Indigenous Earnings Convergence: Canada 1995 to 2020

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[1] The views in this paper do not represent those of the Bank of Canada.

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Abstract

We estimate Indigenous labour market disparity amongst Canadian-born workers over 1995-2020 and describe new facts about earnings patterns. We find dramatic convergence in earnings for Indigenous workers with earnings gaps shrinking by more than half, from 36 to 16 percent for Indigenous men and 16 to 6 percent for Indigenous women. We also explore heterogeneity across seven distinct Indigenous categories, defined by legal status, identity and ancestry. We see this convergence for Registered Indigenous workers living off-reserve, and for unregistered Indigenous workers who report North American Indian or Métis identity and for workers who do not report Indigenous identity but do report Indigenous ancestry. However, we see much less convergence for Registered Indigenous workers living on reserve.

1. Introduction

In Canada, Indigenous[1] peoples account for about 5 percent of the total population and have historically been severely disadvantaged in terms of their labor market outcomes. Pendakur and Pendakur (2002) found stubbornly persistent earnings gaps (conditional on personal characteristics like age and education) amongst Canadian-born workers in the 1970s and 1980s. These gaps were roughly 35 percent between Indigenous and White men and 15 percent between Indigenous and White women. In this paper, we show that this discouraging trend changed. We find a steady convergence in earnings since 1995, with the estimated earnings gaps falling by 20 to 30 percentage points for men and 10 to 15 percentage points for women. Put another way, for both men and women, Indigenous earnings disparity fell by half over 1995 to 2019/2020.[2]

Pendakur and Pendakur (2011) study heterogeneity in earnings across Indigenous groups over 1995 to 2005. They find mild evidence of convergence for many groups over that decade. In the current paper, we use their methodology and extend the study period to 2019/2020. We find that dramatic convergence occurred for a variety of Indigenous groups, including those legally registered under the Indian Act[3], people reporting Indigenous identity but without legal status and those who have Indigenous ancestry but do not report Indigenous identity or legal registry. One might argue that differential tax treatment for Registered Indians may partially offset earnings disparity. However, Registered Indians living off reserve[4] face a tax/transfer

[1] "First Nations peoples", "Aboriginal peoples", "Indigenous peoples" and other terms have been used in Canada over the past few decades in government documents. In this paper we use the word Indigenous to refer to people who either self-identify as Indigenous or report Indigenous ancestry.

[2] Our findings are evident using both 2019 and 2020 incomes and are therefore not likely to be driven by pandemic distortions.

[3] Although "Indian" is not currently used to indicate Indigenous peoples in Canada, it is a term in Canadian law. Thus, when describing a legal status, we use "Registered Indian", and when describing identity or ancestry, we use "Indigenous".

[4] In Canada, "reserves" are analogous to "reservations" in the USA—they are lands set aside by the Federal government for the residency and use of groups of Indigenous people. Reserves are

structure like that of non-Indigenous workers, are mainly urban, and have a legal status whose eligibility is mainly determined by birth right (rather than being chosen via a sense of identity). For this group, earnings gaps fell by 20 and 10 percentage points for men and women, respectively.

The convergence we observe in Canada is not observed in the USA, Australia or New Zealand. For example, Akee (2023) finds that Indigenous peoples in the USA ("American Indians/Alaska Natives") faced severe disparity over 2000 to 2018, with no evidence of convergence. Markham and Biddle (2018) and Maani (2004) draw similar conclusions for Australia and New Zealand, respectively.

In this descriptive paper, we establish that the very large earnings gaps faced by Indigenous peoples in Canada in the 1970s and 1980s shrank by roughly half since 1995. We leave investigation of why this happened to future researchers. However, we will speculate as to possible causal channels in the Discussion section.

2. Literature:

While there is a fairly long history of research assessing the degree to which Indigenous peoples face labour market disparity in the United States, Australia, New Zealand and Canada it is relatively sparse. Either through lack of data, the relatively small portion Indigenous peoples (outside of New Zealand) in the population or sheer indifference, it has not been a core area of interest for academics studying labour issues. In the United States, for example, just under 3 percent of the population reported indigenous origin[5], while in Australia, about 3.8 percent identify as Aboriginal or Torres Strait Islander.

Hurst (1997) examined the 1990 US Census and found that those of American Indigenous/Alaskan Native (AI/AN) origin faced stiff earnings differentials of between 20 to 40 percent. Two decades later, Akee (2023) and Akee, Jones, & Porter (2019) used the American Community Surveys linked to tax data to show that AI/AN peoples continue to face severe earnings disparities. Unlike what we will report for Canada, these papers do not point to any strong evidence of income convergence for AI/AN peoples. For example, Akee (2023) finds a 36 percent gap between AI/AN and non-Hispanic Whites in 2000 and a 39 percent gap in 2018, conditional on age, education and gender (table 7.1).

There is more research on the socioeconomic status of Indigenous peoples in Australia and New Zealand. Jones (1993) examined unemployment, job status and hourly earnings in the 1980s and concluded that it "is impossible to paint a stronger contrast in Australian life chances than the gulf separating Australian Aborigines from European settlers".[6] Daly (1992) using 1986 Australian Census data found that Aboriginal male and female workers in full time employment

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often remote from marketed economic activity. In this work, we distinguish between Registered Indians living on reserve and those living off reserve.

[5] . In 2020, about 3.3 million people reporting only Indigenous origins with an additional 5 million people reporting a combination of Indigenous and other origins (Office of Minority Health 2024).

[6] In an interesting associated study, Biddle et al (2013) correlated labour force discrimination with other forms of discrimination in Australia concluding that some Indigenous Australians decrease their labour supply in order to avoid potentially adverse (discriminatory) situations.

faced earnings gaps of 29% and 11%, respectively, compared to non-Aboriginal workers. He argues that two-thirds of those differences can be explained through education and remoteness. Like those in Australia, Canadian Indigenous peoples have a different geographic distribution than their non-Indigenous counterparts. We provide evidence of Indigenous earnings convergence in Canada even within a single urban area.

More recent evidence on Indigenous earnings gaps in Australia does not suggest convergence. For example, the Australian Institute of Health and Welfare (AIHW 2024) found that Indigenous adults had 28% lower median gross household weekly income than non-Indigenous adults in 2021. Comparing across Daly (1992) and AIHW (2024) suggests that little has changed since the 1980s.

The share of Indigenous persons in the population of New Zealand (17%) is much larger than that in Canada, Australia or the USA (Statistics New Zealand 2024). However, this is not necessarily associated with dramatically better relative labor market performance. Maani (2004) examined earnings gaps faced by Māori and found that gaps had increased between 1986 and 1996, attributing the change to higher differentials faced by Māori men and women who have not completed high school. Conversely, Dixon and Mare (2007) find evidence that Māori incomes improved relative to non-Māori incomes in the 1990s and early 2000s and attribute the improvement to increased employment rates. While we do not formally study employment probabilities in this paper, we do provide evidence (in Appendix 1, Table A4) that Indigenous employment probabilities (which were very low in the 1990s) also converged towards those of non-Indigenous descent over 1995 to 2000, with employment rate disparities reducing by roughly half.

In Canada, George and Kuhn (1994) and Maxim et al (2000) found evidence of extreme earnings and income disparity using data from the 1980s and 1990s, respectively. Pendakur and Pendakur (2002) studied the change over time in Indigenous earnings disparity for the period 1970 to 1995 using Canadian Census data. They found large Indigenous earnings gaps (conditional on worker characteristics) from the 1970s through the 1990s of 30 to 45 percent for Indigenous men and 10 to 20 percent for Indigenous women, and no evidence that these gaps shrank over time. The 25-year period between 1970 and 1995 was thus characterized by extreme disparity and no convergence in earnings for Indigenous peoples.

More recently, Pendakur and Pendakur (2011) focused on the change in Indigenous earnings disparity across 3 census waves. Overall, for both men and women, they saw narrowing disparity in earnings between Indigenous and white workers over 1995 to 2005 but concluded that their 10-year period was too short to make bold statements about convergence. In this paper, we replicate their methodology using 6 census waves covering 1995 to 2020 and show that the small amount of convergence noted in Pendakur and Pendakur (2011) was part of a longer and very important trend.

Chernoff and Cheung (2024) study Indigenous economies and show that the educational attainment of Indigenous peoples improved over the 2000s, and other researchers showed that this was consequential for Indigenous disparity. Lamb and Verma (2021) use the 2008-2018 Labour Force Survey, Haan et al. (2020) used the 2011 Census supplemental Aboriginal Peoples Survey, and Feir (2024) used the 2016 Census to assess Indigenous earnings differentials. These authors argue that educational attainment and sorting across occupation and industry drive more

than half of disparity. However, they all show that considerable disparity (especially amongst men) remains. Unlike these three papers we do not control for job characteristics because we argue that doing so risks "overcontrolling", that is controlling for aspects of jobs that are themselves subject to asymmetric sorting that might be driven by labour market discrimination against Indigenous workers. In the medical literature, such overcontrolling is referred to as "collider bias", and to avoid such collider bias, the log-earnings regressions in the present paper controls only for characteristics of individuals and not for characteristics of the jobs they attain.

We also investigate whether the convergence we observe in our regressions---which control for a variety of personal characteristics---is robust to controlling for fewer or no personal characteristics. The idea here is that if those characteristics, such as education, are colliders then we may be more interested in regressions that control for fewer characteristics. We show that our basic findings about Indigenous earnings convergence are evident regardless of which regressors are included.

Like Pendakur and Pendakur (2011), we use individual-level data on Registry (a legal category defined by the Indian Act), place of residence (on- or off-reserve), identity (self-reported Indigenous identity) and ancestry to construct a set of Indigenous group membership indicators. The right to register under the Indian Act is historically tied to band membership and birth lineage, and thus not available to everyone (Furi and Wherret 2003)[7].

Clatworthy (2005) states that with registration under the Indian Act, there are some entitlements:

> "Indian registration guarantees freedom from taxation on reserve, eligibility for postsecondary education support and access to a broad range of health care services provided under Health Canada's Non-Insured Health Benefits (NIHB) program. The Registered Indian population is also the basis for determining financial allocations to First Nations for some programs and services. [In addition] Band Membership, …. also conveys political rights (including the right to vote in First Nation elections and run for Council), and in many First Nations is a defining criterion for access to a wide range of programs and services administered by the First Nation." (page 2)

People registered under the Indian Act ("Registered Indians") are entitled to sales tax exemptions, health and dental benefits, and possibly education benefits. In addition, Registered Indians living on reserve are further entitled to income tax exemption (for income earned on reserve) and may be entitled to housing benefits and other band-level benefits. Because the benefits of registry differ between Registered Indians living on and off reserve, and because many reserves are remote from economic activity, we distinguish between these two groups in our empirical work.

Feir (2013) studied weekly earnings over 1995 to 2005 found that Registered Indians on reserve saw no earnings convergence over that period. We find that this is true over a longer

[7] Furi and Wherret (2003) write "Prior to 1985, automatic entitlement to band membership usually accompanied entitlement to Indian status. The 1985 amendments recognized the rights of bands to determine their own membership. As a result, persons may possess Indian status but not be members of a band."

period stretching to 2020 for Registered Indian women living on reserve. However, we see a small convergence in earnings for Registered Indian men living on reserve. Both Feir (2013) and Pendakur and Pendakur (2011) saw a convergence in earnings for Registered Indian men and women living off reserve over 1995 to 2005. We find that this convergence continued through to 2020, with earnings disparities falling by roughly half for both men and women.

We also examine convergence for the population reporting Indigenous identity (but not registry). A person can identify as Indigenous regardless of their connection to a First Nations band or reserve. We use responses to the Census question asking if a person is Indigenous. We divide the unregistered population reporting Indigenous identity into three groups (corresponding to tick boxes on the Census form): those reporting First Nations/North American Indian identity; those reporting Métis identity; and those reporting Inuit identity. Respondents in these categories all pay taxes on the same footing as do non-Indigenous people. These groups receive much less targeted government financial support than do Registered Indians. However, Inuit peoples are entitled to health and dental benefits, and there are Provincial benefits (such as targeted housing) available to unregistered people with Indigenous identity.

Feir (2013) and Pendakur (2011) found a convergence for Métis people over 1995 to 2005. In the current work, we find very dramatic convergence in earnings for all three groups of unregistered workers reporting Indigenous identity.

We also show that the size of the unregistered population that expressed Indigenous identity expanded (see also Statistics Canada 2022a). Together with the finding that the labour market outcomes of this population converged towards those of the majority, this relates to other work on ethnic identity (especially Antman and Duncan 2023 and Duncan and Trejo 2011). Antman and Duncan find that willingness to identify as Native American rose over time, and earnings rose over time, for Native Americans linked to tribes that were allowed to open casinos.

We finally examine convergence for unregistered workers who do not report Indigenous identity but who do report Indigenous ancestry. We also see very dramatic convergence in earnings for this group.

In summary, previous evidence for Canada suggested no convergence in earnings for Indigenous peoples over the 1970s to 1990s, and some evidence of convergence over the turn of the millennium. In Australia, New Zealand and the United States, there is no evidence yet of substantial convergence of Indigenous earnings towards the earnings of the majority population. In this paper, we document a very substantial convergence of roughly 20 and 10 percentage points for Indigenous men and women, respectively, in Canada since 1995. The big picture narrative is that up to the 1990s, Indigenous earnings were a world apart from the rest of the ethnic mosaic of Canadian labour market performance. But, since the 1990s, Indigenous earnings have converged towards those of majority workers and this population now faces earnings disparities that sit amongst the distribution of other non-White ethnic groups in Canada (Pendakur and Pendakur 2025).

We can only speculate as to the mechanisms behind this earnings convergence. We see two important channels (which we return to in the Discussion section). First, legal institutions around the governance of Indigenous communities ("Indian reserves") changed quite dramatically since the early 1990s, resulting in increased autonomy and self-governance for

many communities. Several authors point to increased local control of land-use, financial and industrial development decisions in Indigenous communities as supporting income growth for Indigenous peoples in Canada (see: Aragon 2016; Feir 2016; Pendakur and Pendakur 2017, 2021) and the USA (Cornell and Kalt, 1992; Akee, 2009; Akee et al., 2012; Anderson and Parker, 2008, 2009). Second, Canadian law, politics and society have all shifted from the explicitly assimilationist policies lasting through the 1960s to a less brutal stance under the broad umbrella of "reconciliation".

Methodology and Data

We estimate earnings disparities amongst Canadian-born workers comparing Indigenous workers to white workers or Canadian-born British-origin workers using Census data. We use previous-year earnings and current-year personal characteristics data from the Censuses of Canada 1996, 2001, 2006, 2016, 2021 plus the National Household Survey (NHS) of 2011. The 2021 Census provides earnings data for both 2019 and 2020. While 2020 incomes were affected by the COVID19 pandemic, 2019 incomes were not. We therefore focus mainly on 2019 incomes.

For the 2016 and 2021 censuses, earnings data are merged from administrative tax data for almost all cases; in prior years there is a mix of self-reported and merged earnings data. The 1996, 2001 and 2006 datasets are 20% samples, and the 2016 and 2021 datasets are 25% samples, of Canadian households. All Censuses were mandatory and had a response rate exceeding 97%. The NHS was sent to one-third of all households, was not mandatory and had a response rate of 67%.

Our sample is the subset of all people who are Canadian citizens by birth, worked for someone else (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). We include only workers in our sample, and do not try to correct for selection into the labour market. In Appendix 1, Table A4, we assess estimates of disparities in employment probabilities where the sample removes the constraint on wages and class of worker. We find that these disparities follow roughly the same pattern over time as do earnings disparities.

The year of earnings is the year prior to Census year, except in the 2021 Census. In that Census, we have earnings reported for both 2019 and 2020 and run regressions for both years. We note that class of worker refers to whether the respondent is self-employed or employed for wages in the week of the census. For all earnings 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 the class of worker by coding as "paid workers" all people who received more labor income from wages and salaries than from self-employment or from other market income.

We run linear weighted regressions to uncover patterns in earnings as they correlate with Indigenous status.[8] The dependent variable in all regressions is the natural logarithm of total annual earnings from wages and salaries and so excludes zero earners.

[8] Pendakur and Pendakur (2011) ran unweighted regressions for the three census income years 1995, 2000 and 2005. In contrast we run weighted regressions because Statistics Canada policy

For our target population of Indigenous workers, estimated coefficients on the Indigenous indicator variables can be very large, so that coefficients are not close to proportionate earnings gaps. Thus, rather than reporting estimated coefficients from log-earnings regressions, we report the *proportionate earnings gap* equal to *exp(b)-1*, where *b* is the coefficient from the log-earnings regression. Standard errors for these proportionate earnings gaps are derived via the delta method and equal to *exp(b)*se(b)*, where *se(b)* is the hetero-robust standard error of the estimated regression coefficient.

Proportionate earnings gaps may be interpreted as the percent difference in earnings between a particular group and a reference category of workers (e.g., White workers). Because regressions are run by gender, all reported gaps are within gender.

We include the following regressors:

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 or common-law, 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, Master's degree, and PhD). No certificate is the left-out dummy variable.

City of Residence: In regressions that pool all the cities together, we use 12 dummy variables. Ten identify individual census metropolitan areas (CMAs): Halifax, Montreal, Ottawa, Toronto, Hamilton, Winnipeg, Calgary, Edmonton, Vancouver and Victoria. An additional variable identifies people living in another CMA or Census Agglomeration (CA). A final dummy indicates that a respondent does not live in a CMA or CA. Because Indigenous persons are more likely to be in smaller cities or Indigenous reserves, in one set of regressions, we condition on approximately 5500 census subdivisions (municipalities) of residence, which is a much finer geographic control than CMA of residence which we include in our main regressions.

These are the same regressors as are found in Pendakur and Pendakur (2002, 2011). Appendix Tables A1 to A3 give summary statistics on our control and outcome variables. Table A1 gives the frequencies of our Indigenous status groups over time, and Table A2 gives the mean log earnings for each group over time. Table A3 shows frequencies for official language

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no longer allows the release of unweighted regression estimates using Census income data. In light of this, we provide weighted results for 1995 – 2005 so that we can compare across the entire period 1995 – 2020.

knowledge, marital status and schooling as well as the average age and household size for our samples.

We consider two group status categorizations: coarse and detailed. *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. We create a set of three dummy variables indicating broad group status (White, visible minority, Indigenous Person). "Visible minority" is a policy category in Canada indicating people who are non-Indigenous and non-European by ancestry. In our empirical work, we focus on the Indigenous indicator (and not the visible minority indicator). In regressions that use coarse groups, White is the left-out dummy variable.

We also define *Detailed Groups* based on the first two write-in responses to the Ancestry question plus additional information on Indigeneity from the Registry question and the Aboriginal/Indigenous Identity questions. This categorization identifies 7 Indigenous groups and 36 non-Indigenous groups[9]. The Indigenous groups are:

- 2 groups of Registered Indigenous persons (Registered Indians as defined by the Indian Act):
    - Registered Indigenous persons living on a reserve or in an Indigenous community
    - Registered Indigenous persons not living on a reserve or Indigenous community
- 3 groups who self-identify as Indigenous persons but are not registered
    - First Nations / North American Indians
    - Métis
    - Inuit / Inuk
- 2 groups who report Indigenous ancestry but do not report Indigenous identity
    - Only Indigenous ancestry
    - Indigenous ancestry with another ancestry

In regressions that use this detailed categorization, British-origin is the left-out dummy variable.

We first classify according to the Census Registry question (Question 26 of the 2021 Census): "Is this person a Status Indian (Registered or Treaty Indian as defined by the *Indian Act* of Canada)?". The Census divides the physical geography of Canada into about 5500 census sub-divisions (CSDs) which roughly correspond to municipalities or unincorporated communities. Using the Census CSD type variable, we create an indicator for Indigenous communities, defined as a CSD that is a reserve, a self-governing Indigenous territory, or an

[9] Our *detailed ethnicity* coding includes indicators for the following non-Indigenous ethnic groups: 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. The latter 10 groups (Latin American to visible minority multiple) together comprise the visible minority category. We study the evolution of disparity for those groups in (blinded) (2024).

Inuit community in Northern Canada. Combining this with the data on registry status of individuals, we create two categories of self-reported legal Registered Indian status: 1) Registered Indians living on-reserve; and 2) Registered Indians living off-reserve.

Some bands chose not to be enumerated in the Census of Canada (e.g., some band leaders described the Census as a colonial instrument). There were 77 such reserves or settlements in 1996 and 63 such reserves or settlements in 2021 (Statistics Canada 1996, 2021). Consequently, the estimated disparities for Registered Indians living on reserve should be taken with a grain of salt. For the interested reader, Appendix Table A6 provides estimates of the change over time in Indigenous disparity that drop all reserves or settlements that were incompletely enumerated in *either* 1996 or 2021. Here, we find roughly the same magnitudes as those reported for the full sample in main text Table 2.

A question on Indigenous identity (Question 24 in the 2021 Census) has 3 tick boxes: "Is this person First Nations, Métis, or Inuk (Inuit)?". "Métis" refers to people of mixed European (usually French) and Indigenous ancestry; "Inuk/Inuit" refers to Indigenous people of the Arctic.[10] We use this question in combination with the Registry question to create three categories of unregistered people with self-reported Aboriginal/Indigenous identity: 3) First Nations/North American Indian (FN/NAI); 4) Métis; and 5) Inuit. These five categories together comprise the Indigenous indicator in the Coarse group categorization.

Our last two categories capture people who have Indigenous ancestry but do not identify as Indigenous. To do this, we use responses to the Census Ancestry question (Question 23 in the 2021 Census): "What were the ethnic or cultural origins of this person's ancestors?". Up to six responses to this question are in the data. People could write in words like "Indigenous", "Aboriginal" and/or the name of a First Nations group like "Cree". We use the first two responses to identify unregistered Indigenous respondents who reported: 6) solely Indigenous ancestry but not Indigenous identity; and 7) Indigenous and other ancestry (e.g., Indigenous-origin and French-origin) but not Indigenous identity. These 2 categories of the detailed groups are not captured as part of the Indigenous category in the coarse groups.

Taken as a whole, the above categorization allows us to differentiate those classified as Indigenous for policy and program purposes (registry) from those who self-identify as Indigenous (identity) from those who neither register nor self-identify (ancestry).

Registration under the Indian Act is broadly related to historic band membership. Bartlett (1978) argued that

> "Determination of entitlement to be registered as an Indian under the Indian Act was historically important in order to ascertain who was interested in and entitled to be protected on the lands reserved for Indians." (page 589).

From 1869 to 1985 the system was patrilineal, and Indigenous women lost registered status if they married someone without registered status. Prior to the enfranchisement of Registered Indians in 1952, people could not maintain registry and the right to vote. In addition, children could lose status if the male parent refused to acknowledge parentage (Bartlett 1978)

[10] Earlier Censuses used slightly different wordings: over 1996 to 2006, the first tick box was for North American Indian; over 2011 to 2021, the first tick box was for First Nations/North American Indian.

In 1985, Bill C-31 brought three major changes which significantly increased the size of the Registered Indian population. First, individuals (primarily women) who had lost their status through earlier rules could be reinstated along with their children. Second, new rules were brought in to place governing entitlement to registration for all children born after 16 April 1985 (page 1). Third, those who lost registered status through enfranchisement could reclaim registered status. This resulted in an increase of about 114 thousand people to the register by 1996, but these Bill C-31 registries were done by 1996 (Clatworthy 2005).

The bottom line is that during our study period of 1996 to 2021, eligibility for registry under the Indian Act was and is essentially a consistently defined birth right connected to documented ancestry leading back to recognized bands. Registry is nearly automatic for children of Registered Indians.

In our empirical work we focus on the difference in outcomes between people registered under the Indian Act and unregistered Indigenous persons. The key reason that we are interested in this distinction is that, whereas Indigenous identity can be claimed by anyone who feels an affinity to Indigeneity, registry under the Indian Act is limited to those who are eligible. In 2021, of the 1.8 million people who claimed Indigenous identity or registry, about half were registered under the Indian Act (Statistics Canada, 2022).

Over the course of our study (1996 – 2021) the Registered Indian population nearly doubled from 461,400 members in 1996 to 831,715 members in 2021 (Statistics Canada 1997 and 2022). While this is a substantial growth, the registered population is much younger than the rest of the Canadian population (Statistics Canada 2022) and the total fertility rate for Registered Indians is high compared to the rest of the population (in 2016, 2.2 for Registered Indians vs 1.6 for the population as a whole (Provenchar and Galbraith 2024)). Nault et al (1995) confirm that this level of growth is to be expected. Using a life-table analysis that accounted only for births and deaths and not for new adult registrations, they projected a total Registered Indian population of 825,000 to 940,000 in 2015. In reality, the registered population in 2015 was 820,120 (Statistics Canada, 2016). Thus, while large, the growth rate of the Registered Indian population is roughly in line with what would be expected if all registered people were registered automatically at birth.

In contrast, growth rates for unregistered Indigenous groups are much higher than can be explained by natural increase due to births and deaths. For example, while the total fertility rate for Métis women is only 1.8 children per woman (Arriaga 2016), the population reporting Metis identity almost tripled from 210,190 in 1996 to 624,220 in 2021 (Statistics Canada 1997, 2022). Consequently, estimates of the earnings impact of Indigenous status for Registered Indians may be less affected by selection bias due to endogenous reporting than that for unregistered population reporting Indigenous identity.

Since one of the entitlements is freedom from taxation on income earned on reserve, we distinguish in our empirical work between Registered Indians who live reserve and those who live off reserve. This makes comparison of their incomes with those of other workers somewhat fraught. Further, many reserves are in remote locations far from centers of economic activity. Thus, Registered Indians living on reserve face employment challenges different from those of non-Indigenous people. However, Registered Indians living off reserve face the same tax system

as others and are primarily urban residents. Thus, we pay particular attention to earnings outcomes of employed Registered Indians living off reserve in the empirical work below.

3. Descriptive statistics

Table 1 provides weighted population counts (rounded to 0 or 5) and mean log-earnings in our regression sample (Canadian-born, age 25-64, working for someone else, able to speak an official language and earning more than 100$ CAD) for white workers and our Indigenous categories of interest. We present data from the 1996 Census covering 1995 incomes and 2021 Census data covering 2019 incomes. There are two key messages from table 1. First, as noted above, the Indigenous population in our sample of workers aged 25-64 has grown very rapidly. For example, the number of Indigenous women in our sample (second row) tripled between 1995 and 2019. In contrast, the non-Indigenous population (first row) increased by less than 20 percent. Second, this growth in population is quite uneven across our detailed groups of Indigenous peoples. For example, the number of registered women on reserve grew about 70 percent but the number of unregistered women reporting North American Indian or Metis identity grew by a factor of at least 4.

The average log-earnings for our Indigenous origin categories is in the lower panel of Table 1. Two important patterns jump out. First, looking at the difference in average log-earnings between White and Indigenous workers, we see a very substantial convergence over the period. In 1995, the difference in log-earnings for men was 0.63 (equal to 10.25 - 9.62). This corresponds to a proportionate earnings gap of 47 percent. By 2019, the difference in log-earnings for men had fallen to 0.28 (equal to 10.93 - 10.65) corresponding to a proportionate earnings gap of 24 percent. So, the unconditional proportionate earnings gap faced by Indigenous men decreased by half. The objective of our regression analysis is to evaluate this gap conditional on other characteristics of workers including age, education, etc.

4. Main Results

Table 2 shows our primary results for earnings disparity faced by Indigenous women and men as a whole and for subgroups. The top panel of Table 2 presents the proportionate earnings gap corresponding to the coefficient on the Indigenous indicator variable (compared to White workers) in linear regressions of the natural log of annual earnings from wages and salaries on coarse groups and other control variables. Regressions are run separately for men and for women, so that all comparisons are within-sex, and for the reported income year corresponding to each Census year (e.g., 1995 incomes for the 1996 Census). Note that the final 2 income years are 2019 and 2020. Because 2020 employment patterns were severely affected by the global COVID 19 pandemic, we generally refer to results on 2019 earnings to avoid pandemic related effects. Figure1 provides the same information graphically.

In the top panel of table 2 for both men and women, we compare the earnings of all workers reporting Indigenous identity (including all workers reporting registry) to white workers. Looking first at women we see that in 1996, Indigenous women earned 15.7% less in than white women with similar characteristics. By 2019, this gap had fallen to 6.0%. For men the gap fell from 36.1% in 1996 to 15.5% in 2019. This is a very large change over time with the gap shrinking by more than half and is similar in magnitude to the change in raw means shown in table 1.

The bottom panel of Table 2 presents estimates from regressions that are identical to the ones described above, except that coarse group dummies are replaced with detailed group dummies. British-only ethnic origin is the left-out category. In these regressions there are 7 Indigenous group dummies. Of these, we concentrate our analysis on four groups: Registered Indians on reserve, Registered Indians off reserve, and two groups of unregistered peoples with Indigenous identity – First Nations/North American Indian (NAI) and Métis. Figures 2 and 3 provide graphs of the estimates for these four groups.

Before discussing these groups of primary interest, we briefly discuss outcomes for the other three groups. Looking first at the set of workers who report Indigenous ancestry but not identity or registry, we see that the estimated proportionate earnings differences are statistically significantly negative, and that they are decreasing over time for both men and women. We noted in Table 1 that the number of single-origin Indigenous ancestry workers who do not report Indigenous identity is very small by 2021. In contrast, the number of multiple-origin people with some Indigenous ancestry but without Indigenous identity is very large. This group faced the smallest level of earnings disparity of all Indigenous groups in 1995, and saw their earnings gaps shrink by half. By 2019, the earnings gap had fallen to 4 percent for both men and women, which is, though statistically significant, quite small.

One could interpret the earnings impact correlated with Indigenous ancestry in the same way that Duncan and Trejo (2011) interpret the earnings impact of Latin American/Hispanic ancestry in the United States. They argue that because we don't choose our ancestors, we can take ancestry as an exogenous regressor. In this case, the convergence observed for people with Indigenous ancestry (but not identity or registry) would not be polluted by selection bias. However, just as we suspect that the willingness to report Indigenous identity in response to the Indigenous identity question has changed over time, the same might be true of willingness to report Indigenous ancestry in response to the Ancestry question.

Moving up the rows in Table 2, we next consider people reporting Inuit identity. For Inuit men, we see very large earnings gaps in the early years, but they shrink over time, with an estimated proportionate earnings gap of 34 percent in 1995 and of 21 percent in 2019 (16 percent in 2020). This change over time is statistically significant. For Inuit women, we see a different pattern. Inuit women earn *more* than British-origin women, with an estimated earnings premium of 3 percent in 1995 that grows to more than 32 percent in 2005 and remains large and positive thereafter. This earnings premium was noted in Pendakur and Pendakur (2011). As in that paper, we are cautious about interpreting the results for Inuit workers because wages in the northern labor markets where they primarily work are generally much higher than in Canada's south. Consequently, we leave a fulsome investigation of Inuit earnings to future researchers and will not focus on this group for the remainder of this paper.

Turning to our four primary groups of interest our overall finding is that for both men and women and for all 4 groups of Indigenous peoples earnings disparities mostly reduced over time. The key exception is Registered Indians living on reserve.

Looking first at the estimates for women, we see that for Registered Indians living off reserve, the estimated proportionate earnings gap shrank from 18 percent in 1995 to 8 percent in 2019. This change is statistically significant and suggests that earnings disparity for this group

shrank by more than half over 25 years. We note that while the convergence is not monotonic, earnings disparity in 2019 and 2020 was statistically significantly smaller than in any other year.

In contrast, for Registered Indian women living on reserve, the gap was statistically unchanged at around 10 percent in both 1995 and 2019. Reserves are often remote from cities and other areas of economic activity so our set of location controls (11 CMAs, a small CMA dummy and a non-CMA flag) in the baseline regressions may be insufficient to adequately assess differentials for those living on reserves. We will turn to this issue in the next section.

Women reporting First Nations/NAI identity (but not registry) saw shrinking earnings gaps, with disparity reducing from 21 percent in 1995 to 10 percent in 2019. As with Registered Indian women living off-reserve, this change in disparity is statistically significant and represents a reduction of disparity by about half. Finally, women reporting Metis identity (but not registry) saw the most dramatic convergence, with the earnings gap shrinking from 18 percent in 1995 to 3 percent 2019, essentially eliminating the earnings gap between Metis women and majority (British origin) women.

Turning to men, we see statistically significant and large magnitude convergence for all groups. In particular, earnings differentials for registered men living off reserve shrank by more than half, from 33 percent to 13 percent (compared to British-origin men) from 1995 to 2019. This difference is statistically significant and very large at 20 percentage points. Registered men living on reserve also saw an improvement, although not as dramatic, with the earnings gap falling from 52 percent to 46 percent. This decrease of 6 percentage points is not as large but remains statistically significant.

As with women, unregistered Métis men saw differentials shrink from a large magnitude of 22 percent in 1995 to 3 percent in 2019. Although the 3-percentage point disparity in 2019 is statistically significant, we think of this as essentially earnings parity. Unregistered First Nations/NAI men saw differentials shrink from 19 percent to 13 percent. This difference over time of 6 percentage points is statistically significant, is about the same size as that for registered men living on reserve and represents a decline of about ⅓ of the overall disparity faced by this group.

In sum, we see dramatic earnings convergence for all groups except in the case of Registered Indian women living on reserve. We note, however, that this group faces relatively small earnings gaps.

A key takeaway from the results drawn from our detailed groups is that the large convergence observed at the level of Indigenous total is unlikely to be driven by the changing willingness on the part of respondents to identify as Indigenous. Our key evidence for this is that we observe substantial earnings convergence for Registered Indians living off reserve. Unlike those living on reserve, this group faces the same tax regime and lives in broadly similar locations to other workers. Further, because registry eligibility is defined by a birthright (see Appendix A2), the changing nature of Indigenous self-identification is less of an issue.

5. Composition Analysis of the Over-Time Convergence

Table 3 presents estimates of the change in the proportionate earnings gap between 1995 and 2019, with varying regressors lists. We provide the actual proportionate earnings gaps (from which the numbers in Table 3 are computed) in Appendix Table A5. The rightmost column of Table 3, labeled "baselines", corresponds to this change over time for the results shown in Table 2, and gives the appropriate standard errors for these differences. Here, we see that, as described in the discussion above, all groups except registered women living on reserve saw statistically significant convergence in disparity over the period.

Our baseline results from Table 2 show convergence in Indigenous earnings, conditional on a set of controls that may or may not be colliders. If one were convinced that *all* covariates were colliders, then the appropriate measure of Indigenous earnings disparity comes directly from the sample means given in Table 1. For example, in Table 1 we see that Indigenous men have mean log-earnings of 9.62 in 1995 in comparison to the 10.25 mean log-earnings of white men, indicating an unconditional proportionate earnings gap of 46.6% (equal to exp(10.25-9.62)-1). In 2019, this computation yields an unconditional proportionate gap of 24.0%, indicating that the unconditional proportionate gap declined by roughly 23 percentage points. Our baseline regressions control for household size, official language knowledge, marital status, age, education and location. With these controls, the conditional proportionate earnings gap reported in Table 2 was 36.1% in 1995 and 15.5% in 2019, implying that the conditional earnings gap declined by roughly 21 percentage points. This means that, for Indigenous men taken as a whole (the broad classification), we see about the same degree of earnings convergence of the 25-year period regardless of whether we look at the raw earnings or the gap controlling for that set of observed characteristics.

Table 3 follows this line of thinking further. The objective of this table is to show how the inclusion of different covariates affects our assessment of how much convergence in earnings disparity occurred over 1995 to 2019. To do this, we run a set of regressions where the covariate list is increasingly open to the possibility of collider bias and show the convergence in proportionate earnings disparity. In the first panel, we include no regressors at all, so this equals the computations that might be drawn from the columns for 1995 and 2019 in Table 1. The second panel adds basic regressors: marital status, official language knowledge and household size. The third panel adds age dummies; the fifth adds education dummies; and the final panel adds CMA dummies. The final panel corresponds to the baseline regression model and thus equals the difference across years between 1995 and 2019 reported in Table 2.

Table 3 shows the change in the proportionate earnings gap between 1995 and 2019 for our groups of interest.[11] Looking first at Indigenous women (broad classification), we see that

[11] For interested readers, Table A5 presents the estimated proportionate earnings gaps in 1995 and 2019 from which Table 3 is computed. The differences between estimated coefficients across neighbouring columns in any given year may be interpreted as expressing the amount of disparity explained by a covariate, conditional on covariates included in the column to the left. Here, we see that in both 1995 and 2019, the distribution of education explains (in a statistical sense) a large amount of disparity conditional on household size, official language knowledge, and age. We additionally see that for registered men and women living on reserve and for Inuit men and women, location (CMA of residences) explains a lot. However, for other groups, location does not explain very much.

the unconditional gap corresponding to the raw mean log-earnings declined by 16.2 percentage points. When we add basic controls for marital status, official language knowledge and household size, this convergence was 14.4 percentage points, a similarly large amount of convergence. When we add age dummies, the estimated convergence is 13.3 percentage points, and when we add education dummies, it is 13.2 percentage points. However, when we add CMA dummies, the estimated earnings convergence drops to 9.6 percentage points. Location does more than any other covariate to change the estimated amount of earnings convergence. This means that sorting of Indigenous women across locations in Canada explained a larger amount of earnings disparity in 1995 than it did in 2019. That is, the location distribution of Indigenous women was more favourable in terms of earnings in 2019 than it was in 1995.

Our first objective with Table 3 is to assess whether or not our conclusions from Table 2 are very dependent on the regressor list in our baseline. In Table 2, we observed statistically significant convergence for every group except registered on-reserve women. In Table 3, we see that the convergence for registered on-reserve women is statistically insignificantly different from zero regardless of the regressor list. Additionally, we see that the positive convergence is statistically significant for every other group of men and women with the exception of women who are of Indigenous multiple ancestry but do not identify as Indigenous. The bottom line is thus that our basic conclusions hold up.

6. Robustness to Geography Controls

Next, we ask whether more fulsome controls for location of residence change our assessment of the evolution of earnings disparity for Registered Indians living on reserve and Registered Indians living off reserve (estimates for other groups are provided in Table A6). Table 4 presents estimates dealing with this issue in two ways. First, we include controls with finer geography; and second, we provide separate estimates for the CMAs of Edmonton and Vancouver, both of which have large reserves within their boundaries.

In the top row of each panel, we provide an estimate at the Canada-wide level with controls for residence in each of roughly 5500 census subdivisions (CSD) from an absorbing fixed effects regression. CSDs are equivalent to municipalities which, crucially, vary at the reserve level (that is, each Indigenous band or reserve is defined by one or more CSDs). Just under 1000 of these CSDs are Indigenous communities that are either reserves or communities with mainly Indigenous residents. Here, the gaps between Registered Indians and non-Indigenous workers are identified by differences *within* CSD, essentially by comparing the earnings of Registered Indians with non-Indigenous people in their communities.

In each panel, the lower rows provide estimates in each of two large Canadian cities that have large on-reserve populations within the CMA boundaries. These two types of regressions (lots of fixed effects for location, or two specific locations) provide evidence that our basic findings from Table 2 are robust to the geographic specification of the baseline model.

Looking first at the results for Registered Indians living on reserve, we see the estimated Canada-wide earnings gap for women shrank from 13 percent in 1995 to 5 percent in 2019.

The fact that the estimated percentage points of convergence does not depend on which controls are used is due to the fact these controls explain a similar amount of disparity in 1996 and in 2019. Consequently, the bulk of their effect is differenced out when we look at the change over time.

However, because the estimated standard errors are larger in this regression (with many more geography dummies), this 8-percentage point over time reduction in disparity is not statistically significant. Similarly, for women in Edmonton the estimated proportionate earnings gap shrank from 16 percent to zero over the period, but again, the change over time is not statistically significant. In Vancouver, the gap shrank from 34 percent to 10 percent, and this estimated 24 percentage point change over time is statistically significant. Overall, this combination of statistically insignificant and statistically significant point estimates showing convergence for registered women living on reserve suggests to us that our baseline results showing no convergence for this group might be overly pessimistic.

Turning to the estimates for registered men living on reserve, the estimated Canada-wide earnings gap shrank from 31 percent in 1995 to 26 percent in 2019, but again this reduction is not statistically significant. In Edmonton, the earnings gap shrank statistically significantly from 62 percent to 40 percent, and in Vancouver it shrank only slightly (and statistically insignificantly) from 41 percent to 39 percent. Taken together, to us, these results are in line with our baseline finding that convergence was small but meaningful for this group.

The lower bloc of Table 4 provides estimates for Registered Indians living off reserve. For these estimates, we need not belabor the findings. The dramatic convergence observed in Table 2 with its coarse geographic specification holds up to either including 5000 geographic location fixed effects or to considering just the large cities of either Edmonton or Vancouver. For women, the estimated convergence is 14 to 19 percentage points (all 3 changes are statistically significant); this is similar to the 14 percentage points shown in Table 2. For men the estimated convergence is 22 to 24 percentage points (all 3 changes are statistically significant); this is similar to the 20 percentage points shown in Table 2.

7. Discussion

In Canada, Indigenous peoples have been the most disadvantaged ethnic group in terms of income and earnings since at least the 1970s (see, e.g., Pendakur and Pendakur 2002, 2011). In this paper, we establish the fact that Indigenous earnings converged towards those of Canadian-born White workers by at least half since 1995. Earnings gaps fell by at least 20 percentage points for men and 10 percentage points for women. This is true for Registered Indians living off-reserve, and for unregistered Indigenous workers who report North American Indian or Métis Indigenous identity. However, we do not see the same degree of convergence for Registered Indians living on reserve: reductions in earnings gaps for these workers are small and/or not statistically significant.

Many explanations of the poor labor market outcomes of Indigenous peoples hinge on the communal forms of property rights prevalent on Indian reserves in Canada and reservations in the USA (see especially Cornell and Kalt 1992; Aragon and Kessler 2020) and on the lack of local control afforded to Indigenous communities in Canada (see Pendakur and Pendakur 2021). Aragon (2016) finds that autonomy over land-use decisions that came with self-government agreements increased incomes, especially in the 1990s. Pendakur and Pendakur (2021) find similar effects of smaller decentralizations of land management authority (for residents of reserves) since Acts of Parliament permitted them in 1999. However, in our empirical work, we find more dramatic earnings convergence for Registered Indians living off reserve than for those living on reserve. So, although Aragon (2016) and Pendakur and Pendakur (2018, 2021) find

that decentralization of power to Indigenous communities raised incomes in those specific communities, it was not enough to induce much convergence for the whole population of registered Indians workers living on reserve.

Duncan and Trejo (2011) show that people reporting Latin American/Hispanic identity in the USA have smaller earnings gaps than those reporting ancestry from Mexico. They argue that the endogeneity of reporting Latin American identity explains this. In contrast, we find that earnings gaps showed a similar convergence for people reporting Indigenous identity as for those reporting Indigenous ancestry. Although the selection into Indigenous identity definitely changed over time—as more people reported Indigenous identity than could be explained by births and deaths—we do not see a different time path for earnings convergence across these two groups. We also show that for Registered Indians living off-reserve, a group with less endogenous selection and similar tax treatment and residential location to the general population, there is a very large convergence in earnings for both men and women.

Earnings gaps are often interpreted as due to discrimination against minority groups. In this work, we have established the existence of substantial earnings gaps faced by Indigenous peoples and established that they've shrunk over time. However, we cannot easily verify that they are driven by discrimination or differential treatment in the labour market. Nor can we show that the change over time is driven by a decrease in discrimination and/or racism. However, we do think that two long run trends in Canadian society point in this direction.

First, Canada has long had a reputation as a "cultural mosaic", with high immigration rates since the 1960s leading to a population that is currently 23% foreign born. One might think that *all* interethnic disparities may have declined since the 1990s. However, in a companion paper (Pendakur and Pendakur 2025), we show that this is not the case. Earnings gaps faced by non-European ethnic minorities in Canada did not decline from 1995 to 2020. Thus, Indigenous workers "caught up" to other ethnic minorities in Canada, and now face similar earnings gaps to, e.g., Black workers in Canada.

Second, since the 1990s, Indigenous issues have come to the foreground of Canadian politics and society. For example, less than 2% of parliamentary speeches included references to Indigenous issues between 1900 and 1990, but that fraction increased to 8% by 2020 (Feir 2024, Figure 1b). Further, Canada signed the UN Declaration on the Rights of Indigenous Peoples in 2021 (Department of Justice 2021). As well, since the 1970s, self-government agreements have decentralized power from the Federal government to some Indigenous communities in territories not ceded in historic treaties, and since the 1990s, opt-in arrangements have decentralized authority over land and fiscal matters to some Indigenous reserves in ceded territories (Aragon 2016; Pendakur and Pendakur 2021). This increased visibility and prominence of Indigenous affairs in legal and political life points to a cultural change that may have affected all Indigenous persons (regardless of registry) but not as part of an overall convergence in earnings for non-White minorities.

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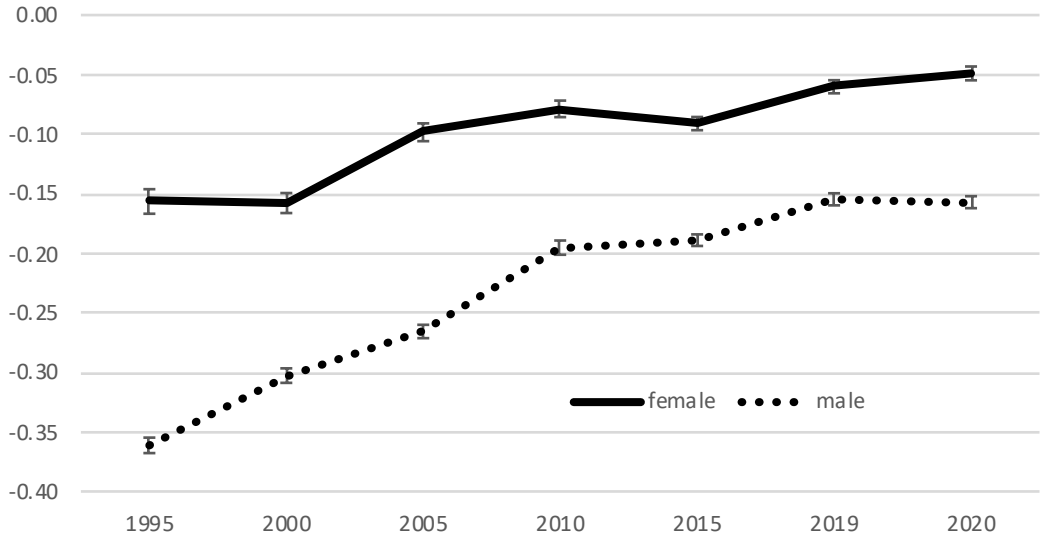
Appendix : Employment Probabilities

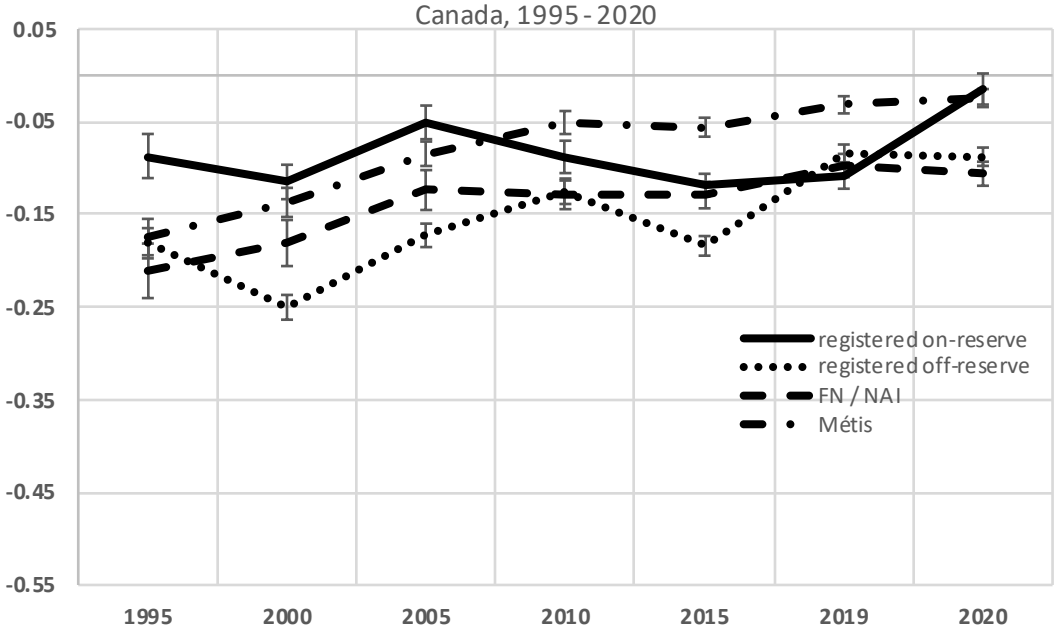
The estimates we provide in Table 2 are for workers. However, Gitter and Reagan (2002) found that American Indian men living on reserve had much lower employment rates than other Americans, suggesting that election into work could be correlated with wages for employed Indigenous people. Consequently, it could be that selection into work induces endogeneity *and* varies with time in such a way as to cancel out the main time trend we report. Our Census data does not contain variables suitable to control for selection bias (e.g., via a Heckman (1974) selection-correction). However, in Appendix Table A4, we offer some comfort to the reader by presenting regressions with the same regressors as those in Table 2 but where the outcome variable is an employment indicator and the sample is not restricted to workers (that is, to people working for wages and salaries with labor income exceeding $100). These regressions show the same patterns as those in Table 2: Indigenous disparities in employment probabilities were very large in the 1990s and decline by roughly half by 2019/2020.

Figure 1: Earnings differentials amongst Canadian-born men and women: Indigenous workers compared to British origin **workers**, Canada, 1995 - 2020



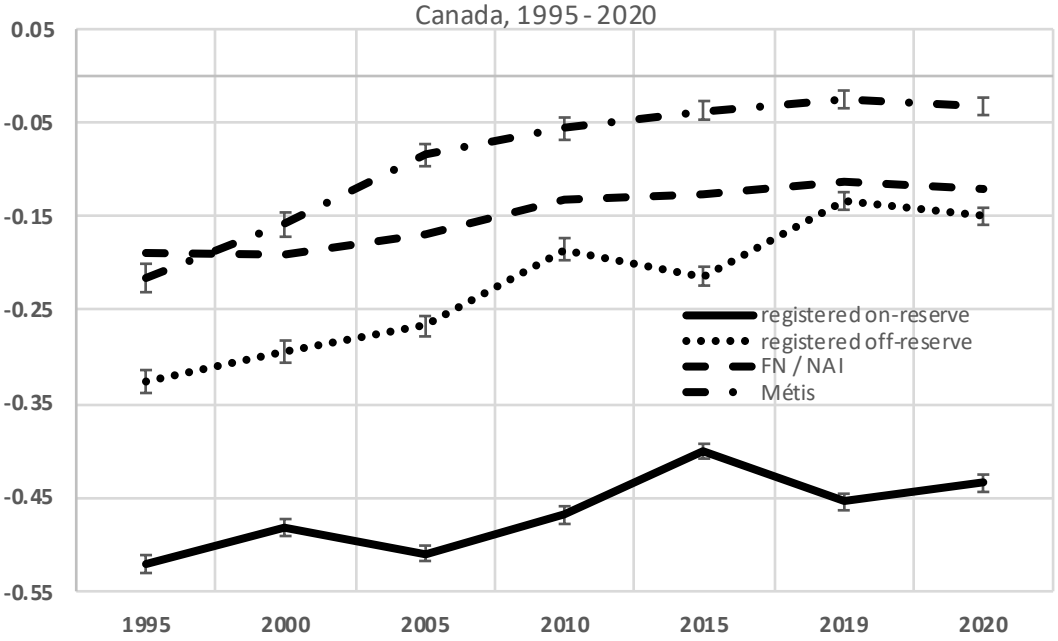
Note: error bars represent 90% confidence intervals

Figure 2: Earnings differentials amongst Canadian-born **female** workers: selected groups of Indigenous women compared to British origin **women**, Canada, 1995 - 2020



Note: error bars represent 90% confidence intervals

Figure 3: Earnings differentials amongst Canadian-born **male** workers: selected groups of Indigenous men compared to British origin **men**, Canada, 1995 - 2020



Note: error bars represent 90% confidence intervals

Table 1 Weighted frequencies and means, 1996 and 2019

group			females				males			
			1996		2019		1996		2019	
Weighted Frequencies			freq		freq		freq		freq	
broad	white		3,776,035		4,373,005		4,082,990		4,628,220	
	Indigenous Identity		89,860		293,560		100,540		276,805	
detailed	Registered	registered on-reserve	19,960		38,500		26,385		36,760	
		registered off-reserve	34,785		90,830		31,625		83,300	
	Identity	FN / NAI	9,365		48,740		27,755		106,485	
		Metis	23,925		109,995		11,015		45,380	
		Inuit	4,205		10,935		4,980		10,160	
	Ancestry	Indigenous ancestry	2,965		1,190		3,755		885	
		Indig. & Other Origins	25,805		81,190		27,315		78,070	
mean log earnings										
			mean	se (mean)	mean	se (mean)	mean	se (mean)	mean	se (mean)
broad	white		9.72	0.00	10.58	0.00	10.25	0.00	10.93	0.00
	Indigenous Identity		9.29	0.01	10.37	0.00	9.62	0.01	10.65	0.00
detailed		British	9.71	0.00	10.61	0.00	10.25	0.00	10.95	0.00
	Registered	registered on-reserve	9.18	0.01	10.12	0.01	9.26	0.01	10.10	0.01
		registered off-reserve	9.32	0.01	10.36	0.01	9.67	0.01	10.66	0.01
	Identity	FN / NAI	9.36	0.03	10.38	0.01	9.89	0.02	10.70	0.01
		Metis	9.33	0.01	10.47	0.01	9.83	0.01	10.84	0.01
		Inuit	9.21	0.02	10.35	0.01	9.55	0.02	10.46	0.01
	Ancestry	Indigenous ancestry	9.40	0.10	10.34	0.08	9.68	0.12	10.61	0.10
		Indig. & Other Origins	9.56	0.02	10.49	0.01	10.08	0.01	10.82	0.01

Selection citizens by birth, age 25-64, working for someone else, able to speak an official language earning more than $100 CAD

Table 2

Earnings differentials, selected Indigenous groups compared to Canadian-born White or British origin men and women, 1995 - 2020

sex	comparison group	group	1995		2000		2005		2010		2015		2019		2020	
			percent	se %	percent	se %	percent	se %	percent	se %	percent	se %	percent	se %	percent	se %
female	observations		811,055		870,810		940,990		986,165		1,213,580		1,242,420		1,174,895	
	R2		0.13		0.14		0.16		0.14		0.15		0.14		0.16	
	white vs	Indigenous	-0.157	0.006	-0.158	0.005	-0.098	0.005	-0.079	0.004	-0.091	0.003	-0.060	0.003	-0.049	0.004
	observations		811,055		870,810		940,990		986,165		1,213,580		1,242,420		1,174,895	
	R2		0.13		0.14		0.16		0.14		0.15		0.14		0.16	
	British origin	Registered on reserve	-0.087	0.014	-0.115	0.011	-0.051	0.011	-0.088	0.011	-0.118	0.007	-0.108	0.009	-0.015	0.010
	vs	Registered off reserve	-0.181	0.010	-0.250	0.008	-0.173	0.008	-0.126	0.008	-0.184	0.006	-0.084	0.006	-0.088	0.006
		FN / NAI	-0.211	0.018	-0.181	0.015	-0.124	0.013	-0.128	0.010	-0.129	0.009	-0.097	0.008	-0.106	0.008
		Métis	-0.175	0.012	-0.137	0.010	-0.085	0.008	-0.051	0.008	-0.056	0.006	-0.032	0.006	-0.025	0.006
		Inuit	0.030	0.035	0.036	0.029	0.323	0.032	0.242	0.027	0.218	0.023	0.175	0.021	0.297	0.024
		Indigenous ancestry	-0.211	0.031	-0.116	0.021	-0.121	0.017	-0.103	0.100	-0.116	0.015	-0.102	0.047	-0.033	0.053
		Indig. & Other Origins	-0.098	0.013	-0.095	0.011	-0.092	0.009	-0.074	0.009	-0.099	0.009	-0.042	0.006	-0.040	0.007
male	observations		888,160		917,355		953,710		974,010		1,213,500		1,292,150		1,172,090	
	R2		0.16		0.15		0.17		0.15		0.16		0.14		0.17	
	white vs	Indigenous	-0.361	0.004	-0.303	0.004	-0.266	0.003	-0.195	0.004	-0.189	0.003	-0.155	0.003	-0.157	0.003
	observations		888,160		917,355		953,710		974,010		1,213,500		1,292,150		1,172,090	
	R2		0.16		0.15		0.17		0.15		0.16		0.14		0.17	
	British origin	Registered on reserve	-0.521	0.006	-0.482	0.005	-0.509	0.005	-0.469	0.006	-0.400	0.005	-0.455	0.005	-0.435	0.006
	vs	Registered off reserve	-0.326	0.007	-0.294	0.007	-0.267	0.007	-0.185	0.007	-0.214	0.006	-0.133	0.006	-0.150	0.006
		FN / NAI	-0.188	0.015	-0.191	0.013	-0.169	0.011	-0.131	0.010	-0.126	0.008	-0.113	0.008	-0.120	0.008
		Métis	-0.216	0.009	-0.159	0.008	-0.084	0.007	-0.056	0.007	-0.037	0.006	-0.025	0.006	-0.032	0.006
		Inuit	-0.340	0.018	-0.345	0.016	-0.270	0.016	-0.183	0.017	-0.243	0.014	-0.212	0.014	-0.158	0.016
		Indigenous ancestry	-0.151	0.026	-0.093	0.018	-0.102	0.015	0.060	0.142	-0.102	0.016	-0.012	0.061	-0.069	0.055
		Indig. & Other Origins	-0.089	0.011	-0.083	0.010	-0.072	0.008	-0.098	0.009	-0.080	0.009	-0.036	0.007	-0.050	0.006

Selection: age 25-64, Canadian citizen by birth, able to speak an official language, primary source of earnings is wages and salaries, earnings greater than $100 CAD

comparison group is in bold

Table 3: Change in earnings differentials between 1995 and 2019 with different controls

				raw mean		basic		age		educ		baseline	
year	sex	**group**	ethnicity	Percent	se %	Percent	se %	Percent	se %	Percent	se %	Percent	se %
2019-1995	female	**White vs**	Indigenous	0.162	0.006	0.144	0.006	0.133	0.006	0.132	0.007	0.096	0.007
		British origin vs	Registered on reserve	0.023	0.012	-0.011	0.013	-0.024	0.014	0.028	0.015	-0.021	0.017
			Registered off reserve	0.099	0.010	0.098	0.011	0.082	0.011	0.117	0.011	0.097	0.011
			FN / NAI	0.084	0.018	0.091	0.019	0.085	0.019	0.113	0.019	0.114	0.019
			Métis	0.177	0.012	0.165	0.012	0.157	0.012	0.177	0.013	0.143	0.013
			Inuit	0.164	0.026	0.139	0.029	0.118	0.030	0.202	0.035	0.144	0.040
			Indigenous ancestry	0.162	0.054	0.166	0.055	0.128	0.053	0.114	0.057	0.109	0.057
			Indig. & Other Origins	0.022	0.014	0.031	0.014	0.015	0.014	0.052	0.014	0.056	0.014
	male	**White vs**	Indigenous	0.226	0.005	0.238	0.004	0.226	0.004	0.225	0.005	0.207	0.005
		British origin vs	Registered on reserve	0.055	0.007	0.069	0.006	0.064	0.007	0.085	0.007	0.066	0.008
			Registered off reserve	0.187	0.008	0.215	0.009	0.188	0.009	0.205	0.009	0.193	0.009
			FN / NAI	0.080	0.016	0.090	0.016	0.069	0.016	0.075	0.017	0.075	0.017
			Métis	0.238	0.010	0.239	0.010	0.218	0.010	0.216	0.011	0.191	0.011
			Inuit	0.112	0.019	0.135	0.019	0.112	0.019	0.158	0.021	0.127	0.023
			Indigenous ancestry	0.179	0.062	0.185	0.065	0.150	0.063	0.137	0.066	0.139	0.066
			Indig. & Other Origins	0.025	0.012	0.072	0.012	0.037	0.012	0.053	0.013	0.053	0.013

Selection: age 25-64, Canadian citizen by birth, able to speak an official language, primary source of earnings is wages and salaries, earnings greater than $100 CAD

"raw mean" has no controls; "basic" controls include official language, marital status and household size; "age" adds age; "education" adds

Table 4	Earnings differentials for male and female Registered Indian workers living off reserve versus Canadian-born British origin workers, Canada, Edmonton and Vancouver															
			1995		2000		2005		2010		2015		2019		2020	
group	sex	region	percent	se of percent	percent	se of percent	percent	se of percent	percent	se of percent	percent	se of percent	percent	se of percent	percent	se of percent
Registered on Reserve	female	Canada	-0.132	0.046	-0.164	0.032	-0.020	0.035	-0.051	0.034	-0.110	0.012	-0.054	0.025	0.024	0.032
		Edmonton	-0.161	0.119	-0.026	0.126	-0.210	0.082	-0.079	0.106	0.041	0.068	0.003	0.094	-0.088	0.097
		Vancouver	-0.347	0.082	-0.249	0.094	-0.089	0.112	-0.241	0.076	-0.330	0.056	-0.107	0.073	-0.166	0.076
	male	Canada	-0.306	0.027	-0.284	0.022	-0.260	0.023	-0.271	0.024	-0.175	0.010	-0.262	0.019	-0.198	0.024
		Edmonton	-0.617	0.042	-0.564	0.043	-0.599	0.035	-0.566	0.044	-0.426	0.033	-0.398	0.055	-0.452	0.053
		Vancouver	-0.411	0.068	-0.476	0.061	-0.410	0.064	-0.440	0.061	-0.438	0.049	-0.390	0.048	-0.342	0.058
Registered off Reserve	female	Canada	-0.256	0.009	-0.271	0.008	-0.208	0.007	-0.170	0.007	-0.216	0.006	-0.119	0.006	-0.128	0.006
		Edmonton	-0.381	0.038	-0.268	0.037	-0.354	0.027	-0.223	0.032	-0.253	0.027	-0.203	0.022	-0.229	0.024
		Vancouver	-0.365	0.031	-0.388	0.028	-0.212	0.034	-0.252	0.030	-0.219	0.027	-0.177	0.024	-0.169	0.026
	male	Canada	-0.375	0.007	-0.317	0.007	-0.288	0.006	-0.222	0.007	-0.236	0.006	-0.157	0.006	-0.179	0.005
		Edmonton	-0.464	0.030	-0.311	0.031	-0.338	0.025	-0.282	0.026	-0.315	0.022	-0.220	0.022	-0.261	0.022
		Vancouver	-0.464	0.026	-0.390	0.026	-0.328	0.027	-0.360	0.026	-0.290	0.024	-0.230	0.022	-0.279	0.022

Note: Selection: age 25-64, Canadian citizen by birth, able to speak an official language, primary source of earnings is wages and salaries, earnings greater than $100 CAD
Regressions control for age, education, marital status, and household size
Canada wide regressions also control for roughly 5500 census subdivisions (municipalities) each year

Table A1 Weighted Frequencies, selected years

sex	model	group		1996	2001	2006	2011	2016	2019	2021
females	broad	Indigenous Identity		89,860	131,290	173,550	206,450	262,740	293,560	276,295
	detailed	Identity	registered on-reserve	19,960	30,740	33,815	31,890	56,765	38,500	34,285
			registered off-reserve	34,785	42,800	54,030	59,865	63,410	90,830	86,335
			FN / NAI	9,365	13,705	19,235	32,860	36,600	48,740	46,235
			Metis	23,925	41,255	62,465	76,685	99,760	109,995	104,535
			Inuit	4,205	5,705	6,955	8,205	9,725	10,935	9,950
		Ancestry	Indigenous ancestry	2,965	7,790	11,480	315	11,195	1,190	1,145
			Indig. & Other Origins	25,805	31,680	52,275	48,205	38,375	81,190	78,025
		Non-Indigenous		3,791,280	4,130,575	4,362,245	4,496,095	4,533,925	3,922,870	4,241,990
males	broad	Indigenous Identity		100,540	135,390	168,315	194,990	246,580	276,805	254,715
	detailed	Identity	registered on-reserve	26,385	135,390	168,315	194,990	246,580	36,760	32,550
			registered off-reserve	31,625	34,965	36,025	33,890	54,990	83,300	77,630
			FN / NAI	27,755	37,070	45,665	53,255	56,600	106,485	98,135
			Metis	11,015	44,705	62,450	72,950	94,700	45,380	42,070
			Inuit	4,980	14,830	19,310	29,565	34,150	10,160	9,025
		Ancestry	Indigenous ancestry	3,755	5,820	6,945	8,075	9,385	885	850
			Indig. & Other Origins	27,315	9,475	12,265	200	9,915	78,070	72,250
		Non-Indigenous		4,099,665	4,223,795	4,292,125	4,394,090	4,367,550	4,848,075	4,397,280

Selection: age 25-64, Canadian citizen by birth, able to speak an official language, primary source of earnings is wages and salaries, earnings greater than $100

Table A2 mean log of income and average age and number of persons in household

		year													
		1995		2000		2005		2010		2015		2019		2020	
sex	group	mean	se	mean	se	mean	se	mean	se	mean	se	mean	se	mean	se
female	white	9.72	0.00	9.93	0.00	10.15	0.00	10.32	0.00	10.45	0.00	10.58	0.00	10.56	0.00
	Indigenous	9.29	0.01	9.53	0.01	9.84	0.02	10.06	0.00	10.18	0.00	10.37	0.00	10.34	0.00
	British	9.71	0.00	9.95	0.00	10.13	0.00	10.33	0.00	10.47	0.00	10.61	0.00	10.60	0.00
	Registered on reserve	9.18	0.01	9.39	0.01	9.62	0.01	9.86	0.01	10.02	0.01	10.12	0.01	10.17	0.01
	Registered off reserve	9.32	0.01	9.50	0.01	9.77	0.01	10.05	0.01	10.11	0.01	10.36	0.01	10.30	0.01
	FN / NAI	9.36	0.03	9.64	0.02	9.85	0.02	10.07	0.01	10.20	0.01	10.38	0.01	10.32	0.01
	Métis	9.33	0.01	9.63	0.01	9.88	0.01	10.16	0.01	10.30	0.01	10.47	0.01	10.43	0.01
	Inuit	9.21	0.02	9.48	0.02	9.87	0.02	10.09	0.02	10.20	0.02	10.35	0.01	10.39	0.02
	Indigenous Ancestry	9.40	0.10	9.56	0.10	9.81	0.05	10.13	0.05	9.92	0.16	10.34	0.08	10.11	0.10
	Indig. & Other Origins	9.56	0.02	9.78	0.01	9.94	0.01	10.17	0.01	10.31	0.01	10.49	0.01	10.46	0.01
male	white	10.25	0.00	10.53	0.00	10.60	0.00	10.71	0.00	10.85	0.00	10.93	0.00	10.92	0.00
	Indigenous	9.62	0.01	10.07	0.04	10.14	0.00	10.41	0.00	10.52	0.00	10.65	0.00	10.62	0.00
	British	10.25	0.00	10.47	0.00	10.62	0.00	10.78	0.01	10.89	0.00	10.95	0.00	10.95	0.00
	Registered on reserve	9.26	0.01	9.49	0.01	9.64	0.01	9.85	0.01	10.16	0.01	10.10	0.01	10.10	0.01
	Registered off reserve	9.67	0.01	9.91	0.01	10.15	0.01	10.38	0.01	10.48	0.01	10.66	0.01	10.59	0.01
	FN / NAI	9.89	0.02	10.08	0.02	10.29	0.02	10.47	0.01	10.61	0.01	10.70	0.01	10.65	0.01
	Métis	9.83	0.01	10.11	0.01	10.39	0.01	10.59	0.01	10.75	0.01	10.84	0.01	10.80	0.01
	Inuit	9.55	0.02	9.71	0.02	10.04	0.02	10.27	0.02	10.32	0.02	10.46	0.01	10.48	0.02
	Indigenous Ancestry	9.68	0.12	10.09	0.08	10.35	0.05			10.90	0.11	10.61	0.10	10.59	0.10
	Indig. & Other Origins	10.08	0.01	10.27	0.01	10.45	0.01	10.53	0.01	10.71	0.01	10.82	0.01	10.78	0.01

Selection: age 25-64, Canadian citizens by birth, speaking an official language, earnings greater than $100

note: empty cells denote low counts

means for age and units are for the average and are for the census year

Table A3 Weighted Frequencies and means of covariates

sex	model	group	1996	2001	2006	2011	2016	2019	2021
Frequencies of categorical covariates									
females	official	English	2502620	2753595	2915415	3046910	3118735	3195435	3002550
	language	French	571135	594700	675395	640365	604660	595290	561235
		bilingual	838535	955950	1011690	1066850	1126365	1180820	1145025
	marital	single	598049	1121035	808655	1537610	1774110	1936300	1961655
	status	married	2785730	2378260	3169232	2355355	2244860	2211380	2011815
		separated	143405	199220	170290	569505	203105	199565	185730
		divorced	315357	523805	379238	203060	540160	532410	474775
		widow	69747	81930	75083	88590	87525	91890	74835
	school	none	691470	650295	448960	355255	303075	274990	239575
		HS cert	1082665	1117675	1155050	1094185	1085110	1071110	982060
		col cert<1yr	101655	109570	197920	199470	263495	240830	226755
		col 1-2	502545	553740	615145	653710	714055	700040	668800
		col 2pl	317465	400580	419030	478490	475625	481310	462580
		trades	362890	422635	426020	415680	354600	333945	315885
		univ cert <ba	131565	140115	234095	228540	160645	164620	154785
		ba	515735	645830	769960	919605	1071850	1187250	1171985
		BA+	85710	105385	127955	140940	104900	118235	113950
		ma	103920	133860	179090	229400	272825	336615	323365
males	oln	English	2502620	2753595	2915415	3046910	3118735	3195435	3002550
		French	571135	594700	675395	640365	604660	595290	561235
		bilingual	838535	955950	1011690	1066850	1126365	1180820	1145025
	marst	single	598049	1121035	808655	1537610	1774110	1936300	1961655
		married	2785730	2378260	3169232	2355355	2244860	2211380	2011815
		separated	143405	199220	170290	569505	203105	199565	185730
		divorced	315357	523805	379238	203060	540160	532410	474775
		widow	69747	81930	75083	88590	87525	91890	74835
	hlos	none	691470	650295	448960	355255	303075	274990	239575
		HS cert	1082665	1117675	1155050	1094185	1085110	1071110	982060
		col cert<1yr	101655	109570	197920	199470	263495	240830	226755
		col 1-2	502545	553740	615145	653710	714055	700040	668800
		col 2pl	317465	400580	419030	478490	475625	481310	462580
		trades	362890	422635	426020	415680	354600	333945	315885
		univ cert <ba	131565	140115	234095	228540	160645	164620	154785
		ba	515735	645830	769960	919605	1071850	1187250	1171985
		BA+	85710	105385	127955	140940	104900	118235	113950
		ma	103920	133860	179090	229400	272825	336615	323365
Means of continuous covariates									
female	age		39.89	41.09	42.33	43.22	43.44	43.66	43.39
	household size		3.05	2.99	2.93	2.88	2.88	2.87	2.89
male	age		40.06	41.20	42.35	42.98	43.17	43.59	43.13
	household size		3.12	3.03	2.95	2.91	2.89	2.88	2.90

Selection citizens by birth, age 25-64, working for someone else, able to speak an official language earning more than 100CAD

Appendix table A4
Employment probability regressions, Broad vs White and Detailed Indigenous groups compared British Origin Canadian-born, 1996 - 2021

sex	comparison group	control	1996 percent	se of percent	2001 percent	se of percent	2006 percent	se of percent	2011 percent	se of percent	2016 percent	se of percent	2019 percent	se of percent	2021 percent	se of percent
female	**white vs**	Indigenous	-0.13	0.00	-0.12	0.00	-0.09	0.00	-0.09	0.00	-0.09	0.00	-0.05	0.00	-0.07	0.00
	British	Registered on-reserve	-0.10	0.00	-0.12	0.00	-0.11	0.00	-0.14	0.00	-0.12	0.00	-0.09	0.00	-0.11	0.00
	origin vs	Registered off-reserve	-0.16	0.00	-0.16	0.00	-0.12	0.00	-0.12	0.00	-0.13	0.00	-0.08	0.00	-0.10	0.00
		FN / NAI	-0.11	0.01	-0.10	0.01	-0.07	0.00	-0.06	0.00	-0.09	0.00	-0.05	0.00	-0.07	0.00
		Metis	-0.07	0.00	-0.06	0.00	-0.04	0.00	-0.03	0.00	-0.05	0.00	-0.02	0.00	-0.03	0.00
		Inuit	-0.03	0.01	-0.05	0.01	-0.03	0.01	-0.03	0.01	-0.05	0.01	0.04	0.01	-0.04	0.01
		Indigenous ancestry	-0.09	0.01	-0.05	0.01	-0.06	0.01	-0.09	0.04	-0.05	0.01	-0.05	0.02	-0.07	0.02
		Indig. & Other Origins	-0.03	0.00	-0.04	0.00	-0.03	0.00	-0.03	0.00	-0.02	0.00	-0.02	0.00	-0.02	0.00
male	**white vs**	Indigenous	-0.17	0.00	-0.16	0.00	-0.12	0.00	-0.12	0.00	-0.12	0.00	-0.06	0.00	-0.10	0.00
	British	Registered on-reserve	-0.21	0.00	-0.23	0.00	-0.22	0.00	-0.24	0.00	-0.20	0.00	-0.15	0.00	-0.19	0.00
	origin vs	Registered off-reserve	-0.17	0.00	-0.15	0.00	-0.11	0.00	-0.11	0.00	-0.12	0.00	-0.07	0.00	-0.11	0.00
		FN / NAI	-0.12	0.01	-0.12	0.00	-0.07	0.00	-0.09	0.00	-0.08	0.00	-0.05	0.00	-0.07	0.00
		Metis	-0.10	0.00	-0.08	0.00	-0.05	0.00	-0.04	0.00	-0.05	0.00	-0.02	0.00	-0.04	0.00
		Inuit	-0.12	0.01	-0.15	0.01	-0.17	0.01	-0.15	0.01	-0.14	0.01	0.00	0.01	-0.14	0.01
		Indigenous ancestry	-0.08	0.01	-0.06	0.01	-0.05	0.01	-0.08	0.05	-0.05	0.01	-0.04	0.02	-0.12	0.02
		Indig. & Other Origins	-0.04	0.00	-0.03	0.00	-0.02	0.00	-0.03	0.00	-0.03	0.00	-0.01	0.00	-0.02	0.00

Selection: age 25-64, Canadian citizen by birth, able to speak an official language
comparison group in bold

Table A5: Earnings differentials for Broad and detailed Indigenous groups, 1995 and 2019

				raw mean		basic		age		educ		baseline	
year	sex	**group**	ethnicity	Percent	se %	Percent	se %	Percent	se %	Percent	se %	Percent	se %
1995	female	**White vs**	Indigenous	-0.352	0.005	-0.314	0.005	-0.302	0.005	-0.220	0.006	-0.157	0.006
		British origin vs	Registered on reserve	-0.412	0.010	-0.313	0.011	-0.289	0.012	-0.217	0.012	-0.087	0.014
			Registered off reserve	-0.323	0.009	-0.284	0.009	-0.270	0.009	-0.221	0.009	-0.181	0.010
			FN / NAI	-0.294	0.017	-0.285	0.017	-0.278	0.017	-0.215	0.018	-0.211	0.018
			Métis	-0.312	0.011	-0.296	0.011	-0.288	0.011	-0.223	0.011	-0.175	0.012
			Inuit	-0.393	0.022	-0.300	0.025	-0.260	0.026	-0.120	0.030	0.030	0.035
			Indigenous ancestry	-0.338	0.028	-0.329	0.028	-0.322	0.028	-0.222	0.031	-0.211	0.031
			Indig. & Other Origins	-0.141	0.013	-0.149	0.013	-0.145	0.012	-0.103	0.013	-0.098	0.013
	male	**White vs**	Indigenous	-0.466	0.004	-0.469	0.003	-0.454	0.003	-0.394	0.004	-0.361	0.004
		British origin vs	Registered on reserve	-0.629	0.005	-0.626	0.005	-0.610	0.005	-0.565	0.005	-0.521	0.006
			Registered off reserve	-0.442	0.007	-0.420	0.007	-0.395	0.007	-0.348	0.007	-0.326	0.007
			FN / NAI	-0.303	0.014	-0.267	0.014	-0.247	0.014	-0.190	0.015	-0.188	0.015
			Métis	-0.343	0.008	-0.323	0.008	-0.307	0.008	-0.246	0.009	-0.216	0.009
			Inuit	-0.501	0.015	-0.501	0.014	-0.464	0.015	-0.403	0.016	-0.340	0.018
			Indigenous ancestry	-0.298	0.024	-0.251	0.024	-0.233	0.025	-0.155	0.026	-0.151	0.026
			Indig. & Other Origins	-0.153	0.011	-0.150	0.010	-0.129	0.011	-0.093	0.011	-0.089	0.011
2019	female	**White vs**	Indigenous	-0.190	0.003	-0.169	0.003	-0.169	0.003	-0.088	0.003	-0.060	0.003
		British origin vs	Registered on reserve	-0.389	0.006	-0.324	0.007	-0.313	0.007	-0.189	0.008	-0.108	0.009
			Registered off reserve	-0.224	0.005	-0.185	0.005	-0.188	0.005	-0.104	0.006	-0.084	0.006
			FN / NAI	-0.209	0.007	-0.193	0.007	-0.193	0.007	-0.102	0.008	-0.097	0.008
			Métis	-0.135	0.005	-0.130	0.005	-0.132	0.005	-0.045	0.006	-0.032	0.006
			Inuit	-0.229	0.014	-0.161	0.016	-0.143	0.016	0.082	0.019	0.175	0.021
			Indigenous ancestry	-0.176	0.047	-0.163	0.047	-0.195	0.044	-0.108	0.047	-0.102	0.047
			Indig. & Other Origins	-0.119	0.006	-0.119	0.006	-0.130	0.006	-0.051	0.006	-0.042	0.006
	male	**White vs**	Indigenous	-0.240	0.003	-0.231	0.003	-0.228	0.003	-0.169	0.003	-0.155	0.003
		British origin vs	Registered on reserve	-0.574	0.004	-0.558	0.004	-0.546	0.005	-0.480	0.005	-0.455	0.005
			Registered off reserve	-0.255	0.005	-0.205	0.005	-0.207	0.005	-0.143	0.006	-0.133	0.006
			FN / NAI	-0.223	0.007	-0.177	0.008	-0.178	0.007	-0.115	0.008	-0.113	0.008
			Métis	-0.105	0.006	-0.084	0.006	-0.089	0.005	-0.029	0.006	-0.025	0.006
			Inuit	-0.389	0.012	-0.366	0.012	-0.351	0.012	-0.246	0.014	-0.212	0.014
			Indigenous ancestry	-0.119	0.058	-0.066	0.060	-0.083	0.058	-0.018	0.060	-0.012	0.061
			Indig. & Other Origins	-0.128	0.006	-0.078	0.007	-0.092	0.006	-0.040	0.007	-0.036	0.007

Table A6: Earnings differentials for Broad and detailed Indigenous groups controlling for CSDs, 1996 and 2019

			Location controls:	baseline 13 CMA dummies		CSD ~5000 CSD dummies		enumerated CSDs 13 CMA dummies	
year	sex	comparison grp	ethnicity	Percent	se %	Percent	se %	Percent	se %
1996	female	**White vs**	Indigenous	-0.157	0.006	-0.224	0.007	-0.159	0.006
		British origin vs	Registered on reserve	-0.087	0.014	-0.132	0.046	-0.098	0.015
			Registered off reserve	-0.181	0.010	-0.256	0.009	-0.181	0.010
			FN / NAI	-0.211	0.018	-0.240	0.017	-0.210	0.018
			Métis	-0.175	0.012	-0.200	0.012	-0.175	0.012
			Inuit	0.030	0.035	-0.346	0.033	0.031	0.035
			Indigenous ancestry	-0.211	0.031	-0.215	0.031	-0.211	0.031
			Indig. & Other Origins	-0.098	0.013	-0.105	0.012	-0.098	0.013
	male	**White vs**	Indigenous	-0.361	0.004	-0.305	0.005	-0.358	0.004
		British origin vs	Registered on reserve	-0.521	0.006	-0.306	0.027	-0.523	0.006
			Registered off reserve	-0.326	0.007	-0.375	0.007	-0.326	0.007
			FN / NAI	-0.188	0.015	-0.217	0.014	-0.187	0.015
			Métis	-0.216	0.009	-0.245	0.009	-0.216	0.009
			Inuit	-0.340	0.018	-0.405	0.025	-0.339	0.018
			Indigenous ancestry	-0.151	0.026	-0.157	0.026	-0.151	0.026
			Indig. & Other Origins	-0.089	0.011	-0.120	0.010	-0.089	0.011
2019	female	**White vs**	Indigenous	-0.060	0.003	-0.080	0.004	-0.060	0.003
		British origin vs	Registered on reserve	-0.108	0.009	-0.054	0.025	-0.110	0.009
			Registered off reserve	-0.084	0.006	-0.119	0.006	-0.084	0.006
			FN / NAI	-0.097	0.008	-0.096	0.008	-0.097	0.008
			Métis	-0.032	0.006	-0.052	0.006	-0.032	0.006
			Inuit	0.175	0.021	-0.097	0.024	0.175	0.021
			Indigenous ancestry	-0.102	0.047	-0.093	0.048	-0.102	0.047
			Indig. & Other Origins	-0.042	0.006	-0.039	0.006	-0.042	0.006
	male	**White vs**	Indigenous	-0.155	0.003	-0.114	0.003	-0.152	0.003
		British origin vs	Registered on reserve	-0.455	0.005	-0.262	0.019	-0.459	0.006
			Registered off reserve	-0.133	0.006	-0.157	0.006	-0.133	0.006
			FN / NAI	-0.113	0.008	-0.114	0.008	-0.113	0.008
			Métis	-0.025	0.006	-0.061	0.006	-0.025	0.006
			Inuit	-0.212	0.014	-0.191	0.022	-0.213	0.014
			Indigenous ancestry	-0.012	0.061	-0.028	0.059	-0.010	0.061
			Indig. & Other Origins	-0.036	0.007	-0.037	0.007	-0.036	0.007

Notes: Selection: age 25-64, Canadian citizen by birth, able to speak an official language, primary source of earnings is wages and salaries, earnings greater than $100 CAD

comparison group is in bold

the leftmost column reproduces the change over time reported in main text Table 3; the middle column provides estimates that drop CMA dummies and replace them with roughly 5000 census subdivision dummies, corresponding to regressions underlying results in main text Table 4; the rightmost columns provide estimates of the baseline regression dropping all CSDs that were incompletely enumerated *either* in 1996 *or* in 2021.