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Louis-Philippe Béland
Carleton University

Oluwatobi Fakorede
Carleton University

Derek Mikola
Carleton University

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Department of Economics

1125 Colonel By Drive
Ottawa, Ontario, Canada
K1S 5B6

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Louis-Philippe Beland

Oluwatobi Fakorede

Derek Mikola

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Abstract

Using the Canadian Labour Force Survey, we document the short-term impact of COVID-19 on self-employed individuals in Canada, which we interpret as small business owners. We document an important decrease in business ownership between February 2020 and May 2020 (-14.8 percent for incorporated and -10.1 percent for unincorporated entities). We find a greater decrease in ownership and aggregate hours for women, immigrants and less educated over the same period. The industries with the largest decrease are in art, culture, and recreation (-14.8 percent); in education, law and social, community and government services (-13.6 percent); and in sales and service occupations (-12.8 percent).

KEYWORDS: COVID-19, Self-Employed workers, Entrepreneurship, Employment, Labour Force, Hours.

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* Authors: Beland: Carleton University. Email: louisphilippe.beland@carleton.ca; Fakorede: Carleton University. Email: Olubunmifakorede@cmail.carleton.ca; Mikola: Carleton University. Email: Derek-mikola@cmail.carleton.ca. We would like to thank Abel Brodeur for comments.

1 Introduction

The COVID-19 pandemic has led the Canadian provincial governments to shut down non-essential businesses and services across Canada and impose social and physical distancing policies. These policies have resulted in severe job loss for Canadians. The pandemic is having unparalleled economic consequences on the Canadian economy.

In this paper, we study the effect of the COVID-19 pandemic on self-employed individuals in Canada, which we interpret as small business owners. The importance of entrepreneurial activity and, in particular, small business entrepreneurship, has been widely discussed during the COVID-19 pandemic in Canada. The viability of small business is an important concern for policy makers since some small businesses may never recover from COVID-19 (e.g. [Bensadoun \(2020\)](#)).¹ Small business owners play a pivotal role in the Canadian economy and it is crucial to understand how the pandemic is affecting them.

In this paper, we use the Canadian Labour Force Survey, a nationally representative survey, to document the short-term effect of COVID-19 on the number of active small businesses in Canada. We then investigate if there are heterogeneous changes based on owners' characteristics such as gender, immigrant status, education and age.

We show an important decrease in business ownership between February 2020 and May 2020 (-14.8 percent for incorporated and -10.1 percent for unincorporated entities). Over the same period, we find larger decreases in ownership for immigrants (-16.1 percent), women (-12.9 percent), and less educated individuals (-17.8 percent). We also find a drastic decrease in aggregate hours worked for immigrants (-44.3 percent), women (-43.5 percent), and less educated individuals (-57.2 percent). The industries with the largest decrease are in art, culture and recreation (-14.8 percent); in education, law and social, community and government services (-13.6 percent); and in sales and service occupations (-12.8 percent).

Our results build on the growing literature studying the impact of the pandemic on economic outcomes in Canada (e.g., [Beland, Brodeur, Mikola and Wright \(2020\)](#); [Beland, Brodeur, Haddad and Mikola \(2020\)](#); [Lange and Warman \(2020\)](#)) and other countries (e.g., [Beland, Brodeur and Wright \(2020\)](#); [Rojas et al. \(2020\)](#); [Brodeur et al. \(2020\)](#); [Kahn et al. \(2020\)](#) and [Lewandowski \(2020\)](#)). We contribute to the literature by documenting the labour market effects of COVID-19 on self-employed workers in Canada, who represent a cornerstone of the Canadian economy.

The rest of the paper is as follows: Section 2 discusses background and self-employment in Canada, Section 3 discusses the data, Section 4 presents the results, and Section 5 concludes.

¹A list of different policies implemented by the Canadian federal government is available here: canada.ca/en/departement-finance/economic-response-plan.html

2 Background and Self-Employment in Canada

Self-employed workers are a vital part of the Canadian economy which all levels of government have continuously promoted through the provisions of loans, grants, and other support. Self-employed people vary from owners of large incorporated businesses to owners of small unincorporated businesses. Programs such as the Canada Small Business Financing Program, where the government shares loan risk with lenders, exist to make it easier for small businesses to obtain funding for start up or expansion. Several studies underline the fragility of small businesses such as research by [Bartik et al. \(2020\)](#) based on a survey of 5,800 small businesses located in the US. [Bartik et al. \(2020\)](#) document that the median firm, of those with expenses over \$10,000, only has enough liquidity to continue to carry out business for up to two weeks. Large shocks to these firms, like mandatory shut-downs, represent large strains which challenge their existence in the economy.

A recent poll by the Canadian Imperial Bank of Commerce (CIBC), found that 81 percent of Canadian small business owners say COVID-19 has negatively impacted their operations.² As part of the government's COVID-19 Economic Response Plan, the government of Canada proposed to: provide a 75 percent wage subsidy for up to 3 months; allow businesses including the self-employed to defer GST/HST payments until June; provide a government guaranteed and funded loan to small businesses through the Canada Emergency Business Account; and launched a program that enables up to \$45 billion in funding by further guaranteeing loans through Export Development Canada and the Business Development Bank. Several additional programs and policy have been created after COVID-19 such as business rent assistance.³ The attention given to small businesses is a result of how important they are seen to be in terms of job creation.

Studies examining the effect of COVID-19 on small businesses are scarce as of yet, but one such study conducted by [Fairlie \(2020\)](#) on small businesses in the US examined demographic and industry patterns, using the Current Population Survey. [Fairlie \(2020\)](#) found that the number of business owners operating in the United States dropped by 22 percent between February 2020 to April 2020. This is a considerable drop, especially when compared to the Great recession, where there was a 5 percent drop in the number of small business owners. In examining demographic trends, [Fairlie \(2020\)](#) found that the African American population experienced the largest drop in the number of business owners due to COVID-19, followed by the Latinx population which lost 41 percent and 32 percent of their small businesses, respectively. His research further revealed that male business ownership decreased by 23 percent while female business ownership decreased by 19 percent. Our paper uses the Labour Force survey

²The poll is available here: <http://cibc.mediaroom.com/2020-05-04-COVID-19-impact-felt-by-81-per-cent-of-Canadian-small-business-owners-CIBC-Poll>

³For a complete list, see canada.ca/en/department-finance/economic-response-plan.html. It is also worth noting that provinces also created different programs to help small business owners.

to perform a similar analysis for the Canadian economy.⁴

A major concern is the possibility that racial and gender inequality will be exacerbated by the COVID-19 pandemic. According to Statistics Canada’s 2018 supplemental Labour Force Survey, about 15 percent of the Canadian population is self-employed and 38 percent are women. The same supplement to the Labour Force Survey revealed that the top reason individuals gave for choosing self-employment was “independence, freedom, being one’s own boss.” The second, third, and fourth most common reasons were, respectively, the nature of the respondent’s job, work-family balance, and flexible hours respectively. One important disparity in the reasons for choosing self-employment when broken down by gender was that women were more likely to cite work-family balance (15 percent vs. 5 percent of men), and flexible hours (11 percent vs. 7 percent of men) as their main reason for being self-employed. This suggests that having kids is an important component of why women become self-employed. Moreover, mandatory daycare and school closures might have important repercussions for these self-employed workers. There is a body of work examining why people go into self-employment such as the work of [Boden \(1999\)](#), [Dawson et al. \(2014\)](#) and [Leonard et al. \(2017\)](#).⁵ The Canadian literature has also looked at entry and exit from self-employment, including [Chan \(2019\)](#), [Finnie and Gray \(2018\)](#), [Galindo da Fonseca \(2019\)](#), [Liu et al. \(2018\)](#) and [Schuetze \(2015\)](#). We contribute to this literature by studying the effect of COVID-19 on entrepreneurship.

There are a few related papers studying the effects of COVID-19 in Canada. [Lange and Warman \(2020\)](#) document a rapid decline in vacancy postings following the pandemic. Importantly, they find a similar impact across Canada. [Beland, Brodeur, Mikola and Wright \(2020\)](#) document the short-term impact of COVID-19 on labour market outcomes in Canada (see also [Koebel and Pohler \(2020\)](#) and [Lemieux et al. \(2020\)](#)). They find that COVID-19 had drastic negative effects, especially on younger, not married, and less educated workers. They also investigate the impact by occupation using indices for (1) exposed to disease, (2) work in proximity to co-workers, (3) essential workers, and (4) can work remotely. They find that the impact of COVID-19 was significantly more severe for indices (1) and (2), and significantly less for indices (3) and (4).⁶ Our paper documents the number of active business owners in Canada and investigates heterogeneity based on characteristics. Our results can help provide guidance for policy recommendations and highlight the self-employed workers in most need of assistance.

⁴While we do not have data on race in the LFS, we find that immigrants are significantly more affected than Canadian born.

⁵A large literature study the determinants of entrepreneurship. These factors include family background and race (e.g., [Hout et al. \(2000\)](#); and [Fairlie and Robb \(2010\)](#)), immigration status (e.g., [Hunt and Gauthier-Loiselle \(2010\)](#)), financial constraints (e.g., [Fairlie and Krashinsky \(2012\)](#)), risk attitudes (e.g., [Blanchflower and Oswald \(1998\)](#); [Skriabikova et al. \(2014\)](#)) and economic conditions (e.g., [Fairlie \(2013\)](#)). See [Beland and Unel \(2019\)](#) for a complete literature review.

⁶Using the Canadian Perspective Survey, they also show that reported mental health is significantly lower among the most affected workers. [Beland, Brodeur, Mikola and Wright \(2020\)](#) study graphically self-employed workers and distinguish between incorporated and unincorporated. We study here in more detail the effect of COVID-19 on self-employed based on characteristics.

3 Data

3.1 Labour Force Survey

The Canadian Labour Force Survey (LFS) presents a picture of the current state of the Canadian labour market. It is collected by Statistics Canada on a monthly basis and includes respondent-level information on employment status, weekly hours worked, and labour force status.⁷ It also includes characteristics of respondents such as gender, age, education level, marital status and immigration status. It is a nationally representative survey.

The population surveyed includes non-institutionalized individuals 15 years of age and older in all of Canada. The survey excludes full-time members of the Canadian Armed Forces and people living on reserves or other Aboriginal settlements. Data is collected from interviews of 56,000 households and approximately 100,000 individuals on a monthly basis. Statistics Canada carries out the LFS survey via telephone in English or French or through visits to households by a field interviewer. The survey is cross-sectional, and the respondents remain in the survey for six months. Due to COVID-19, none of the interviews were conducted face-to-face after March 2020.

The LFS allows us to document the short-term effect of COVID-19 on the number of active small businesses in Canada. We use changes in business ownership between February 2020 and May 2020 and we restrict our observations to those which are classified as self-employed at their main job. Similarly to [Fairlie \(2020\)](#), we largely interpret self-employed workers as small business owners.⁸ The LFS also allows us to answer how COVID-19 has affected the labour market outcomes of the remaining self-employed workers and to investigate potential heterogeneity of the effect of COVID-19 on self-employed individuals. Our final dataset to create figures on the labour market outcomes of active self-employed workers uses the information of respondents collected between January 2016 and May 2020.

Table 1 provides a description of our dataset. The top panel describes the main outcomes we use to summarize the labour market conditions of active self-employed workers in Canada. We see that the self-employed have a high likelihood of being in the labour force (97 percent, on average), a low likelihood of being unemployed (1 percent, on average), and work about 35.1 hours per week. The unemployed sample is restricted to the self-employed in the labour force while the labour force participation is the whole sample of self-employed. The total actual hours of work is restricted to the self-employed in the labour force. We focus on self-employed individuals between the ages of 15 and 69.

The bottom panel shows the various demographic characteristics of the self-employed for the sample associated with the labour force participation market outcome from the top panel.

⁷The public files of the LFS do not have information on hourly wages or earnings for self-employed. This information is available for individuals working in the public or private sector.

⁸The literature argues that incorporated entities is a better proxy for entrepreneurship (e.g., [Levine and Rubinstein \(2017\)](#); [Beland and Unel \(2019\)](#))

The LFS categorizes respondents into one of 4 different categories for the self employed which we collapse into incorporated and unincorporated.⁹ Table 1 shows that more than 60 percent of the self-employed are male. Among self-employed women, nearly 44 percent have children. Moreover, among the self-employed, 69 percent have a post-secondary accreditation and 70 percent are non-immigrants.

4 Results

4.1 Analysis of the number of active business owners before and after COVID-19

We investigate the effect of COVID-19 on the number of active self-employed business owners in Canada, following Fairlie (2020). Table 2 shows changes in relevant variables from January 2020 to May 2020. We interpret these as the number of active small businesses in the representative sample.¹⁰ The first column in the table shows that the number of unincorporated businesses decreased by 10.12 percent in the period between February and May 2020. The number of incorporated businesses decreased by a larger amount of 14.8 percent. Table 2 also shows the evolution of the number of small business owners employed over time as the consequences of COVID-19 became more dire. The last two columns in the first panel measure the total number of self-employed individuals that are employed with paid help and without paid help. We see a decrease in the number of business owners who reported being employed with paid help by approximately 10.1 percent between February and May 2020 and by 17.8 percent for those employed without paid help. To investigate how much less self-employed workers are working, we show the number of full-time as well as part-time aggregated hours worked at the main job. We find a decrease in aggregate hours for full-time self-employed workers by 34.4 percent and by 18.7 percent for self-employed workers usually working part-time. Furthermore, we see a decrease in the number of business owners that are in the labour force by 12.6 percent between February and May 2020. One potential concern over our analysis is related to the fact that the number of active business owners might have a seasonality component. To investigate this, we also report in our tables the changes from February 2019 to May 2019 and we compute a double-difference. Table 2 shows an increase in business owners between February 2019 and May 2019 and therefore all our double-difference estimates are significantly higher. We find that our calculations above, using changes from February to May 2020, could be a lower-bound of the effect of COVID-19 on self-employed business owners.

Table 3 studies the number of business owners by characteristics of owners (gender, immigrant status, marital status, kids or no kids, education and age). Table 3 shows a larger decrease in ownership for female (-12.9 percent) versus male (-11.96 percent) owners from February 2020 to May 2020. It finds a higher decrease in ownership for immigrants (-16.1 percent) than non-

⁹We aggregate “incorporated, with paid help” and “incorporated, no paid help” into “incorporated.” We make a similar aggregation for the unincorporated.

¹⁰It should be noted that the actual number of small businesses is much greater, and the LFS surveys a small representative set of the population. We use the sample weight.

immigrants (-10.6 percent), and a higher decrease for not married (-15.4 percent) individuals compared to married (-10.5 percent) individuals over the same period. Table 3 finds a smaller decrease for women with kids (-9.2 percent) than without kids (-15.5 percent). This suggests that the daycare and schools being closed might not be the primary reason for the decrease in business ownership by women. Table 3 also presents results by education category and age category. It shows a higher decrease for less educated business owners (-17.8 percent for individuals with less than a high school diploma) and individuals in the 35 to 54 years age group (-13.8 percent). Table 3 also presents results for double-difference calculation, using change from February to May 2019. Once again, the changes from February to May 2019 were all positive and all our double-difference estimates confirm the previous analyses but show impacts which are substantially larger in magnitude.

Table 4 presents the aggregate hours worked by individual characteristics (gender, immigration status, marital status, kids or no kids, education and age) before and after COVID-19. Table 4 finds a drastic decrease in aggregate hours for all characteristics. The effects are significantly larger for immigrants (-44.3 percent), women (-43.5 percent), individuals with less than high school education (-57.2 percent), and younger workers (-49.5 percent for aged 15 to 34 and -44.9 percent for aged 35 to 54) from February 2020 to May 2020. We also present a double-difference calculation and the effect of COVID-19 are significantly larger using this method. Moreover, the double-difference calculation do not alter which self-employed workers were more affected by COVID-19.¹¹

Table 5 studies the effect of COVID-19 on the number of active businesses by industry. It compares the first five months of 2020 to the first five months of 2019. It shows a reduction in the number of small businesses for most industries. One important exception is those in health. There was an increase in small businesses in health by 11.4 percent for the first five months of 2020 compared to the first five months of 2019. The industries with the largest decrease are in art, culture and recreation (-14.8 percent); in education, law and social, community, and government services (-13.6 percent); and in sales and service occupations (-12.8 percent).

4.2 Graphical Analysis of the labour market outcomes of the active self-employed business owners before and after COVID-19

Next, we present graphical evidences to study changes in labour market outcomes for the active self-employed workers from January 2016 to May 2020. The LFS gives us critical labour market information about the self-employed which includes whether they are employed, in the labour force and their total actual hours of work.¹² We construct our figures through weighted

¹¹Similarly to [Beland, Brodeur, Mikola and Wright \(2020\)](#) which studies the effect of COVID-19 on the Canadian labour market, we find a more pronounced impact on younger and less-educated self-employed workers. The larger impact on immigrants and women seems to be self-employed specific.

¹²As mentioned above, the public data files of the LFS do not have information on hourly wages or earnings for the self-employed, precluding analysis on changes in wage rates over time. It is possible that COVID-19 affects earnings differently depending on incorporation status.

aggregation of the self-employed by year, month and various demographic characteristics. As discussed earlier, for each labour market outcome, we restrict our dataset as follows: the unemployed sample is restricted to the self-employed in the labour force. The total actual hours of work are restricted to the self-employed in the labour force. We focus on self-employed individuals between the ages of 15 and 69. Our analysis can help highlight the active self-employed in most need of help. All graphs are structured in the same way. Panel (a) presents results for unemployment rate, Panel (b) for labour force participation, and Panel (c) for actual hours of work over the period January 2016 to May 2020.¹³

Figure 1 shows that COVID-19 led to an increase in unemployment (from about 0.6 to 1.4 percent from February 2020 to May 2020), a decrease in labour force participation (from about 96.5 to 93.5 percent between February 2020 to May 2020), and a drastic decrease in actual hours worked (from about 34 to 23 hours from February 2020 to May 2020) for self-employed workers that remained in the labour force.

Figure 2 distinguishes between self-employed incorporated and unincorporated. Self-employed are separated into two categories: incorporated (working for themselves in corporate entities) and unincorporated (working for themselves in other entities). Figure 2 shows that both incorporated and unincorporated are both negatively affected by COVID-19, suggesting that COVID-19 has had a negative impact on entrepreneurship.

Figure 3 distinguishes between self-employed business owners with paid help and without paid help. Figure 3 shows that the effect of COVID-19 is significantly larger (for unemployment, labour force participation and actual hours worked) for self-employed without paid help. This could be due to their businesses being smaller operations.

We now investigate with graphical representations the short-term effects of COVID-19 on labour market outcomes for different subgroups of respondents. Different groups of self-employed workers are potentially affected differently and this could help target any additional policy aimed at helping small business owners. Figures 4, 5, 6, 7, 8, and 9, illustrate the outcome variables by gender, age group, marital status, education, immigration status, and years since immigration, respectively.

Figure 4 shows our three main outcome variables by gender. It shows that COVID-19 resulted in negative labour market outcomes for both male and female self-employed workers, but the effect is significantly larger for women, especially for unemployment. Figure 5 shows the evolution of the three outcome variables by age group. It shows that COVID-19 was particularly difficult for younger self-employed, possibly due to their business being less established. Figure 6 presents the impact of COVID-19 by marital status. Figure 6 shows COVID-19 has had a negative impact for both married and unmarried self-employed individuals. However, the effect of COVID-19 is larger for unmarried self-employed workers.

Next, Figure 7 shows the effect of COVID-19 by education. It finds that COVID-19 had

¹³Data on immigration status is available in the LFS only after December 2016, which leads to a slightly shorter time period of between January 2017 and May 2020.

a negative impact on all groups. In Figure 8 we see a negative impact of COVID-19 for both immigrants and non-immigrants, but the effect is more pronounced for immigrants. Similarly, Figure 9 shows that the effect is more pronounced for immigrants of less than 10 years, also potentially due to their business being less established.

5 Conclusion

In this paper, we study the effect of the COVID-19 pandemic on labour market outcomes of self-employed workers in Canada. The importance of small business entrepreneurship has been widely discussed in Canada during the COVID-19 pandemic. The viability of small business is an important concern for policy makers and there are concerns that some small businesses may never recover (e.g. [Bensadoun \(2020\)](#)).

We use the Labour Force Survey, a nationally representative survey, to document the short-term effect of COVID-19 on the number of active small businesses in Canada. We also investigate if there are heterogeneous changes based on owners' characteristics such as gender, immigrant status, education, and age.

We show an important decrease in business ownership between February 2020 and May 2020 (-14.8 percent for incorporated and -10.1 percent for unincorporated entities). We find a higher decrease in ownership for immigrants (-16.1 percent), women (-12.9 percent), less educated individuals (17.8 percent) over the same period. We also find a drastic decrease in aggregate hours worked for immigrants (-44.3 percent), women (-43.5 percent), and less educated individuals (-57.2 percent). The industries with the largest decrease are in art, culture and recreation (-14.8 percent); in education, law and social, community and government services (-13.6 percent); and in sales and service occupations (-12.8 percent).

The Federal government has been responding to fear of long-term negative effects on businesses using several programs. Despite this help, we document considerable negative short-term effects on small businesses. We also document several heterogeneity based on owners characteristics which can help target additional help. Future research needs to follow closely what happens to small businesses and investigate if the shutdown of businesses is short-term or permanent. This can potentially have a long term impact on the Canadian economy and on job creation.

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Table 1: Summary Statistics for Labour Market and Individual Variables

| <i>Labour Market Variables</i> | | | | |
|-----------------------------------|-------|-----------|-------|------|
| | Mean | Std. Dev. | Max | Min |
| Unemployed | 0.01 | 0.08 | 1.00 | 0.00 |
| Labour Force Participation | 0.97 | 0.18 | 1.00 | 0.00 |
| Total Actual Hours of Work | 35.11 | 22.33 | 99.00 | 0.00 |

| <i>Individual Variables</i> | | Labour Force Participation Specification (%) |
|---|--|--|
| Self Employment Incorporation Status | | |
| Unincorporated | | 55.0 |
| Incorporated | | 45.0 |
| Sex | | |
| Male | | 62.7 |
| Female | | 37.3 |
| Age Categories | | |
| 15 to 34 | | 17.2 |
| 35 to 54 | | 46.3 |
| 55+ | | 36.5 |
| Highest Educational Attainment | | |
| Less than highschool | | 8.8 |
| Highschool or some college | | 22.5 |
| Postsecondary Accreditation | | 68.7 |
| Women with Kids | | |
| Woman, no kids | | 56.1 |
| Woman with Kids | | 43.9 |
| Immigration | | |
| Immigration \leq 10 years ago | | 6.4 |
| Immigration $>$ 10 years ago | | 23.5 |
| Non-immigrant | | 70.1 |
| Marital Status | | |
| Not Married | | 38.1 |
| Married | | 61.9 |

Notes: Authors' calculations using the Labour Force Survey between January 2016 and May 2020. All observations are self employed.

Table 2: Active Small Business Statistics Before and After COVID-19

| | Unincorporated | Incorporated | PAID HELP | |
|-------------------------------|--------------------------------------|-----------------------------------|-----------------|---------|
| | | | With | Without |
| Jan 2020 | 4,768 | 4,115 | 6,318 | 2,565 |
| Feb 2020 | 4,693 | 4,102 | 6,254 | 2,540 |
| Mar 2020 | 4,417 | 3,761 | 5,925 | 2,253 |
| Apr 2020 | 4,300 | 3,469 | 5,654 | 2,115 |
| May 2020 | 4,218 | 3,495 | 5,622 | 2,091 |
| Feb 2019 | 4,775 | 4,107 | 6,370 | 2,512 |
| May 2019 | 5,009 | 4,142 | 6,427 | 2,724 |
| May - Feb 2020 ($\Delta\%$) | -10.12% | -14.80% | -10.11% | -17.69% |
| May - Feb 2019 ($\Delta\%$) | 4.92% | 0.83% | 0.90% | 8.42% |
| 2020 - 2019 ($\Delta\%$) | -15.04% | -15.63% | -11.01% | -26.12% |
| | Hours worked ≥ 30 (Millions) | Hours worked < 30 (Millions) | In labour force | |
| Jan 2020 | 77.2 | 11.1 | 8,931 | |
| Feb 2020 | 78.2 | 11.0 | 8,822 | |
| Mar 2020 | 53.8 | 10.0 | 8,211 | |
| Apr 2020 | 42.5 | 7.8 | 7,793 | |
| May 2020 | 51.3 | 8.9 | 7,712 | |
| Feb 2019 | 75.0 | 11.0 | 8,945 | |
| May 2019 | 85.8 | 11.4 | 9,216 | |
| May - Feb 2020 ($\Delta\%$) | -34.38% | -18.71% | -12.59% | |
| May - Feb 2019 ($\Delta\%$) | 14.40% | 3.36% | 3.02% | |
| 2020 - 2019 ($\Delta\%$) | -48.77% | -22.07% | -15.61% | |

Notes: Authors' calculations. Data from the Canadian Labour Force Survey. The time period is January 2020 to May 2020. Observations are only those who are self-employed. Weights are applied to all measures. Counts are weighted within the sample while hours worked are weighted up to the population.

Table 3: Business Owners by Individual Characteristics Before and After COVID-19

(a) Business Owners by Individual Characteristics

| | Male | Female | Not Immigrant | Immigrant |
|-------------------------------|-------------|---------|---------------|-----------|
| Jan 2020 | 5638 | 3245 | 6085 | 2798 |
| Feb 2020 | 5492 | 3303 | 6028 | 2767 |
| Mar 2020 | 5092 | 3086 | 5762 | 2416 |
| Apr 2020 | 4866 | 2903 | 5387 | 2382 |
| May 2020 | 4835 | 2878 | 5391 | 2322 |
| Feb 2019 | 5615 | 3267 | 6222 | 2660 |
| May 2019 | 5714 | 3437 | 6480 | 2671 |
| May - Feb 2020 ($\Delta\%$) | -11.97% | -12.86% | -10.56% | -16.09% |
| May - Feb 2019 ($\Delta\%$) | 1.76% | 5.21% | 4.16% | 0.39% |
| 2020 - 2019 ($\Delta\%$) | -13.72% | -18.07% | -14.72% | -16.48% |
| | | | WOMEN | |
| | Not Married | Married | No kids | With kids |
| Jan 2020 | 3362 | 5521 | 1864 | 1443 |
| Feb 2020 | 3255 | 5540 | 1855 | 1489 |
| Mar 2020 | 3090 | 5088 | 1700 | 1429 |
| Apr 2020 | 2889 | 4880 | 1610 | 1346 |
| May 2020 | 2755 | 4958 | 1568 | 1353 |
| Feb 2019 | 3405 | 5477 | 1810 | 1431 |
| May 2019 | 3609 | 5542 | 1887 | 1534 |
| May - Feb 2020 ($\Delta\%$) | -15.37% | -10.50% | -15.45% | -9.16% |
| May - Feb 2019 ($\Delta\%$) | 6.00% | 1.18% | 4.25% | 7.20% |
| 2020 - 2019 ($\Delta\%$) | -21.37% | -11.68% | -19.71% | -16.36% |

Notes: Authors' calculations. Data from the Canadian Labour Force Survey with within-sample weights applied. The time period is January 2020 to May 2020. Observations are only those who are self-employed.

(b) Business Owners by Individual Characteristics

| | EDUCATION LEVEL | | |
|-------------------------------|--------------------------|--------------------------------|--------------------------------|
| | Less than high school | High school or some college | Postsecondary accreditation |
| Jan 2020 | 735 | 1883 | 6266 |
| Feb 2020 | 698 | 1855 | 6242 |
| Mar 2020 | 630 | 1774 | 5774 |
| Apr 2020 | 595 | 1708 | 5466 |
| May 2020 | 574 | 1650 | 5489 |
| Feb 2019 | 710 | 1947 | 6225 |
| May 2019 | 744 | 2070 | 6337 |
| May - Feb 2020 ($\Delta\%$) | -17.81% | -11.03% | -12.06% |
| May - Feb 2019 ($\Delta\%$) | 4.70% | 6.34% | 1.80% |
| 2020 - 2019 ($\Delta\%$) | -22.51% | -17.38% | -13.86% |
| | AGE CATEGORIES | | |
| | 15 to 34 | 35 to 54 | 55+ |
| Jan 2020 | 1459 | 4153 | 3271 |
| Feb 2020 | 1414 | 4142 | 3240 |
| Mar 2020 | 1357 | 3857 | 2964 |
| Apr 2020 | 1338 | 3588 | 2843 |
| May 2020 | 1313 | 3571 | 2829 |
| Feb 2019 | 1511 | 4112 | 3259 |
| May 2019 | 1540 | 4331 | 3280 |
| May - Feb 2020 ($\Delta\%$) | -7.17% | -13.77% | -12.67% |
| May - Feb 2019 ($\Delta\%$) | 1.90% | 5.34% | 0.64% |
| 2020 - 2019 ($\Delta\%$) | -9.07% | -19.10% | -13.31% |

Notes: Authors' calculations. Data from the Canadian Labour Force Survey, with within-sample weights applied. The time period is January 2020 to May 2020. Observations are only those who are self-employed.

Table 4: Aggregate Hours Worked by Individual Characteristics Before and After COVID-19

(a) Aggregate Hours Worked by Individual Characteristics

| | Male | Female | Not Immigrant | Immigrant |
|-------------------------------|-------------|---------|---------------|-----------|
| Jan 2020 | 61.4 | 26.9 | 59.7 | 28.6 |
| Feb 2020 | 60.7 | 28.5 | 60.9 | 28.3 |
| Mar 2020 | 46.4 | 17.3 | 46.1 | 17.7 |
| Apr 2020 | 36.8 | 13.5 | 36.9 | 13.4 |
| May 2020 | 44.2 | 16.1 | 44.5 | 15.8 |
| Feb 2019 | 59.3 | 26.7 | 59.0 | 27.0 |
| May 2019 | 66.3 | 30.9 | 69.1 | 28.0 |
| May - Feb 2020 ($\Delta\%$) | -27.28% | -43.46% | -26.95% | -44.26% |
| May - Feb 2019 ($\Delta\%$) | 11.76% | 15.71% | 17.17% | 3.82% |
| 2020 - 2019 ($\Delta\%$) | -39.04% | -59.16% | -44.12% | -48.08% |
| | | | | |
| | | | WOMEN | |
| | Not Married | Married | No kids | With kids |
| Jan 2020 | 32.5 | 55.8 | 13.9 | 13.0 |
| Feb 2020 | 32.9 | 56.3 | 14.5 | 14.0 |
| Mar 2020 | 22.8 | 41.0 | 9.2 | 8.0 |
| Apr 2020 | 16.9 | 33.4 | 6.9 | 6.6 |
| May 2020 | 20.4 | 39.9 | 8.1 | 8.0 |
| Feb 2019 | 32.9 | 53.1 | 14.0 | 12.7 |
| May 2019 | 38.1 | 59.0 | 15.6 | 15.2 |
| May - Feb 2020 ($\Delta\%$) | -38.16% | -29.10% | -44.06% | -42.82% |
| May - Feb 2019 ($\Delta\%$) | 15.91% | 11.17% | 11.41% | 20.47% |
| 2020 - 2019 ($\Delta\%$) | -54.07% | -40.27% | -55.48% | -63.29% |

Notes: Authors' calculations. Data from the Canadian Labour Force Survey, weighted up to the population. The time period is January 2020 to May 2020. All values are in millions of hours. Observations are only those who are self-employed.

(b) Aggregate Hours Worked by Individual Characteristics

| | EDUCATION LEVEL | | |
|-------------------------------|--------------------------|--------------------------------|--------------------------------|
| | Less than high school | High school or some college | Postsecondary accreditation |
| Jan 2020 | 1.2 | 4.6 | 21.0 |
| Feb 2020 | 1.5 | 5.0 | 22.0 |
| Mar 2020 | 0.8 | 3.1 | 13.4 |
| Apr 2020 | 0.7 | 2.3 | 10.5 |
| May 2020 | 0.6 | 2.7 | 12.7 |
| Feb 2019 | 6.7 | 18.5 | 60.8 |
| May 2019 | 7.7 | 22.8 | 66.6 |
| May - Feb 2020 ($\Delta\%$) | -57.21% | -45.66% | -42.03% |
| May - Feb 2019 ($\Delta\%$) | 15.65% | 23.52% | 9.49% |
| 2020 - 2019 ($\Delta\%$) | -72.85% | -69.18% | -51.52% |
| | AGE CATEGORIES | | |
| | 15 to 34 | 35 to 54 | 55+ |
| Jan 2020 | 4.5 | 14.6 | 7.8 |
| Feb 2020 | 5.0 | 15.6 | 7.8 |
| Mar 2020 | 2.8 | 9.3 | 5.3 |
| Apr 2020 | 2.1 | 7.3 | 4.1 |
| May 2020 | 2.5 | 8.6 | 5.0 |
| Feb 2019 | 15.1 | 45.1 | 25.7 |
| May 2019 | 17.5 | 50.6 | 29.0 |
| May - Feb 2020 ($\Delta\%$) | -49.51% | -44.88% | -36.70% |
| May - Feb 2019 ($\Delta\%$) | 15.75% | 12.09% | 12.93% |
| 2020 - 2019 ($\Delta\%$) | -65.26% | -56.97% | -49.63% |

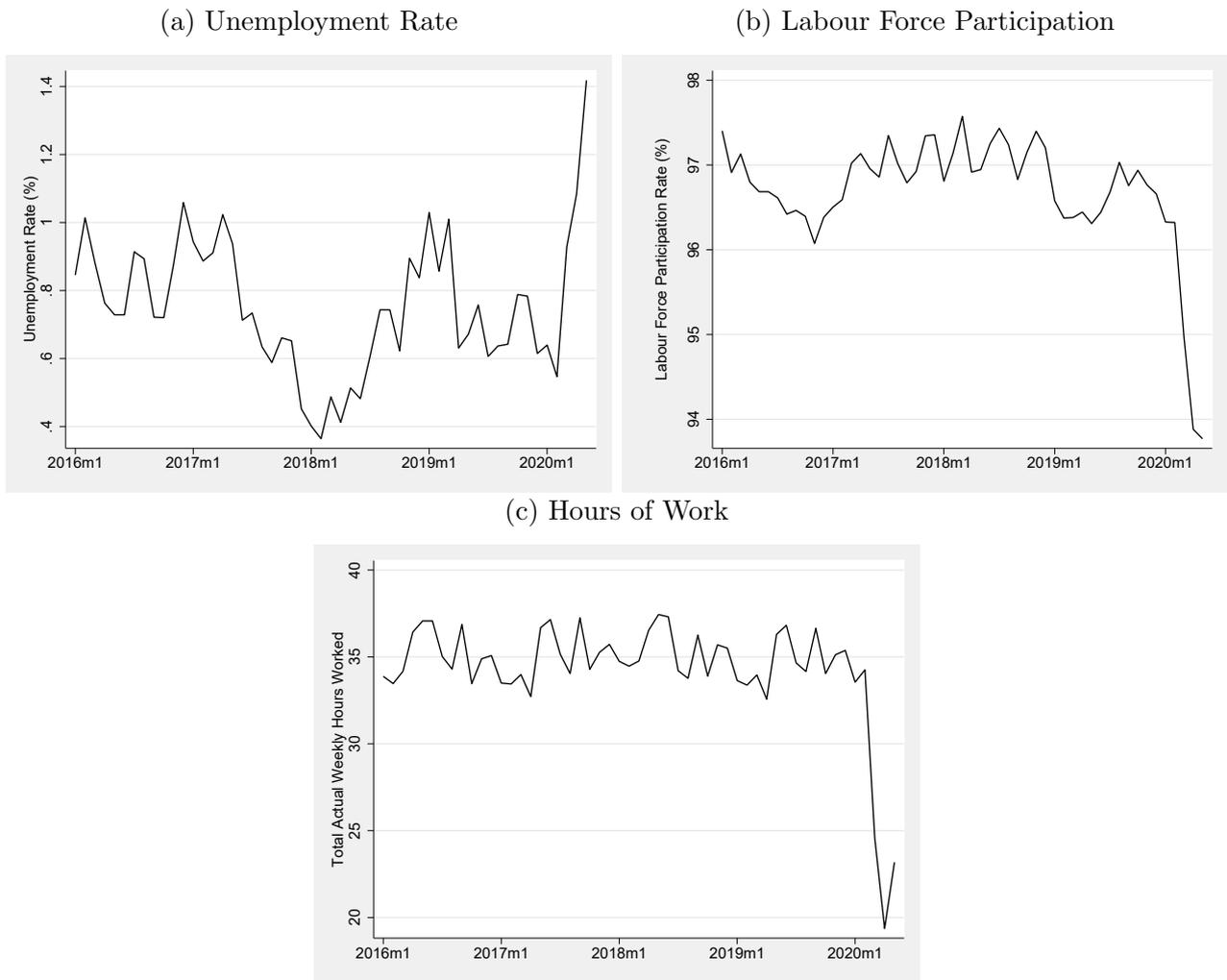
Notes: Authors' calculations. Data from the Canadian Labour Force Survey, weighted up to the population. The time period is January 2020 to May 2020. All values are in millions of hours. Observations are only those who are self-employed.

Table 5: Small Business Statistics by Industry

| | January to May | | | 2020 - 2019 ($\Delta\%$) |
|---|----------------|--------|--------|----------------------------|
| | 2018 | 2019 | 2020 | |
| Business, finance and administration occupations | 4,640 | 4,601 | 4,065 | -11.65% |
| Health occupations | 3,411 | 3,405 | 3,794 | 11.43% |
| Management occupations | 11,118 | 10,532 | 9,888 | -6.12% |
| Natural and applied sciences and related occupations | 2,689 | 2,804 | 2,597 | -7.36% |
| Natural resources, agriculture and related occupations | 1,088 | 962 | 1,007 | 4.62% |
| Occupations in art, culture, recreation and sport | 3,559 | 3,592 | 3,059 | -14.84% |
| Occupations in education, law and social, community and government services | 3,646 | 3,578 | 3,090 | -13.64% |
| Occupations in manufacturing and utilities | 732 | 688 | 702 | 2.02% |
| Sales and service occupations | 7,095 | 7,178 | 6,260 | -12.79% |
| Trades, transport and equipment operators and related occupations | 7,503 | 7,649 | 6,876 | -10.11% |
| Total | 45,482 | 44,989 | 41,338 | -8.12% |

Notes: Authors' calculations. Data from the Canadian Labour Force Survey with within-sample weights applied. Observations are only those who are self-employed.

Figure 1: Unemployment Rate, Labour Force Participation, and Hours of Work for Self-Employed.



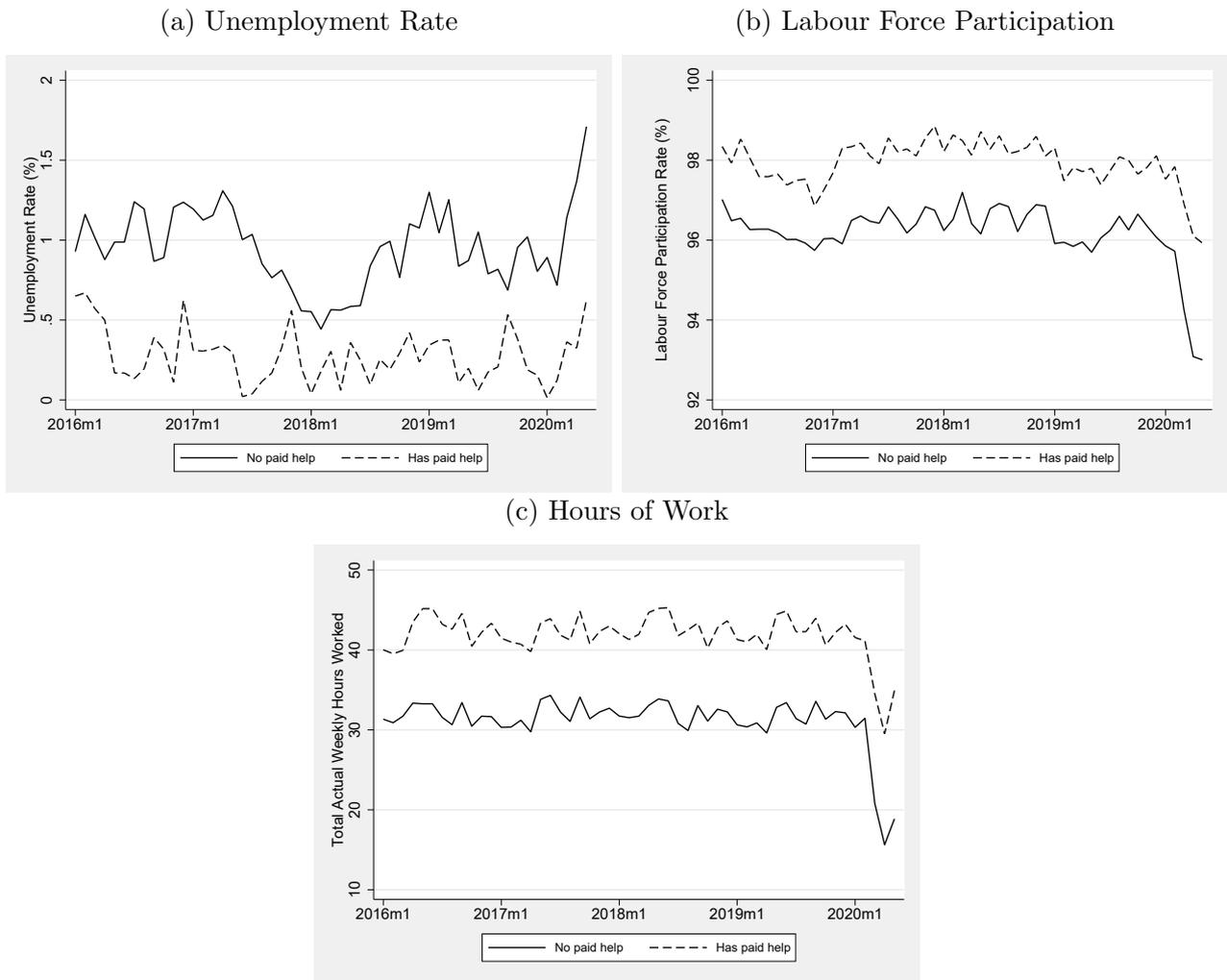
Notes: Authors' calculations. Data from the Canadian Labour Force Survey. The time period is January 2016 to May 2020.

Figure 2: Unemployment Rate, Labour Force Participation, and Hours of Work for Self-Employed by Incorporation Status.



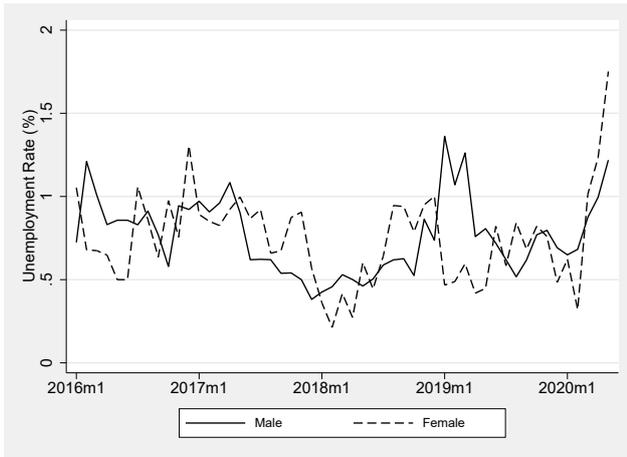
Notes: Authors' calculations. Data from the Canadian Labour Force Survey. The time period is January 2016 to May 2020.

Figure 3: Unemployment Rate, Labour Force Participation, and Hours of Work for Self-Employed by those with Paid Help

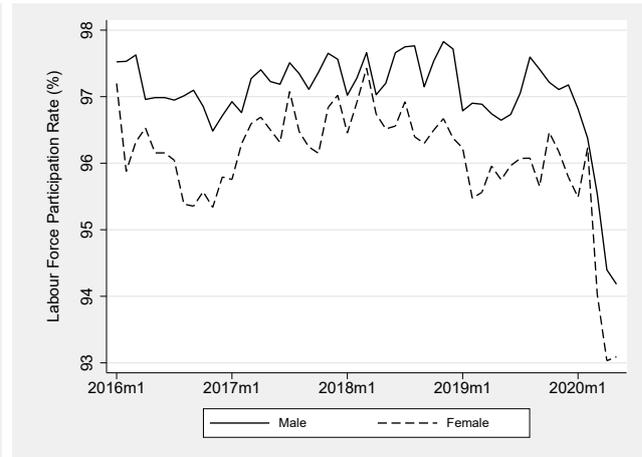


Notes: Authors' calculations. Data from the Canadian Labour Force Survey. The time period is January 2016 to May 2020.

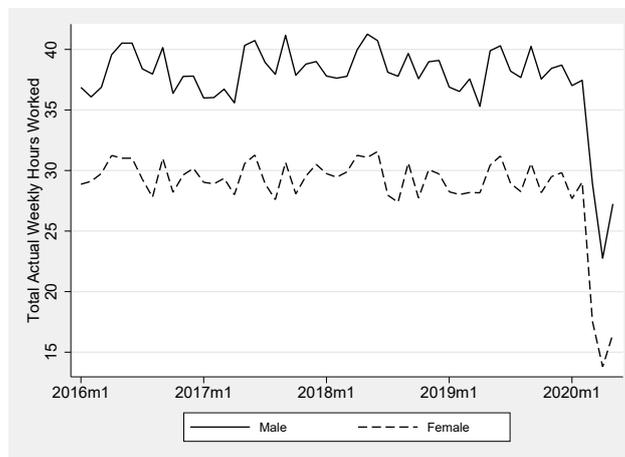
Figure 4: Unemployment Rate, Labour Force Participation, and Hours of Work for Self-Employed by Sex.



(a) Unemployment Rate.



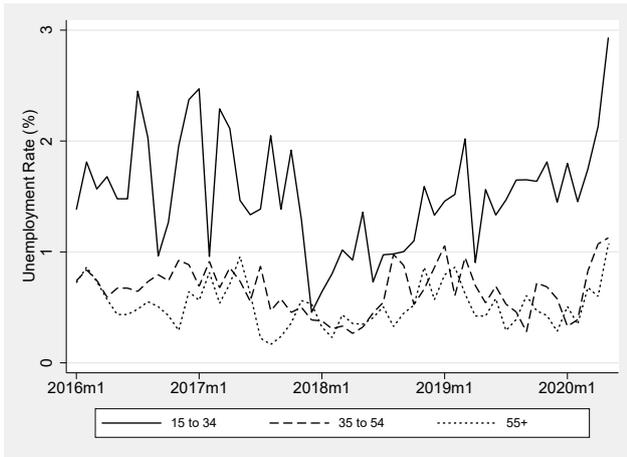
(b) Labour Force Participation.



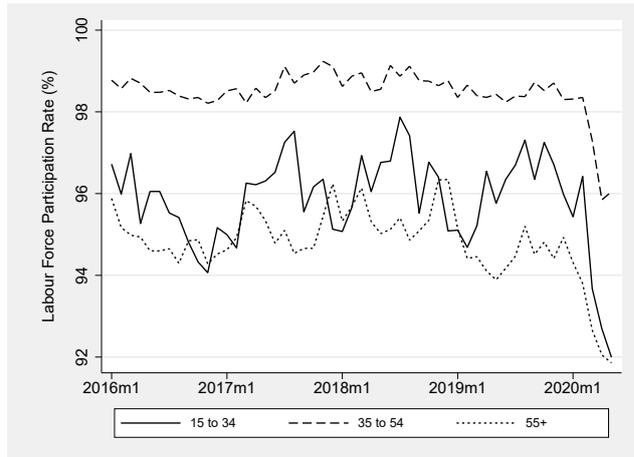
(c) Hours of Work.

Notes: Authors' calculations. Data from the Canadian Labour Force Survey. The time period is January 2016 to April 2020. Observations are only those who are self-employed.

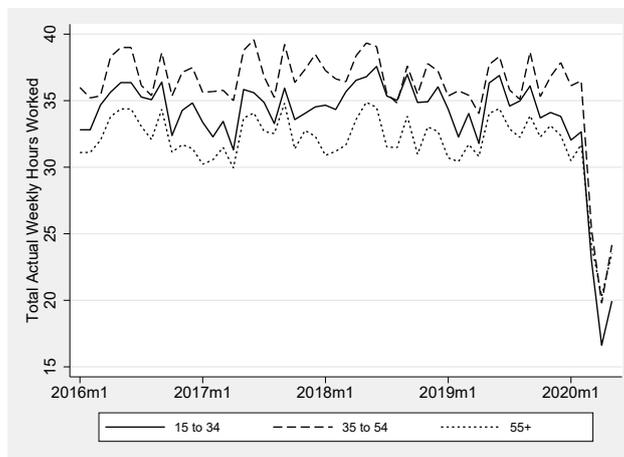
Figure 5: Unemployment Rate, Labour Force Participation, and Hours of Work for Self-Employed by Age Group.



(a) Unemployment Rate.



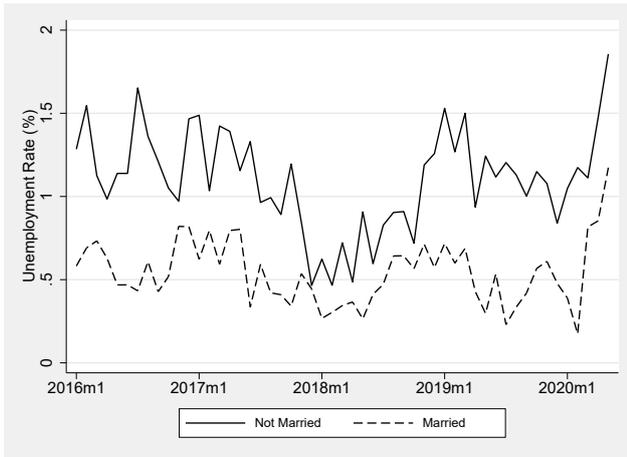
(b) Labour Force Participation.



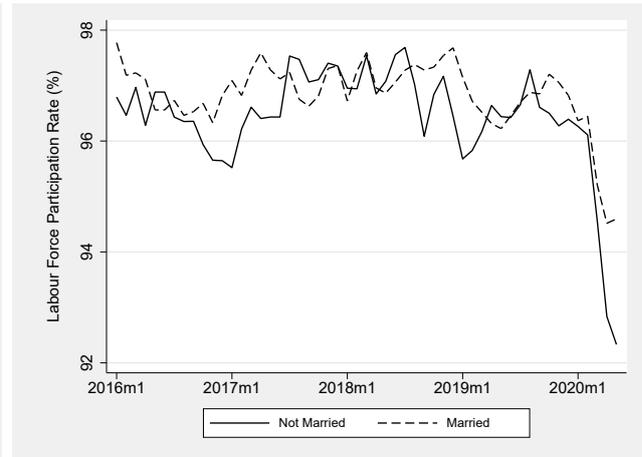
(c) Hours of Work.

Notes: Authors' calculations. Data from the Canadian Labour Force Survey. The time period is January 2016 to April 2020. Observations are only those who are self-employed.

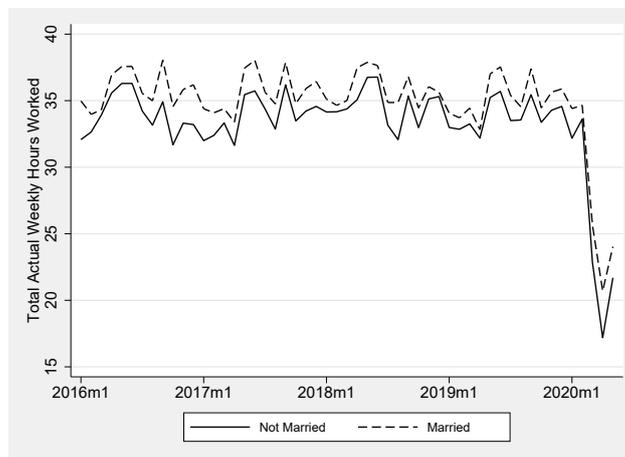
Figure 6: Unemployment Rate, Labour Force Participation, and Hours of Work for Self-Employed by Marital Status.



(a) Unemployment Rate.



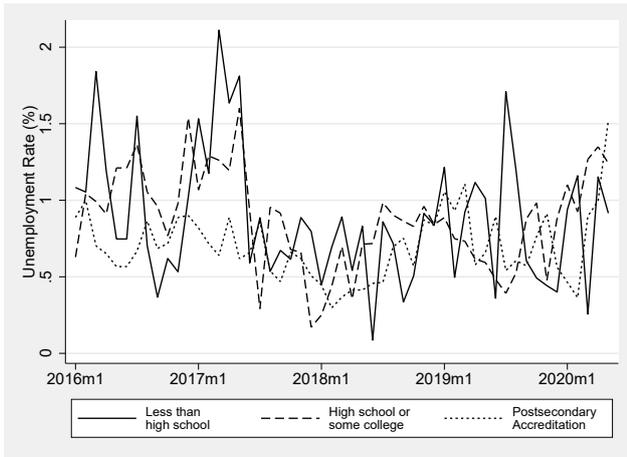
(b) Labour Force Participation.



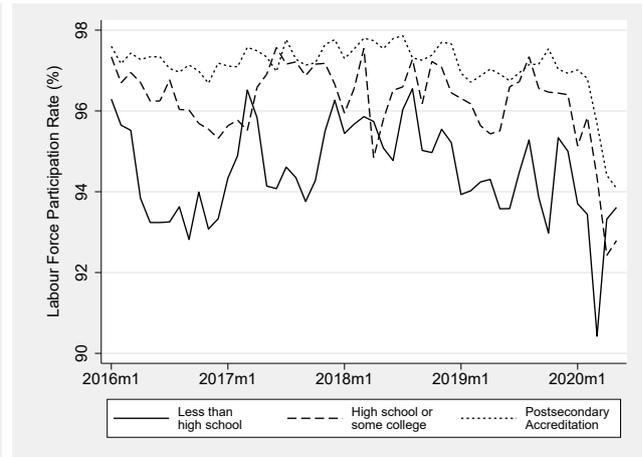
(c) Hours of Work.

Notes: Authors' calculations. Data from the Canadian Labour Force Survey. The time period is January 2016 to April 2020. Observations are only those who are self-employed.

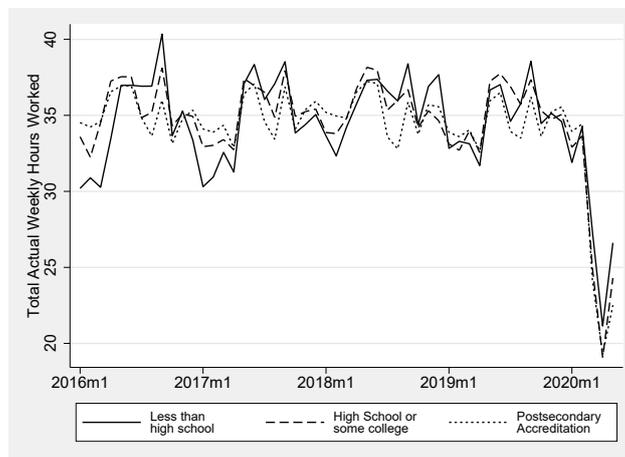
Figure 7: Unemployment Rate, Labour Force Participation, and Hours of Work for Self-Employed by Education.



(a) Unemployment Rate.



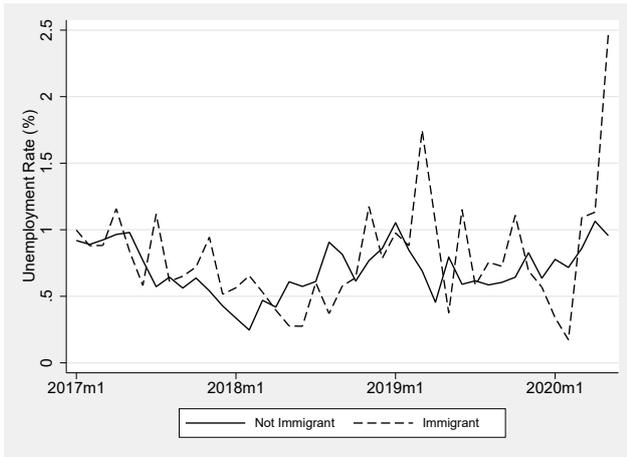
(b) Labour Force Participation.



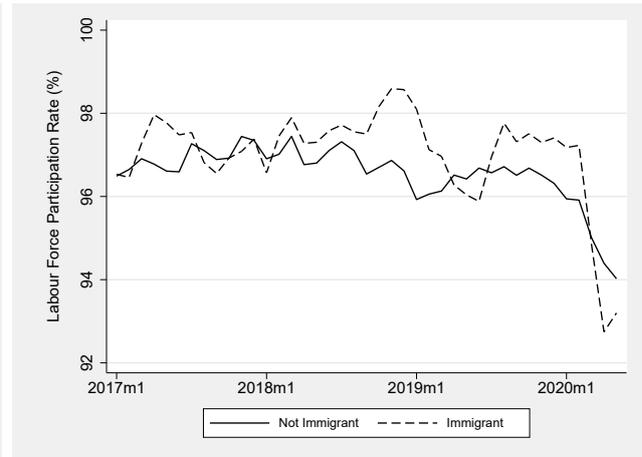
(c) Hours of Work.

Notes: Authors' calculations. Data from the Canadian Labour Force Survey. The time period is January 2016 to April 2020. Observations are only those who are self-employed.

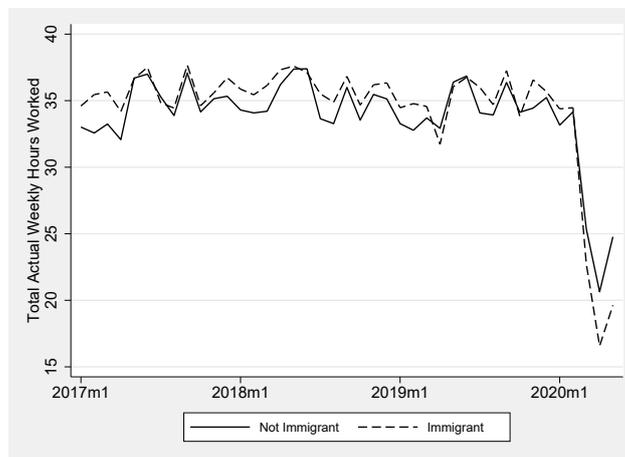
Figure 8: Unemployment Rate, Labour Force Participation, and Hours of Work for Self-Employed by Immigration Status.



(a) Unemployment Rate.



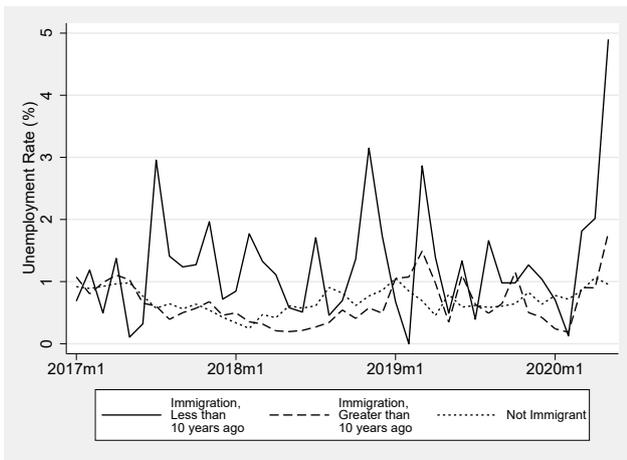
(b) Labour Force Participation.



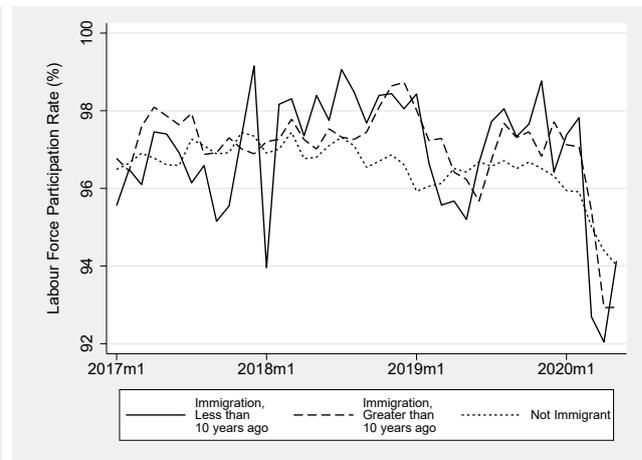
(c) Hours of Work.

Notes: Authors' calculations. Data from the Canadian Labour Force Survey. The time period is January 2017 to April 2020. Observations are only those who are self-employed.

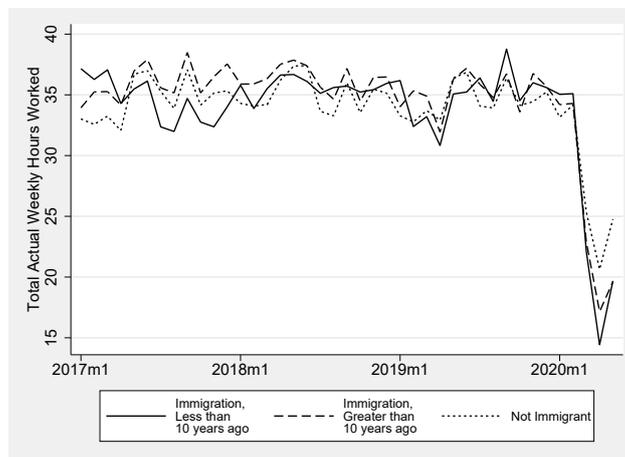
Figure 9: Unemployment Rate, Labour Force Participation, and Hours of Work for Self-Employed by Years Since Immigration.



(a) Unemployment Rate.



(b) Labour Force Participation.



(c) Hours of Work.

Notes: Authors' calculations. Data from the Canadian Labour Force Survey. The time period is January 2017 to April 2020. Observations are only those who are self-employed.