Off-colour: Canada's ethnically stratified labour market, 1995 - 2020

Krishna Pendakur Dept of Economics, Simon Fraser University <u>pendakur@sfu.ca</u>

Ravi Pendakur Graduate School of Public & International Affairs, University of Ottawa <u>pendakur@uottawa.ca</u>

#### Abstract

In a series of papers, Pendakur and Pendakur (1998, 2002, 2011, 2015) document that Canadian-born visible minority earnings disparity increased over the 4 decades from the 1970s to the mid 2000s. In this work, we extend the timeframe of analysis to cover earnings differentials from 1995 to 2020. The novelty of this research comes from the fact that we use a consistent model and definition of ethnic groups over time and assess both broad and detailed ethnic categories. We assess these differentials at the Canada-wide level as well as for Montreal, Toronto and Vancouver.

We find that disparity for visible minorities a whole are small and stable for women, with visible minority women earning 4-5 per cent less than comparable white women throughout the period. However, disparities are large and possibly increasing for men, with visibile minority men earning 12-15 per cent less than comparable white men over 1995 to 2005 and 16-18 per cent less over 2010-2020. In addition, we find evidence of a hierarchy of earnings inequality amongst visible minority ethnic groups, with Chinese and South Asians faring better than Caribbean and African-Black groups. We also find strong evidence that disparities are larger in Montreal than in Toronto and weak evidence that they are smaller in Vancouver than in Toronto.

#### Introduction

A large body of Canadian research shows that immigrants can face substantial labor market disparity, which may have worsened since 1990 (see for example, Akbari, 1992; Howland and Sakellariou, 1993; Stelcner and Kyriazis, 1995; Christofides and Swidinsky, 1994; Baker and Benjamin, 1995; Hum and Simpson, 1999; Pendakur and Pendakur, 1998; Lian and Matthews, 1998). Pendakur and Pendakur (1998, 2002, 2011, 2015) document that amongst the Canadian born population, visible minority earnings disparity increased over the 4 decades from the 1970s to the mid 2000s. In this work, we extend the timeframe of analysis to assess earnings differentials faced by ethnic minorities from 1995 to 2020. We also assess these differentials for visible minorities as a whole and for various non-European ethnic groups, and study disparities at the Canada-wide level and for Montreal, Toronto and Vancouver. We find that negative earnings differentials faced by visible minorities as a whole are small and stable for women, and large and possibly increasing for men. In addition, we find that there is a hierarchy of outcomes that are relatively stable across CMAs and over time with Caribbean and African black workers facing higher levels of disparity than do Chinese and South Asian workers.

# Literature:

Since the late 1990s, there has been a fairly substantial literature that has attempted to measure the variation in earnings across ethnic groups in Canada. Howland and Sakellariou (1993) used 1986 Public Use Census data and found that as compared to white men, the earnings gap faced by visible minorities ranged from 2% for South Asian men to 21% for Black men. Using the 1989 Labour Market Activity Survey, Christofides and Swindinsky (1994) concluded that, while British or French immigrant males were not generally disadvantaged in the Canadian labor market, minority immigrant males earned 18% less than non-minority males on average. Pendakur and Pendakur (1998) found that substantial earnings differentials existed between groups, with immigrant visible minorities facing the largest earnings differentials as compared to their respective white Canadian-born counterparts (15.8 percent for men and 9.1 percent for women). Since then, the literature concerning earnings differentials across ethnic groups in Canada has grown substantially (see for example, Pendakur and Pendakur 2002; 2011; Blackaby, et al. 2002; Black 2006; Qui and Schellenberg 2022; Skuterud 2010). For example, Pendakur and Pendakur (2002) and Yap (2010) used 1996 census and 1999 firm data respectively, finding that even amongst the Canadian-born, visible minority workers earned less than their white counterparts.

Several researchers have pointed to important heterogeneity that may be masked when looking within the overall visible minority earnings gap. Lin (2015) finds that visible minority earnings gaps are smaller between women than they are between men (see also Pendakur and Pendakur 1998, 2002). Amongst Canadian-born workers, Pendakur and Pendakur (1998) emphasize that Indigenous workers are the most disadvantaged, bringing to the foreground the

fact that the aggregation of all non-white groups into a single category obscures variation between various ethnic groupings. In this paper, we do not investigate Indigenous labour market outcomes; we pursue that objective in a companion paper (Pendakur and Pendakur 2024b). In this paper, we consider both the aggregate visible minority category and its constituent subcategories in an attempt to capture the evolution over time of the heterogeneity across groups.

While much of the research looks at a selection of groups in a moment in time, there is a generational dimension to these earnings gaps. Skuterud (2010) found that there were observable decreases in the earnings gaps from one generation to the next for Black and Chinese groups, but that southeast Asian groups' earning gaps held constant irrespective of generation. However, because many of the non-European minority groups are relatively new to Canada, the counts are often low for the children of Canadian-born ethnic minorities (third generation plus). Because we focus on a large number of ethnic groups, many of whom have low counts in this dimension, we don't address the generational dimension. In this paper, we focus exclusively on the earnings disparities faced by Canadian-born ethnic minorities (second generation plus).

Much of the work has focused on earnings from employment in part because selfemployment earnings can be difficult to interpret. However, there are other aspects of earnings that have been studied. Fang and Heywood (2010, 2006) found that earnings differentials are small for minorities reporting performance pay as part of earnings. Pendakur and Pendakur (2015) looked at the degree to which including occupation and industry controls reduces inequity. However, they also argued that if these characteristics are rationed by employers, including work-based controls which may, therefore, mask one form of discrimination. More recently, Block et al (2019) used tabular data from the 2016 Census to describe broadly uncontrolled differences in economic outcomes for racialized groups. They found that racialized men and women faced substantial penalties in the labour force. However, because they did not control for immigrant status, they could not speak to the degree to which the gap diminished for those born in Canada. Akbari and Debbarman (2022) also used the 2016 census to focus on employment probabilities across generations, concluding that several visible minority groups faced employment challenges that continued through to the third generation. Although selfemployment income and employment probabilities are interesting, they are beyond the scope of the current paper, where we exclusively study earnings from wages and salaries of employed people.

An important predictor of earnings differentials for ethnic minorities in Canada is the location in which individuals reside. Sigouin (2017) studied this variation using 2006 Census and 2011 National Household survey to compare earnings differentials by region. She found that in Quebec, all observed visible minority groups (Black, Chinese, Arab, and South Asian) had an average wage gap differential of 44-48% less than whites (Sigouin, 2017). This was in stark contrast to the Atlantic provinces, where Chinese and South Asian groups faced no disparity, while Arab and Black groups did. Black groups in particular, faced differentials of 35% less than whites (Sigouin, 2017). In this paper, we speak to this geographic variation by separately

estimating minority disparity in Canada's three largest cities: Montreal, Toronto, Vancouver. The focus on census metropolitan areas allows us to de facto control for the effects of markets.

In the United States, Darity et al (1996) used 1980 and 1990 census data and found significant differences in the earnings of major ethnic groups across the United States. White men of Russian ancestry had average earnings nearly twice that of the national average at the time. In contrast, African American men could only expect to make about 60% of the national average. People of Indian ancestry earned on average 115% of the national average, and those of Chinese or Korean ancestry earned the same as the national average. People of Vietnamese ancestry, on the other hand, earned only 65% of the national average (Darity et al., 1996). Every other Hispanic and non-white group could expect to earn less than the average to varying degrees. In general, though, the average earnings gap across all groups was smaller in 1990 than it was in 1980, and it was smaller than it was in 1970 (Semyonov and Lewin-Epstein, 2009). As such, they found that earnings gaps have diminished decade over decade.

A decade later, research still pointed to an imbalance between ethnic groups, though disparities are smaller. Using the 2000 U.S. census to estimate the intersectionality of ethnicity and gender in earnings differentials, Greenman and Xie (2008) found sizable earnings differentials by gender and race in the U.S. labor market, with women earning less than men and most racial/ethnic minority groups earning less than whites. When compared to the findings of Darity et al. (1996) we find that results from the 2000 census show a significant reduction in the size of the earnings gaps, with no group facing an earnings penalty of over 25% as compared to the majority white group.

Wang (2008) looks at how ethnicity affects one's earnings. She uses the same 2000 U.S. census as Darity et al (1996) and a two-level linear model that controls for personal-level variables and correlation errors for individuals in the same labor market to examine just this. Prior to introducing any individual-level variables, Asian men made more than Hispanic or Black men, and an individual from any of these groups would earn less if they were an immigrant (Wang, 2007). However, when controlling for age, education, working hours, self-employment, and English proficiency, the advantage that Asian men have over Black or Hispanic men all but disappears. White men continue to be the highest earners regardless. Furthermore, the earnings gap between men and women of any ethnic group remains relatively consistent regardless of if we control for individual-level variables or not (Wang, 2008). Within a local labor market, there is evidence that the presence of certain groups can have a positive or negative effect on the earnings of another group. For instance, the presence of black men has a positive earnings effect for white men, and a negative earnings effect for black and Asian women (Wang, 2007). However, other studies have found that these effects differ in public and private sectors (Semyonov and Lewin-Epstein, 2009) So, while ethnicity is still clearly important in determining earnings, it does so while interacting with other factors in a dynamic way.

In conducting their research on ethnic earnings differentials in the United States over a 60-year time frame, Hirsch and Winters (2013) found that by 2010, the earnings gap between whites and black workers was greater than it has ever been. They relate this to trends in joblessness, with Whites and Hispanics suffering all-time highs of 17% and 24% joblessness respectively. In contrast, Black Americans had a joblessness rate of over 40%. Once again, we see that education has a significant effect on the earnings gaps of individuals, and when we account for education the gap across ethnic groups decreases significantly. According to their analyses, education accounts for 50% of the disparity between groups, with a claimed 2-2.5% of the disparity being explained by ethnicity among whites and Hispanics. Although Canada and the United States have had very different histories regarding the legal status of Black residents, we find similarly severe disparities for Black workers in Canada over the entire period of the study.

Fisher and Houseworth (2017) use thirty years of Current Population Survey data and find similar patterns for minority women even after correcting for self-selection into the labor force. Because Canadian census data lack plausible instruments for labor force participation, we are unable to correct for time varying patterns in participation. We therefore restrict our analysis to comparisons amongst men and amongst women, and do not attempt to draw comparisons across genders.

Bishop et al (2021) assess racial disparities over 40 years of data from the Panel Study of Income dynamics. Because their data follow a fixed set of households and people over time, they are able to study earnings mobility in addition to earnings disparity. They find significant variation in earnings mobility across races that seems to reinforce earnings disparities. In contrast, our data are repeated cross-sections, with different individuals in each wave. Consequently, we focus exclusively on earnings disparities and are not able to comment on trends in mobility.

As with Canadian findings, part of the debate surrounding earnings differentials in the United States is rooted in the differences in 'ethnic' groups. For instance, Darity et al. (1996) compare dozens of ethnic groups, while Hirsch and Winters (2013) assess only 3; white, Black, Hispanic, omitting Asians entirely. That said, the general trends suggest that ethnic whites earn more than most other groups, and education is increasing in importance. In Britain, findings are similar. Using data from 1993 to 1997 and 2005 to 2008, Brynin and Guveli (2012) found that no group in the United Kingdom earns more than the white majority. Further, aside from Black Africans and South Asians, most groups experienced very little improvement in their earnings differences. Clark and Nolan (2021) use British Labour Force Survey data from 1993 to 2019 and found that the relative success of larger minority groups of Britain varies by group (Clark and Nolan, 2021). As compared to majority whites, Indians saw worsening yields from their individual characteristics, while Pakistanis saw substantial increases. Black Africans saw diminishing returns as well, while Bangladeshis saw less change in either direction. Interestingly, Indians and Bangladeshis were observed to suffer a disproportionate amount of unlawfully low

pay between 2000 and 2006, with 35% of Bangladeshis in the U.K. during that time being paid less than the national minimum wage (Clark and Nolan, 2021).

Much like in Canada where province is an important determinant of the earnings gap (see Sigouin, 2017), regionality plays a big role in the U.K. In particular, there exists a north/south divide where the south tends to have better outcomes for non-whites. Interestingly, there is also an observed glass ceiling of sorts, where groups who have low gaps (Chinese, Indian) actually do worse when we zoom in on their earnings relative to those of whites in the same occupation, which is attributed to an inability to access the highest paying jobs (Brynin and Guveli, 2012).

Immigration status also plays an important role in determining earnings in the U.K. OLS regressions of the 1993-2009 Labour Force Surveys show that white immigrants in the U.K. face a 5% earnings penalty and non-white immigrants face a 21% penalty (Hunt, 2012). The effect of immigrant status seems to disappear when controlling for individual characteristics but reappears when accounting for those immigrants from English-speaking countries. This indicates that *where* one immigrates from is more important than merely the fact that one has immigrated at all (Hunt, 2012). Oaxaca-Blinder decompositions show that native-born British individuals see greater yields from their characteristics. Even if those characteristics are held constant, an immigrant is likely to experience worse returns, which is explained by their immigrant status (Hunt, 2012).

There has been a focus on exogenous factors, with one study finding education to have primacy over ethnicity in determining the size of the earnings gap (Nakhaie, 2006). Even when immigrants (white and visible minority) attain their highest level of education in Canada, it has a lower rate of return relative to earnings than for native-born Canadians (Mo Kwon, 2018; Laryea and Hayfron, 2005). That being said, higher education can still lead to lower earnings gaps, with graduate degrees able to reclaim as much as 4% of the gap (Yap, 2010). Beyond education, earnings gaps tend to be higher for ethnic minorities working in ethnic enclaves as opposed to those who work in "regular sectors" (Jiang, 2021). As is the case in Canada and the United States, in the UK, most groups also see returns on education, except for those individuals who identified as Black Caribbean. Clark and Nolan (2021) conclude that while whites remain the best paid group in Britain, the way forward towards reduced earnings gaps rests in education, as it yields the highest return on investment.

The guiding conclusions from the above research suggest that in many cases, minorities born in Canada, particularly those ancestries from outside Europe continue to face significant disparities in labour market attainment. However, these disparities vary widely by group. Given this, the use of a catch-all category like 'visible minority' or 'racialized groups' for policy purposes is questionable.

# Methodology

We seek to assess the degree to which Canadian-born visible minority groups may be subject to earnings differentials over the period 1995 to 2020. As much as possible, we copy the methodology of Pendakur and Pendakur (2002) who study these disparities over the period 1970 to 1995. Pendakur and Pendakur (2011) did the same exercise for the period 1995 to 2005. A key difference between the current work and Pendakur and Pendakur (2002 and 2011) is that whereas they ran unweighted regressions, we run weighted regressions because Statistics Canada introduced a policy in the early 2000s to require such weighting.

Relative to Pendakur and Pendakur (2011) who cover 1995 to 2005, the empirical novelty in this work is to cover the period 2005 to 2020. But, because Pendakur and Pendakur (2011) ran unweighted regressions, we provide estimates from weighted regressions for the entire period 1995 to 2020.

The important difference between weighted and unweighted estimates arises from a combination of factors: a) about a quarter of Indigenous people in Canada live on reserves; b) Indigenous people living on reserve face very large earnings gaps compared to other workers; and, b) Indigenous people living on reserves are oversampled by the Census of Canada. Thus, unweighted estimates may be misleading when it comes to measuring overall disparity faced by the total Indigenous population.. However, it does not make much difference in the estimates of earnings disparities faced by non-Indigenous ethnic minorities. In this paper, we study only visible minority ethnic groups. This set of ethnic groups does not include Indigenous groups; we report on Indigenous groups in a companion paper (see Pendakur and Pendakur 2024b).

#### Data

We use earnings and personal characteristics data from the Censuses of Canada 1996, 2001, 2006, 2016, 2021 plus the National Household Survey of 2011<sup>1</sup>. The 2021 Census provides earnings data for both 2019 and 2020, merged from administrative tax data. The 1996, 2001 and 2006 datasets are twenty per cent samples of all Canadian households and the 2016 and 2021 datasets are twenty-five per cent samples of Canadian households. The NHS was sent to about one-third of all households.

<sup>&</sup>lt;sup>1</sup>. The National Household Survey replaced the census in 2011. Compared to the 2006, 2016 and 2021 Censuses, participation in the NHS was not mandatory, and both response and completion rates are much lower (see <u>https://www12.statcan.gc.ca/nhs-enm/2011/ref/about-apropos/nhs-enm\_r005-eng.cfm</u>). Because Statistics Canada has a policy of imputing blank responses in the census (and therefore the NHS), there is far more data imputation in the 2011 NHS as compared to the 5 censuses we use. However, Wayne Smith, Canada's chief statistician at the time, argued that the survey can provide robust estimates for most variables, even if it cannot match the Censuses in terms of data quality (Smith 2015). The 2006 dataset is a twenty per cent sample of all Canadian households and the 2016 and 2021 datasets are twenty-five per cent samples of Canadian households, while the NHS was sent to about one-third of all households.

We run linear regressions that are estimated on the subset of all people who are Canadian citizens by birth, worked for someone else in the previous year (class of worker equals paid worker); are aged 25 to 64; earned more than 100\$; spoke an official language (English or French); and report a level of schooling (including no certificate). The year of earnings is the year prior to Census year, except for the 2021 Census. In that Census, we have income reported for both 2019 and 2020 and run regressions for both years. We note that class of worker refers to the class in the week of the census. For all years but 2019, we assume that the class of worker reported in the census year is the same as would have been reported in the income year. For 2019 earnings only, we impute class of worker by coding as "paid workers" all people who received more labour income from wages and salaries than labour income from self-employment.

The dependent variable in all regressions is the natural logarithm of total annual earnings from wages and salaries. The logarithmic function 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.

Rather than reporting estimated coefficients from log-earnings regressions, we report proportionate earnings gap equal to exp(b)-1, where b is the coefficient from the log-earnings regression. Proportionate earnings gaps may be interpretted as the per cent difference in earnings between a particular group and the base category of white workers. Because regressions are run by gender, all reported proportionate earnings gaps are within gender.

We include the same control variables as Pendakur and Pendakur (2002), with some slight changes in coding due to the evolution of census coding categories over time:

Age: Eight age cohorts as dummy variables (age 25 to 29, 30 to 34, 35 to 39, 40 to 44, 45 to 49, 50 to 54, 55 to 59, and 60 to 64). Age 25 to 29 is the left-out category.

Household size: A dummy variable indicating a single-person household and a continuous variable indicating the number of family members for other households.

Official language: Three dummy variables (English, French, bilingual - English and French). English is the left-out dummy variable.

Marital status: Five dummy variables indicating marital status (single - never married, married, separated, divorced, widowed). Single is the left-out dummy variable.

Schooling: 12 levels of certificates as dummy variables (none, high school, trades certificate, college certificate less than 1 year, college certificate less than 3 years, college certificate 3 or more years, university certificate less than Bachelors, Bachelor's degree, BA+, medical degree, Masters degree, and PhD). No certificate is the left-out dummy variable.

City of Residence: In regressions that pool all the cities together, we use 11 dummy variables indicating the census metropolitan area (CMA) of Halifax, Montreal, Ottawa, Toronto, Hamilton,

Winnipeg, Calgary, Edmonton, Vancouver and Victoria, plus a flag for not living in one of the ten listed CMAs.

Group status: *Coarse groups* are drawn from the *population* question which asks if the respondent is white or a member of a set of non-European groups. Together with the questions related to Indigenous identity, we create a single variable set with three dummy variables indicating broad group status (White, Visible Minority, Indigenous Person). In our empirical work, we focus on the visible minority dummy (and not the Indigenous indicator). White is the left-out dummy variable.

We also define *detailed ethnicity* for the non-Indigenous population on the basis of the first two write-in responses to the Ancestry question. The non-Indigenous ethnic groups are: British, Canadian, French, British French Canadian within group multiples, American Australian New Zealand, Austrian German, Scandinavian, Dutch, Baltic origins, Belgian, Polish, Russian, Czech and or Slovak, Hungarian, Portuguese, Italian, Greek, Jewish, Balkan, Other European, White multiple origin, Spanish, Latin American, Arab or West Asian, South Asian, Chinese, Black, African Black, Caribbean, South East Asian, Other Asian, and visible minority multiple origin. In our empirical work, we focus on the latter 10 groups (Latin American to visible minority multiple), which together comprise the ethnic groups that comprise the visible minority category. The left-out category is British origin.

Appendix Tables A1-A2 give summary statistics on our data. In Table A1, we give the weighted numbers of observations of males and females, respectively, in our samples that fall into our broad and detailed ethnic groups and who live in the CMAs of Montreal, Toronto and Vancouver. Here, the weighted counts are rounded to the nearest 5 and roughly equal the number of observations times 5 for five of the seven time periods (1995 - 2015). The main point we wish to make is that we have plenty of observations in each of our ethnic groups of interest and in each of our 3 CMAs of interest.

Appendix Tables A2 gives summary statistics on the outcome variable, log-earnings, and on covariates age, household size, official language knowledge, marital status and education. We do not provide summary statistics on CMA of residence (other than the big 3) or group status, as these are implied from Table A1. The upper panel gives the mean of the outcome variable by group. Here we see, for example, that in 1996 the mean log-earnings of white men was 0.15 higher than that of visible minority men. By 2019, this gap in mean log-earnings had shrunk to 0.11. The objective of our regression analysis is to evaluate this gap conditional on the other characteristics of workers including age, education, etc.

#### Results

We present proportionate earnings gaps between selected visible minority ethnic groups and the base category of British-origin people. These are computed from regression coefficients on ethnic group dummies in a regression of log-earnings on ethnic group dummies and a set of control variables. The proportionate earnings gap is equal to exp(coef)-1, and we report its standard errors computed via the delta method.

Proportionate earnings gaps may be interpreted as giving the percentage difference in earnings faced by a minority worker in a given visible minority ethnic group compared to a majority-group worker with similar personal characteristics (age, education, city of residence, etc). For our coarse groups, visible minority workers are compared to white workers. For our detailed ethnic groups, members of specific visible minority ethnic groups are compared to British-origin workers.

We run regressions for Canada as a whole, including city of residence dummies, and we run regressions separately for Montreal, Toronto and Vancouver, Canada's 3 largest cities. Each regression is run separately for men and for women, and each regression is run separately with broad ethnicity dummies and with detailed ethnicity dummies. Thus, we ran 16 regressions for each of 7 waves of Census earnings data (1995, 2000, 2005, 2010, 2015, 2019, 2020).

# Estimated Disparity for Visible Minorities as a Whole

Table 1 provides estimates of the earnings differentials facing visible minorities from regressions using broad ethnic groups. It gives the estimated proportionate earnings gap for visible minority men and women for Canada as a whole and for Montreal, Toronto and Vancouver over the income years 1995 to 2020. We show these estimates graphically in Figures 1 (women) and 2 (men). The error bars provide 90% confidence intervals. The thick gray lines give the estimate for Canada as a whole.

At the level of Canada as a whole, the disparity faced by visible minority women in comparison to white women is small, about 3 to 4 percentage points, and completely static over time. Pendakur and Pendakur (2001) observed that visible minority women earned *more* than similarly aged and educated white women in the 1970s and 1980s. However, that earnings premium declined over time, and by the mid 1990s, had disappeared, replaced by a small earning gap. Essentially, we find that this near parity in earnings for visible minority women continued for the next two decades.

In contrast, for men, the disparity is large, about 13 to 18 percentage points, and increased over time, from a 13% proportionate earnings gap in 1995 to 18% gap in 2020. At the Canada-wide level, we see that over the 4 waves from 1995 to 2010 visible minorities face an earnings gap of 13% to 16%. However, disparities enlarge slightly over the next decade. Over the 3 waves of earnings data from 2015 to 2020, visible minority men face an earnings gap of 17% to 18%. Although the increase is small (e.g., 2 percentage points), because the magnitudes are estimated very precisely, this increase is statistically significant.

Our results are a bit different from what has been observed in terms of earnings disparities by "race" in the United States. Rogers (2024) shows that Black women's earnings converged towards those of white women over the 1970s and 1980s but had not converged any

further since 1990. Our results for women have a similar spirit. However, Rogers (2024) finds that Black men's earnings converged towards white men's earnings slowly over the 1990s, 2000s and 2010s (page 2). In Canada, we do not see this convergence over the last 20 years; instead, we see a small amount of divergence.

This increase in earnings disparity faced by visible minority men is statistically significant, large, and a bit surprising. Over this period, the fraction of the Canadian population that was visible minority increased from 11% to 26%, and the fraction of the Canadian-born population that was visible minority increased from 3% to 11% (these figures are from Statistics Canada's public-use microdata). So, the increase in disparity coincided with a slow and steady increase in the fraction of Canadians in this broad group. In fact, by 2020, Toronto was majority visible minority, and Vancouver nearly so.

Given that Canada's ethnic diversity increased most in its large cities, it is instructive to examine earnings disparities at the city level. We run the same regressions (dropping CMA dummies) for Canada's 3 largest cities of Montreal, Toronto and Vancouver, and the estimated earnings differentials are shown in Figures 1 and 2 in thin lines. Looking first at women (Figure 1), we see substantial heterogeneity in the level and time-path of disparities across cities.

In Montreal, the visible minority earnings gap narrowed from 14% in 1995 to about 6% in 2020 (a statistically significant change). In Toronto, disparity was roughly constant around 4% throughout the period. In Vancouver, visible minority women earned an earnings *premium* throughout the period, indicating that the earnings of visible minority born in Canada women in Vancouver were higher than those of similarly aged and educated Canadian-born white women. The premium shrank from 14% in 1995 to about 8% in 2020 (a marginally statistically significant difference). The message here is that the Canada-wide estimate—which was unchanged over 25 years—masks some variation across cities.

Turning to men (figure 2), between 2005 and 2020, the point-estimates suggest that earnings gaps faced by visible minority men increased in all 3 cities: by 5 percentage points in Vancouver, 4 percentage points in Montreal and 2 percentage points in Toronto. These shifts are statistically significant in Vancouver and marginally so in Montreal. So, the Canada-wide trend of increasing visible minority disparity for men is evident in these large cities, where the bulk of visible minority people live.

However, the big message from Figures 1 and 2 is in the overall levels of earnings gaps across the cities, rather than in the change of those gaps over time. While earnings gaps may have increased by a few percentage points over time, the differences across cities dwarfs this over-time change. Throughout the period, earnings gaps in Montreal are 10 to 15 percentage points higher than those in Vancouver. Earnings gaps in Toronto lie neatly in between. These findings echo those of Pendakur and Pendakur (2001) who studied the same cities over the 1970s to the 1990s.

Estimated Disparity for Visible Minority Ethnic Groups

A different kind of heterogeneity masked by the numbers in Table 1 is heterogeneity across the constituent groups of the visible minority category. Table 2 gives estimates at the Canada-wide level of proportionate earnings gaps faced by the 10 visible minority groups that together exhaust the visible minority category. They are: Latin American; Caribbean; Black; African Black; Arab/West Asian; South Asian; Chinese; Southeast Asian; Other Asian; and multiple-origin Visible Minority.

When we examine heterogeneity over time across the groups that make up the visible minority category, there are two kinds of heterogeneity we might observe: there could be different levels across groups; and/or there could be different time trends across groups.

Looking first at Figures 3 and 4, which present estimated earnings differentials for 8 of the groups for women, we see that time trends are pretty flat for all groups except, possibly, Caribbean, SE Asian and Arab/West Asian women. For Caribbean women, disparities declined from about 15% to about 6%, and for SE Asian women, disparities decreased from (an imprecisely estimated) earnings gap of about 10% to a (precisely estimated) rough parity by the end of the period. For Arab/West Asian women, disparity increased from roughly parity to about 6%.

The more important heterogeneity across groups is in overall level of disparity. Chinese women outperform other visible minority women, indeed, their earnings are slightly *higher* than those of similarly aged and educated British-origin women. SE Asian and South Asian women face earnings disparities in the very early waves, but by 2010 to 2020, have reached earnings parity with British-origin women. Spanish/Latin American, Caribbean, Arab/West Asian and Visible Minority multiple-origin women all face small earnings gaps of 5% to 10% in the later part of the period. Finally, women reporting African Black origins face the largest earnings gaps of around 15% throughout the period.

The big picture we draw from these results is that for women there is not a lot of heterogeneity in time trends, but there is a lot of heterogeneity in the levels of disparities faced by different groups.

Turning to the results for men, we see different patterns. First, the points estimates of the levels of earnings disparity are larger than those observed for women (analogous to what we saw in Figure 1). Whereas women face earnings gaps/premia ranging from a 10% premium to a 20% gap; for men, the disparities range from 0% to 35%.

Looking first at the time trends, we saw in Figure 1 that for visible minority men as an aggregate, there was a slight increase in earnings disparity over the decades. We see this increase in disparity evident for Arab/West Asian, African Black and Visible minority multiple-origin men. For these groups, the earnings gaps increased by 10 to 15 percentage points.

In contrast, none of the remaining groups saw statistically significant changes in earnings disparity over the 1995 to 2020. However, the latter part of our period shows some convergence for some groups. In particular, the earnings gaps faced by Spanish/Latin American and South Asian men declined over time from about 20% in 2000 and 2010 to about 11% in 2020 (or 15% in 2019). This latter finding is in sharp contrast to those of Qui and Schellenberg (2022) who found that South Asians outperformed whites in the labour market. Thus, there is some variation in time-trends across the groups.

As we saw for women, the heterogeneity in levels is the most eye-catching result. Chinese men face earnings gaps less than 10% throughout the period. Spanish/Latin American men, South Asian and Visible Minority multiple-origin men earn 12% to 20% less than similar British-origin men over the 2010s. Finally, SE Asian, Caribbean and African Black men face earnings gaps exceeding 20% throughout the period.

Estimated Disparity in Montreal, Toronto and Vancouver

In Figures 1 and 2, we showed that Toronto and Montreal have larger visible minority earnings gaps than Vancouver. In Figures 3 to 6, we showed that Caribbean and African Black workers face larger disparities than other groups, including, e.g., Chinese workers. A natural question is whether or not group level disparities vary across cities. That is, are the large earnings seen in Montreal driven by the fact that Montreal has more visible minorities in relatively disadvantaged ethnic groups, or is it driven by the fact that those groups are more disadvantaged in Montreal? In this section, we approach these questions by estimating the model separately for each Montreal, Toronto and Vancouver (dropping the CMA dummies). In this work, because Montreal and Vancouver have essentially non-overlapping compositions, the most informative comparisons will be between Montreal and Toronto and between Vancouver and Toronto.

Table 3 shows estimated earnings differentials for men and women in Montreal, Toronto and Vancouver for 5 of the Visible Minority ethnic groups: Arab/West Asian; Caribbean; S. Asian; Chinese; and Visible Minority multiple-origin. The Table presents estimated percent earnings differentials and estimated standard errors, as daggers that indicate statistically significant differences between earnings differentials in Montreal and Toronto, or between Vancouver and Toronto.

Looking first at Toronto, we see estimated earnings disparities that are similar to those seen for Canada as a whole. Since almost half the visible minorities in Canada live in Toronto, it is not surprising to see this similarity. For example, for Arab/West Asian women, we see earnings disparities between 3% and 8% over 2005 to 2020 at both the Canada-wide level (reported in Table 2) and specifically in Toronto (reported in Table 3). We see a similar story for other ethnic groups as well, both for women and for men.

Now, we turn to whether or not disparities for various ethnic groups are different between Montreal and Toronto and Vancouver and Toronto, respectively. Looking first at women in Montreal, the estimated disparities faced by Caribbean women are smaller than those in Toronto over 2011 to 2019, and statistically significantly so in 2019. In contrast, the estimated disparities faced by Chinese, Visible minority and multiple-origin women are larger than those in Toronto over 2011 to 2019, and statistically significantly so in 2019.

Looking next at Vancouver, we see that the estimated earnings differentials faced by Chinese and South Asian women are statistically significantly smaller than those in Toronto throughout the period. For women in these groups, relative earnings are better than similar women in Toronto. For women, no ethnic groups in Vancouver have relatively worse earnings outcomes than those in Toronto.

Turning to the results for men. In Montreal, the estimated earnings differentials are statistically significantly different from those in Toronto for many Visible Minority ethnic groups in many years. For the most part, the estimated earnings differentials are larger in Montreal than in Toronto. Over 2010 to 2019, the estimated earnings differential faced by Caribbean men in Montreal is 5 to 10 percentage points larger than that observed in Toronto. Those faced by South Asian men are 5 to 15 percentage points larger in Montreal than in Toronto.

The big picture here is that the daggers in the Table indicate that Montreal has greater disparities for many ethnic groups than those same groups face in Toronto. Consequently, we interpret the finding in Table 1 (shown also in Figure 2)—that the visible minority earnings gap is larger in Montreal than in Toronto—to be driven not solely by the composition of visible minorities in Montreal versus Toronto, but rather at least in part by different patterns of earnings disparity within ethnic groups across the cities.

Looking finally at the estimated disparities faced by visible minorities in Vancouver, we see only Visible minority multiple-origin men with a pattern that differs clearly from what is seen in Toronto. These men have relatively higher earnings (that is, smaller earnings disparities) than similar men in Toronto. However, for Chinese-origin and South-Asian origin men (the two largest visible minority ethnic groups in Vancouver), there is no clear ranking across the cities.

The shading in the Table indicates ethnic group/city combinations where we have fewer than 1000 weighted observations informing our estimates. For these cells, we don't think we should trust the inference, which suggests that in Vancouver, we should pay attention to the estimates only to South Asian, Chinese and Visible Minority multiple origin people. The big picture here is that, for the most part, earnings disparities in Vancouver are not statistically different from those in Toronto. Consequently, we conclude that the finding in Table 1 (also shown in Figure

2)—that the visible minority earnings gap is smaller in Vancouver than in Toronto—may well be mostly driven by the composition of visible minorities in Vancouver.

## Conclusions

Over the course of the last 3 decades, there has been a substantial literature measuring earnings differentials faced by ethnic minorities both in Canada and the United States (see: Akbari, 1992; Howland and Sakellariou, 1993; Darity et al 1996; Pendakur and Pendakur 2002; 2011; Blackaby, et al. 2002; Black 2006; Greenman and Xie 2008; Block et al 2019; Qui and Schellenberg 2022). Work in the United States (Darity et al 2006; Greenman and Xie 2008; Wang 2007) has at times contradicted those of Hirsch and Winter's (2013) findings that the gap has increased for Black men, with others (for example, Darity et al) concluding that earnings gaps may be narrowing.

In Canada, findings are also varied. While there is some debate in both the United States and Canada over the level and nature of earnings differentials faced by minorities, there is agreement that a 'white' vs 'non-white' categorization is too coarse to adequately understand inequity in the labour market. Researchers have noted a lot of heterogeneity in the labour outcomes of different minority groups. While there is general agreement that amongst women, earnings differentials faced by minorities are relatively small or positive, those faced by non-European origin men tend to be much larger and universally negative. An exception to this "minority men earn less" pattern is found in Qiu and Schellenberg (2022) who consider only young workers aged 25-44 and who consider disparities in public versus private employment. They find that Chinese and South Asian origin young men in the public sector actually outperform similarly aged and educated white men in the public sector.

In this paper we have assessed the earnings differential faced by Canadian-born minorities over a twenty-five-year period (1995 - 2020) using consistent definitions of ethnic groups over the entire period. This allows us to assess both the differential faced by ethnic groups, as well as change over time both in Canada as a whole, and in Canada's three largest metropolitan areas.

For women, our findings mirror previous research, showing that the gaps amongst female workers tend to be small, and some groups (South East Asian and Chinese) may actually enjoy a premium, conditional on their observed characteristics. We saw very little change in these gaps over time.

The same cannot be said for men, where non-European origin men universally face negative earnings differentials compared to similarly aged and educated British-origin men. Further, we find that contrary to our expectations, the earnings gaps faced by non-European origin men who are born, educated and socialized in Canada have not improved dramatically over time. Rather the gaps faced by groups, and in particular Caribbean and African-Black Canadians, have remained remarkably stable and high. We note that some groups have seen some improvement. The differential faced by South Asian men shrank from about 20% in 2000 to about 15% in 2019. However, Arab and West Asian men saw a decline in incomes relative to British origin men, with earnings differentials increasing from about 4% in 1995 to about 14% in 2019. Similarly, the earnings gap faced by African Black men increased from 22% to 30% over 2005 to 2019.

It is widely acknowledged that immigrants in Canada face substantial earnings differentials (see for example: Akbari 1992; Li 2000; Pendakur and Pendakur 1998; Nadeau and Seckin 2010). Much—though not all—of this can be explained via productivity-related factors such as lack of foreign credentials recognition, language difficulties or time in Canada. The existence of earnings gaps faced by minorities born in Canada is much harder to write off as a product of productivity differences. The key drivers for immigrants are not relevant for the Canadian-born: language ability (being born in Canada they should be accentless and fluent), lack of credentials (Canadian credentials should be readily recognized) or socialization (entire life in Canada).

The fact that these disparities appear to be stable over time is even more troubling. Recalling that we control for basic personal characteristics, including age, education, language ability and CMA of residence, we cannot easily explain the difference away as a product of visible minorities being younger (which they are) or less educated (which they are not). We therefore find ourselves in a quandary. When we started this work (see Pendakur and Pendakur 1998) we assumed that over time the differences would fade as more and more minorities entered the labour market. Instead, there appears to be a hardening of the status quo – something more akin to a vertical mosaic than a tossed salad. References:<sup>2</sup>

- Akbari, A. 1992. "Economics of Immigration and Racial Discrimination: A literature survey, 1970-1989." Ottawa: Multiculturalism and Citizenship.
- Akbari, A. and S. Debbarman. 2022. Employment Probability of Visible Minority Immigrants in Canada by Generational Status, Circa 2016." <u>Canadian Public Policy</u> 48(S1): pp. 38-48.
- Baker, M., and D. Benjamin. 1995. "Ethnicity, Foreign Birth and Earnings: A Canada/US Comparison." In Transition and Structural Change in the North American Labour Market, ed. M. Abbott, C. Beach, and R. Chaykowski. Kingston, ON: IRC Press, Queen's University. pp: 281-313
- Bishop, J.A., J.G. Rodríguez, and L.A. Zeager. 2021. Race and Earnings Mobility in the US. Journal of Economics, Race, and Policy, 4, pp.166-182.
- Black, D., A. Haviland, S. Sanders, and L. Taylor. 2006. Why do minority men earn less? A study of wage differentials among the highly educated. The Review of Economics and Statistics, 882, pp.300-313.
- Blackaby, D.H., D. Leslie, P. Murphy, and N. O'Leary. 2002. White/ethnic minority earnings and employment differentials in Britain: evidence from the LFS. Oxford Economic Papers, 542, pp.270-297.
- Block, S., E. Galabuzi-Grace, and R. Tranjan. 2019. Canada's colour coded income inequality. Ottawa: Canadian Centre for Policy Alternatives.
- Brynin, M., and A. Guveli. 2012. Understand the Ethnic Pay Gap in Britain. Work, Employment and Society, 264, 574–587. <u>https://doi.org/10.1177/0950017012445095</u>
- Christofides, L.N., and R. Swidinsky. 1994. "Wage Determination by Gender and Visible Minority Status: Evidence from the 1989 LMAS." Canadian Public Policy 20 (1): 34–51.
- Clark, K., and S. Nolan. 2021. The Changing Distribution of the Male Ethnic Wage Gap in Britain. IZA Institute of Labor Economics. <u>https://papers.ssrn.com/sol3/papers.cfm?abstract\_id=3828323</u>
- Darity, W., D. Guilkey, and W. Winfrey. 1996. Explaining differences in economic performance among racial and ethnic groups in the USA. The American Journal of Economics and Sociology, 554, 411–425. <u>https://doi.org/10.1111/j.1536-7150.1996.tb02639.x</u>
- Fang, T. and J. Heywood. 2010. Immigration, ethnic wage differentials and output pay in Canada. British Journal of Industrial Relations, 48(1), pp.109-130.
- Fang, T. and J. Heywood. 2006. Output pay and ethnic wage differentials: Canadian evidence. Industrial Relations: A Journal of Economy and Society, 45(2), pp.173-194.
- Fisher, J.D. and C. Houseworth. 2017. The widening black-white wage gap among women. Labour, <u>313, pp.288-308.</u>
- Greenman, E., and Y. Xie. 2008. Double Jeopardy? The Interaction of Gender and Race on Earnings in the United States. Social Forces, 863, 1217–1244. <u>https://doi.org/10.1353/sof.0.0008</u>
- Hirsch, B. T., and J. Winters. 2013. An Anatomy of Racial and Ethnic Trends in Male Earnings in the U.S. The Review of Income and Wealth, 604, 930–947. <u>https://doi.org/10.1111/roiw.12064</u>

<sup>&</sup>lt;sup>2</sup> The authors declare that they have no conflict of interest

- Howland, J., and C. Sakellariou. 1993. "Wage Discrimination, Occupational Segregation and Visible Minorities in Canada." Applied Economics 25 (11): 1413–22.
- Hum, D., and W. Simpson. 2004. "Economic Integration of Immigrants to Canada: A Short Survey." Canadian Journal of Urban Research 13 (1): 46–62.
- Hum, D. and W. Simpson. 1999. Wage opportunities for visible minorities in Canada. Canadian Public Policy/Analyse de Politiques, pp.379-394.
- Hunt, P. 2012. From the Bottom to the Top: A More Complete Picture of the Immigrant-Native Wage Gap in Britain. 1, 1–18.
- Jiang, S., 2021. A study on the discrepancies between immigrants working in the regular and the ethnic enclave sectors in the Canadian Labor market. Applied Economics, 53(51), pp.5964-5987.
- Laryea, S.A. and J. Hayfron. 2005. African immigrants and the labour market: Exploring career opportunities, earning differentials, and job satisfaction. The African diaspora in Canada: Negotiating identity and belonging, pp.113-31.
- Lian, J., and D. Matthews. 1998. "Does the Vertical Mosaic Still Exist? Ethnicity and Income in Canada, 1991." Canadian Review of Sociology and Anthropology / La Revue Canadienne de Sociologie et d'Anthropologie 35 (4): 461–81.
- Li, P.S., 2000. Earning disparities between immigrants and native-born Canadians. *Canadian Review* of Sociology/Revue canadienne de sociologie, 37(3), pp.289-311.
- Lin, H. 2015. Investigation of Earnings differentials between Visible Minorities and Whites [Major Paper, University of Ottawa]. https://ruor.uottawa.ca/bitstream/10393/32374/1/Lin Hao 2015 researchpaper.pdf
- Mo Kwon, S. 2018. Earnings Differentials between Immigrants and Non-Immigrants in Canada due to Lower Returns to Immigrants' Human Capital [Major Paper, University of Ottawa]. https://ruor.uottawa.ca/bitstream/10393/37173/3/Kwon\_Soon%20Mo\_2017\_researchpaper.pdf
- Nadeau, S. and A. Seckin. 2010. The immigrant wage gap in Canada: Quebec and the rest of Canada. *Canadian Public Policy*, *36*(3), pp.265-285.
- Nakhaie, M. R. 2006. A Comparison of the Earnings of the Canadian Native-Born and Immigrants, 2001. Canadian Ethnic Studies, 382, 19–46.
- Pendakur, K. and R. Pendakur. 2015. Colour of Money Redux: Immigrant and Ethnic Group Earnings Differential in Canada from 1991 to 2006. The Housing and Economic Experiences of Immigrants in US and Canadian Cities. Toronto: University of Toronto Press.
- Pendakur, K., and R. Pendakur. 2002. Colour My World: Have Earnings Gaps for Canadian-Born Ethnic Minorities Changed over Time? Canadian Public Policy / Analyse de Politiques, 28(4), 489–512. <u>https://doi.org/10.2307/3552211</u>
- Pendakur, K., and R. Pendakur, R. 1998. The colour of money: Earnings differentials among ethnic groups in Canada. The Canadian Journal of Economics, 313, 518–548. https://doi.org/10.2307/136201
- Pendakur, K. and R. Pendakur. 2011. Color by Numbers: Minority Earnings in Canada 1995-2005. Journal of International Migration and Integration; Vol. 12(3): 205-329.

- Qiu, H. and G. Schellenberg G. 2022. The weekly earnings of Canadian-born individuals in designated visible minority and White categories in the mid-2010s. Statistics Canada.
- Rodgers, William M. III. 2024. The History of the U.S. White-Black Wage Gap from 1969 to Now. St Louis: Federal Reserve Bank of St Louis. <u>https://www.stlouisfed.org/open-vault/2024/jan/us-white-black-wage-gap-history-from-1969#</u>
- Semyonov, M., and N. Lewin-Epstein. 2009. The declining racial earnings' gap in United States: Multi-level analysis of males' earnings, 1960-2000. Social Science Research, 382, 296–311. https://doi.org/10.1016/j.ssresearch.2008.11.001
- Sigouin, J. 2017. Income Inequality Between Visible Minorities and Whites: A Comparison Between Quebec and the Rest of Canada [Thesis, McGill University]. <u>https://www.proquest.com/docview/2504781136?pq-origsite=gscholar&fromopenview=true</u>
- Skuterud, M. 2010. The visible minority earning gap across generations of Canadians. Canadian Journal of Economics, 433, 860–881. <u>https://doi.org/10.1111/j.1540-5982.2010.01598.x</u>
- Smith, W. 2015. The 2011 National Household Survey the complete statistical story. https://www.statcan.gc.ca/en/blog-blogue/cs-sc/2011NHSstory Ottawa: Statistics Canada.
- Stelcner, M. 2000. "Earnings Differentials among Ethnic Groups in Canada: A Review of the Research." Review of Social Economy 58 (3): 295–317.
- Stelcner, M. and N. Kyriazis. 1995. An empirical analysis of earnings among ethnic groups in Canada. International Journal of Contemporary Sociology, 32(1), pp.41-79.
- Wang, Q. 2008. Race/Ethnicity, Gender and Job Earnings across Metropolitan Areas in the United States: A Multilevel Analysis. Urban Studies, 454, 825–843. <u>https://doi.org/10.1177/0042098007088470</u>
- Yap, M. 2010. Slicing and dicing the gender/racial earnings differentials. International Journal of Manpower, 314, 466–488. <u>https://doi.org/DOI 10.1108/01437721011057038</u>

			1995	20	000	2	2005	2	010		2015	2	2019	2	2020	
sex	region	control	% dif	se of %	% dif	se of %	% dif	se of %	% dif	se of %						
female	Canada	observations	811,055		870,810		940,990		986,165		1,213,580		1,242,420		1,174,895	
		R2	0.133		0.137		0.155		0.143		0.153		0.136		0.157	
		vismin	-0.034	0.010	-0.040	0.008	-0.018	0.006	-0.041	0.005	-0.036	0.004	-0.042	0.003	-0.037	0.004
	Montreal	observations	94,185		99,195		107,365		118,450		138,620		142,125		135,885	
		R2	0.114		0.130		0.154		0.143		0.165		0.145		0.172	
		vismin	-0.143	0.032	-0.141	0.023	-0.080	0.017	-0.104	0.013	-0.065	0.011	-0.075	0.009	-0.057	0.009
	Toronto	observations	79,450		85,505		89,485		97,125		122,705		125,980		117,685	
		R2	0.102		0.097		0.118		0.126		0.150		0.135		0.168	
		vismin	-0.085	0.017	-0.035	0.013	-0.022	0.011	-0.002	0.010	-0.028	0.007	-0.015	0.007	-0.006	0.007
	Vancouver	observations	39,645		41,135		43,345		48,780		57,465		59,925		56,060	
		R2	0.087		0.079		0.094		0.092		0.109		0.096		0.126	
		vismin	0.134	0.025	0.087	0.020	0.137	0.018	0.075	0.015	0.133	0.013	0.050	0.010	0.076	0.011
male	Canada	observations	888,160		917,355		953,710		974,010		1,213,500		1,292,150		1,172,090	
		R2	0.164		0.154		0.172		0.149		0.164		0.135		0.166	
		vismin	-0.125	0.008	-0.162	0.006	-0.132	0.005	-0.165	0.004	-0.179	0.003	-0.170	0.003	-0.177	0.003
	Montreal	observations	97,890		99,695		103,770		113,835		133,690		144,935		131,835	
		R2	0.165		0.146		0.178		0.160		0.182		0.142		0.185	
		vismin	-0.193	0.027	-0.277	0.019	-0.202	0.015	-0.212	0.011	-0.237	0.009	-0.223	0.008	-0.238	0.007
	Toronto	observations	79,425		84,975		87,205		93,645		119,125		128,220		114,795	
		R2	0.185		0.184		0.212		0.198		0.230		0.192		0.240	
		vismin	-0.146	0.015	-0.165	0.011	-0.118	0.010	-0.118	0.008	-0.133	0.007	-0.145	0.006	-0.142	0.006
	Vancouver	observations	41,925		42,385		43,725		49,130		59,010		64,460		58,400	
		R2	0.169		0.159		0.159		0.137		0.162		0.134		0.175	
		vismin	-0.052	0.018	-0.097	0.015	-0.049	0.014	-0.100	0.012	-0.083	0.010	-0.103	0.008	-0.109	0.009

Table1Percent differences between visible minority and white working men and women, 1995 to 2020

Note: other variables in the model are: age cohorts, marital status, official language knowledge, highest educational certificate, household size and selected CMAs

Selection: Canadian citizens by birth whose whose primary source of labour income is from wages and salaries, with non-missing schooling information and reporting more than \$100.

Table	2			
Percent differ	ences between selected Canadia	n-born non-European ethnic gr	oups and British origin worki	ng men and women, 1995 to 2020

		1995	20	00	2	2005	20	010		2015	2	019	2	2020	
sex	control	% dif	s.e. of %	% dif	s.e. of %	% dif	s.e. of %	% dif	s.e. of %						
female	observations	811,055		870,810		940,990		986,165		1,213,580		1,242,420		1,174,895	
	R2	0.134		0.137		0.156		0.143		0.154		0.137		0.158	
	Spanish Latin	-0.279	0.089	-0.180	0.056	-0.034	0.039	-0.057	0.024	-0.070	0.017	-0.072	0.015	-0.090	0.014
	Caribbean	-0.147	0.026	-0.140	0.018	-0.056	0.015	-0.117	0.013	-0.125	0.010	-0.081	0.011	-0.069	0.011
	Black	-0.150	0.057	-0.145	0.041	-0.149	0.047	0.015	0.109	-0.250	0.064	-0.128	0.022	-0.128	0.023
	African Black	-0.081	0.066	-0.144	0.045	-0.192	0.030	-0.071	0.028	-0.170	0.021	-0.164	0.016	-0.142	0.017
	Arab w Asia	0.016	0.037	-0.062	0.027	-0.027	0.021	-0.085	0.019	-0.086	0.014	-0.072	0.011	-0.063	0.011
	S. Asian	-0.009	0.035	-0.051	0.021	0.026	0.015	-0.023	0.012	-0.019	0.010	-0.020	0.009	0.004	0.009
	Chinese	0.105	0.021	0.050	0.017	0.077	0.014	0.020	0.012	0.069	0.010	0.061	0.009	0.069	0.009
	SE Asia	-0.239	0.056	-0.097	0.034	0.092	0.027	0.038	0.020	0.027	0.014	0.016	0.012	0.023	0.012
	Other Asia	0.150	0.031	0.089	0.028	0.074	0.024	-0.027	0.022	-0.021	0.020	0.002	0.016	0.001	0.017
	vismin w other	-0.095	0.015	-0.062	0.013	-0.064	0.010	-0.052	0.008	-0.091	0.006	-0.073	0.006	-0.070	0.006
male	observations	888,160		917,355		953,710		974,010		1,213,500		1,292,150		1,172,090	
	R2	0.1659		0.156		0.1747		0.1517		0.1664		0.1376		0.1682	
	Spanish Latin	-0.335	0.075	-0.189	0.043	-0.097	0.033	-0.225	0.019	-0.196	0.014	-0.162	0.013	-0.144	0.013
	Caribbean	-0.261	0.020	-0.210	0.015	-0.200	0.012	-0.222	0.011	-0.285	0.008	-0.232	0.009	-0.254	0.009
	Black	-0.210	0.042	-0.227	0.035	-0.303	0.033	-0.358	0.078	-0.347	0.059	-0.208	0.021	-0.237	0.020
	African Black	-0.243	0.044	-0.265	0.035	-0.220	0.025	-0.247	0.021	-0.353	0.015	-0.297	0.014	-0.336	0.012
	Arab w Asia	-0.030	0.030	-0.073	0.023	-0.070	0.018	-0.161	0.017	-0.152	0.012	-0.137	0.010	-0.154	0.009
	S. Asian	-0.150	0.024	-0.205	0.015	-0.118	0.012	-0.212	0.009	-0.162	0.008	-0.145	0.008	-0.114	0.008
	Chinese	0.010	0.016	-0.089	0.013	-0.025	0.011	-0.095	0.010	-0.092	0.008	-0.086	0.008	-0.070	0.008
	SE Asia	-0.245	0.043	-0.119	0.029	-0.139	0.019	-0.196	0.014	-0.152	0.011	-0.169	0.010	-0.185	0.009
	Other Asia	0.068	0.024	0.000	0.022	0.040	0.022	-0.038	0.020	-0.044	0.018	-0.096	0.014	-0.093	0.014
	vismin w other	-0.077	0.014	-0.109	0.011	-0.080	0.009	-0.093	0.007	-0.127	0.006	-0.151	0.005	-0.168	0.005

Note: other variables in the model are: age cohorts, marital status, official language knowledge, highest educational certificate, household size and selected CMAs

Selection: Canadian citizens by birth whose whose primary source of labour income is from wages and salaries, with non-missing schooling information and reporting more than \$100.

table:	3

Earnings differentials for selected women and men compared to British origin men and women. Montreal. Toronto and Vancouver, 1995-2020

	Lannigo a	inerentiats for sei	1995	endnamen og	2000	Sinton onginni	2005	ion, i ionaicad,	2010	10000101, 100	2015		2019		2020	
sex	region	control		s.e.of%		s.e.of%		s.e.of%		s.e.of%		s.e.of%		s.e. of%		s.e.of%
female	Montreal	ArabwAsia	-0.014	0.069	-0.008	0.056	-0.045	0.038	-0.096	0.035	-0.035	0.029	-0.025	0.021	-0.014	0.021
iciliate	Fionticat	Caribbean	-0.241	0.058 †	-0.183	0.030	-0.043	0.033	-0.057	0.028	-0.084	0.023	-0.023	0.021	0.024	0.021
		S. Asian	-0.262	0.116	-0.185	0.092	0.001	0.068	-0.206	0.046 ††	-0.090	0.041	-0.057	0.037	-0.007	0.038
		Chinese	0.068	0.093	0.076	0.086	0.028	0.060	-0.017	0.046	0.054	0.041	0.002	0.035 ++	-0.012	0.032 ††
		visminwother	-0.209	0.042	-0.103	0.040	-0.093	0.028	-0.112	0.022 #	-0.108	0.019	-0.105	0.017 ††	-0.084	0.017
	Toronto	ArabwAsia	0.081	0.092	-0.109	0.053	-0.085	0.049	-0.025	0.046	-0.069	0.034	-0.073	0.024	-0.044	0.026
		Caribbean	-0.123	0.036	-0.130	0.025	-0.054	0.022	-0.085	0.021	-0.126	0.016	-0.094	0.016	-0.089	0.017
		S. Asian	-0.091	0.054	-0.073	0.034	0.005	0.027	0.036	0.023	-0.042	0.018	-0.010	0.015	0.035	0.017
		Chinese	0.022	0.036	0.044	0.032	0.075	0.027	0.031	0.023	0.085	0.020	0.115	0.017	0.128	0.018
		vismin wother	-0.186	0.029	-0.121	0.024	-0.048	0.022	-0.022	0.019	-0.107	0.015	-0.062	0.011	-0.051	0.012
	Vancouver	ArabwAsia	0.465	0.317	-0.054	0.173	-0.029	0.121	-0.056	0.121	-0.139	0.075	-0.045	0.040	0.062	0.045 ††
		Caribbean	-0.145	0.126	-0.308	0.108	-0.094	0.115	-0.025	0.119	-0.045	0.094	-0.134	0.095	-0.003	0.117
		S. Asian	0.076	0.067 †	0.103	0.047 ††	0.235	0.041 ††	0.108	0.032 †	0.151	0.028 ††	0.047	0.021 ††	0.081	0.023 †
		Chinese	0.181	0.039 ††	0.133	0.033 ††	0.204	0.033 ††	0.058	0.027	0.152	0.026 ††	0.082	0.019	0.134	0.021
		visminwother	-0.093	0.043	-0.051	0.038	-0.047	0.033	0.010	0.030	-0.010	0.025 ††	-0.014	0.018 ††	0.014	0.019 ††
male	Montreal	ArabwAsia	0.029	0.068 †	-0.099	0.047	-0.024	0.039	-0.049	0.036 ††	-0.147	0.025	-0.134	0.020	-0.164	0.018 ††
		Caribbean	-0.236	0.060	-0.372	0.032 ††	-0.222	0.027	-0.246	0.023 ††	-0.307	0.017 ††	-0.255	0.017 ††	-0.238	0.017
		S. Asian	-0.122	0.152	-0.279	0.069	-0.208	0.049 †	-0.321	0.036 ††	-0.231	0.033 ††	-0.183	0.034	-0.155	0.032 †
		Chinese	-0.119	0.066	-0.163	0.058	-0.086	0.047	-0.158	0.038	-0.173	0.030 ††	-0.127	0.033	-0.140	0.031 ††
		visminwother	-0.213	0.040 ††	-0.086	0.040 ††	-0.105	0.027	-0.126	0.022	-0.174	0.018 †	-0.202	0.016 ††	-0.195	0.015 †
	Toronto	ArabwAsia	-0.148	0.074	-0.029	0.058	-0.050	0.048	-0.171	0.041	-0.107	0.031	-0.097	0.024	-0.089	0.024
		Caribbean	-0.311	0.026	-0.197	0.021	-0.192	0.019	-0.165	0.019	-0.216	0.015	-0.202	0.016	-0.231	0.016
		S. Asian	-0.258	0.038	-0.183	0.026	-0.110	0.022	-0.158	0.018	-0.085	0.016	-0.124	0.014	-0.089	0.015
		Chinese	-0.059	0.031	-0.117	0.023	-0.060	0.021	-0.097	0.019	-0.040	0.016	-0.070	0.014	-0.042	0.014
		visminwother	-0.090	0.030	-0.178	0.022	-0.126	0.019	-0.091	0.018	-0.136	0.014	-0.157	0.010	-0.163	0.010
	vancouver	ArabwAsia	-0.133	0.124	-0.252	0.093 #	-0.005	0.143	0.090	0.138 †	-0.034	0.079	-0.089	0.035	-0.111	0.035
		Caribbean	-0.134	0.111	0.158	0.130 #	-0.096	0.086	-0.019	0.093	-0.303	0.058	-0.167	0.074	-0.304	0.062
		S. Asian	-0.152	0.044 †	-0.186	0.032	-0.073	0.028	-0.232	0.021 #	-0.115	0.020	-0.106	0.018	-0.083	0.019
		Chinese	0.022	0.029 †	-0.073	0.024	-0.015	0.023	-0.090	0.021	-0.045	0.019	-0.085	0.015	-0.102	0.015 #
notool	aignificant	vismin wother	-0.160	0.037	-0.151	0.032	-0.036	0.030 ††	-0.089	0.026	-0.083	0.021	-0.099	0.016	-0.124	0.015 ††
notes:	significant	ly different from To	bionto at:	0.05:	<del>tt</del>											

0.10: †

weighted frequency less than 1000

othervariables in the model are: age cohorts, marital status, official language knowledge, highest educational certificate, household size and selected CMAs

Selection Canadian citizens by birth whose whose primary source of labour income is from wages and salaries, with non-missing schooling information and reporting more than \$100.

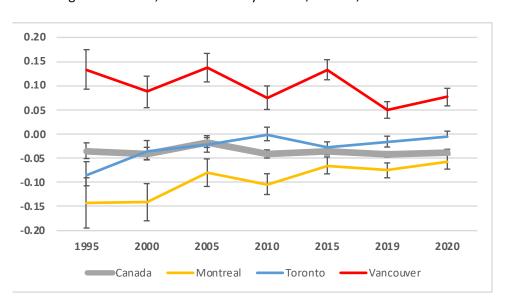


Figure 1 % Earnings differentials, visible-minority females, Canada, 1995 to 2020

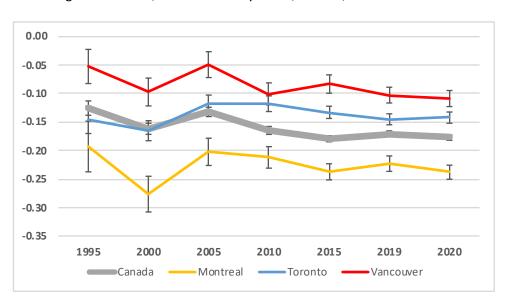
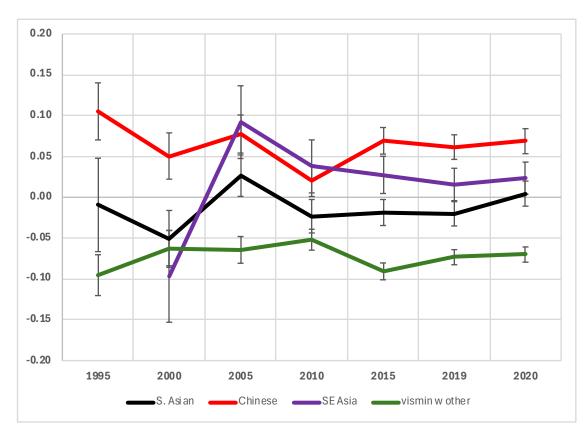
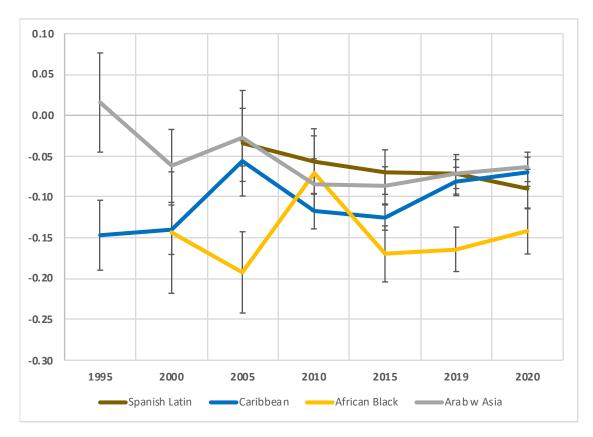


Figure 2 % Earnings differentials, visible-minority males, Canada, 1995 to 2020

Figure 3 Earnings differentials amongst females for selected ethnic groups, compared to British origin women, Canada, 1995 to 2020





# Figure 4Earnings differentials amongst females for selected ethnic groups,<br/>compared to British origin women, Canada, 1995 to 2020

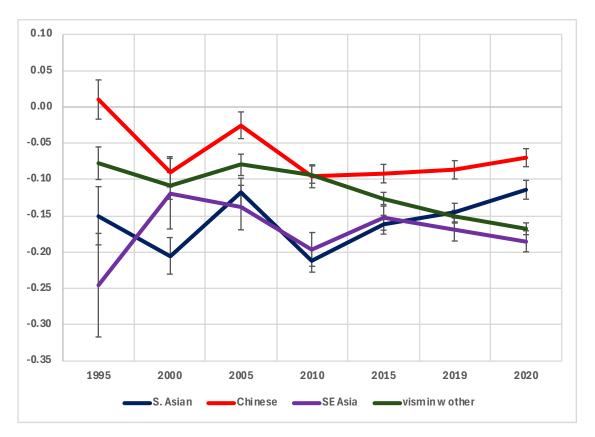


Figure 5 Earnings differentials amongst males for selected ethnic groups, compared to British origin women, Canada, 1995 to 2020

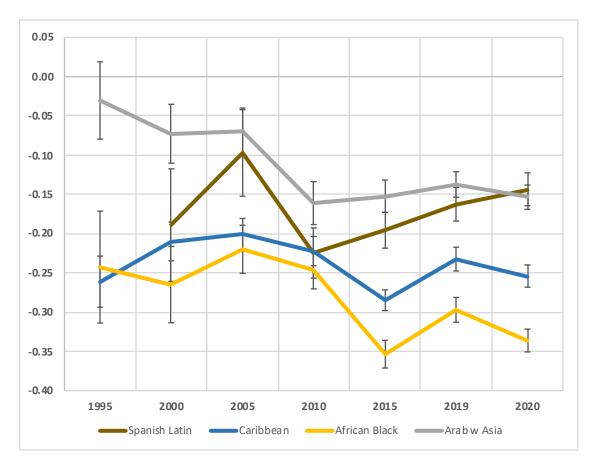


Figure 6Earnings differentials amongst males for selected ethnic groups,<br/>compared to British origin men, Canada, 1995 to 2020

Table A1 Weighted frequencies for selected variables, 1996 to 2021 census
---

			year						
			1996	2001	2006	2011	2016	2019	2021
female	Visible minority (broad	White	3,776,035	4,099,335	4,314,875	4,390,520	4,365,575	4,373,005	4,121,655
		Indigenous	89,860	131,290	173,550	206,450	262,740	293,560	276,295
		vismin	46,395	73,625	114,075	157,150	221,440	304,980	310,855
	selected ethnic groups	British	441,155	392,170	393,180	396,620	326,060	1,078,045	1,002,460
		Black	1,050	1,930	1,365	345	450	5,385	5,135
		Caribbean	5,120	10,230	16,835	19,225	29,235	26,530	26,500
		African Black	910	1,625	2,920	4,590	5,305	8,645	9,030
		Arab w Asia	3,595	5,455	8,605	9,095	14,175	25,625	26,155
		Chinese	13,320	17,805	25,735	33,660	44,955	48,580	48,950
		S. Asian	3,875	9,400	19,405	27,075	38,895	41,900	42,810
		SE Asia	875	3,175	6,820	11,555	19,345	24,565	25,935
		Spanish Latin	305	950	2,495	6,145	10,730	13,540	13,990
		vismin w white	17,430	24,755	40,170	71,355	89,245	103,600	106,085
		Other Asia	6,525	7,035	8,200	8,010	8,295	12,725	12,345
	CMA populations	Montreal	476,655	519,960	550,220	541,745	568,785	581,975	556,605
		Toronto	406,520	449,320	461,350	487,665	508,525	523,630	489,745
		Vancouver	203,415	219,075	224,455	235,835	241,025	247,850	232,200
male	Visible minority (broad	White	4,082,990	4,295,655	4,361,005	4,428,835	4,408,515	4,628,220	4,175,035
		Indigenous	100,540	135,390	168,315	194,990	246,580	276,805	254,715
		vismin	48,965	75,005	113,780	163,190	218,775	304,090	300,040
	selected ethnic groups	British	551,530	475,145	465,155	461,395	385,395	1,124,095	1,005,805
		Black	1,300	1,770	1,460	250	360	4,980	4,615
		Caribbean	5,110	10,160	15,535	18,365	25,515	24,000	23,560
		African Black	1,085	1,610	3,170	4,715	5,520	8,680	8,725
		Arab w Asia	3,840	5,965	8,640	9,625	14,235	26,490	25,395
		Chinese	14,270	19,355	27,730	36,460	47,450	51,380	50,045
		S. Asian	4,465	9,890	19,555	27,610	38,130	42,480	40,860
		SE Asia	1,105	3,190	7,365	12,380	19,770	25,990	26,965
		Spanish Latin	285	1,235	2,460	5,985	10,335	14,095	13,980
		vismin w white	17,160	23,640	38,905	66,700	83,370	96,925	97,020
		Other Asia	6,970	7,345	7,790	8,840	8,530	14,005	13,055
	CMA populations	Montreal	495,385	523,190	535,235	526,670	551,100	597,640	543,950
		Toronto	402,825	447,885	447,400	479,505	495,740	534,395	479,165
		Vancouver	215,645	227,955	225,825	245,285	249,425	267,705	243,000

Selection

Age 25 - 64, Citizen by birth, primary source of income is from wages and salaries, able to speak an official language, earnings more than \$100 in annual

table 2a Means

		Census													
		1996		2001		2006		2011		2016		2019		2021	
sex	variable	mean	se	mean	se	mean	se	mean	se	mean	se	mean	se	mean	se
female	age	39.9	0.0	41.1	0.0	42.3	0.0	43.2	0.0	43.4	0.0	43.7	0.0	43.4	0.0
	units	3.0	0.0	3.0	0.0	2.9	0.0	2.9	0.0	2.9	0.0	2.9	0.0	2.9	0.0
	white	9.723	0.001	9.93	0.001	20.309	0.004	10.318	0.001	10.449	0.001	10.582	0.001	10.561	0.001
	vismin	9.815	0.011	10.027	0.009	20.184	0.028	10.36	0.006	10.47	0.004	10.633	0.003	10.574	0.004
	Indigenous	9.29	0.006	9.525	0.005	19.683	0.046	10.061	0.004	10.177	0.004	10.371	0.003	10.338	0.003
	British	9.706	0.004	9.953	0.004	10.128	0.004	10.329	0.004	10.474	0.003	10.613	0.002	10.595	0.002
	Spanish Latin	9.331	0.176	9.733	0.085	10.022	0.042	10.196	0.028	10.306	0.019	10.448	0.016	10.348	0.017
	Black	9.517	0.08	9.759	0.057	9.908	0.061	10.401	0.121	10.161	0.109	10.376	0.025	10.321	0.03
	African Black	9.62	0.083	9.833	0.065	9.936	0.045	10.353	0.032	10.318	0.029	10.406	0.021	10.344	0.023
	Caribbean	9.633	0.034	9.879	0.024	10.092	0.016	10.237	0.017	10.362	0.012	10.551	0.011	10.497	0.013
	Arab w Asia	9.823	0.039	9.987	0.032	10.129	0.024	10.313	0.024	10.423	0.017	10.585	0.013	10.53	0.013
	S. Asian	9.836	0.035	9.989	0.023	10.177	0.017	10.38	0.013	10.524	0.01	10.701	0.009	10.651	0.01
	Chinese	10.044	0.017	10.266	0.015	10.403	0.013	10.544	0.012	10.716	0.009	10.858	0.008	10.817	0.009
	SE Asia	9.484	0.081	9.897	0.041	10.14	0.025	10.339	0.02	10.446	0.014	10.611	0.011	10.539	0.013
	Other Asia	10.109	0.027	10.274	0.025	10.407	0.023	10.484	0.025	10.665	0.022	10.751	0.018	10.713	0.019
	vismin w white	9.713	0.018	9.997	0.015	10.112	0.012	10.286	0.009	10.375	0.007	10.599	0.006	10.537	0.007
male	age	40.1	0.0	41.2	0.0	42.4	0.0	43.0	0.0	43.2	0.0	43.6	0.0	43.1	0.0
	units	3.1	0.0	3.0	0.0	3.0	0.0	2.9	0.0	2.9	0.0	2.9	0.0	2.9	0.0
	white	10.247	0.001	52.66	0.016	10.597	0.001	10.712	0.001	10.849	0.001	10.927	0.001	10.92	0.001
	vismin	10.091	0.01	51.214	0.118	10.39	0.006	10.565	0.006	10.668	0.004	10.815	0.004	10.742	0.004
	Indigenous	9.62	0.005	50.368	0.179	10.142	0.004	10.411	0.004	10.521	0.004	10.653	0.003	10.615	0.004
	British	10.247	0.003	10.465	0.003	10.624	0.003	10.776	0.006	10.887	0.003	10.953	0.002	10.951	0.002
	Spanish Latin	9.639	0.151	10.075	0.063	10.274	0.04	10.632	0.005	10.509	0.02	10.669	0.015	10.622	0.017
	Black	9.802	0.073	10.086	0.053	10.039	0.065	10.258	0.129	10.318	0.127	10.569	0.025	10.476	0.03
	African Black	9.863	0.074	10.07	0.064	10.191	0.036	10.414	0.033	10.333	0.032	10.497	0.022	10.369	0.026
	Caribbean	9.793	0.035	10.116	0.023	10.231	0.018	10.397	0.017	10.447	0.013	10.643	0.012	10.55	0.014
	Arab w Asia	10.122	0.036	10.375	0.03	10.446	0.024	10.593	0.025	10.707	0.018	10.832	0.013	10.742	0.014
	S. Asian	10.032	0.035	10.193	0.023	10.364	0.016	10.55	0.014	10.753	0.011	10.91	0.01	10.863	0.011
	Chinese	10.244	0.017	10.46	0.015	10.606	0.013	10.74	0.011	10.88	0.009	11.021	0.008	10.993	0.009
	SE Asia	9.85	0.07	10.204	0.035	10.193	0.023	10.421	0.021	10.608	0.013	10.728	0.011	10.627	0.012
	Other Asia	10.434	0.024	10.569	0.025	10.717	0.023	10.813	0.024	10.974	0.022	10.949	0.017	10.915	0.018
	vismin w white	10.13	0.017	10.318	0.015	10.468	0.011	10.665	0.0373	10.691	0.007	10.81	0.006	10.723	0.007

Selection: age 25-64, born in Canada, speaking an official language, earnings great than \$100