Metro Taxi et al. v. City of Ottawa

Expert Report of Michael Ornstein

Introduction

I have been retained to provide expert opinion on the sociological makeup of Ottawa taxi plate owners. I was asked, first, to determine the representation of minority groups and, second, to consider the economic wellbeing of minority groups prominent in the Ottawa taxi industry. In addition, I was asked to examine the representation of French-Canadians among plate owners and to consider evidence of their historical disadvantage.

I am an Associate Professor of Sociology at York University. As Director of the Institute for Social Research at York University for twelve years, in addition to the general management I planned survey projects, designed survey samples, wrote questionnaires, planned field work and analyzed survey data. I am the author of *A Companion to Survey Research*, published by Sage in 2013. My research involves the statistical analysis of surveys, including Canadian Censuses. I teach social statistics at the graduate level. Using Canadian Census and their own equity survey I have conducted research on the representation of women, Indigenous people and racialized groups in the legal profession for the *Law Society of Ontario* and the *Law Society of British Columbia.* I have conducted pay equity analysis for two universities. My CV is attached.

As set out in this *Report*, in my view Ottawa taxicab plate owners are disproportionately members of groups protected by Section 15 of the *Charter of Rights and Freedoms* and Part I of the *Human Rights Code.* Further, the minority groups predominant in the industry are economically disadvantaged, compared to the populations of the Ottawa-Gatineau Metropolitan Area and the Province of Ontario. While they account for a small number of plate owners, French-Canadians have experienced historical disadvantage.

This report has five sections. In Section A, I consider how minority groups are defined and show how the complete list of plate owners' names and a survey of plate owners can be used to describe them and how the 2016 Canadian Census provides comparisons between plate owners and the population. Focussing on visible minority groups and immigrants, Section B describes Ottawa plate owners in comparison to the populations of the Ottawa-Gatineau metropolitan area and the Province of Ontario. Section C examines the economic wellbeing of the visible minority groups prominent in the industry. Section D provides historical evidence of the economic condition of French-Canadians in Ontario and Quebec. Section E is a conclusion.

A. Methodology

1. Defining and Measuring Minority Groups

Section 15 of the *Charter* protects groups defined by "race, national or ethnic origin [and] colour." Conventionally, "ethnic origin" involves differentiating White European groups by broad nationality (for example, Scandinavian), individual nations (British or Danish) or sub-national areas (Scottish or Flemish). The term "race" has fallen into disuse because it implies a simple classification based on appearance. Contemporary understanding is best captured by the idea of "racialization", which directs attention to the "social construction" of sometimes imperceptible and ambiguous differences in appearance, in the context of unequal power[1]. In Canada, it is impossible to think about national or ethnic origin outside of immigration.

Since 1996, Statistics Canada has measured racialization by asking Census respondents to self-identify as members of "visible minority" groups, although the question simply asks, "Is this person" and lists alternative responses, which in 2016 included White, South Asian, Chinese, Black, and seven other groups (by convention listed on the form in descending order of size). Respondents could also "specify" a group not on the list and were instructed to "mark more than one [answer] if applicable". Indigenous persons are considered distinct and *not* members of a visible minority. The Census questions about place of birth, year of immigration (referring to when a person became a landed immigrant) and citizenship are straightforward[2].

The 2016 Census form establishes a standard for identifying visible minority and immigrant taxi plate owners and statistical analysis of the 2016 Census "Public Use Microdata File" allowed me to compare the plate owners to the Canadian population in its entirety or to a province or metropolitan area[3].

2. Describing Ottawa Taxi Plate Owners

The Canadian Censuses and major Statistics Canada surveys provide a wide range of demographic information. Depending on the year, between one-fifth and one-third of all Canadian households received the detailed "long form" version of the census. The Census covers everyone living in Canada, but in many

[1] Ramos (2013) has a nice review of Canadian sociologists' changing focus.
[2] The complete census form is at http://www23.statcan.gc.ca/imdb/p3Instr.pl?Function=getInstrumentList&Item_Id=295122&UL=1V&
[3] The term "microdata" indicates the file is made up of a sample of the records of individual Census respondents, rather than being "aggregate data" that are grouped in geographical areas or in another way.

cases does not include the information required to identify members of a specific group, for example Ottawa taxi plate owners.

The census classification of occupations into about 500 detailed categories is the basis for the only major study of taxi *drivers*, Li Xu's 2012 *Citizenship and Immigration Canada* report on "Who Drives a Taxi in Canada?" Not all drivers, however, are taxi plate owners, and vice versa. Indeed, in Ottawa there appear to be about twice as many taxi drivers as plate owners, assuming not too much change between 2006 and 2015[4]. Unfortunately, the Census does not provide the information required to determine which taxi drivers are plate owners[5] or to identify plate owners who do not drive. As this part of the Census form has not changed, an update of Xu's report on the 2006 Census would have the same limitations.

Scholarly research reflects this dearth of systematic information about plate owners. Eric Tucker's (2018) fine discussion of the history of the taxi industry, for example, which focussed on Toronto and sets Uber's challenge in the context of a long history of conflict between drivers, medallion owners and brokers, makes no mention of the social composition of the owners or drivers. More broadly, scholars such as Srnicek (2017) focus on the impact of "platform capitalism" on the economics of industries, the transformation of work, employment relations and unionization, especially their legal aspects, rather than on the kinds of workers who provide a service.

To obtain new data describing the social characteristics of Ottawa taxi plate owners, I began with a complete list of taxi plate renewals and transfers in 2014, 2015 and 2016, obtained from the City of Ottawa in the course of this proceeding. These records were combined to create a list of every plate owner in one or more years, though most plates had the same ownership in all three years. Most owners had just one plate. I removed eight corporate plate owners from the list because firms are not properly characterized by the personal characteristics of individuals, such as gender, age and racialization.

Using their given names and surnames, I was able to classify all the individual plate owners into the census "visible minority" categories. Such classification can be problematic in some populations, for example there are many Black Canadians with British surnames and the Yiddish surnames of some early 20th century Jewish immigrants were changed to common English surnames. Classifying the names of plate

[4] The comparison is compromised, first because it compares 2006 pre-Uber era taxi drivers to 2014-2016 taxi plate owners and, second, because the census question, "What was this person's work or occupation?", asks about a person's main occupation and provides no information about part-time drivers with a different main job.

[5] In the Censuses, earnings in the form of wages or salary and self-employment income are reported separately, and this might seem a basis for separating taxi drivers from plate owners. The problem is that both plate owners, who drive their own taxi, could not be distinguished from non-plate owner- drivers who "rent" a plate are self-employed. Also, plate owners who do not drive a taxi, but instead and rent out their plate or allow a family member to use it, cannot be identified in the Census, which does not measure assets except for permanent homes.

owners was made easier because of the distinctiveness of Arab, Indian and African names and because I knew individuals' first names and surnames. For reference, a number of websites provide information on the nationalities of names[6]. Table 2 will show that plate owners are overwhelmingly non-European. If anything, the presence of Anglicized foreign names in the list would lead to over-estimating the number of European names. Because the great majority of plate owners were men, as Table 1 will show, there was no reason for concern about name changes at marriage.

While plate owners' names provided a basis of measuring racialization, obtaining information on age, immigration, language and other personal characteristics required direct contact. So, the plate owners were surveyed by telephone using questions closely matched to the 2016 Census, except for minor modifications to accommodate the difference between our telephone survey and the "self-administered" Census, which used the web and printed forms. For a short survey with factual questions, there is no reason to think differences in the survey mode would produce artificial discrepancies between the plate owner telephone survey and the self-administered Census.

The survey of plate owners was conducted by the research firm Leger between October 26 and November 26, 2018. Leger interviewed 180 of the 688 individual plate owners, for a 26 percent response rate. While not unusually low for a telephone survey, it does raise the question of how well the survey respondents represent the complete population of plate owners. Because their names allowed all plate owners to be classified into visible minority groups, I was able to compare survey respondents and non-respondents. While statistically significant at the .05 level, but not the .01 level, the difference was not large enough to materially affect the survey results. I found that 8.9 percent of survey respondents had European names (identified as "White" in the tables), compared to 10.2 percent for survey *non*-respondents. The principal difference was that 55.5 percent of the survey non-respondents had Arab names, compared to 46.1 percent of respondents, while all the other non-White groups appeared in slightly greater numbers among survey respondents.

Of the individuals we surveyed, 78 percent had just one plate, 17 percent had two plates and just 5 percent had three or four plates.

3. Comparing Taxi Plate Owners to What "Population"?

The 2016 long form Census, distributed to one fourth of all households in Canada, provides the appropriate population statistics to compare with the representation of minority groups among taxi plate owners and to examine group differences in economic condition. The long form response rate was 98.1 percent in Ontario

[6] The most useful sites are wikipedia.org and forebears.io.

and 97.8 percent nationally[7]. It is a good match to information for 2014-2016 taxi plate owners. Census information on the population dates to May 2016, when the Census was taken, except that the Census income figures are from 2015 tax filings.

Since plate owners did not necessarily live in the City of Ottawa, a more appropriate geographical comparison is to the Ottawa-Gatineau *Census Metropolitan Area* or CMA, which is approximately the commuting radius of the City[8]. Because commuting is between home and work, the CMA is a reasonable definition of a local labour market and is the natural context to study a group of workers. For broader reference, I also made comparisons to the province of Ontario.

Table 1
Number of Plate Owners by Age by Gender

Age	Men	Women	Total
	number		
25-29	1	0	1
30-34	2	0	2
35-39	4	0	4
40-44	6	2	8
45-49	19	1	20
50-54	26	0	26
55-59	39	2	41
60-64	26	2	28
65-69	18	1	19
70-74	17	1	18
75-79	6	0	6
80 or more	2	0	2
No answer	4	1	5
Total	170	10	180

Source: 2018 Taxicab Plate Owners Survey;
Analysis: Michael Ornstein

Table 1 shows that just 10 of the 180 surveyed plate owners were women, and only 3 out of 175 (5 respondents did not give their age) were under 35. So, in addition to the entire population, I compared plate owners to all labour force participants[9] and to men in the labour force age 35 and older, which describes the great majority of plate owners.

Generally, poverty and living standards are defined for families, on the assumption that family members pool their income, share the benefits of assets (mainly homes, vehicles and second homes) and have the same housing, food and other necessities (see Jenkins and Van Kerm, 2009). Measures of the economic wellbeing of any group must include children, working-age adults who are not in the labour force and retirees, as well as people who are employed.

[7] See https://www12.statcan.gc.ca/census-recensement/2016/ref/response-rates-eng.cfm
[8] The formal definition is at https://www150.statcan.gc.ca/n1/pub/92-195-x/2011001/geo/cma-rmr/def-eng.htm
[9] By Statistics Canada definition, a labour force participant is employed or is not employed and looking for work.

B. Ottawa Taxi Plate Owners

Table 2 provides striking evidence of a highly racialized industry. Of the 688 Ottawa taxi plate owners, 365 or 53.1 percent are Arabs, compared to 3.9 percent of the entire Ottawa-Gatineau CMA population, 3.2 percent of its labour force and 3.7 percent of its male labour force age 35 and older. Compared to the province, the disparity is much greater, since there are just 1.6, 1.2 and 1.3 percent of Arabs in the three Ontario population groups, respectively. About one fourth of plate owners, 24.6 percent, are South Asian, compared to 2.6 percent of the Ottawa-Gatineau CMA population, 2.6 percent of its labour force and 2.6 percent of its male labour force age 35 and older. For the province, 8.5 percent of the population is South Asian, so proportionally there are still nearly three times more South Asian plate owners.

Black plate owners are the third largest non-White group, accounting for 5.5 percent of all plate owners, compared to 5.6 percent of the Ottawa-Gatineau CMA population, 5.2 percent of its labour force and 3.9 percent of its male labour force age 35 and older who are Black. While the number of Black plate owners would be underestimated if some had British names, this is highly unlikely because all 14 Black plate owners in the survey were immigrants with African names, almost all Ethiopian. Also, among the plate owners classified as White because of their European names, few had English names that could potentially belong to Black Canadians; and no one else in our survey identified as Black.

West Asians, almost all with Iranian first names and surnames, are the fourth largest non-White group of plate owners, accounting for 4.7 percent of plate owners. This compares with 0.6 percent West Asians in the Ottawa-Gatineau CMA population, 0.5 percent of its labour force and 0.4 percent of its male labour force age 35 and older. Depending on the comparison group there are at least eight times as many West Asian plate holders as members of the population.

In total, 9.9 percent of plate owners are White, compared to 76.1 percent of the Ottawa-Gatineau CMA population, 78.5 percent of its labour force and 80.6 percent of its male labour force age 35 and older. Thus Arabs, South Asians and West Asians are dramatically over-represented among taxi plate owners, while the sizeable number of Black plate owners is close to their representation in the population. Indigenous persons and other visible minority groups are very small in number or entirely absent. Just 8 of the 688 plate owners are Southeast Asian, 7 are Chinese, one is South or Central American. *None* of the plate owners is Filipino, Korean, Japanese, Indigenous, from a visible minority group not listed in the survey question, a member of two visible minorities, or both White *and* racialized.

Thirteen plate owners had French surnames, accounting for 1.9 percent of all 688 plate owners – in the context of *all* Whites accounting for just under 10 percent of plate owners. Because the Census file does not include names, an exact comparison to the population cannot be made, but I can approximate.

Table 2

Racialization of Ottawa Taxicab Plate Owners, Compared to the 2016 Census for the Ottawa-Gatineau CMA and Ontario

Group	Taxicab Plate Owners		Ottawa-Gatineau Census Metropolitan Area			Ontario		
			Everyone	All Labour Force Participants	Male Labour Force Participants, Age 35 or more	Everyone	All Labour Force Participants	Male Labour Force Participants, Age 35 or more
	number	*percent*	*percent*			*percent*		
Arab	365	53.1	3.9	3.2	3.7	1.6	1.2	1.3
Black	38	5.5	5.6	5.2	3.9	4.1	4.0	3.4
Chinese	7	1.0	2.9	2.7	2.8	5.4	5.1	5.1
Filipino	0	0.0	0.9	1.1	0.8	2.2	2.7	2.1
Korean	0	0.0	0.1	0.1	0.1	0.6	0.6	0.6
Japanese	0	0.0	0.0	0.0	0.0	0.1	0.1	0.1
Latin American	1	0.1	1.0	1.0	1.0	1.4	1.6	1.5
South Asian	169	24.6	2.6	2.6	2.6	8.5	8.2	8.5
Southeast Asian	8	1.2	0.9	0.9	0.9	0.9	0.9	0.8
West Asian	32	4.7	0.6	0.5	0.4	1.1	1.0	1.0
Other Visible Minorities	0	0.0	0.1	0.0	0.0	0.7	0.7	0.6
Multiple Visible Minority	0	0.0	0.3	0.2	0.1	0.7	0.6	0.5
White *and* Visible Minority	0	0.0	2.0	0.9	0.6	1.8	1.0	0.7
Indigenous	0	0.0	2.9	2.9	2.6	2.8	2.4	1.9
White	68	9.9	76.1	78.5	80.6	68.1	70.0	71.9
Total		100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number in the Sample	688		33,667	18,407	5,946	349,499	186,579	62,749

Sources: 2014-2016 Taxicab Plate Database; 2016 Canadian Census public use microdata file; Analysis: Michael Ornstein

I defined French-Canadians as non-immigrants who described their cultural background as French only *or* whose first language was French *and* whose cultural origin was reported as only "Canadian" or as French with one or more other origins. By this criterion, 25.9 percent of the entire Ottawa-Gatineau population was French-Canadian in 2016, with very similar percentages for labour force participants and male labour force participants age 35 and above. For all of Ontario, 3.6 percent of the population was French-Canadian. Considering the local labour market, French-Canadians, like Whites as a whole, are dramatically underrepresented among taxi plate owners – to a degree that tweaks to the definition of the group could not change. Even compared to all of Ontario, where the comparison to Ottawa plate owners seems less apt, French-Canadians are underrepresented.

Table 3 shows that just 10 percent of plate holders were born in Canada, compared to 80.3 percent of the Ottawa-Gatineau population, 79.2 percent of its labour force and 76.2 percent of its male labour force age 35 and older[10]. There is a somewhat higher concentration of immigrants in Ontario as a whole, but nowhere near the extraordinary percentage of plate owners who are immigrants.

One third of plate owners were born in Lebanon, 8 percent in other countries of the Middle East, 5 percent in Iran and 2 percent in Afghanistan. Thus nearly half, 49 percent, of all plate owners were born in the Middle East or West Asia. This compares to 2.9 percent of the entire Ottawa-Gatineau population, 2.9 percent of men age 35 or more in the labour force in the CMA and 3.7 percent of the Ontario population (the Census file does not separate the Middle East and West Asia). Depending on the comparison, compared to the population, plate owners are 10 to 15 times more likely to be Middle Eastern and West Asian immigrants.

Twenty-eight percent of plate owners were born in India, compared to just 1.0 percent of the Ottawa-Gatineau population, 1.2 percent of its labour force and 1.2 percent of its labour force age 35 and older. The corresponding figures for the entire province are somewhat higher, 3.0, 3.6 and 4.0 percent, respectively. I could have grouped South Asian *nations*, in parallel to the idea of a broader South Asian visible minority group, and then compared South Asian plate owners to the South Asian population. But this would underplay the distinctiveness of the plate holders, who were entirely born in India. In contrast, while 3 percent of the Ontario population was born in India, another 2.2 percent were born in other South Asian nations, mainly Pakistan, Bangladesh and Sri Lanka.

I have noted the significant presence of Black Ottawa taxi plate owners, roughly in line with the size of the Black population of Ottawa-Gatineau. Changing the criterion to place of birth, 7 percent of plate

[10] Because they are based on large samples, percentages from the Census are given to one decimal point, while those from the smaller plate owners survey are given to the nearest percentage.

Table 3

Place of Birth of Ottawa Taxi Plate Owners, Compared to the 2016 Census for the Ottawa-Gatineau CMA and Ontario

			Ottawa-Gatineau Census Metropolitan Area			Ontario		
Place of Birth	Taxi Plate Owners		Everyone	All Labour Force Participants	Male Labour Force Participants, Age 35 or more	Everyone	All Labour Force Participants	Male Labour Force Participants, Age 35 or more
	number	*percent*		*percent*			*percent*	
Canada	18	10.2	80.3	79.2	76.2	70.0	68.4	63.6
Northern, Western Europe, US, Austra	0	0.0	3.4	2.9	3.9	4.3	3.5	4.5
Southern Europe	2	1.1	1.0	0.8	1.2	3.1	2.4	3.5
Eastern Europe	4	2.3	1.3	1.5	1.7	2.2	2.6	3.0
Caribbean	1	0.6	1.2	1.5	1.4	1.8	2.1	2.3
South and Central America	0	0.0	1.0	1.1	1.4	2.0	2.4	2.8
Middle East	74	42.0	0.0	0.0	0.0	0.0	0.0	0.0
West Asia	12	6.8	0.0	0.0	0.0	0.0	0.0	0.0
Middle East and West Asia	0	0.0	2.9	2.9	3.7	2.7	2.6	2.9
North Africa	1	0.6	0.9	1.0	1.4	0.4	0.4	0.5
Africa, except North Africa	12	6.8	2.6	3.0	2.6	1.3	1.5	1.7
India	49	27.8	1.0	1.2	1.2	3.0	3.6	4.0
Other South Asia	0	0.0	0.6	0.7	0.8	2.2	2.5	3.2
China, including Hongkong, Taiwan	1	0.6	2.0	2.0	2.2	3.6	3.7	4.0
Southeast Asia	2	1.1	0.9	1.0	1.3	1.4	1.5	1.8
Other Asia and Oceania	0	0.0	0.8	1.1	0.8	1.8	2.5	2.1
Filipines	0		0.1	0.1	0.1	0.3	0.3	0.3
Total		100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number in the Sample	176		34,057	18,711	6,023	352,074	188,538	63,251

Sources: 2018 Taxi Plate Owners Survey; 2016 Canadian Census public use microdata file; Analysis: Michael Ornstein

owners were born in Africa (excluding North Africa), compared to just 2.6 percent of the total Ottawa-Gatineau population and 2.6 percent of men in the labour force 35 and older[11]. Just one of the surveyed plate owners immigrated from the Caribbean. Again, the aggregate figure understates their distinctiveness, for all 12 taxi plate owners born in three bordering countries in the Horn of Africa, 9 in Ethiopia, 2 in Eritrea and 1 in Somalia. The overall Black Canadian population, in contrast, includes distinct and sizeable groups from many nations of Africa, from the Caribbean, and with historical North American roots.

In order of specificity, first, Ottawa taxi plate holders are almost entirely racialized, and thus dramatically distinct from the Ottawa-Gatineau and Ontario populations, whether or not matched in terms of gender, age and employment. Second, the racialized plate holders are almost entirely from the Arab, West Asian, South Asian and Black visible minority groups, to the near or total exclusion of the other prominent visible minority groups of Chinese, Southeast Asians, Koreans and Filipinos. And, third, within these four groups, the taxi holders are almost entirely immigrants from Lebanon, India, Iran, and the Horn of Africa.

Of the 154 immigrant plate owners whose year of settlement was known, just one came to Canada as a pre-school child, 8 were of primary school age (between 6 and 12), and 16 were of secondary school age (13-18). The remainder were quite varied in age at arrival, with 56 young adults between 19 and 24, 32 in their mid-to late-20s, 27 in their 30s, 11 in their 40s and 3 were older.

Of the 156 immigrant plate owners who answered, 130 or 83 percent did not have English or French as their first language, 14 grew up in English or French *and* another language, and 12 grew up only in English and/or French. Of 18 Canadian-born plate owners, 12 had English or French as their first language, 5 spoke another language and one spoke English and another language. Of 46 Indian plate owners, just 1 had English as their first language, 3 had English or French *and* another first language and 42 had neither English nor French as their first language – almost all answered Punjabi or "Indian".

These findings are consistent with Xu's (2012) research on taxi drivers in Ottawa-Gatineau, although non-owner drivers must differ somewhat from plate holders. Of two thousand taxi drivers in the CMA in 2006, Xu found that 63.2 percent were immigrants and that just 8.3 percent of the immigrant taxi drivers had arrived after 2001, 9.1 percent between 1996 and 2001 and 82.3 percent[12] came to Canada in 1995 or earlier. This is not inconsistent with our findings, though compared to 2014-2016 plate owners, the 2006

[11] The figures for a visible minority and its usual place of birth – for example, comparing "Black" to persons born in Africa and Arabs to persons born in the Middle East – differ somewhat because members of visible minority group need not be born in their traditional homeland. This true for members of visible minority born in or outside of Canada.

[12] The three percentages do not add to exactly 100 percent due to rounding error.

taxi drivers described by Xu were more likely to be Canadian-born. Xu does not consider racialization, but the distribution of the birthplaces of the Ottawa-Gatineau immigrant taxi drivers is strikingly similar to the plate owners. As of 2006, drivers born in Lebanon accounted for 33.1 percent of foreign-born taxi drivers in Ottawa-Gatineau; followed by drivers born in India, 13.4 percent; Iran, 5.5 percent; Ethiopia, Eritrea and Somalia, 4.7, 3.1 and 2.8 percent, respectively; Afghanistan, 2.4 percent; and Iraq 2.0 percent (see p.11).

Separating Montreal, Ottawa-Gatineau, Toronto, Hamilton, Winnipeg, Calgary, Edmonton and Vancouver, Xu provides striking evidence of commonalities and differences in the taxi industries of large Canadian cities. Everywhere but Hamilton, where the figure is 47 percent, a majority of taxi drivers were immigrants: more than 80 percent in Toronto and Vancouver, around two-thirds in Ottawa-Gatineau, Winnipeg, Calgary and Edmonton, and 60 percent in Montreal (p. 11).

The mixture of nationalities was different in each city, however. Taxi drivers born in Lebanon accounted for of 33.1 percent of immigrant drivers in Ottawa-Gatineau, 18.7 percent in Montreal and 9.9 percent in Calgary, but they were a negligible presence in the other cities. Drivers born in India accounted for no less than 73.9 percent of immigrant drivers in Winnipeg, 63.3 percent in Vancouver, 39.5 percent in Calgary, between 20 and 30 percent in Toronto, Hamilton, and Edmonton, but just 1.2 percent in Montreal. Haitians accounted for one-third of Montreal immigrant drivers, but were a negligible presence in the other cities. Drivers born in Ethiopia, Eritrea and Somali-born accounted for 24.9 percent of Edmonton's immigrant drivers and about 10 percent in Ottawa-Gatineau, Toronto and Calgary, but were nearly absent in Montreal, Hamilton, Winnipeg and Vancouver.

Rather than representing the range of visible minority groups, each city's taxi industry combines a small number of "ethnic niches" defined by national origin. Scholar Ivan Light (205: 652-3) defines such niches as "industrial or occupational clusters of coethnics in excess of 150 percent of the expected number …[who] often turn to self-employment because of disadvantage."

There is a demographic and socio-economic explanation for the prominence of some groups in the taxi industry, different in each city, and the near absence of the Chinese, Japanese, Filipinos and Southeast Asians. First, in order to become a force in the taxi industry in a city, a group must have a large presence, which accounts for the involvement of Haitians in Montreal but not other cities. On the supply side, whether a group enters the industry depends on its members' educational and occupational credentials and whether they are recognized, language skills, and historical attitudes towards different types of work.

On the demand side, while the barriers to entry are low, the industry appears to be more welcoming to adult immigrants from ethnic groups already established in this work, whose first language is not English

or French. At the same time, in order to attract workers, there needs to be demand for drivers when new immigrants are looking for employment. Because of the long and non-standard hours, much like keeping a small store, employment in the taxi industry must be articulated with family life. But, where shop-keeping encourages *inter*-generational ties within a family; taxi driving encourages *intra*-generational bonds between siblings and cousins. The latter, especially because driving is almost exclusively male and, because only about a quarter of two-child families have two brothers and one-half of three-child families.

Family connections are also encouraged by the nature of taxi plates, which allow one vehicle to be driven all day and night. This invites very long hours of work, but also splitting time into day and night shifts. Family bonds can provide the trust, reliability and coordination involved in sharing a vehicle. Examining the list of plate owners, the repetition of surnames is very striking.

A well-known feature of modern labour markets is that a person's first job on entering the labour force has a long-term impact on their occupational trajectory and earnings. One reason for the solidification of ethnic niches in the industry is that, while taxi driving involves the skills and knowledge of a business or craft, it does not serve well as the first rung of a career ladder of increasing skill and responsibility. The work is physically grueling, without union protection or a minimum wage, and with few or no employment benefits, whether a driver owns a plate or not. Also, self-employed drivers and owners have no private pensions and their Canada Pension Plan contributions come at twice the cost for employees, whose contributions are matched by their employers. In this context, the purchase of a taxi plate provides a way to save, especially for retirement, not so different from buying a home.

The ethnic niches within the taxi industry represent a response to economic adversity, especially for groups whose first language is not English or French and from nations whose education credentials are often not recognized. Tucker shows how drivers, with and without plates, come into conflict with companies controlling taxi dispatch, beginning with land line telephones early in the last century, and with non-driver investors who accumulate plates. This, long before the new challenge of "platform capitalism"[13]. In large cities, the regulatory solution to low prices and poor working conditions in the industry took the form of a system of medallions. But the development of a free market in medallions, both for investors and for individuals entering, retiring or leaving the industry, created rents, so that the price of medallions was not necessarily related to the capacity of a taxi's fares to generate income. While the value of medallions has always fluctuated with the appetites of investors and changing demand; it is also vulnerable to drastic disruption by new dispatching technology and unlicensed competition, unless curbed by effective protection by the municipal regulator.

[13] For a fine commentary, see Weatherby (2018).

C. The Economic Condition of the Racialized Groups Prominent Among Plate Owners

A broad literature examines the impact of Indigeneity and racialization on material wellbeing, for example see Lightman and Good Gingrich (2018), Pendakur and Pendakur (2011) and Skuterud (2010). Universally, the research shows that non-White groups, both Indigenous and racialized[14], are disadvantaged relative to self-identified White persons. There is, however, no single conventional measure of disadvantage, which depends on many factors, including geography; whether comparison is based on employed persons, all persons or families; the measure of income, such as low or median or mean income; the source and date of the data; and whether personal and family characteristics, such as gender, family type and size and education are taken into account (Jenkins and Van Kerm, 2009). Rather than attempting to summarize the disparate published findings, based mainly on the 2011 and earlier Censuses and using a variety of metrics, timely measures of inequality can be obtained from the 2016 Census microdata directly. For this comparison, it makes sense to broaden the geographical area beyond the Ottawa-Gatineau CMA, since claims about inequality between groups are more general. Because of the provincial variation in the relative numbers in the different visible minority groups and potentially in their economic standing, it is reasonable to focus on the Province of Ontario. Finally, rather than considering all the groups, the comparison should be tailored to four groups dominant among Ottawa plate owners, Arabs, South Asians, Blacks and West Asians. These four groups are compared to White Ontarians in Tables 4 and 5, thus omitting Indigenous persons, Chinese, Filipinos, Southeast Asians, and so on.

Table 4 gives the percentage of each group in poverty, based on "economic family" income and accounting for family size and community size. Statistics Canada defines economic family members as partners and their blood relatives living in the same dwelling and assumes that every family member has the same standard of living. Most economic families are couples with or without a child and single parents with one or more children, but they also include co-resident siblings, potentially with their families, and multi-generational households.

Statistics Canada's "low income measure" is the international poverty standard, based on median income, while its "market basket measure," is based on the cost of a "basket of goods and services representing a modest, basic standard of living,"[15] measured separately in 19 major cities and otherwise based on

[14] Sometimes with the exception of the Japanese group.
[15] See the definition at https://www12.statcan.gc.ca/census-recensement/2016/ref/dict/pop165-eng.cfm

Table 4

Economic Indicators by Group for Ontario

	Poverty in Percent		Economic Family Income in Dollars		Total Personal Income in Dollars		Number in Sample		
Group	Low Income Measure	Market Basket Measure	Mean	Accounting for Family Size	Mean, for Ages 20-64	Mean, for Ages 20 or more	Poverty and Economic Family Income	For Personal Income ages 20-64	For Personal Income age 20 or more
Arab	38.7	46.2	47,361	49,955	36,835	35,858	5,397	2,929	5,444
Black	25.3	29.8	59,856	65,789	37,315	36,720	14,400	8,359	14,470
South Asian	18.1	22.2	78,251	82,063	42,324	40,631	29,573	17,619	29,709
West Asian	36.7	42.8	50,437	54,085	33,446	32,200	3,812	2,454	3,829
White	10.1	13.9	83,681	91,771	59,026	56,405	237,276	141,413	237,968

Source: 2016 Canadian Census public use microdata file; Analysis: Michael Ornstein

categories of community size within provinces. In 2018, the Government of Canada designated the market basket measure as the official measure of poverty.

Every group experiences poverty and in 2016 in Ontario, 10.1 percent of Whites had "low income" and 13.9 percent were poor according to the market basket measure. For Arabs in Ontario, who account for the largest group of plate owners, the corresponding poverty figures are 38.7 and 46.2 percent, about three and a half times the percentage for White Ontarians. West Asians were only marginally better off, with 36.7 and 42.8 percent of their Ontario population living in poverty, according to the low income and market basket measures, respectively. Black Ontarians were somewhat better off, but more than one in four were poor, 25.3 percent using the low income measure and 29.8 percent using the market basket measure – around two and a half times the figures for Whites. The fourth group, South Asians, experienced about 80 percent more poverty than White Ontarians, 18.1 and 22.2 percent for the two measures, respectively.

The third and fourth columns of Table 4 show the groups' mean economic family income[16], first "unadjusted" and second "adjusted for family size" [17]. The latter "adjusted" figures are a better measure of economic disparity because they account for the higher cost of maintaining a larger family at a given living standard. The two sets of figures are similar, but the economic advantage of the White group is greater adjusting for family size, since White families are smaller, on average. The mean adjusted income of Arabs was $49,955, only 54.4 percent of the White mean of $91,771. For West Asians, the mean is $54,085, for Blacks $65,789 and for South Asians $82,063.

Table 4 also gives mean values of total individual income for people between 20 and 64, capturing the peak ages of employment. Again, White individuals have the highest mean, $59,026, compared to $33,446 for West Asians, $36,835 for Arab Ontarians, $37,315 for Blacks and $42,324 for South Asians. Respectively, the four groups had 57, 60, 72 and 94 percent of the mean total income of Whites in Ontario.

[16] Because measure of family income included in the public use microdata file has 33 discrete categories, ranging from "under $2,000" to "$250,000 or more", the mean income of a group cannot be computed directly. The estimated mean was obtained using "interval regression," based on the logarithms of the range of each category, to obtain predicted values, then exponentiating to obtain the mean dollar values in Table 4. Since racialization is an individual characteristic, a family can include people from two or more groups. In this case, as for homogeneous families, each person is assigned the family's value for income.

[17] This adjustment follows the convention of dividing the family's total income by the square root of the number of persons in the family. For example, to maintain the same standard of living, a four-person family requires twice the income as a single person, since the square root of four is two.

Table 5

Economic Family Income in 2015 by Group for Ontario

Group	Economic Family Income Decile						Number in Sample
	First (lowest) Decile	Second or Third Decile	Seventh Deciles, the "middle class"	Eighth or Nineth, the upper middle class	Tenth (top) decile	Total	
	percent						
Arab	30.7	27.3	26.3	10.1	5.5	100.0	5,397
Black	17.1	28.3	36.7	14.3	3.5	100.0	14,400
South Asian	11.2	25.2	40.8	15.6	7.3	100.0	29,573
West Asian	26.2	30.9	28.7	10.1	4.0	100.0	3,812
White	7.5	16.7	38.8	24.1	12.9	100.0	237,276

Source: 2016 Canadian Census public use microdata file; Analysis: Michael Ornstein

Table 5 divides economic family income into five categories based on deciles, which are tenths, of the national distribution of economic family income[18]. Naturally, figures for the first decile are similar to the figures for poverty, above. Just 7.5 percent of Whites in Ontario were in this very low-income group, compared to 30.7 percent of Arabs, 26.2 percent of West Asians, 17.1 percent of Blacks and 11.2 percent of South Asians. The second group, spanning the range from nearly poor to more liveable low income, defined here as the fifth of the population between the tenth and thirtieth percentiles of the distribution of family income, included 16.7 percent of Whites, and between 25.2 and 30.9 percent of the four minority groups. The middle class, defined as the range between the 30th and 70th percentiles – so 40 percent of the total population – of economic family income, included just 26.3 percent of Arabs, 28.7 percent of West Asians, but similar percentages of Black, South Asian and White Ontarians, respectively 36.7, 40.8 and 38.8 percent of the population. Much higher percentages of Whites were in the two highest groups, the upper middle class, ranging from the 70th to 90th percentiles of economic family income, and the top decile. The highest category of family income included 12.9 percent of Whites, compared to 3.5, 4.0, 5.5 and 7.3 percent of the Black, West Asian, Arab and South Asian groups, respectively.

While more recent, these findings are entirely consistent with previous research. For example, from the 2006 Census, Block (2010: 8) showed the average employment income of non-racialized Ontarians is $41,335, compared to $31,963 for Arabs, $30,337 for Blacks, $31,711 for South Asians and $26,502 for West Asians. Low income (after taxes) affected 6.0 percent of non-racialized Ontarians in economic families, 31.0 percent of Arabs, 23.4 percent of Blacks, 17.6 percent of South Asians and 34.0 percent of West Asians (2010: 9); while for persons not in economic families low income was much higher, 23.8 percent for non-racialized persons, and 48.9, 41.1, 43.8 and 55.9 percent, for the same four visible minority groups, respectively.

Using a variety of measures, the 2016 Census provides compelling evidence of the economic disadvantage of the four racialized groups accounting for the great majority of Ottawa taxi plate owners. The Arab and West Asian groups are most disadvantaged, followed by Blacks and South Asians. While the level of disadvantage depends on the measure of income, due in part to group differences in family size, family composition and age, the disparities are not merely statistical – with the very large Census sample, quite small differences are statistically significant – but point to dramatically lower living standards. Arabs, the largest group of plate owners, are also the most disadvantaged; in Ontario they are more than three and a half times more likely than Whites to be poor; and by the market basket measure,

[18] Thus, for Canada as a whole the first decile includes exactly 10 percent of the population, the second decile has 10 percent, and so on. Applying this same categorization to a part of Canada, such as a province or metropolitan area, however, each decile will generally not include exactly 10 percent of the total.

nearly half are below the poverty line. Overall, the West Asians are slightly better off than Black Ontarians, who have two and half times the White rate of poverty, personal incomes averaging a third less than Whites and less than one-third the chance of being in the top income group. South Asian Ontarians are measurably disadvantaged, but not so dramatically. Still, they experience 50 percent more poverty than Whites and their personal incomes are nearly 30 percent lower.

D. The Historical Disadvantage of French-Canadians

To adequately describe the historical disadvantage of French-Canadians would be an enormous task, so I first needed to identify what would be critical in thinking about the Ottawa taxi industry, but I was also limited by the paucity of systematic information on inequality before the 1960s, presumably because there was not the means to easily analyze large datasets, although there is research by Bernard Blishen (1958) and John Porter (1967). Note that I confine myself to the examination of economic disadvantage, and do not address the linguistic, cultural, educational and governmental elements of the experience of French-Canadians.

The first extensive examination of this aspect of inequality was the 1969 *Report of the Royal Commission on Bilingualism and Biculturalism* and specifically Book III on *The Work World*, Part 1 on Socio-Economic Status[19]. Its presentation of research findings is prefaced with the statement that "Official equality of language has very limited significance if it is not accompanied by equality of opportunity," (p.3) and the Report notes that "Because so little pertinent data were available, we had to carry out extensive research studies" (p.5). The *Commission* therefore relied on a study conducted for them by Raynauld, Marion and Béland, "La repartition des revenus selon les groups ethniques au Canada" (1967).

Based on Raynauld, Marion and Béland's analysis of the 1961 Census, the *Commission* concluded that, "… socially and economically, Francophones are in a far weaker position than Anglophones in the work world. They are decidedly and consistently lower in average income levels, in schooling levels, in occupational scales and in the ownership of industry." (p.5).

Results selected from the *Commission* tables are reproduced here in Table 6, with references to their source in the *Report*. In the 1961 Census, the first row of that Table shows that, excluding agriculture, French-Canadian men earned an average of $3,872, compared to $4,852 for British Canadians. French-

[19] The entire Report is available for download, online. Book III, discussed here, is at http://publications.gc.ca/site/eng/9.699863/publicat ion.html

Canadian[20] men earned less than German, Jewish and Ukrainian Canadians, with average non-agricultural earnings of $4,207, $7,426 and $4,128 respectively, but more than Italian Canadians, at the time predominantly recent immigrants, who averaged $3,621. Especially striking, French earnings were relatively lower in Quebec than in the English provinces. Using the total income of salary and wage earners as the criterion, in Quebec the means for French and British men were $3,880 and $5,915 – the French mean was 34.4 percent lower. In Ontario the corresponding figures were $4,093 and $5,032 – the French mean was 18.7 percent lower.

Not surprisingly, a large difference in education was at least partly responsible for lower French earnings. In 1961, more than half of French-Canadian men employed outside of agriculture, 54.2 percent, had *no* high school education, compared to 30.9 percent of Canadians of British origin, a startling 71.0 percent of Italian Canadians, and between 26.8 and 46.7 percent of the other groups. Almost twice the proportion, 12.5 percent of British Canadians, had attended university at this time before the 1960s expansion of post -secondary education, compared to 6.3 of French-Canadians. Finally, 5.9 percent of the French-Canadian men were in professional and technical occupations, and 7.6 percent in managerial occupations, compared to 9.3 and 12.1 percent for British Canadians, respectively.

It is impossible to argue with *Commission's* conclusion that French-Canadians were disadvantaged. At a time when computerized data analysis was in its infancy, the research by Raynauld, Marion and Béland is exemplary.

Ideally, I would trace change from 1961 over time. From research by Pendakur and Pendakur (2011) on the 1995, 2000 and 2005 Census, we know that the French-British differences were much diminished and essentially entirely attributable to differences in education and other demographic variables. But it is also true that the 1960s *Commission's* exact research question is less appropriate, because the British are no longer *the* reference for socio-economic comparisons. The focus of research on this aspect of inequality has changed almost entirely to comparisons of Indigenous persons and visible minority groups with a "White" majority that combines the European nationalities, and to studies of immigration. Meanwhile, academically and in the public mind, the definition of the "French" group has become more ambiguous. Reflecting this, but also standing in the way of consistent analysis, Statistics Canada changed its view and allowed "Canadian" as a valid answer to the census question about a person's ancestry. Not only does this

[20] Commenting on the definition of "French" in this analysis, the *Report* reads, "While we are primarily interested in the position of the two major language groups, the use of ethnic origin – rather than mother tongue or official language – as the main variable in Part 1 marks it off from Parts 2 and 3. The complex network of influences determining the relative statuses of individuals and groups can be adequately described only by considering the various ethnic origins – not just British and French – that are represented in the Canadian population. However, it is obvious that the linguistic variables follow the ethnic variable closely." (p.13)

Table 6
Selected Comparisons Between the French and Other Ethnic Groups, 1961

	Group							
	British	French	German	Italian	Jewish	Ukrainian	Others	Source*
Canada: Average total income of the male non-agricultural labour force	4,852	3,872	4,207	3,621	7,426	4,128	4,153	Table 1, p. 16
Quebec: Average labour income of male salary- and wage-earners (excluding self-employed)	4,940	3,185	4,254	2,938	4,851	3,733		Table 5, p.23
Quebec: Average total income of male salary- and wage-earners	5,915	3,880	4,716	3,491	7,523	4,318	4,415	Table 3, p.19
Ontario: Average total income of male salary- and wage-earners	5,032	4,093	4,455	3,646	6,438	4,297	4,722	Table 3, p.19
Canada: Percentage with No High School Education for the male non-agricultural labour force	30.9	54.2	40.1	71.0	26.8	46.7	42.6	Table 6, p.26
Canada: Percentage with University Education for the male non-agricultural labour force	12.5	6.3	9.2	3.0	25.5	7.9	10.9	Table 6, p.26
Canada: Percentage of the male labour force in professional and technical Occupations	9.3	5.9	6.1	2.8	13.7	5.8	6.9	Table 13, p.38
Canada: Percentage of the male labour force in Managerial Occupations	12.1	7.6	8.3	6.6	39.4	7.1	9.5	Table 13, p.38

* References are to Book III of the 1969 Report of the Royal Commission on Bilingualism and Biculturalism

invite immigrants to view this answer as a means of asserting their commitment to Canada, the term Canadian may have different meanings for people with French and British ancestry.

My own analysis of the 1981 Census, in Table 7, suggests that the French-English differences observed in 1961 were considerably diminished in the next two decades. For ages 20-64, the mean total income of French-Canadians in Ontario was 93 percent of the income of British Canadians, in Quebec 90 percent and in the Ottawa-Gatineau CMA 87 percent. Eliminating the effect of very high incomes by considering the median, French-Canadians in Ontario has 96 percent of the income of British Canadians, in Quebec 92 percent and in the Ottawa-Gatineau CMA 95 percent. On the one hand, the *pattern* of differences is the same as the 1961 results: French incomes are lower than the British and the French are relatively worse off in Quebec than Ontario. But, by 1980 the magnitude of the French-British difference was much smaller.

Table 7

Total Income of French and British Canadians Age 20-64 for Ontario, Quebec and the Ottawa-Gatineau CMA, 1981

	Ontario	Quebec	Ottawa-Gatineau CMA
	mean total income		
French	13,958	13,523	14,665
British	14,975	15,065	16,886
Total	14,726	13,770	15,889
French as Percent of British	93	90	87
	median total income		
French	12,456	11,767	13,325
British	13,000	12,839	14,033
Total	12,965	11,981	13,778
French as Percent of British	96	92	95
	number in sample		
French	7,190	51,975	2,866
British	47,169	5,206	3,174
Total	89,477	65,126	7,980

Source: 1981 Canadian Census public use microdata file: Analysis: Michael Ornstein

E. Conclusion

Overwhelmingly, Ottawa taxi plate owners are members of racialized minorities and immigrants The Arab, Black, South Asian and West Asian groups, which dominate, are economically disadvantaged. Rather than using published research on taxi drivers rather than plate owners and hoping that decade-old findings are still valid, I analyzed the list of all Ottawa plate owners, commissioned a survey and examined the most recent, 2016 Census. Using this Census, with its very high response rate, there was no need to grapple with the high level of non-response in the 2011 National Household Survey (which replaced the Census in that year) or argue that findings of the 2006 Census still hold.

Research conclusions often rest on statistical significance, meaning evidence that a hoped-for pattern is not the product of a researcher's wishful thinking that could have resulted from chance. Here, there is no such concern. In terms of racialization, place of birth and first language, the distinctiveness of the plate holders could not possibly be a statistical anomaly; while the timeliness, very high response rate, volume and quantity of the Census data reveal the disadvantage of racialized groups beyond doubt.

This new research on Ottawa taxi plate owners is more systematic, but the racialization of the industry would be apparent to any mildly curious regular user of Ottawa taxis. The extraordinary differences in the living standards of racialized groups might be less visible to someone whose regular routines keep them in a restricted community, but they are obvious to anyone whose daily life takes them around any large Canadian city, and they are consistent with a huge body of research on inequality.

I conclude there is good evidence of historical socio-economic disadvantage of French Canadians around 1960 and that this disadvantage persisted in diminished form until 1980, before further attenuating. By the 1980s, complexities in the definition of European ethnic groups and changes in the information collected in the census make this comparison more ambiguous.

Date: 04 September 2019

Michael Ornstein

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Court File No. 16-69601

ONTARIO
SUPERIOR COURT OF JUSTICE

B E T W E E N:

METRO TAXI LTD., MARC ANDRÉ WAY and ISKHAK MAIL

Plaintiffs

and

CITY OF OTTAWA

Defendant

Proceeding under the *Class Proceedings Act, 1992*

ACKNOWLEDGMENT OF EXPERT'S DUTY

1. My name is Michael Ornstein. I live in the City of Toronto, in the Province of Ontario.

2. I have been engaged by or on behalf of the plaintiffs to provide evidence in relation to the above-noted court proceeding.

3. I acknowledge that it is my duty to provide evidence in relation to this proceeding as follows:

   (a) to provide opinion evidence that is fair, objective and non-partisan;

   (b) to provide opinion evidence that is related only to matters that are within my area of expertise; and

   (c) to provide such additional assistance as the Court may reasonably require, to determine a matter in issue.

4. I acknowledge that the duty referred to above prevails over any obligation which I may owe to any party by whom or on whose behalf I am engaged.

Date 17 June 2019

Michael Ornstein

METRO TAXI LTD. et al. Plaintiffs	and	CITY OF OTTAWA Defendant

Court File No. 16-69601

ONTARIO
SUPERIOR COURT OF JUSTICE

Proceeding commenced at OTTAWA

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