determinants of immigrants' earnings in Canada and explain the variation in wages between destinations. In Chapter 3, I describe the data and the variables employed for estimation. Chapter 4 presents the empirical methodology used for analysis. Chapter 5 discusses the results of chapter 4. Also, chapter 6 discusses the results and explains the limitations of this study. Finally, Chapter 7 provides the conclusion and enlists some policy recommendations.

CHAPTER 2: LITERATURE REVIEW

In this Chapter, I review the literature and provide a general overview of the demographic and human capital factors that affect the earnings of immigrants in Canada. Also, given that this study acknowledges that the impact of these factors may differ between destinations, further discussion on the reasons for the possible varying effects will be provided.

2.1: General overview of factors affecting Immigrants' earnings in Canada

Studying the economic outcome of immigrants in the labour market tells us the extent to which immigrants integrate into a host country's economic system. This is because finding a job and earning a decent wage are fundamental to their integration by being their main point of access to food security, health services, decent housing, etc. The determinants of immigrants' earnings have been primarily examined in literature. These include their human capital; educational attainment (Aydemir and Sweetman, 2007; Ferrer and Riddell, 2008) and proficiency in the host country's official language(s) (Kossoudji, 1988; Chiswick and Miller, 2002; Boyd and Cao, 2009), also the value attributed to immigrants' education (Li, 2001; Reitz, 2003b; Dietz et al., 2009; Sweetman, 2004) and racial discrimination (Picot, 2004; Banerjee, 2009); Pendakur and Pendakur, 1998). These determinants are discussed in this section.

Most immigrants' difficulties establishing themselves in the Canadian workforce have been attributed to the "human capital theory." When immigrants move to another country, one thing they bring with them is their human capital. Therefore, the human capital model has been the dominant research approach in understanding immigrant labour market integration. This theory states that an individual's investment in education, training, health and other social skills (e.g., communication) leads to an accumulation of knowledge, which increases their productivity and, thus, the wages employers are willing to pay for those skills (Becker, 1962; Schulz, 1961, 1971). Therefore, the more individuals invest in their human capital characteristics, the more returns they should receive. Consistent with these findings is a study conducted by Ferrer and Riddell (2008), who used the 1981-2001 census data to examine how the educational attainment of immigrants is rewarded in Canada. They found that those with higher education levels, especially at the postgraduate level, received substantial earnings gains relative to immigrants without a degree. Also, some studies suggest that educational attainment may not only directly affect immigrants' earnings, but it can also affect their assimilation. For example, Scheoni (1996) affirms that highly educated immigrants can assimilate into the host country more quickly than their less-educated counterparts. In addition, according to Scheoni (1996), highly educated immigrants may improve their language skills quickly and learn how the host country's labour market functions more rapidly than less-educated immigrants.

Furthermore, language proficiency is an important communication factor in the human capital framework. This is because greater communication efficiency raises labour productivity (Carnevale et al., 2001; Shields and Price, 2002). For immigrants, proficiency in the host country's official language(s) can promote efficient job search and enhance earnings. According to Kossoudji (1988), individuals who are proficient in the host country language(s) reduce the general uncertainty about productivity and provide the extra signal that, by overcoming the language barrier, they have higher levels of ability and drive than the average immigrant. Economists have, in fact, extensively studied the relationship between language proficiency and immigrants' economic success. Most have found a positive relationship with earnings. For example, using panel data from ten years in Germany, Dustmann and Arthur van Soest (2002) found that a good command of the host country's language is associated with an earnings advantage of about 5% for German immigrants. Similarly, Shields and Price (2002) estimated a sizeable positive effect of English language proficiency on wages. They found an impact of about 16.5% on immigrants' mean hourly occupational wages in the UK. Also, in Canada, Boyd and Cao (2009) used the 2001 Canadian Census data to study the effects of language proficiency on Canadian adult immigrants' earnings. The results indicated that in 2000, females with the highest levels of proficiency earned, on average, \$684 per week, while their counterparts with no knowledge of English and French earned \$427, a difference of \$257. Similar differentials were found for immigrant men; on average, those with the highest English/French proficiency earned \$1,042, while those with the lowest level earned \$579. They recommend that immigrants improve their language fluency levels as early as possible to reduce the loss of potential income. Contrary to the advocacy of the human capital theory, a large body of work criticized the theory for its failure to explain the labour market challenges that some immigrants with higher levels of human capital face (e.g., Li, 2001). Some studies posit that such labour market challenges could be related to foreign credentials and racial discrimination.

Another relevant issue that impacts the labour market outcome faced by immigrants is credential recognition. Most immigrants tend to be highly educated. For example, in 2016, 57% of immigrants aged 25-64 years had post-secondary education relative to 48% of the native-born population in the same group (StatsCan 2017). However, the economic returns they gain can be hampered if their educational qualifications are not recognized in the host country. According to Akbari (2011), the lack of immigrants' credential recognition contributes to the higher unemployment rates that immigrants could face. Even if employed, they may be working in a job that does not suit their qualifications and hence receive lower earnings than their true worth. Li (2001) used the 1996 Census of Canada data to estimate immigrant university graduates' earnings

relative to their Canadian-born counterparts. In his analysis, he groups immigrants according to where they have obtained their degree: in Canada, abroad, and mixed (those who have degrees from Canada and abroad). The results showed that generally, native-born Canadian degree-holders had the highest earnings, followed by Canadian immigrant degree-holders and mixed education degree-holders. In contrast, immigrant foreign degree-holders had the lowest wages. Moreover, Canadian employers, in principle, trust Canadian credentials and those of immigrants whose source countries have similar institutions as Canada (Reitz 2007) but doubt foreign credentials received from the “third world.” Dietz et al. (2009) claimed that the situation of immigrants from non-traditional source countries (e.g., Africa, the Middle East etc.) is worse because employers can perceive their educational degree as being lower quality or less transferrable to the Canadian context. Using data from the 2006 Canadian Census, (Fortin, Lemieux and Torres, 2016) analyzed the impact of the location of study on immigrants’ earnings. The results indicated a significant negative wage premium on degrees obtained in Asian countries. By contrast, there was only a small negative premium on degrees from the United States, Oceania, and Western Europe. Interestingly, a slight premium on degrees from the United Kingdom was found, indicating that credentials obtained in those countries are as valuable in the labour market as in Canada.

Finally, the immigrant earning disadvantages have also been more pronounced for visible minority immigrants in Canada. In most host countries’ labour markets, the life chances for White and visible minority immigrants differ, especially since the earnings of immigrants from Africa and Asia tend to be less than that of European immigrants. Unfortunately, visible minority groups are penalized for being immigrants and non-White. Literature on earnings differentials between visible minority immigrants and White immigrants in Canada suggests that discrimination may be responsible, at least partly, for the income disparity observed. For example, Pendakur and Pendakur (1998) used data from the 1991 Census to examine earnings gaps between Whites and visible minority immigrants relative to native-born. They found that White immigrant females and visible-minority females faced earnings gaps of 1% and 9%, respectively, compared with Canadian-born White females. They concluded that characteristics did not fully explain earning gaps, indicating that discrimination was a contributing factor. In addition, Banerjee (2009) used the Survey of Labour and Income Dynamics (SLID) data for 1999–2004 to examine the income growth of immigrants in Canada. The result revealed that both White and visible minority recent immigrants had much lower annual income relative to native-born in the first year. However, the racial difference in recent immigrants’ income was apparent over the period. While recent White immigrants nearly caught up with their native-born counterparts, those of the visible minority immigrants still lagged. The study suggested that the lag was attributable to the fact that visible

minority immigrants received lower returns to education and faced significant penalties for speaking languages other than English/French than their White counterparts.

2.2: Immigrants' Income Differentials: NMID versus MID

Studies that have examined the earning differences between Canada's metropolises have established that immigrants in smaller metropolises tend to earn higher incomes than those in larger metropolises (Strategic Research and Statistics, 2005; Bernard, 2008; Fong et al. (2015). Fong et al. (2015) used the 2006 Canadian census to examine and compare the earnings of immigrants in Canada's larger (including Toronto, Montreal, and Vancouver) and smaller metropolises. In their analysis, they differentiate immigrants by entrepreneurs and paid workers. Their results showed that after controlling for demographic and socioeconomic background, entrepreneurs and paid workers in the larger metropolises have significantly lower initial earnings (9.18%) than their counterparts in smaller metropolises (13.17%). The study also examined the impact of language ability and duration in a country on immigrants' earnings. The results showed that while these factors significantly and negatively affected the earnings of immigrants in the larger metropolises, in the smaller metropolises, immigrants' (both entrepreneurs and paid workers) earnings were unrelated to these factors. According to the authors, these may explain the growth in the representation of recent immigrants in non-gateway metropolises.

In addition, using data from the Longitudinal Administrative Databank (LAD) for the period 1992- 2003, Bernard (2008) compared the earnings of immigrants in the larger Census Metropolitan Areas (CMAs) of Montréal, Toronto and Vancouver and small CMAs such as Winnipeg, Edmonton, and Calgary. The study showed that immigrants in the Small CMAs earned 16% higher than their counterparts in the Large CMAs. Also, when comparing immigrants' income in rural and urban areas, the result suggested that their earnings in rural areas were 12% higher than in urban areas. Moreover, a similar pattern was found for most vulnerable immigrants (visible minorities, the less-educated and those deficient in the official language) between locations. Findings showed that immigrants with no more than a high school education initially earned 46% lower than the highly educated in the large CMAs, compared with 23% lower in small CMAs. However, the gap closed quickly over the years for those in the smaller CMAs. Finally, the results demonstrated that visible minorities fared better in the smaller CMAs. Although there were initial discrepancies, subsequent increases in income were faster, especially for Asians in smaller CMAs. Based on these findings, Bernard (2008) concluded that regardless of immigrants' education, ability in an official language or race, their economic integration between 1992-2003 was faster in destinations outside the larger CMAs. Therefore, based on these findings, I hypothesize that immigrants in NMID have higher earnings than their counterparts in MID (**Hypothesis 1**).

2.3: Explanations for Income Differentials of immigrants in NMID AND MID

Scholars have pointed to several explanations that can help account for the earning differential of immigrants by destination.

First, an explanation for the earnings differences is the difference in immigrants' human capital assessments between destinations. The economic outcome of immigrants depends on where they are employed and are shaped by interrelated institutional forces such as education, barriers in the labour market of settlement and immigration policy (Reitz, 2001). Regarding education, Reitz (2001) affirms that the labour market earnings of immigrants are affected by the educational profile of native-born residents. This is because the more native-born are highly educated, the more difficult it is for immigrants to gain employment. In Canada, highly educated Canadian-born tend to be concentrated in the larger provinces where most universities are located ; however, some smaller provinces are not so endowed (Akbari,2011). For example, according to the 2016 census, the percentage of native-born with a bachelor's degree or above was highest in Ontario (31.7%) followed by British Columbia (31.2%). However, the percentages were less in provinces such as Prince Edward Island (20.8%)and Newfoundland and Labrador (21.9%). Therefore, settlement in such provinces provides an advantage for immigrants, especially highly educated ones.

Meanwhile, immigrants' ability to use their skills and qualifications may be related to barriers (such as recognition of foreign credentials and language proficiency) in the destination labour market. It is argued that a lack of ability in an official language and having foreign educational qualifications are not significant handicaps for immigrants outside the central regions (Haan, 2008; Bernard, 2008; Reitz, 2001), thus, contributing to the higher earnings for immigrants. The active participation of NMID provinces in the PNP allows these provinces to select immigrants with skills that meet their labour market needs. Moreover, the labour shortage propels these Provincial Governments and employers to provide incentives to attract and retain immigrants. For example, the provincial government of Saskatchewan signed a special memorandum with the Philippines government in 2006 to attract labour from the Philippines. To ensure their success in the labour market, the Saskatchewan government guaranteed that the selected applicants would receive some employment and English-language training. Also, licensing and credential-granting agencies were advised to recognize foreign licenses and credentials of selected immigrants (Garcea, 2007). Similarly, immigrants in the Atlantic provinces appear to have a higher probability of credential recognition than their counterparts in Ontario and British Columbia (Houle and Yssaad, 2010,); Kaida, 2017). Given the differences in destination policies and labour market dynamics, I hypothesize that human capital and demographic characteristics affect wages less for immigrants in NMID than in MID (**Hypothesis 2**).

Another explanation has to do with the proportion of immigrants between destinations. The destination determines the nature of the labour market in which immigrants compete (either amongst themselves or with native-born). Larger provinces have more employment opportunities, enabling immigrants to gain employment quickly. However, the labour markets of these provinces also have the most competition as they tend to amass a sizeable number of highly skilled native-born and immigrants (Picot and Sweetman, 2005). The concentration and the increased supply of skilled personnel in the larger provinces provide employers with the luxury to select from a large pool of workers, hence are less willing to offer competitive or higher wages. Meanwhile, in the smaller provinces, the less supply of skilled labour, therefore less competition, and the increased demand by employers motivates employers to offer higher wages. Haan (2008) argues that the reduced saturation of specific segments of the labour markets in smaller provinces induces less competition, allowing employers to pay earning premiums for immigrants' skills. To back this claim, Aydemir and Sweetman (2007) found that highly educated immigrants who live in large metropolises do not appear to receive the earnings premium relative to immigrants residing in smaller metropolises. The authors suggested that this could be due to less competition in the labour market of smaller metropolises. Another possible explanation is that certain high-paying skilled jobs, especially in industries such as oil and gas, may only be available in other regions due to the abundance of natural resources. This could create a clustering effect, where individuals with the necessary skills and training are more likely to be employed in those regions, further exacerbating the economic disparity between regions.

Aside from the competition factor, it is also argued that the large pool of skilled workers in the large provinces allows employers to differentiate and rank workers by characteristics such as gender and race (Li,2000). Yet, with the smaller pool and the shortage of skilled labour in the smaller regions, immigrants are less likely to experience employment-related discrimination. Using the 1996 Census of Canada to examine immigrants' earnings in the larger CMAs, Li (2000) found that visible minority immigrants earned less than White immigrants. Although this was the case in smaller CMAs, a comparison between the metropolises showed that racial/employment-related discrimination was less pronounced in the smaller metropolises. Based on these findings, I hypothesize that visible minority immigrants in NMID face less wage discrimination than those in MID (**Hypothesis 3**).

CHAPTER 3: DATA

3.1: Data and Sample selection

The dataset used for the analysis presented throughout this paper is based on the 2016 Census public use microdata file (PUMF) on individuals. This data represents a 2.7 % sample of individuals who answered the census questionnaire 2A-L form. The census file includes information about Canadians' demographic, social, and economic characteristics at the individual level. It enumerates everyone living in Canada, including non-permanent residents, such as those with a student or employment authorization, a ministerial permit, or who have claimed refugee status. In this study, the population of interest is immigrants residing in the Canadian provinces. The sample consists of immigrants and native-born in NMID and MID. This paper groups the provinces in Atlantic Canada and the Prairies to form the NMID, while Ontario and British Columbia are grouped as the MID. Again, it defines NMID as one where the immigrant population is less than or equal to 20%. On the other hand, MID consists of an immigrant population of more than 20%. Although Quebec is another major immigrant destination in Canada, due to its unique immigration policies, linguistic cultural background relative to the ROC, I decided to exclude Quebec from MID³. Instead, separate analysis for Quebec vs the Rest of Canada (ROC) will be performed. Meanwhile, Northern Canada is excluded due to limited data availability.

The 2016 census defines immigrants as “people who are, or who have ever been, landed immigrants or permanent residents”. However, this study includes non-permanent residents in the sample⁴. Also, it is restricted to individuals between 18-64 years to retain respondents who comprise the working-age population. Additionally, French-only observations were excluded from the non-Quebec analysis. The primary reason for excluding the French-only observations was technical difficulties encountered during the estimation of the Heckman model. Specifically, non-convergence errors were consistently received when attempting to run the model with the French-only observations included in the data. After further investigation, it was determined that the non-convergence errors were caused by the small sample size of French-only people in the NMID and

³ Quebec's unique immigration policies prioritize French language proficiency and cultural integration, which can result in different immigration patterns and integration experiences of immigrants compared to the rest of Canada (ROC). Additionally, Quebec operates its own separate immigration system with different selection criteria and targets, making it difficult to compare its immigration patterns with those of other provinces. Given these significant differences, it was deemed appropriate to exclude Quebec from the MID grouping in this thesis. While excluding Quebec from the discussion may limit the generalizability of the findings, it is important to acknowledge its unique circumstances and potential impact on the settlement and integration of immigrants.

⁴ Permanent and non-permanent immigrants make up the total immigrant sample used throughout this paper.

MID estimations. Therefore, I decided to exclude these observations from the analysis to address this issue. While the exclusion of the French-only observations may have introduced limitations to the study, the decision was made to obtain accurate and reliable results from the Heckman model. Finally in this study, I examine the wage differences between immigrants in NMID and MID provinces, for men and females separately, and compared to non-immigrants.

3.1.2: Sample selection Bias

Moreover, it is understood that dropping some observations in the data may cause a problem of sample selection bias. This refers to the problem where the dependent variable is only observed for a restricted non-random sample, hence estimates may not be representative of the population. For example, in the 2016 census data, the variable “wage”, which is used as an independent variable in this study has respondents in the labour force and those not in the labour force both earning zero and non-zero wages. In this thesis, the sample selection bias is suspected if I keep only those with non-zero wages, since an individual’s wage is observed only if they participate in the labour force. Therefore, to correct this bias, the Heckman two-step selection correction model is employed to provide valid estimates of parameters. This approach provides a means of correcting biases for non-randomly selected samples. In the end, the weighted⁵ and unweighted samples are provided in table 1 below:

Table 1: summary of full samples of immigrants and native- born in NMID and MID respectively in 2015.

	Unweighted sample		weighted sample
	Total sample size = 269,474		Total population =9,980,094
NMID	Native-born	73,938	2,737,973
	Immigrants	13,808	511,187
MID	Native-born	127,319	4,715,705
	Immigrants	54,409	2,015,229

⁵ Weight includes survey weights and bootstrap weights provided and as specified in the census documentation. survey weights are used to rescale the sample distribution to match the population distribution. It allows to make correct inferences about the finite population that is represented by the survey.

In addition, to compare the racial discrimination faced by visible minority immigrants in both destinations, the sample for this analysis is further restricted to immigrants⁶ only. For this analysis, the weighted and unweighted samples presented below are:

Table 2: summary of full samples for immigrants only in NMID and MID by race, respectively, in 2015

	Unweighted sample		weighted sample
	Total sample size = 68,217		Total population =2,526,416
NMID	Whites	3,596	133,130
	visible minority	10,212	378,057
MID	Whites	14,845	549,835
	visible minority	39,564	1,465,394

This part of the analysis is only interested in the racial discrimination visible minority immigrants face relative to White immigrants; hence native-born are excluded from this sample. In table 2, the immigrant populations are decomposed into Whites and visible Minorities. According to the 2016 census, most new immigrants to both destinations were visible minorities. This is because the source continent of these immigrants to Canada was predominantly Africa, the Middle East, and Asia relative to Europe⁷. The sample selection and the variables such as education level, language proficiency, race etc., chosen in this study are classic choices for the wage differentials literature (Borjas (1983), Lands (2013) and Syed et al. (2018)).

⁶ The Employment Equity Act defines visible minorities as “persons other than Aboriginals who are non-Caucasians in race or non-White in colour” (Statistics Canada, 2021). The visible minority population consists of the following groups: South Asian, Chinese, Blacks, Filipino, Arab, Latin America, Southeast Asian, West Asian, Korean, and Japanese. Sample also includes people in the “multiple responses” or in the “visible minority, n.i.e (The abbreviation 'n.i.e.' means 'not included elsewhere.' Includes persons with a write-in response such as 'Guyanese,' 'West Indian,' 'Tibetan,' 'Polynesian,' 'Pacific Islander,' etc.)” categories. Moreover, the visible minority variable studied in this paper is an aggregate of all these individual minority groups. Aboriginals are excluded from the analysis.

⁷ 24.9 % of immigrants were from Europe, Americas, and Oceania, 13.4% were from Africa and 61.8% were from Asia (StatsCan, 2016)

3.2.1: Variables

3.2.2: Dependent Variable

The dependent variable is the natural logarithm of the wages of individuals. For the 2016 Census, the reference period for wages is the calendar year 2015. The wage variable is defined as “gross wages and salaries before deductions for income taxes, pension plan contributions and employment insurance premiums. It includes military pay and allowance, tips, commissions, and cash bonuses associated with paid employment, benefits from wage-loss replacement plans or income-maintenance insurance plans, supplementary unemployment benefits from an employer or union, research grants, royalties from invention with no associated expenses and all types of casual earnings during 2015. Wages in the data are positive, negative or zero and is a rounded value of the amount received by the individual in 2015” (StatsCan, 2016). The unit of analysis is individuals. Therefore, wages are an essential variable for this study. An analysis of wages aims to determine if someone who is an immigrant in NMID will likely earn a similar amount of income as those in MID—at the same time, holding constant other variables that could account for this earning difference if any difference is found. The natural logarithm of annual wages has been widely adopted in economics as it accounts for normality assumptions necessary for OLS analysis.⁸ The Log transformation also allows results to be interpreted as percentages (Li and Dong 2007).

3.2.3: Independent variables

The key independent variables include educational attainment, language proficiency, foreign credentials, and visible minority status. In the estimates, categorical dummies for all variables are created with one reference category omitted.

An individual’s highest level of education attained is included. The respondent’s level of education is an important human capital factor in an immigrant’s economic success in Canada. This is because a higher educational level suggests a person is more competitive in the labour market. Research has shown that individuals with higher education levels generally have higher incomes than those with lower education levels (Ferrer and Riddell, (2008); Gregorio and Lee, (2002); (Yoshida and Smith, (2008)). The educational level variable is classified as : less than high school (reference), high school, college or technical training and bachelor’s degree/above.

⁸According to Pendakur and Pendakur (2007) an advantage of using the logarithmic function is that “it de-skews the distribution of earnings, which is useful because it decreases the influence of very high earnings reporters. However, it also increases the influence of very low earnings reporters”.

Language proficiency in this study is indicated by whether the respondents know English or French. A language barrier can impede an immigrant's success in the host country's labour market (Chiswick and Miller, 1995). Hence, the knowledge of official language variable is classified into English Only (reference), English and French, and other⁹. According to Thomas (2009), immigrants residing in smaller provinces of Canada are less likely to communicate in languages other than English or French at work than in larger provinces. Therefore, this variable in the analysis is crucial for this study as it explains how language proficiency affects immigrants in different destinations.

Again, the 2016 Census data allow us to examine the impact of immigrants' foreign credentials on earnings. It collects information on where an individual obtained their highest education. Foreign credential recognition is a critical issue in the labour market outcome of immigrants. It is argued that immigrants from certain countries, such as those from less or developing countries, face employment barriers because their education and experience acquired in their country of origin are not recognized in Canada (Bauder 2003; Buzdugan and Halli 2009). The location of the study variable includes Canada (reference), US/Europe and Other (includes all Asia, Africa etc.).

Also, the analysis consists of visible minority status where 0 = Whites; 1 = visible minorities to examine whether visible minority immigrants experience earning disadvantages. The visible minority status is used to explore the possibility of racial discrimination when its impact persists after controlling for several observable characteristics¹⁰. Moreover, this study does not split the visible minority groups into different ethnic groups due to the low number of visible minorities in some non-major immigrant destination provinces. This is the case for Atlantic Canada which already has a small immigrant population of 2.3% (Statistics Canada 2017) hence a lower share of visible minorities in the country¹¹.

3.2.4: Control variables

This study includes individual-level control variables expected to influence one's earnings. These include the length of residence, labour force status, marital status, age group and number of children. The year of immigration variable provided by the census data is used to create a length of

⁹ As explained earlier French only observations for the NMID vs MID analysis were excluded to avoid non-convergence errors in the Heckman model.

¹⁰ Although other unobserved factors such as motivation and talent of the individual are not accounted for in the model, it is important to note that these factors may also influence immigrant earnings.

¹¹ Most studies differentiate the visible minority groups but in doing so they exclude the Atlantic province due to its lower share of visible minorities especially for immigrants.

residence variable to measure how long immigrants have been living in Canada. This is important since several studies have found that someone who has just arrived might encounter socio-economic problems because it takes time to get accustomed to the labour market and institutions of a host country, as well as get the right credentials to obtain a good working position (Frank et al. 2013). The year of immigration variable is grouped into 2 categories: established immigrants (lived in Canada for more than 10 years) and recent immigrants (lived less than 10 years). Labour force status is a dummy which consists of whether the individual is in the labour force (i.e., 0= not in the labour force and 1=labour force).

Furthermore, demographic characteristics are controlled for. First is the respondent's age group; the sample is restricted to individuals between 18 and 64 to capture the most active members in the labour market, defined as the "working-age population" by Statistics Canada (2012). The age variable in the data source was provided in groups therefore I created an age category based on the groupings to capture information contained in the variable. Thus, age is grouped into below 35years (reference group), 35-54years and 55years and above.

Finally, correcting the sample selection bias, Marital status¹² and number of children variables are controlled for in the selection estimate of the Heckman model. These variables affect wages indirectly through causing people to be more or less likely to earn wages. Marital status is categorized into Never married/single (reference), Married/common law and Separated/Divorced/Widowed. Also, I control for the number of children. This is because having children may affect an individual's labour market participation, career choices, hours worked etc., affecting their wages. The number of children variable is a dummy where 0=no toddler and 1=Have a toddler < 5years .

¹² Lee and Edmonston (2013) suggests that married people are generally better off in the labour market than others. Although the reasons for this may be unclear, he affirms that this may be because there are two-earners in the family or other selectivity factors. Also, Schoeni (1995) posits that the relationship between marital status and income could be attributed to reverse causality and discusses four different hypothesis that have been presented on this theme. The first hypothesis suggests that marriage enables workers to be more productive especially for men; the second hypothesis states that married people tend to earn more due to positive assortative mating (i.e., individuals who are financially successful tend to attract people of the same calibre); the third hypothesis proposes discrimination by employers as a factor. Thus, employers usually prefer married men, therefore they tend to discriminate in their favour. Finally, the fourth hypothesis states that marriage is correlated with some unobservable characteristics that are rewarded in the labour market hence the higher earnings.

CHAPTER 4: METHODOLOGY

This session presents the models used in this paper. To estimate the differences in earnings of immigrants and natives and immigrants vs immigrants between NMID and MID, a simple OLS regression model could be written as

$$\text{Ln}(\text{wage})_i = \beta_0 + X_i \beta + \gamma Z_i + \varepsilon_i \dots\dots \text{if gender} = (1,2),$$

where $\text{wage}_i \neq 0$

Where: wage_i ¹³; represents the wage of an individual (i); $\beta_1 \dots\dots, \beta_i$: are coefficients of explanatory variables; X_i is a vector of explanatory variables; Z_i is also a vector of control variables and ε_i ; is the error term. The problem with this OLS model is that the parameter estimates will be biased. This is because people with zero wages may have different characteristics (such as lower education or skills) that influence their wage levels and their likelihood of earning zero wages. If these characteristics are not included in the regression model, the OLS estimates of the coefficients for the included variables will be biased. The bias arises because the model assumes that the sample of individuals are randomly selected from the population and does not account for self-selection of individuals into the sample. Due to this selection bias, estimates of the OLS model are unreliable hence could not be used for the analysis. To address the potential for sample selection bias in my analysis, I employ the Heckman two-step estimator¹⁴ to correct for the self-selection of individuals into zero and non-zero wage categories. This allows me to account for the relationship between the probability of earning a non-zero wage and the wage levels and correct the bias introduced by excluding individuals with zero wages. Doing this ensures that the coefficients for the explanatory variables are not biased due to the non-representative nature of the sample.

4.1: Heckman model

The Heckman sample selection model involves two equations. 1:the outcome equation including the explanatory variables that determines the outcome variable (ln(wages) in this case) and, 2:the selection equation including variables that determine the probability of earning zero or non-zero wages. This approach allows me to use the full sample to estimate a Probit model of the probability of earning zero or non-zero wages in the first step (selection equation). Then an inverse Mills ratio known as lambda (λ_i)¹⁵ is constructed from the estimates in the selection equation. Lastly, using

¹³ As the Wage of an individual is logged, I interpret the results in percentage terms for all estimations in this paper. Percentage can be calculated with $(\exp(\beta)-1) * 100$.

¹⁴ Stata allows one to perform this method, by simply using the “Heckman” command and specify the selection model to automatically adjust for selection.

¹⁵Refer to Heckman (1979) paper on “Sample Selection Bias as a Specification Error” for details on how the Inverse Mills Ratio is derived.

only the non-zero wage subsample in the second step, the outcome equation is estimated where $\text{Ln}(\text{wage})_i$ is the dependent variable and X_i , Z_i and λ_i are the explanatory variables. Since λ_i is included as an additional explanatory variable, the sample selection bias is corrected. Therefore, the coefficients of parameters will be unbiased. To express this, for model 1, the two equations can be written as : Wage is observed if:

$$\text{Selection equation: Zero_wages} = \alpha_0 + \alpha_1 \text{Immstat}_i + \alpha_2 \text{Residence}_i + \alpha_3 \text{Immstat}_i * \text{Residence}_i + \alpha_4 \text{Hdgree}_i + \alpha_5 \text{Kol}_i + \alpha_6 \text{Locstud}_i + \alpha_7 \text{Vismin}_i + \alpha Z_i + u_i$$

$$\text{Outcome equation : Ln(wage)}_i = \beta_0 + \beta_1 \text{Immstat}_i + \beta_2 \text{Residence}_i + \beta_3 \text{Immstat}_i * \text{Residence}_i + \beta_4 \text{Hdgree}_i + \beta_5 \text{Kol}_i + \beta_6 \text{Locstud}_i + \beta_7 \text{Vismin}_i + \alpha Y_i + \lambda_i + \varepsilon_i .$$

From the selection equation, the dependent variable Zero_wages take on the value of 1 if respondent has non-zero wages and 0 = if not. The dependent variable in the outcome equation: $\text{Ln}(\text{wage})_i$ is observed if $\text{Zero_wages}=1$. The right-hand side of the equation includes the independent variables that explain the probability of respondent earning non-zero wages. This includes dummy variables: immigration status, residence, and an interaction term: $\text{Immstat} * \text{Residence}$. Hdgree_i which represents educational attainment, Kol_i ; Knowledge of official Language, Locstud_i ; the location of study, Vismin_i ; visible minority status. Also, Z_i ; a vector for control variables (i.e., labour force status, marital status, age group and number of children). Finally, Y_i is a subset of Z_i that excludes labour force status, marital status, and number of children.

In both equations, those factors determining the probability of non-zero wages are obviously included as determinants of wages. However, for the selection correction to work, the Heckman approach requires that both equations are different to avoid high collinearity. Thus, using the same explanatory variables in both equations will make it difficult to identify the estimates of parameters for the outcome equation and would imply that its specification depends mainly on the lambda (λ_i). This would make the results of the outcome equation imprecise. Therefore, at least one variable should be included in the selection equation that has no direct effect on the dependent variable in the outcome equation for identification. Hence, the variables related to labour force status, marital status and number of children were excluded from the outcome variable to act as an excluded instrument in the selection model.

Moreover, the estimated parameters for immigrants living in both destinations can be different. Thus, it could be that the impact of educational attainment or language proficiency on earnings may be more pronounced for immigrants in MID than their counterparts in NMID, and vice versa. Therefore, for model 2, I estimate Heckman equations stated above for NMID and MID destinations separately. For this model, I am only interested in how the relationship of explanatory

variables may differ for immigrants between destinations. For this analysis, the following equations were used: Wage is observed if :

Selection equation : $Zero_wages = \alpha_0 + \alpha_1 Hdgree_i + \alpha_2 Kol_i + \alpha_3 Locstud_i + \alpha_4 Vismin_i + \alpha Z_i + u_i$

Outcome equation: $Ln(wage)_i = \beta_0 + \beta_1 Hdgree_i + \beta_2 Kol_i + \beta_3 Locstud_i + \beta_4 Vismin_i + \alpha Y_i + \lambda_i + \varepsilon_i$
 Model 1 and 2 includes the same set of variables discussed earlier. However, I control for the duration of residence in the second analysis (i.e., for model 2). Again, drawing on the work of Clogg et al. (1995) and Paternoster et al. (1998)¹⁶, a Z-test is employed to test whether the impacts of independent variables on wages are significantly different at a p-value = 0.05 in both destinations.

Nevertheless, endogeneity concerning the choice of immigrant destination is a critical problem in this study. As immigrants may choose to reside in destinations that are more appealing and provide favourable assimilation conditions. Thus, it is possible that destination characteristics such as the availability of job, social/cultural networks, differences in cost of living, taxes and other factors between destinations can causes wages of immigrants to differ. Also, if immigrants who chose to reside in a certain destination differ in many observable and unobservable characteristics compared to those who do not then that may cause wages to differ. Therefore, simply comparing the outcomes of these individuals to those who did not choose to reside in that destination may lead to biased results. To obtain a more accurate estimate of the relationship between the dependent and independent variables, it is necessary to control for the endogeneity using methods such as instrumental variables. However, I could not implement this approach due to the lack of information on reasons for destination choice and the difficulty in identifying a sound instrument. Also, I understand that a weak instrument could potentially induce even worse estimates. The control variables used in this study addresses the selection issue as much as possible (controlling for many variables that may affect wages). However, I acknowledge the endogeneity issue as a limitation of this study. Therefore, results presented in this study should be interpreted with caution and not considered causal estimates. Further research, using different methods or alternative data sets may be required to address this issue fully and to obtain more robust estimates.

¹⁶ $Z = \frac{\beta_1 - \beta_2}{\sqrt{SE\beta_1^2 + SE\beta_2^2}}$. Where β_1 and β_2 are the coefficients in model 2 for the various residences (0,1), respectively. SE indicates the standard error. Clogg et al. (1995) and Paternoster et al. (1998) recommend the use of this method for large sample studies. According to the authors, it helps to determine whether the coefficients that describe the relationship between the dependent variable and explanatory variables in the first model are significantly different from the coefficients that describe the relationship between those in the second model.

4.2: Measuring Discrimination

Secondly, the analysis is refined by examining both destinations' earning differentials between visible minority and White immigrants. The method used to examine this is based on the Oaxaca-Blinder decomposition model (Oaxaca, 1973,1994; Blinder,1973). Like all analysis performed in this study, the estimates provided are adjusted for sample selection bias¹⁷. The following equation represents the model¹⁸:

$$\bar{Y}_w - \bar{Y}_{vm} = (\bar{X}_w - \bar{X}_{vm}) \bar{\beta}_w + \bar{X}_{vm} (\bar{\beta}_w - \bar{\beta}_{vm}) = E + U \dots \text{(Eq. 6)}$$

Where, $\bar{\beta}$ represents the estimated parameter. The subscript “w” stands for Whites, and “vm” represents visible minorities. In this model, Whites are the reference group. The difference in mean wages between Whites and visible minorities (i.e., $\bar{Y}_w - \bar{Y}_{vm}$) can be decomposed into an explained gap $(\bar{X}_w - \bar{X}_{vm}) \bar{\beta}_w$, which is due to differences in individuals’ observed characteristics. The explained gap represents the “*Endowment Effect (E)*” between both groups. This measures the expected change of visible minority group mean wages if they had Whites’ predictor levels. The unexplained gap $\bar{X}_{vm} (\bar{\beta}_w - \bar{\beta}_{vm})$, which is due to differences in the estimated observable coefficients for both groups, represents the “*Coefficient effect (U)*”. This measures the expected change in the visible minority group’s mean wages if they had Whites’ coefficients (Weichselbaumer and Winter-Ebmer, 2005). According to Oaxaca (1973) and Blinder (1973), the unexplained gap can be interpreted as the “*Discrimination effect*”. This is because it shows when visible minorities gain lower wages despite having similar human capital and demographic characteristics as Whites.

Although such an assumption is feasible, it is not without limitations. For example, the unexplained gap could be biased and influenced by measurement errors since it may capture both the effects of discrimination and the unobserved group differences that could affect wages (Blank et al., 2004). Finally, a detailed decomposition model is employed to identify the contributions made by individual explanatory variables to the overall explained and unexplained wage gap. An advantage of this method is that it allows the researcher to determine how much of the wage gap is due to a specific variable, for example, language proficiency, education etc. Also, for categorical variables, the detailed decomposition provides the contribution of each level of the categorical variable to the wage gap.

¹⁷ In Stata, the Oaxaca command is used with the Heckman command to correct for sample selection. By doing this, the decompositions are automatically adjusted for selection.

¹⁸ The equation (4) presented in this paper is not exact model provided by the originators. Due to the complicated nature of theirs, and for simplicity sake, the original one was altered and customized for the purpose of this paper. For more details on the original model, refer to (Oaxaca, 1973) and Blinder, (1973)

CHAPTER 5: EMPIRICAL RESULTS

This chapter presents the results of the regressions addressing the research objectives. Thus, I examine the relationships between wages and the explanatory variables (i.e., educational attainment, foreign credential, language proficiency and visible minority status). As discussed in chapter 2, differences in these characteristics may cause earning disparity between individuals or groups. Hence, I will first present a descriptive statistics of immigrants living in both destinations. The purpose is to identify the differences in the variables, as mentioned earlier, between immigrants in both destinations relative to native-born. Section 5.2 provides the results for model 1, where I analyze the wage disparity between immigrants in destinations. Also, results from the Quebec vs ROC are discussed. Again, results from model 2, where I analyze the differential impacts of explanatory variables on wages of immigrants in NMID vs MID, are presented. Finally, section 5.3 discusses the results of the Oaxaca decomposition exploring racial discrimination among immigrants.

5.1: Descriptive statistics

Tables 3a and 3b show the characteristics of immigrants and native-born living in both destinations for females and males, respectively. As per Statistics Canada's guidelines, the results are based on weighted frequencies, not raw counts. The tables provide the mean sample statistics of the variables from the 2016 census data¹⁹. A t-test is employed to determine the differences in average characteristics between MID and NMID. First, the characteristics of females are discussed, followed by that of males.

For females, while wages of immigrants and native-born are significantly different at $p\text{-value}=0.05$ ²⁰ in NMID, the wages for those in MID are not. For example, while in NMID, native-born females earn on average only 5% log-point more than immigrants; in MID, immigrants earn 2% log-point more than native-born females. Also, when comparing immigrants in NMID vs MID, there is no evidence suggesting a significant wage difference. Regarding characteristics, there are no significant differences in educational attainment between female immigrants ($p\text{-value}>0.05$). However, there are differences in language proficiency, location of study, and visible minority status ($p\text{-values}=0.00$). These factors may contribute to wage disparity between immigrants in NMID vs MID. For example, in both destinations, immigrants are more educated and likely to have

¹⁹ The same applies for all results presented in this thesis including the Oaxaca decomposition models.

²⁰ After performing the t-test for all samples (i.e., Native-born vs Immigrants), the p-values for wage difference for females in NMID was 0.03 and 0.4 for those in MID. Also, for males, p-value from t-test were greater than $p\text{-value}=0.05$ (i.e., 0.90 for NMID and 0.06 for those in MID) suggesting no significant difference in wages.

a bachelor's degree or above than natives. Also, most immigrants are proficient in English only; however, those proficient in English and French and "other" languages are better represented in MID. Also, most immigrants, especially in MID, acquired their highest education in Canada. At the same time, foreign credentials from other countries, such as Asia, Africa, and the Middle East, are more prevalent among immigrants in NMID. This is unsurprising, given that most recent immigrants in the census year immigrated from these source countries and predominantly settled in the NMID provinces (StatsCan, 2017). Furthermore, most immigrants in both destinations belong to the visible minority group but are slightly more in NMID than in MID. Regarding the length of residence, recent immigrants are better represented in NMID while most immigrants in MID are established. Finally, immigrants in both destinations are younger, more likely to be married, and participate in the labour force.

On the other hand, for men, there are no significant differences between the wages of native-born and immigrants in both destinations. Precisely, results from Table 3b suggest that the mean wages of native-born and immigrant men are similar in NMID. In contrast, immigrants in MID have slightly higher mean wages (2% log-point) than native-born men. Moreover, a significant difference is found in comparing the wages of immigrant men in NMID vs MID. Immigrant men in NMID earn a 17% log-point higher mean wage than their MID counterparts. Also, for the explanatory variables, the t-test reveals no significant differences in educational attainment or visible minority status (p -values from t-test > 0.05) between the two destinations. However, differences in language proficiency and location of study are observed (p -values=0.00), indicating that these factors may have contributed to wage variations between the groups. Moreover, immigrant men are more educated in both destinations than native-born men. Also, they tend to be younger, mainly in the labour force and more likely to be married than native-born. Like females, immigrant men are primarily proficient in English only; however, those proficient in English and French and other languages are better represented in MID than in NMID. Again, most immigrant men are visible minorities, but a significant share resides in NMID provinces. Finally, immigrant men with credentials outside Canada are better represented in NMID than in MID.

Based on the descriptive statistics, there are differences between the two destinations in specific characteristics for both men and females, particularly in language proficiency and location of study. The next section will provide a more in-depth examination of the data to identify potential drivers of the wage differences between immigrants in NMID and MID provinces.

Table 3a: Descriptive statistics for sample for Females in NMID AND MID respectively. Standard errors are in parenthesis.

VARIABLES	Non-major immigrant destination		Major immigrant destination	
	Native-born	Immigrants	Native-born	Immigrants
Total sample size	36,880	6,856	63,891	27,728
Logged Wages (mean)	10.05 (0.008)	10 (0.02)	10.01 (0.007)	10.02 (0.01)
<u>Educational attainment</u>				
Less than high school	7.64	7.67	5.46	8.14
High school	31.14	24.29	29.95	23.14
College or technical training	36.08	26.04	34.96	27.6
Bachelor's degree or above	25.14	42	29.63	41.12
<u>Language Proficiency</u>				
English only	87.05	93.9	85.77	90.94
English and French	12.33	3.72	14.18	5.58
Other	N/A	2.35	N/A	3.44
<u>Location of highest education attained</u>				
Canada	60.26	25.12	62.8	35.25
Europe/US	0.87	11.32	1.57	10.68
other	38.87	63.56	35.63	54.07
<u>Race</u>				
Whites	96.98	24.91	90.75	26.62
visible minority	3.04	75.09	9.25	73.38
<u>Age group</u>				
Below 35yrs	36.57	32.18	39.65	25.39
35-54 yrs	44.97	53.53	42.96	55.26
55years /above	18.46	14.29	17.38	19.35
<u>Labour force status</u>				
Not in_labor force	11	11.56	10.37	11.55
In labour force	89	88.44	89.63	88.45
<u>Marital status</u>				
Never Married/Single	18.75	10.79	25.11	13.81
Married/Living common law	75.3	85.84	68.45	78.09
Separated/Divorced/Widowed	5.93	3.37	6.43	8.1
<u>Number of children</u>				
No toddler	93.35	92.04	93.66	94.49
Have toddler	6.65	7.96	6.3	5.51
<u>Length of Residence</u>				
Established Immigrants	N/A	51.33	N/A	74.53
Recent Immigrants	N/A	44.8	N/A	23.03

Table 3b: Descriptive statistics for sample for Males in NMID and MID respectively. Standard errors are in parenthesis.

VARIABLES	Non-major immigrant destination		Major immigrant destination	
	Native-born	Immigrants	Native-born	Immigrants
Total sample size	37,058	6,952	63,428	26,681
Logged Wages (mean)	10.59 (0.008)	10.59 (0.02)	10.4 (0.007)	10.42 (0.01)
<u>Educational attainment</u>				
Less than high school	12.19	8.83	8.73	9.82
High school	32.05	23.96	33.4	23.7
College or technical training	37.98	26.6	35.48	25.05
Bachelor's degree or above	17.78	40.61	22.39	41.43
<u>Language Proficiency</u>				
English only	89.32	94.61	89.11	91.91
English and French	10.05	3.45	10.85	4.41
Other	N/A	1.94	0.01	3.64
<u>Location of highest education attained</u>				
Canada	54.64	25.29	56.23	31.71
Europe/US	1.03	13.22	1.46	13.01
other	44.34	61.49	42.3	55.28
<u>Race</u>				
Whites	96.98	27.16	90.72	27.96
visible minority	3.02	72.84	9.28	72.04
<u>Age group</u>				
Below 35yrs	36.13	29.06	39.74	25.01
35-54 yrs	42.96	54.79	41.72	52.77
55years /above	20.91	16.15	18.53	22.23
<u>Labour force status</u>				
Not in_labor force	8.4	6.67	8.95	7.39
In labour force	91.6	93.33	91.05	92.61
<u>Marital status</u>				
Never Married/Single	19.84	11.64	26.84	14.53
Married/Living common law	78.08	87.86	70.74	83.54
Separated/Divorced/Widowed	2.08	0.5	2.42	1.92
<u>Number of children</u>				
No toddler	92.64	89.66	93.1	93.16
Have toddler	7.36	10.34	6.9	6.84
<u>Length of Residence</u>				
Established Immigrants	N/A	50.04	N/A	73
Recent Immigrants	N/A	45.14	N/A	24.39

5.2: Examining the wage differentials of immigrants between NMID and MID

This section presents the Heckman results of the analysis of model 1 for NMID vs MID. However, only the outcome equations results²¹, adjusted for sample selection bias, will be discussed. Again, the discussion focuses on the results of NMID vs MID. As mentioned earlier, I will briefly mention the Quebec vs ROC comparison results, which are included in the Appendix A (Tables iii and iv) for reference. Finally, I will provide evidence to support the argument that the earnings of immigrants are higher in NMID than in MID. And that this wage disparity for females is due to differences in the penalties for foreign credentials and visible minority status, but not educational attainment and lower language proficiency. Also, for men, they are due to educational attainment and foreign credentials but not language proficiency and visible minority status.

5.2.1: Heckman two-step estimation results

Due to the presence of sample selection bias, the Heckman two-step approach was used to obtain unbiased estimates of the model parameters. Upon examination, I found evidence of selection biases in all models. The coefficients of the Inverse Mills ratio (λ_i) were negative and statistically significant in all models. This implies that, the unobservable factors that influence the sample selection are negatively related to the outcome of interest(wages). Suggesting that using the standard OLS models to estimate parameters without including λ_i would yield biased results since it does not account for selection. Consequently, when comparing the results from both methods, I find that the Heckman-corrected estimates (refer to Tables 4a and 4b) differ from the non-corrected OLS model (refer to Appendix A: tables i and ii). For example, in the OLS model, there is no statistically significant difference in wages between immigrants in MID and NMID. However, once the selection is accounted for, I find that wage is about 4% larger for immigrants in NMID relative to MID, statistically significant at the 5% level.

Tables 4a and 4b contain the adjusted results of model 1 for females and males, respectively. According to table 4a, female immigrants earn, on average, 2.12% higher wages than native-born females. At the same time, male immigrants earn 7.90% more than native-born men. Considering the interaction term²², the Heckman results show that, on average, female immigrants in NMID earn significantly 3.98% more than their MID counterparts, contrary to the OLS model. However, for men, the wage difference is not statistically significant. According to table 4b,

²¹ I decided not to interpret the coefficients from the selection equation because they are estimated only for calculating the probability that the dependent variable is observed, in the probit model, and to obtain the inverse mills ratios used for correcting bias in the outcome equation.

²² The interaction term shows the wage difference between immigrants in NMID and MID

immigrant men in NMID earn only 1.71% more than their counterparts in MID. As expected and consistent with the findings of Bernard (2008) and Fong et al.(2015), immigrants residing outside the major destinations perform relatively better in the labour market. While the NMID vs MID comparison provide valuable insights, comparing immigrant earnings in Quebec and ROC offers a complementary perspective. The results from this comparison are presented in the appendix (refer to Tables iii and iv for females and males, respectively), but I will focus on the interaction terms for this discussion. According to the results, female and male immigrants in Quebec earn 13.76% and 12.54% less than their counterparts in ROC, respectively. Both results are significant at the 5% level and consistent with Nadeau and Seekin's (2010) findings. Possible explanations for the Quebec vs ROC findings could be attributed to language barriers, skill mismatch, and wage discrimination (more in the discussion section).

Having discussed the wage differences in Quebec and ROC, I now return to the comparison between NMID and MID. In the following section, I will build upon the previous discussion by analyzing the relationships between select independent variables on the wages of immigrants between destinations. Tables 5a1 and 5b1 provide the results for model 2 for females and males, respectively. Notably, Immigrants' educational attainment, language proficiency, foreign credentials and visible minority status affect wages in both NMID and MID; however, the magnitudes of effects vary by destination.

5.2.2: For Females

The result reveals that while the relationship between foreign credentials, visible minority status, and wages differ significantly between the destinations, the effects of educational attainment and language proficiency do not. I find that the earning disadvantage of having credentials from Europe/US is statistically different at a 5% significance level. However, this disadvantage is more pronounced for immigrants in NMID. For instance, in NMID, immigrants with credentials from Europe/US earn 23% less than their Canadian-educated counterparts vs 10% less for those in MID. This finding suggests that NMID may have more barriers for immigrants to have their foreign credentials recognized and valued. Alternatively, the labour markets in NMID may be more competitive with a larger pool of highly educated and skilled immigrants, inducing potential biases against immigrants with foreign credentials.

Also, the earning disadvantage of being a visible minority immigrant is statistically different between destinations. Thus, while the effect of being a visible minority is insignificant for female immigrants in NMID, the opposite is true for their counterparts in MID. In NMID being a visible minority is associated with a 4% decrease in wages, relative to an 11.6% decrease in MID. The insignificant impact on wages for immigrants in NMID suggests that employers in those

provinces may be indifferent to the race of immigrants. However, for MID, the significant wage gap could be attributed to racial discrimination in employment. These findings underscore the importance of addressing potential workplace discrimination sources, particularly in regions where such disparities persist.

5.2.3: For Males

While the effects of educational attainment (specifically, college and training) and foreign credentials are statistically different (at $p\text{-value}=0.05$), those of language proficiency and visible minority status are not. For example, in NMID, having a college and training certificate increases wages by 24% but 10% for their counterparts in MID. However, the relationship for those with a bachelor's degree or above does vary between the destinations. This could be due to the differences in the labour market demand for certain skills between destinations. Also, while having a foreign credential from Europe/US is negatively associated with wages in MID, this is not the case for those in NMID. Immigrant men in NMID who obtained their highest education in Europe/US experience a 1.92% increase in wages vs a 6.29% decrease for their counterparts in MID. This implies that relative to MID, credentials from Europe/US are highly valued by employers in NMID and perhaps likened to those acquired in Canada, hence the difference in relationships observed.

Having discussed the wage disparity between immigrants in NMID vs MID, I examine another critical aspect of the immigrant experience in the next section: discrimination faced by visible minority immigrants. Specifically, I will provide insights into the extent of racial discrimination this group faces, its impact on their wages and how it differs between the destinations.

Table 4a: Heckman 2-step model estimating logged wages between immigrants and native-born in NMID and MID, correcting for sample selection Bias for females.

VARIABLES	Outcome model adjusted for selection	Selection model
	ln(wages)	zerowages
<u>Immigrant Status(ref=native-born)</u>		
Immigrants	0.021** (0.01)	0.03 (0.029)
<u>Residence(ref=MID)</u>		
NMID	0.019*** (0.007)	0.092*** (0.021)
Immigrant*NMID	0.039** (0.016)	-0.057 (0.05)
<u>Educational attainment (Ref=less than high school)</u>		
High school	0.220*** (0.012)	0.015 (0.035)
College or technical training	0.140*** (0.018)	-0.111** (0.051)
Bachelor's degree or above	0.564*** (0.017)	-0.072 (0.051)
<u>Language Proficiency(ref=English only)</u>		
English and French	-0.029*** (0.009)	0.034 (0.027)
Other	-0.260*** (0.029)	0.325* (0.189)
<u>Location of Study (ref=Canada)</u>		
Europe/US	-0.181*** (0.017)	0.142*** (0.052)
Other	-0.420*** (0.014)	-0.028 (0.041)
<u>Race(ref=Whites)</u>		
visible minority	-0.128*** (0.01)	0.086*** (0.025)
<u>Agegroup(ref=below 35years)</u>		
35-54yrs	0.731*** (0.006)	-0.114*** (0.022)
55yrs/above	0.635*** (0.009)	-0.169*** (0.025)
<u>Labourforce status(ref=not in labourforce)</u>		
In labour force		0.810*** (0.019)
<u>Marital status(ref=never married/single)</u>		
Married/living common law		0.461*** (0.02)
Separated/divorced/widowed		0.398*** (0.039)
<u>Number of children(ref= no toddler)</u>		
Have a toddler <5years		-0.203*** (0.032)
Lambda	-0.947*** (0.005)	
Constant	9.673*** (0.017)	0.977*** (0.052)
Number of observations	135,355	
Selected observation	133,280	
Non-selected observation	2,075	

Standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1

Table 4b: Heckman 2-step model estimating logged wages between immigrants and native-born in NMID and MID, correcting for sample selection Bias for males.

VARIABLES	Outcome model adjusted for selection	Selection model
	ln(wages)	zerowages
<u>Immigrant Status(ref=native-born)</u>		
Immigrants	0.076*** (0.011)	-0.0004 (0.034)
<u>Residence(ref=MID)</u>		
NMID	0.134*** (0.007)	0.097*** (0.025)
Immigrant*NMID	0.017 (0.01)	0.019 (0.066)
<u>Educational attainment (Ref=less than high school)</u>		
High school	0.140*** (0.011)	0.100*** (0.031)
College or technical training	0.212*** (0.016)	-0.074 (0.067)
Bachelor's degree or above	0.501*** (0.016)	0.183*** (0.069)
<u>Language Proficiency (ref=English only)</u>		
English and French	-0.073*** (0.01)	0 (0.037)
Other	-0.345*** (0.03)	0.086 (0.111)
<u>Location of Study (ref=Canada)</u>		
Europe/US	-0.118*** (0.016)	0.073 (0.066)
Other	-0.360*** (0.014)	-0.048 (0.062)
<u>Race(ref=Whites)</u>		
visible minority	-0.318*** (0.01)	-0.007 (0.03)
<u>Age group (ref=below 35years)</u>		
35-54yrs	0.825*** (0.006)	-0.112*** (0.032)
55yrs/above	0.617*** (0.009)	-0.400*** (0.032)
<u>Labor force status (ref=not in the labour force)</u>		
In labour force		0.952*** (0.022)
<u>Marital status (ref=never married/single)</u>		
Married/living common law		0.723*** (0.029)
Separated/divorced/widowed		0.568*** (0.077)
<u>Number of children (ref= no toddler)</u>		
Have a toddler <5years		0.055 (0.054)
Lambda	-0.889*** (0.007)	
Constant	10.075*** (0.017)	0.826*** (0.069)
Number of observations	134,119	
Selected observation	132,419	
Non-selected observation	1,700	

Table 5a1: Heckman results for estimating the impact of select variables on earnings between NMID and MID for female immigrants. selection model result in appendix 5a2.

	Non-major immigrant destination	Major immigrant destination	z-test results
	Outcome model adjusted for selection	Outcome model adjusted for selection	
VARIABLES	ln_wages	ln_wages	p-value
<u>Educational attainment (Ref=less than high school)</u>			
High school	0.043 (0.05)	0.086*** (0.024)	nsd
College or technical training	0.205*** (0.055)	0.146*** (0.027)	nsd
Bachelor's degree or above	0.511*** (0.052)	0.506*** (0.025)	nsd
<u>Language Proficiency(ref= English only)</u>			
English and French	-0.078 (0.069)	-0.048 (0.029)	nsd
Other	-0.218*** (0.074)	-0.254*** (0.032)	nsd
<u>Location of Study (ref=Canada)</u>			
Europe/US	-0.258*** (0.051)	-0.102*** (0.024)	Sd***
Other	-0.290*** (0.037)	-0.314*** (0.019)	nsd
<u>Race(ref=Whites)</u>			
visible minority	-0.045 (0.035)	-0.123*** (0.015)	Sd***
<u>Age group(ref= below 35years)</u>			
35-54yrs	0.461*** (0.03)	0.612*** (0.016)	Sd***
55yrs/above	0.496*** (0.046)	0.567*** (0.022)	Sd*
<u>Length of residence</u>			
Established immigrants	0.431*** (0.072)	0.384*** (0.047)	nsd
Recent immigrants	0.180** (0.071)	0.053 (0.048)	Sd*
Lambda	-0.93*** (0.21)	-0.91*** (0.011)	nsd
Constant	9.525*** (0.091)	9.458*** (0.054)	nsd
Number of observations	6,856	27,728	
Selected observation	6,762	27,342	
Non-selected observation	94	386	

Standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1. Sd: Statistically different. Nsd: not statistically different

Table 5b1: Heckman results for estimating the impact of select variables on earnings between NMID and MID. For male immigrants Note: selection model result in appendix 5b2.

	Non-major immigrant destination	Major immigrant destination	z-test results
VARIABLES	ln_wages	ln_wages	p-value
<u>Educational attainment (Ref=less than high school)</u>			
High school	0.03 (0.043)	-0.037 (0.024)	Sd*
College or technical training	0.212*** (0.047)	0.096*** (0.026)	Sd***
Bachelor's degree or above	0.483*** (0.045)	0.426*** (0.024)	nsd
<u>Language Proficiency(ref= English only)</u>			
English and French	-0.045 (0.065)	-0.02 (0.032)	nsd
Other	-0.305*** (0.071)	-0.369*** (0.033)	nsd
<u>Location of Study (ref=Canada)</u>			
Europe/US	0.019 (0.044)	-0.065*** (0.023)	Sd***
Other	-0.232*** (0.036)	-0.270*** (0.019)	nsd
<u>Race(ref=Whites)</u>			
visible minority	-0.285*** (0.03)	-0.247*** (0.016)	nsd
<u>Age group(ref= below 35years)</u>			
35-54yrs	0.567*** (0.028)	0.673*** (0.017)	Sd***
55yrs/above	0.521*** (0.041)	0.542*** (0.022)	nsd
<u>Length of residence</u>			
Established immigrants	0.231*** (0.063)	0.123*** (0.048)	Sd*
Recent immigrants	0.033 (0.062)	-0.138*** (0.048)	Sd***
Lambda	-0.79*** (0.04)	-0.85*** (0.015)	Sd*
Constant	10.239*** (0.081)	10.184*** (0.054)	nsd
Number of observations	6,952	26,681	
Selected observation	6,906	26,381	
Non-selected observation	46	300	

Standard errors are in parentheses. *** p<0.01, ** p<0.05, * p<0.1 Sd: Statistically different. Nsd: not statistically different

5.3: Explore the labour market Discrimination faced by visible minorities in both destinations.

Using equation 6 from Chapter 4, this section provides the results from the Oaxaca decomposition model, which measures racial discrimination experienced by visible minority immigrants in NMID and MID. First, a descriptive statistic of the characteristics of Whites and visible minority immigrants in both destinations is presented. Then in subsection 5.3.2, a summary of the results of the two-fold decomposition for females and males will be provided. Finally, in subsections 5.3.3 and 5.3.4, I present the results of the explained and unexplained portions for females and males, respectively.

5.3.1: Descriptive statistics

As demonstrated earlier, this section identifies the differences in characteristics between visible minorities and Whites between NMID and MID. Tables 6a and 6b provide the descriptive statistics from the 2016 census for female and male immigrants²³, respectively. The sample sizes for females and males are large, with more visible minorities in MID (i.e., 20,344 females and 19,220 males) than in NMID (i.e., 5,148 females and 5,064 males). For females in NMID, I find no significant wage differences between Whites and visible minorities, but significant wage differences are observed for those in MID. Specifically, Whites earn on average \$0.084 more than visible minorities. While the wage gap may be small in absolute terms it could still be indicative of a systematic pattern of pay discrimination based on race. Moreover, even small wage gaps can accumulate over time, resulting in significant financial losses for visible minority females. Therefore, addressing and eliminating any factors contributing to the wage gap is crucial. On the other hand, for men, Whites in NMID earn on average \$0.369, significantly more than visible minority men. In contrast, those in MID earn \$0.220 more than visible minority men. Regardless of gender, visible minorities in both destinations tend to be younger, less likely to be married and more likely than Whites to have a bachelor's degree or above. However, Whites are more likely to have completed college or technical training. Regarding language proficiency, Whites and visible minorities are equally likely to know English only. Nevertheless, those that know both English and French are better represented by Whites. Also, a larger share of visible minorities obtained their highest degree outside Canada, while most Whites obtained theirs in Canada or Europe/US. Finally,

²³ As indicated by Table 6a and 6b, the comparison group is always White immigrants vs visible minority immigrants. Therefore, moving forward, the words White immigrants and visible minorities immigrants will not always be written but should be assumed when one comes across the words Whites and visible Minorities.

most recent immigrants are visible minorities, but all groups are equally likely to be in the labour force.

5.3.2: Aggregate decomposition results for females and males

This section summarizes the decomposed wage gaps by the portions due to differences in observable characteristics (i.e., explained) and discrimination (i.e., unexplained portion) in both destinations. Refer to Appendix A: Tables 7 and 8 for females and males, respectively. For females in MID, most of the wage gap (0.153) can be explained by the variables included in the analysis. On the other hand, in NMID, most of the gap (-0.173) cannot be explained by them. Also, for men, the wage gap in MID has the most considerable explained portion (i.e., 51.36%), while the unexplained portion is more prominent for those in NMID (i.e., 68.83%). These findings potentially indicate that discrimination, if present, plays a minor role in MID, but the opposite is true for NMID. Thus, visible minorities in the NMID provinces may be more likely to experience racial discrimination than their counterparts in MID.

5.3.3: Explained Detailed Decomposition Analysis for females and males, respectively.

In this section, a detailed analysis of the explained portion of the wage gaps between Whites and visible minorities is performed to identify the factors potentially contributing to it. The signs of the coefficients are crucial for interpretation. For example, a positive coefficient means the differences in the observable characteristic increase the wage gap, while a negative coefficient decreases it. Moreover, I will focus on the variables that have significant contributions since they are crucial in determining the wage gaps in both destinations. According to the results for females and males, the wage gaps are primarily influenced by education levels: college/training and bachelor's/above, language proficiency and foreign credentials. As shown in Tables 9 and 10: columns (2) and (5) for females and males, respectively.

Higher education is usually associated with high wages in the labour market. Therefore, the fact that visible minorities living in both destinations are more likely to have a bachelor's degree or above than Whites constitute an asset. For example, for females, having a bachelor's degree or above reduces the wage gap (3.8% in NMID vs 1.9% in MID), whereas college/technical training increases the gap (2.7% in NMID vs 0.4% in MID). Similarly, for men, having a bachelor's degree or above decreases the gap (5.4% in NMID vs 3.3% in MID) while individuals with college or technical training certificates experience increased gaps (3.6% in NMID vs 1.4% in MID).

Additionally, for females, knowing English and French decreases the gaps in both destinations. But for men, while proficiency in English and French does not affect wage gaps in MID, it reduces the gap for those in NMID by 0.6%. Even so, knowing other languages also contributes significantly. In NMID, low language proficiency (indicated by other) increases the gap

(0.7% in NMID and 1.2% in MID. This suggests that language skills are essential in determining the wages for visible minorities in Canada.

Finally, for females, while having foreign credentials from Europe/US is associated with a 5.7% vs 1.7% reduction in the gaps for NMID and MID respectively, obtaining a degree from other countries increases the gap in both destinations. On the other hand, foreign credentials affect the wage gaps differently for males. While credentials from Europe/US does not make a difference in NMID, the wage gaps for their counterparts in MID decreases by 1.7%. Further, visible minority men in both destinations are penalized for holding degrees from “other” countries. This variable results in gap increases by 5.4% in NMID vs 6.4% in MID. As discussed earlier, most visible minorities obtained their credentials from other countries. Hence the differential experiences observed indicate Canadian employers’ potential biases regarding foreign credential recognition in the labour market.

Overall, the findings from the explained portion show the need for increased awareness and attention to how various factors can impact employment outcomes for different groups in the Canadian labour market. It may also be necessary for employers and policymakers to develop strategies that help reduce these disparities and ensure that individuals from diverse backgrounds have equal opportunities to succeed. Although most of the variables contributes to the explained portion, a considerable proportion of the gaps remains unexplained. This highlights the importance of exploring additional factors that could contribute to wage disparities.

5.3.4: Unexplained Detailed Decomposition Analysis for females and males, respectively.

In this section, I decompose the unexplained wage gaps into specific variables and identify the potential factors that may play a role. A negative coefficient indicates visible minorities receive more returns for having that characteristic (advantaged). In contrast, a positive coefficient means visible minorities receive fewer returns for that characteristic (disadvantaged). Usually, a positive coefficient is associated with discrimination since it illustrates when visible minorities earn less even when they have the same characteristics as White immigrants. Results for this analysis are reported in in columns (3) and (6) of tables 9 and 10 for females and males, respectively.

According to the results for females, only college/technical training and language proficiency contributes significantly to the unexplained portions in NMID and MID, respectively. For men, while only credentials from “other” countries significantly contributes to the unexplained portion in NMID, in MID, having a bachelor’s degree or above, proficiency in English and French, and possessing credentials from “other” countries contributes significantly. These provide evidence

to support the discrimination hypothesis²⁴. For instance, in NMID, visible minority females are discriminated against by the college/technical training variable, as they earn significantly less (15.6%) than Whites, all else equal. Conversely, for men, visible minorities in both destinations are disadvantaged and experience lower returns for having a bachelor's degree or above. However, the disadvantage is more pronounced in MID. For instance, in NMID, visible minority men with a bachelor's degree or above earn 5.54% less on average than Whites with the same education level, whereas in MID, their counterparts earn 10.3% less. The descriptive statistics show that visible minorities are more highly educated than Whites. Irrespective of this, they receive lower returns; therefore, based on this result, one can conclude that racial discrimination plays a role in the wage disparity. Also, since the effect size is larger in MID (i.e., 10.3% vs 5.54% in NMID), then it can also be concluded that MID is more discriminatory than NMID.

Additionally, while knowing English and French does not contribute to the unexplained portion in NMID, this variable contributes significantly to the unexplained portion in MID. Thus, all else equal, visible minority females and males earn 0.5% and 0.8% less than their White counterparts, respectively. While the earning disadvantages for visible minorities in MID may not be considered substantial, they still provide evidence of potential discrimination against this group. Lastly, visible minority men with foreign credentials, particularly those obtained from less developed countries, experience earning disadvantages. Although this is evident in both destinations, the extent of discrimination is more pronounced in NMID (19.7%) than in MID (11.9%). The finding of discrimination against visible minority females and males in both destinations is crucial, as it highlights the persistent challenges faced by these groups in the labour market. However, it is difficult to make definitive statements about the relative prevalence of discrimination between the destinations. This is because most of the variables included in the analysis do not significantly contribute to the unexplained portions of the wage gaps, particularly for those in NMID. The unexplained portions indicate the extent to which differences in earnings between visible minorities and Whites could not be accounted for by factors such as education, foreign credentials and language proficiency. The fact that a significant portion of the wage gap remains unexplained indicates the presence of other unobserved factors that could be influencing the wage gaps. These unobserved factors could include differences in access to networks, experience, or other characteristics not captured by the variables included in the analysis.

²⁴ This hypothesis assumes that if visible minorities and Whites are perfect substitutes and employers do not discriminate, competition in the labour market would induce equal wages for both groups per their human capital. However, if there are wage disparities, it could likely be due to employers' discrimination (Chiswick, 1973)

Table 6a: Descriptive statistics: Whites and visible minority immigrants in NMID and MID for FEMALES

VARIABLES	Non-major immigrant destination		Major immigrant destination	
	Whites	visible minority	Whites	visible minority
Total sample sizes	1,708	5,148	7,384	20,344
Logged wages	10.112 (0.041)	10.123 (0.015)	10.203 (0.019)	10.119 (0.08)
<u>Educational attainment</u>				
Less than high school	6.65	8.04	6.84	8.61
High school	24.24	24.3	24.01	22.83
College or technical training	32.67	23.85	30.59	26.48
Bachelor's degree or above	36.53	43.8	38.56	42.08
<u>Language Proficiency</u>				
English only	93.27	94.15	89.6	91.48
English and French	6.44	2.82	9.52	4.15
Other	0.29	3.03	0.88	4.37
<u>Location of highest education attained</u>				
Canada	32.2	22.78	38.24	34.16
Europe/US	32.55	4.27	26.84	4.8
other	35.25	72.94	34.91	61.04
<u>Age group</u>				
Below 35yrs	21.66	35.66	18.01	28.07
35-54 yrs	53.4	53.57	52.95	56.1
55years /above	24.94	10.76	29.04	15.83
<u>Labour force status</u>				
Not in_labor force	12.94	11.07	11.51	11.57
In labour force	87.06	88.93	88.49	88.43
<u>Marital status</u>				
Never Married/Single	5.8	12.45	7.45	16.13
Married/Living common law	91.75	83.88	85.43	75.42
Separated/Divorced/Widowed	2.46	3.67	7.12	8.45
<u>Number of children</u>				
No toddler	95.84	90.77	95.48	94.14
Have toddler	4.16	9.23	4.52	5.86
<u>Length of Residence</u>				
Established Immigrants	68.91	45.51	83.83	71.17
Recent Immigrants	26.58	50.82	13.43	26.5

Table 6b: Descriptive statistics: Whites and visible minority immigrants in NMID and MID for MALES

VARIABLES	Non-major immigrant destination		Major immigrant destination	
	Whites	visible minority	Whites	visible minority
Total sample sizes	1,888	5,064	7,461	19,220
Logged wages	10.923 (0.029)	10.554 (0.014)	10.674 (0.019)	10.454 (0.008)
<u>Educational attainment</u>				
Less than high school	10.7	8.14	10.28	9.65
High school	20.92	25.1	21.12	24.69
College or technical training	35.7	23.2	31.48	22.55
Bachelor's degree or above	32.68	43.56	37.11	43.11
<u>Language Proficiency</u>				
English only	94.44	94.67	91.34	92.17
English and French	5.19	2.8	7.59	3.18
Other	0.37	2.53	1.07	4.68
<u>Location of highest education attained</u>				
Canada	30.77	23.24	33.91	30.86
Europe/US	32.84	5.9	30.06	6.39
other	36.39	70.85	36.03	62.75
<u>Age group</u>				
Below 35yrs	23.52	31.12	17.75	27.83
35-54 yrs	51.91	55.86	50.65	53.58
55years /above	24.58	13.01	31.6	18.58
<u>Labour force status</u>				
Not in_labor force	5.35	7.17	7.39	7.39
In labour force	94.65	92.83	92.61	92.61
<u>Marital status</u>				
Never Married/Single	7.04	13.35	8.67	16.81
Married/Living common law	92.74	86.04	89.75	81.13
Separated/Divorced/Widowed	0.21	0.61	1.58	2.06
<u>Number of children</u>				
No toddler	91.15	89.1	94.77	92.53
Have toddler	8.85	10.9	5.23	7.47
<u>Length of Residence</u>				
Established Immigrants	65.2	44.39	80.63	70.05
Recent Immigrants	27.86	51.58	15.82	27.71

Table 9: Oaxaca decomposition corrected for sample selection bias, using Heckman for females in NMID and MID, respectively.

VARIABLES	White females VS visible minority females					
	NMID			MID		
	(1)	(2)	(3)	(4)	(5)	(6)
	Total logged wage gap	Explained by differences in observable characteristics	Unexplained by differences in observable characteristics	Total logged wage gap	Explained by differences in observable characteristics	Unexplained by differences in observable characteristics
	-0.011 (0.044)	0.162*** (0.028)	-0.173*** (0.049)	0.084*** (0.021)	0.153*** (0.012)	-0.069*** (0.022)
<u>Educational attainment</u>						
High school		0 (0.001)	0.048 (0.054)		0.001 (0.001)	-0.034* (0.019)
College or technical training		0.027*** (0.009)	0.145* (0.08)		0.004** (0.002)	-0.027 (0.04)
Bachelor's degree or above		-0.039*** (0.009)	0.116 (0.096)		-0.019*** (0.004)	-0.01 (0.051)
<u>Language Proficiency</u>						
English and French		-0.008* (0.005)	0.008 (0.01)		-0.007*** (0.003)	-0.011* (0.006)
Other		0.008** (0.004)	-0.001 (0.004)		0.007*** (0.002)	0.005** (0.002)
<u>Location of highest education attained</u>						
Europe/US		-0.057*** (0.021)	-0.013 (0.025)		-0.017** (0.008)	-0.008 (0.01)
other		0.089*** (0.022)	0.105 (0.07)		0.091*** (0.008)	0.036 (0.043)
<u>Length of Residence</u>						
Established Immigrants		0.101*** (0.025)	0.031 (0.158)		0.059*** (0.009)	-0.145 (0.1)
Recent Immigrants		0.034 (0.025)	-0.008 (0.088)		-0.012 (0.009)	-0.023 (0.025)
<u>Age group</u>						
35-54 yrs		-0.003 (0.008)	-0.045 (0.057)		-0.024*** (0.005)	0.107*** (0.03)
55years /above		0.077*** (0.011)	-0.074** (0.03)		0.070*** (0.006)	-0.045** (0.019)
Constant			-0.485 (0.351)			0.086 (0.178)

Standard errors are in parentheses. *** p<0.01, ** p<0.05, * p<0.1

Table 10: Oaxaca decomposition corrected for sample selection bias, For males in NMID and MID, respectively.

White males VS		visible minority males				
VARIABLES	NMID			MID		
	(1)	(2)	(3)	(4)	(5)	(6)
	Total logged wage gap 0.369** *	Explained by differences in observable characteristic s 0.115***	Unexplained by differences in observable characteristic s 0.254***	Total logged wage gap 0.220** *	Explained by differences in observable characteristic s 0.113***	Unexplained by differences in observable characteristic s 0.107***
	(0.032)	(0.021)	(0.035)	(0.021)	(0.011)	(0.022)
<u>Educational attainment</u>						
High school		0 (0.002)	0.004 (0.025)		0 (0.001)	0.015 (0.019)
College or technical training		0.034*** (0.008)	0.029 (0.052)		0.014*** (0.004)	0.03 (0.031)
Bachelor's degree or above		-0.056*** (0.009)	0.054 (0.054)		-0.034*** (0.004)	0.098** (0.039)
<u>Language Proficiency</u>						
English and French		-0.006* (0.003)	-0.004 (0.008)		0 (0.002)	0.008* (0.004)
Other		0.007*** (0.002)	-0.003 (0.003)		0.012*** (0.002)	0 (0.005)
<u>Location of highest education attained</u>						
Europe/US		0.018 (0.015)	0.021 (0.021)		-0.017** (0.008)	0.019 (0.012)
other		0.053*** (0.016)	0.180*** (0.058)		0.066*** (0.007)	0.112*** (0.031)
<u>Length of Residence</u>						
Established Immigrants		0.062*** (0.018)	-0.083 (0.077)		0.021*** (0.007)	-0.024 (0.088)
Recent Immigrants		-0.029 (0.021)	-0.014 (0.055)		0.01 (0.008)	0.014 (0.026)
<u>Age group</u>						
35-54 yrs		-0.028*** (0.009)	-0.024 (0.039)		-0.025*** (0.005)	0.062** (0.027)
55yrs /above		0.060*** (0.009)	-0.03 (0.022)		0.067*** (0.005)	-0.048** (0.018)
Constant			0.123 (0.217)			-0.179 (0.161)

Standard errors are in parentheses. *** p<0.01, ** p<0.05, * p<0.1

CHAPTER 6: DISCUSSION

The primary objective of this study is to contribute to existing research surrounding the economic well-being of immigrants in Canada. Accordingly, it has three research questions, two of which are answered by the results presented in chapter 5, section 5.2.1 and subsections 5.2.2 and 5.2.3:

RQ1: How do immigrants fare relative to Canadian-born counterparts in both destinations? And are there earning variations among immigrants between destinations?

RQ2: Are the effects of immigrants' educational attainment, language proficiency, foreign credential, race and demographic characteristic on earnings significantly different between destinations?

The first analysis of this study (in section 5.1) demonstrates that contrary to the general understanding of the immigrants vs natives earning disparity, in 2015, immigrants earned more than their native-born counterparts. A possible explanation is the recognition of immigrants' human capital in the labour market. Immigrants often bring unique skills and knowledge to their new country, which can be valuable to employers. Additionally, some immigrants may have advanced degrees or specialized training/skills in high demand, leading to higher wages. Another factor that may contribute to higher earnings among immigrants is ambition and motivation. Immigrants who choose to come to a new country often do so because they are motivated to achieve their goals and take advantage of opportunities. These qualities can result in higher earnings compared to native-born workers. Finally, network effects can also play a role in the higher earnings of immigrants. Immigrants may have connections and networks to help them find better job opportunities and advance their careers in their new country. This could result in higher wages and more job stability for immigrants than native-born workers.

Moreover, I hypothesized that immigrants in NMID would have higher earnings than their counterparts in MID. The results of this analysis are presented in section 5.2.1. In this part of the analysis, my hypothesis was based on existing findings in host countries and the limited literature in the Canadian context. Specifically, previous studies indicated that immigrants in small to mid-sized cities earned significantly higher wages than those in the host country's larger cities. This finding is consistent with studies from the US and across various European countries (e.g., Hall et al., 2011; Donato et al., 2008); and two previous Canadian studies (e.g., Bernard, 2008; Fong et al., 2015). While this study does not specifically examine variations in earnings across different metropolitan areas or cities, the analysis of provincial variations suggests that similar patterns may exist. Specifically, my findings indicate that immigrants in NMID earn slightly higher wages than their counterparts in MID. This supports hypothesis 1 that immigrants perform better outside Canada's gateway destinations. A possible explanation could be attributed to the earlier discussion

that there may be less competition in the labour market of NMID compared to MID (refer to chapter 2).

Furthermore, Quebec vs ROC was examined to provide another perspective on the regional earnings disparity among immigrants, given the slight differences in immigration policies, language barriers and cultural backgrounds between the two regions. Despite the differences, the findings show similar patterns, highlighting the importance of considering regional variations in immigrants' labour market performance. For both females and males, the results show that immigrants in Quebec earn significantly less than their counterparts in ROC. Some potential factors contributing to this include language barriers, skill mismatch, and wage discrimination. Quebec is predominantly French-speaking, and language proficiency can affect job opportunities and wages. Since the pool of prospective immigrants who know French only is smaller than that of prospective immigrants who know English only, one would expect that the human capital of immigrants in Quebec would be lower than their counterparts in ROC. In addition, skill mismatch, where the skills and qualifications of immigrants do not match the demands of the local labour market, may contribute to lower wages and limited job opportunities in Quebec. According to Nadeau and Seckin (2010), Quebec has, for some time, put relatively more weight on specific skills and occupations and less on education and experience in selecting prospective immigrants than the ROC. Therefore, the differences may have made Quebec less effective in attracting successful immigrants than the ROC, which could help explain the more significant immigrant wage gap. Finally, a possible reason could be discrimination against immigrants. Many studies have hinted at the possibility of immigrants being more discriminated against in Quebec than in ROC (e.g., Boudarbat (2005)), hence the wider earning gaps.

The differential effects of explanatory variables on immigrants' wages between NMID and MID:

The results for RQ2 are discussed in sections 5.2.2 and 5.2.3. I find that all human capital and demographic factors included in the study affect the earnings of immigrants in both destinations. Although the PNPs allow the smaller Provincial Governments to recruit immigrants with skills favourable to the local job demand, highly skilled immigrants are often prioritized. As observed in the descriptive statistics (refer to Tables 4a and 4b), for females and males, the proportion of certain immigrant characteristics (e.g., bachelor's degree or above) is not significantly different between destinations. However, similarities and discrepancies in how some of the characteristics relate to wages are found. For example, for males and females, having lower language proficiency is not different between destinations. However, immigrants in both destinations are penalized for not knowing either of the official languages. As discussed in chapter 2, immigrants with lower language

proficiency may face various barriers to accessing well-paying jobs that require good communication skills. Also, it could hinder their ability to demonstrate their skills and qualifications to potential employers, leading to a skill mismatch in the labour market. These could result in lower wages and fewer job opportunities. Therefore, finding no differences means language ability is equally essential in NMID and MID.

Also, I find differences in the wage penalty for foreign credentials. The results for females indicate that while the penalty of having a credential from Europe/US is significantly different, there is no difference for those with a credential from “less developed/other” countries. However, in either case, the earning disadvantages are more pronounced for females in NMID. This contradicts Hypothesis 2, which states that the effect of explanatory variables on wages would be less for immigrants in NMID than in MID. Meanwhile, the results for male immigrants are mixed. While a positive relationship between credentials from Europe/US and wages is found for men in NMID, a negative relationship is observed for those in MID. Yet the positive relationship in NMID reinforces the argument of Dietz et al. (2009), who claimed that Canadian employers tend to perceive the credentials of immigrants from Europe/ US as of higher quality and more transferable to the Canadian context relative to credentials from Asia, Africa and the Middle East (discussed in Chapter 2). This could imply that employers in NMID are more discriminatory concerning foreign credential recognition than their counterparts in MID. On the other hand, I find that while having a credential from “other/less developed” countries negatively affects earnings in NMID and MID, the earning disadvantage is minor for men in NMID. This finding is consistent with previous studies affirming that foreign educational qualifications are not a significant handicap for immigrants outside the central regions (Haan, 2008; Bernard, 2008; Reitz, 2001). An explanation is that due to the shortage of skilled labour, employers in NMID pay less attention to immigrants’ credentials than those in MID. As discussed in chapter 3, the large pool of skilled immigrants in MID allows employers to be pickier and more penalizing of foreign credentials than employers in NMID.

Having discussed some similarities between males and females above, there are also notable differences worth exploring. For instance, the relationship between educational attainment and wages is distinct for each gender. Educational attainment does not make a difference between the destinations for females. Highly educated females (i.e., bachelor/above) are equally rewarded in both NMID and MID and earn higher wages than females with less than a high school education. This is also the case for men with a bachelor’s/above. Moreover, wages for men with college or technical training differ between the destinations, with those in NMID more advantaged. A possible explanation is that industries that demand specialized/technical skills may be more concentrated in NMID, leading to higher demand, better job prospects, and higher wage premiums for men with

college/technical training certifications. Conversely, the labour market in MID may be more competitive due to the higher supply of men with college/technical training. Hence the lower wage premiums offered (as discussed in chapter 2).

Racial discrimination between visible minorities and White immigrants:

The third research question of this thesis can be answered by referring to the results of chapter 5, sections 5.3.2, 5.3.3 and 5.3.4:

RQ3: How do visible minority immigrants fare in both destinations? Is Racial discrimination more pronounced in MID than in NMID?

For this analysis, I hypothesized that visible minority immigrants in NMID would face less wage discrimination than those in MID. While previous research argues that the prevalence of racial hierarchies in the larger metropolises explains the earning disadvantages (e.g., Li, 2000; Dion and Kawakami, 1996), results from this study suggest that employers in NMID equally possess prejudices against visible minority immigrants. In this analysis, most variables explain the wage differences for females and males in both destinations (refer to section 5.3.3). Thus, the wage gaps are primarily influenced by educational attainment, low language proficiency and foreign credentials. For instance, while a bachelor's degree or above decrease wage gaps, college or technical training increases the gaps in both destinations. A possible explanation for this would be differences in the types of jobs or industries where these credentials are particularly valuable. Employers may place a higher value on certain types of degrees or certifications for certain jobs. For example, employers may prefer to hire individuals with a bachelor's degree for higher-level or management positions while valuing college or technical training for more technical or hands-on roles. Unfortunately, these preferences may vary by race. The results for college or technical training cohorts indicates the potential of discrimination against visible minorities with these educational level certifications relative to Whites.

Additionally, while knowing English and French decreases the wage gaps, low language proficiency increases them. Language skills are valuable in the Canadian job market, particularly for jobs requiring interaction with customers or clients. Canadian employers in the customer service or hospitality industries value employees who can communicate effectively with various individuals. Although this study does consider the influence of industry types in which visible minorities are employed, it is possible that individuals with limited language skills may be less likely to be employed in such jobs, which could contribute to the observed earnings disadvantage for visible minority individuals.

Alternatively, for the unexplained portion (refer to results in section 5.3.4), I find that the wage gaps in NMID have the largest unexplained portion compared to MID for females and males.

Despite this, most of the explanatory variables do not significantly contribute to the unexplained portion in NMID except for the contributions of college/technical training for females and foreign credentials from other countries for males. Conversely, MID has the lowest unexplained portion, with variables such as bachelor's degree/above, knowledge of English and French and credentials from other countries making a significant contribution. The results suggest that other factors, such as differences in experience, labour market conditions and institutional factors, may influence the wage gap in NMID. Therefore, it cannot be definitively concluded that NMID is more discriminatory than MID. It is important to note that a sizeable unexplained portion in NMID does not necessarily imply that discrimination is playing a role, although it could be a factor. Further research is needed to determine the specific factors contributing to the wage gap in NMID and to make more robust conclusions about the nature of the wage gap in this region. The results of this study provide important insights into the wage gap in these regions. Still, more work is needed to fully understand the complex issues contributing to earnings differences between visible minority and White immigrant men.

6.1: LIMITATIONS

This study contributes to the existing research gaps surrounding immigrants' economic well-being outside the major immigrants' destination; like others, it is not without limitations.

The main limitation of this study is the selection issue involving the choice of immigrant destination. As noted earlier, selection bias can lead to variations in the wages of immigrants between destinations. For example, immigrants who are more highly skilled or educated than others may choose a destination that offers higher-paying jobs or a higher standard of living. Also, immigrants with specific industry experience or in-demand skills may be more likely to be employed in high-paying jobs, potentially earning higher wages. For example, suppose highly educated immigrants choose to reside in a destination, say NMID. In that case, this could cause wages to be higher or lower (if the increases in labour supply depress wages). Alternatively, different destination factors, such as the availability of jobs, competition in the labour market, high cost of living, and social/cultural networks, can cause immigrants to reside in either NMID or MID. For example, a destination with favourable economic conditions and more extensive social/cultural networks exposes immigrants to better opportunities and job information that could provide higher earnings. Therefore, it is important to interpret these findings cautiously. Dealing with this selection issue is not easy. Still, to address it as much as possible, a wide range of relevant covariates that would affect wages are included in the analysis. Nevertheless, there may be some unobservable differences between immigrants going to MID or NMID, which are not controlled. This includes

unobservable preferences for the types of jobs (i.e., low vs high-paying), occupations, work experiences, and motivations. Similarly, for the Oaxaca-Blinder model, as mentioned in chapter 4, the unexplained portion may include potential effects of differences in the unobserved variables. While this study (like others) associates the unexplained part with racial discrimination, it does not make it the only reason for the wage gap between visible minorities and White immigrants. Thus, there is a possibility that these omitted variables could explain some of the wage gaps. Therefore, to alleviate this problem, questions related to the unobserved variables and the choice of destination should be included in future surveys.

Another potential limitation is that the NMID estimates may be influenced by certain NMID provinces more than others, such as Alberta and Saskatchewan. These provinces are home to industries such as oil and gas that offer high-paying positions, which may skew the overall estimates. By pooling these higher wages with the lower wages in the Atlantic region, the coefficients may overestimate the wage gaps and limit their generalizability to other provinces. It is important to be aware of these potential limitations when interpreting and drawing conclusions from the results.

Finally, limitations pertain to the dataset used. First, the 2016 census data does not differentiate the categories of immigrants; thus, economic immigrants, refugees, and family class. Meanwhile, the skills and experience of these individuals may vary, and they may face different economic barriers. Alternative datasets that track this information, such as the Census of Population and the longitudinal immigration datasets, may benefit future studies. Also, due to the small sample size of visible minorities in some NMID provinces (e.g., Atlantic Canada), this study did not separate visible minorities into different ethnic or racial groups. Instead, the different samples of these groups in the provinces were lumped together (for NMID and MID). Meanwhile, visible minorities are heterogeneous, and the wage gap between Whites and individual ethnic groups may differ. For example, the experience of Blacks may vary from that of Asians, as discussed by Pendakur et al. (2007). Therefore, treating all the individual ethnic groups as a homogenous group may bias the wage gap. Future research should consider exploring the differences through this lens.

CHAPTER 7: CONCLUSION

Recent immigrants to Canada have increasingly settled outside Canada's major immigrant destinations (MID) provinces since 2016, yet little is known about the labour market outcomes of these immigrants in the new destination provinces. The purpose of this thesis is to fill the gap in the literature in this regard. Using the 2016 Canadian census, I compare the wage gaps between immigrants in NMID and MID, focusing on educational attainment, language proficiency, foreign credential, and visible minority status. Further, White and visible minority immigrants are differentiated in the analysis to explore the extent of racial discrimination in NMID and MID.

The results indicate that irrespective of gender, immigrants in both destinations earn on average more than native-born. More importantly, those in NMID perform slightly better in the labour markets than in MID. As discussed in this study, factors such as differences in the value placed on immigrants' observable characteristics and other unobserved differences in characteristics may have influenced the wage gaps between the destinations. For example, results show that immigrant men in NMID are less penalized for having credentials outside Canada. In some cases, such as having credentials from Europe/US and the educational level of college/technical training, they are even more advantaged than their counterparts in MID. However, there are instances where those in MID are relatively advantaged. For example, for females, immigrants with credentials from outside Canada are less penalized than their counterparts in NMID, amongst others. Also, in both destinations, the visible minority wage gap for men results from the endowment and coefficient effects. In MID, most of the wage gap can be explained by the fact that visible minority immigrants have some characteristics that may have disadvantaged them in the labour market. However, in NMID, most of the wage gap is unexplained by observables and potentially by unobservable characteristics. Findings about the overall earning advantage of immigrants in NMID have policy implications for Provincial Governments in NMID. Therefore, to attract and retain more immigrants to those provinces, the following recommendations should be considered:

7.1: POLICY RECOMMENDATIONS

Governments in NMID should focus assistance on immigrants with low human capital characteristics, such as language skills. From tables 5a and 5b, it can be observed that the earnings of immigrants are significantly disadvantaged by this variable. Employers in NMID expect immigrants to be proficient in the official languages. As discussed earlier, knowledge of the country's official languages is equally important in both destinations. Therefore, a useful policy option is that the NMID governments should provide more language training opportunities for

immigrants with limited knowledge of the official languages. This will enable them to be more economically mobile. As their language skills improve, they could potentially earn higher wage premiums. Foreign-trained immigrants may encounter fewer challenges with their credentials in NMID. However, I encourage the Provincial Governments to provide additional incentives, like those implemented by the Saskatchewan government (mentioned in chapter 2). Furthermore, to allocate funds for foreign credential recognition programs offered by organizations that assist in evaluating international qualifications.

Again, governments in NMID should promote policies aimed at reducing social and economic inequalities, such as poverty reduction and universal healthcare, as this can significantly reduce workplace discrimination by addressing the underlying causes of systemic inequality. These policies help create a more equal and just society where all individuals have access to the same opportunities and resources regardless of race or background. By reducing the barriers to education and economic opportunities and providing equal access to healthcare and other services, these policies can help level the playing field and reduce the disparities between different racial groups. Therefore, addressing these broader issues can help to create a more equitable society and reduce discrimination in all its forms. This could also potentially increase immigrant retention (especially since the majority are visible minorities) in these provinces.

Finally, more information about the economic performance of immigrants in NMID should be readily available through the media, governmental websites and even the Canadian high commissions in source countries. Providing such information can increase transparency and improve the reputation of provinces in NMID as immigrant-friendly destinations. This information can attract immigrants seeking better economic opportunities and provide a clear understanding of the potential economic benefits of immigrating to NMID. It can also help dispel misconceptions about discrimination or other barriers and ensure that immigrants are fully aware of their opportunities. Moreover, the ability to compare the conditions between destinations will hopefully entice them to immigrate to the provinces outside the major ones. Such a policy initiative will enhance immigrants' successful attraction and retention in the NMID provinces.

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APPENDIX A: TABLES

Table i. OLS model results without adjusting for sample selection bias for Females.

VARIABLES	ln_wages
<u>Immigrant Status(ref=native-born)</u>	
Immigrants	-0.009 (0.015)
<u>Residence(ref=MID)</u>	
NMID	0.029*** (0.01)
Immigrant*NMID	0.006 (0.022)
<u>Educational attainment (Ref=less than high school)</u>	
High school	0.213*** (0.02)
College or technical training	0.008 (0.026)
Bachelor's degree or above	0.417*** (0.025)
<u>Language Proficiency(ref=English only)</u>	
English and French	0.006 (0.013)
Other	-0.123*** (0.043)
<u>Location of Study (ref=Canada)</u>	
Europe/US	-0.166*** (0.023)
Other	-0.485*** (0.019)
<u>Race(ref=Whites)</u>	
visible minority	-0.023 (0.014)
<u>Age group(ref=below 35years)</u>	
35-54yrs	0.447*** (0.01)
55yrs/above	0.287*** (0.015)
<u>Labourforce status(ref=not in labour force)</u>	
In labour force	1.562*** (0.023)
<u>Marital status(ref=never married/single)</u>	
Married/living common law	0.574*** (0.012)
Separated/divorced/widowed	0.592*** (0.02)
<u>Number of children(ref= no toddler)</u>	
Have a toddler <5years	-0.397*** (0.02)
Constant	7.952*** (0.034)

Standard errors are in parentheses. *** p<0.01, ** p<0.05, * p<0.1

Table ii. OLS model results without adjusting for sample selection bias for Males.

VARIABLES	ln_wages
<u>Immigrant Status(ref=native-born)</u>	
Immigrants	-0.003 (0.015)
<u>Residence(ref=MID)</u>	
NMID	0.122*** (0.01)
Immigrant*NMID	0.02 (0.02)
<u>Educational attainment (Ref=less than high school)</u>	
High school	0.201*** (0.016)
College or technical training	0.100*** (0.022)
Bachelor's degree or above	0.371*** (0.022)
<u>Language Proficiency(ref=English only)</u>	
English and French	-0.068*** (0.014)
Other	-0.321*** (0.043)
<u>Location of Study (ref=Canada)</u>	
Europe/US	-0.119*** (0.022)
Other	-0.392*** (0.018)
<u>Race(ref=Whites)</u>	
visible minority	-0.207*** (0.014)
<u>Age group(ref=below 35years)</u>	
35-54yrs	0.397*** (0.009)
55yrs/above	0.048*** (0.014)
<u>Labourforce status(ref=not in labour force)</u>	
In labour force	1.583*** (0.028)
<u>Marital status(ref=never married/single)</u>	
Married/living common law	0.927*** (0.013)
Separated/divorced/widowed	0.804*** (0.03)
<u>Number of children(ref= no toddler)</u>	
Have a toddler <5years	0.058*** (0.013)
Constant	8.111*** (0.034)

Standard errors are in parentheses. *** p<0.01, ** p<0.05, * p<0.1

Table iii: Heckman 2-step model estimating logged wages between immigrants and native-born in Quebec and ROC for females.

VARIABLES	Outcome model adjusted for selection	Selection model
	ln(wages)	zero wages
<u>Immigrant Status(ref=ative-born)</u>		
Immigrants	0.035*** (0.009)	0.023 (0.028)
<u>Residence(ref=ROC)</u>		
Quebec	-0.020* (0.01)	-0.153*** (0.03)
Immigrant*Quebec	-0.148*** (0.016)	-0.043 (0.046)
<u>Educational attainment (Ref=less than high school)</u>		
High school	0.206*** (0.011)	0.02 (0.03)
College or technical training	0.101*** (0.016)	-0.110** (0.045)
Bachelor's degree or above	0.546*** (0.015)	-0.097** (0.046)
<u>Language Proficiency(ref=English only)</u>		
French only	-0.123*** (0.012)	-0.065* (0.036)
English and French	-0.028*** (0.009)	0.014 (0.026)
Other	-0.268*** (0.028)	0.315* (0.182)
<u>Location of Study (ref=Canada)</u>		
Europe/US	-0.191*** (0.015)	0.128*** (0.047)
Other	-0.428*** (0.013)	-0.047 (0.038)
<u>Race(ref=Whites)</u>		
visible minority	-0.141*** (0.009)	0.075*** (0.024)
<u>Age group(ref=below 35years)</u>		
35-54yrs	0.735*** (0.005)	-0.106*** (0.018)
55yrs/above	0.618*** (0.008)	-0.160*** (0.021)
<u>Labourforce status(ref=not in labour force)</u>		
In labour force		0.832*** (0.017)
<u>Marital status(ref=never married/single)</u>		
Married/living common law		0.428*** (0.017)
Separated/divorced/widowed		0.363*** (0.034)
<u>Number of children(ref= no toddler)</u>		
Have a toddler <5years		-0.200*** (0.028)
Lambda	-0.93*** (0.004)	
Constant	9.708*** (0.016)	1.054*** (0.047)
Number of observations	176,469	
Selected observation	173,687	
Non-selected observation	2,782	

Table iv: Heckman 2-step model estimating logged wages between immigrants and native-born in Quebec and ROC for males.

VARIABLES	Outcome model adjusted for selection	Selection model
	ln(wages)	zero wages
<u>Immigrant Status(ref=native-born)</u>		
Immigrants	0.063*** (0.01)	0.001 (0.033)
<u>Residence(ref=ROC)</u>		
Quebec	-0.127*** (0.011)	-0.108*** (0.039)
Immigrant*Quebec	-0.134*** (0.016)	-0.04 (0.055)
<u>Educational attainment (Ref=less than high school)</u>		
High school	0.106*** (0.009)	0.072*** (0.027)
College or technical training	0.164*** (0.015)	-0.122** (0.058)
Bachelor's degree or above	0.471*** (0.015)	0.093 (0.06)
<u>Language Proficiency(ref=English only)</u>		
French only	-0.152*** (0.013)	-0.036 (0.044)
English and French	-0.067*** (0.01)	-0.006 (0.034)
Other	-0.383*** (0.029)	0.083 (0.113)
<u>Location of Study (ref=Canada)</u>		
Europe/US	-0.117*** (0.015)	0.081 (0.059)
Other	-0.348*** (0.013)	-0.075 (0.054)
<u>Race(ref=Whites)</u>		
visible minority	-0.327*** (0.009)	-0.02 (0.028)
<u>Age group(ref=below 35years)</u>		
35-54yrs	0.823*** (0.006)	-0.139*** (0.026)
55yrs/above	0.610*** (0.008)	-0.376*** (0.027)
<u>Labourforce status(ref=not in labour force)</u>		
In labour force		0.979*** (0.018)
<u>Marital status(ref=never married/single)</u>		
Married/living common law		0.690*** (0.024)
Separated/divorced/widowed		0.571*** (0.068)
<u>Number of children(ref= no toddler)</u>		
Have a toddler <5years		0.05 (0.046)
Lambda	-0.89*** (0.006)	
Constant	10.156*** (0.015)	0.929*** (0.059)
Number of observations	175,760	
Selected observation	173,450	
Non-selected observation	2,310	

Standard errors are in parentheses. *** p<0.01, ** p<0.05, * p<0.1

Table 5a2: Heckman selection model results for females

VARIABLES	Non-major immigrant destination	Major immigrant destination
	zero wages	zero wages
<u>Educational attainment (Ref=less than high school)</u>		
High school	0.166 (0.164)	0.044 (0.094)
College or technical training	0 (0.174)	-0.157 (0.098)
Bachelor's degree or above	-0.062 (0.17)	0.01 (0.1)
<u>Language Proficiency(ref=English only)</u>		
English and French	-0.23 (0.147)	-0.091 (0.069)
Other	-0.501*** (0.192)	0.439** (0.223)
<u>Location of Study (ref=Canada)</u>		
Europe/US	0.426** (0.193)	0.041 (0.075)
Other	-0.017 (0.106)	-0.06 (0.057)
<u>Race(ref=Whites)</u>		
visible minority	0.044 (0.096)	0.025 (0.048)
<u>Age group(ref= below 35years)</u>		
35-54yrs	-0.06 (0.091)	-0.036 (0.051)
55yrs/above	0.029 (0.144)	-0.120* (0.063)
<u>Length of residence</u>		
Established immigrants	-0.281 (0.226)	-0.322** (0.135)
Recent immigrants	-0.296 (0.22)	-0.325** (0.137)
<u>Labourforce status(ref=not in labour force)</u>		
In labour force	0.718*** (0.09)	0.788*** (0.048)
<u>Marital status(ref=never married/single)</u>		
Married/living common law	0.531*** (0.093)	0.427*** (0.047)
Separated/divorced/widowed	0.812** (0.333)	0.365*** (0.079)
<u>Number of children(ref= no toddler)</u>		
Have a toddler <5years	-0.141 (0.141)	-0.013 (0.089)
Constant	1.170*** (0.273)	1.362*** (0.165)

Standard errors are in parentheses. *** p<0.01, ** p<0.05, * p<0.1

Table 5b2. Heckman selection model results for males

VARIABLES	Non-major immigrant destination	Major immigrant destination
	zero wages	zero wages
<u>Educational attainment (Ref=less than high school)</u>		
High school	0.025 (0.19)	0.279*** (0.074)
College or technical training	0.148 (0.261)	0.025 (0.084)
Bachelor's degree or above	0.243 (0.23)	0.377*** (0.094)
<u>Language Proficiency(ref= English only)</u>		
English and French	-0.413* (0.231)	0.275* (0.151)
Other	-0.024 (0.326)	0.124 (0.12)
<u>Location of Study (ref=Canada)</u>		
Europe/US	0.423 (0.312)	0.003 (0.095)
Other	0.165 (0.193)	-0.066 (0.075)
<u>Race(ref=Whites)</u>		
visible minority	-0.294 (0.179)	-0.067 (0.059)
<u>Age group(ref= below 35years)</u>		
35-54yrs	0.12 (0.177)	-0.063 (0.066)
55yrs/above	-0.134 (0.184)	-0.187** (0.073)
<u>Length of residence</u>		
Established immigrants	0.213 (0.2)	-0.03 (0.127)
Recent immigrants	0.363 (0.223)	-0.009 (0.134)
<u>Labourforce status(ref=not in labour force)</u>		
In labour force	0.798*** (0.138)	0.843*** (0.053)
<u>Marital status(ref=never married/single)</u>		
Married/living common law	0.730*** (0.15)	0.565*** (0.062)
Separated/divorced/widowed	5.640*** (0.539)	0.349** (0.138)
<u>Number of children(ref= no toddler)</u>		
Have a toddler <5years	-0.113 (0.214)	0.069 (0.106)
Constant	0.760** (0.363)	0.872*** (0.167)

Standard errors are in parentheses. *** p<0.01, ** p<0.05, * p<0.1

Table 7: Summary of Oaxaca two-fold decomposition results for Whites and visible minority immigrants in NMID and MID, respectively, for females after correcting for sample selection bias using Heckman.

		mean log wage	wage gap	portion explained	portion unexplained
NMID	Whites	10.112	-0.011	0.162***	-0.173***
	visible minority	10.123			
MID	Whites	10.203	0.084***	0.153***	-0.069***
	visible minority	10.119			

Table 8: Summary of Oaxaca two-fold decomposition results for Whites and visible minority immigrant men in NMID and MID after correcting for sample selection bias using Heckman.

		mean log wage	wage gap	portion explained	% Of wage gap	portion unexplained	% Of wage gap
NMID	Whites	10.923	0.369***	0.115***	31.17%	0.254***	68.83%
	visible minority	10.554					
MID	Whites	10.674	0.220***	0.113***	51.36%	0.107***	48.64%
	visible minority	10.454					

APPENDIX B: FIGURES

Figure 1: Immigrant inflows to Canada from 1990-2020



**** Figure generated using data from Statistics Canada <https://www.statcan.gc.ca/>

Figure 2: Trend of immigrant inflows in the major immigrant destinations

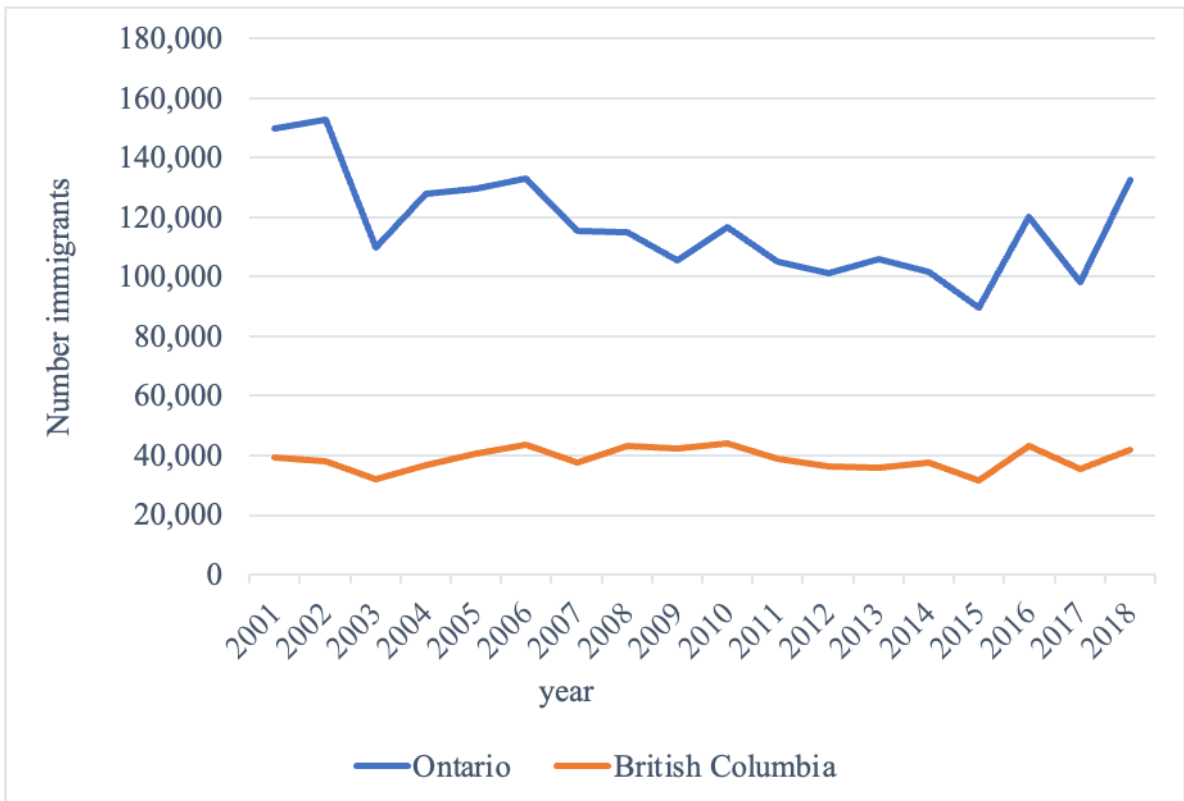


Figure 3: Trend of immigrant inflows in the non-major immigrant destination (Prairies)

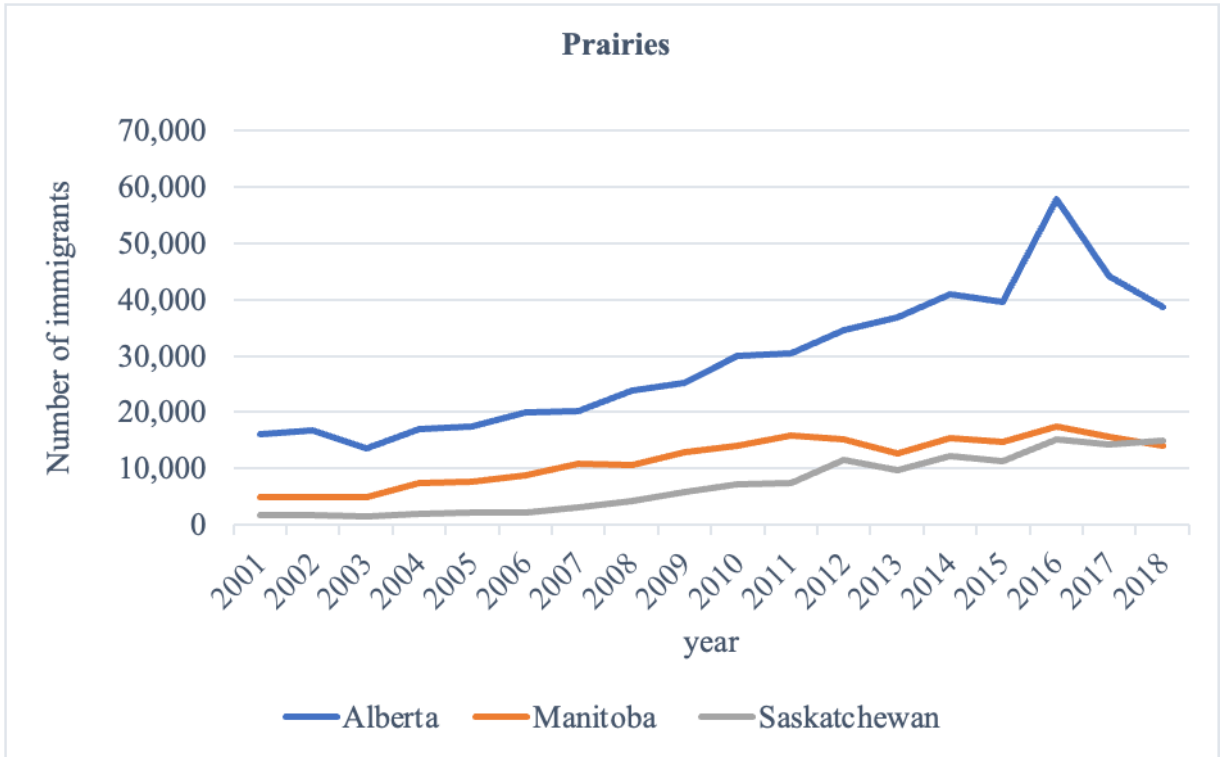


Figure 4: Trend of immigrant inflows in the non-major immigrant destination (Atlantic Canada)

