

Short-Term Effect of COVID-19 on Self-Employed Workers in Canada

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À l'aide de l'Enquête sur la population active au Canada, les auteurs documentent les répercussions à court terme de la maladie provoquée par le coronavirus 2019 (COVID 19) sur les travailleurs indépendants au Canada qui, interprètent-ils, regroupent les propriétaires de petites entreprises. Ils relèvent une importante diminution du nombre de propriétaires d'entreprises entre février 2020 et mai 2020 (-14,8 pour cent dans le cas des entités constituées en sociétés et 10,1 pour cent dans celui des entités non constituées en sociétés). Ils observent un fléchissement marqué dans la propriété et le total des heures travaillées chez les femmes, les immigrants et les personnes moins scolarisées au cours de la même période. Les secteurs d'activité présentant la diminution la plus importante sont ceux des arts, de la culture et des loisirs (-14,8 pour cent) ; de l'éducation, du droit et des services sociaux, communautaires et gouvernementaux (-13,6 pour cent) ; et des fonctions de vente et de services (-12,8 pour cent).

Mots clés : COVID-19, emploi, entrepreneuriat, heures travaillées, population active, travailleurs indépendants

Using the Canadian Labour Force Survey, we document the short-term impact of coronavirus disease 2019 (COVID-19) on self-employed individuals in Canada, whom 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 substantial decrease in ownership and aggregate hours for women, immigrants, and less educated people over the same period. The occupational categories 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, employment, entrepreneurship, hours worked, labour force, self-employed workers

Introduction

The coronavirus disease 2019 (COVID-19) pandemic has led 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 article, 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 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 because 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 understanding how the pandemic is affecting them is crucial.

In this article, we use the Canadian Labour Force Survey (LFS), 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 whether heterogeneous changes have occurred on the basis of owner characteristics such as gender, education, age, and immigrant status.

We show an important decrease in business ownership between February 2020 and May 2020 (-14.8 percent for incorporated entities and -10.1 percent for unincorporated entities). Over the same period, we a substantial decrease 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 (–28.9 percent). The occupational categories 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 et al. 2020a, 2020b](#); [Lange and Warman 2020](#)) and other countries (e.g., [Beland, Brodeur, and Wright 2020](#); [Brodeur et al. 2020](#); [Kahn, Lange, and Wiczer 2020](#); [Lewandowski 2020](#); [Rojas et al. 2020](#)). We contribute to this 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 article proceeds as follows: In the next section, we discuss background and self-employment in Canada; we then discuss the data and present the results. The final section concludes.

Background and Self-Employment in Canada

Self-employed workers are a vital part of the Canadian economy, and all levels of government have continuously promoted them through the provision 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, in which 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 [Bartik et al.'s \(2020\)](#) research, based on a survey of 5,800 small businesses located in the United States. [Bartik et al. \(2020\)](#) document that the median firm, of those with more than \$10,000 in expenses, has only enough liquidity to continue to carry out business for as long as two weeks. Large shocks to these firms, like mandatory shutdowns, represent large strains that challenge their existence in the economy.

A recent poll by the [Canadian Imperial Bank of Commerce \(2020\)](#) found that 81 percent of Canadian small business owners say that COVID-19 has had a negative impact on their operations. 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 self-employed persons to defer goods and services tax/harmonized sales tax payments until June, and provide a government-guaranteed and -funded loan to small businesses through the Canada Emergency Business Account, and it 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 policies have also been created, such as business rent assistance.² 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 yet, but one such study conducted by [Fairlie \(2020\)](#) on small businesses in the United States examines demographic and industry patterns, using the Current Population Survey. Fairlie found that the number of business owners operating in the United States dropped by 22 percent between February 2020 and April 2020. This is a considerable drop, especially when compared with the Great Recession, when there was a 5 percent drop in the number of small business owners. In examining demographic trends, Fairlie found that the African American population experienced the largest drop in the number of business owners as a result of 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, and female business ownership decreased by 19 percent. Our article uses the LFS to perform a similar analysis for the Canadian economy.³

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 LFS, about 15 percent of the Canadian population is self-employed, and 38 percent of the self-employed are women. The same supplement to the LFS revealed that the top reason individuals gave for choosing self-employment was independence, freedom, and 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. One important disparity in the reasons for choosing self-employment when broken down by gender was that women were more likely than men to cite work–family balance (15 percent vs. 5 percent, respectively) and flexible hours (11 percent vs. 7 percent, respectively) as their main reason for being self-employed. This finding 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. A body of work examines why people go into self-employment, such as the work of [Boden \(1999\)](#); [Dawson, Andrew, and Latreille \(2014\)](#); and [Leonard, Emery, and McDonald \(2017\)](#).⁴ 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 and Grekou \(2018\)](#), and [Schuetze \(2015\)](#). We contribute to this literature by studying the effect of COVID-19 on entrepreneurship.

A few related articles study the effects of COVID-19 in Canada. [Lange and Warman \(2020\)](#) document a rapid decline in vacancy postings after the pandemic began. More important, they find a similar impact across Canada. [Beland et al. \(2020b\)](#) document the short-term impact of COVID-19 on labour market outcomes in Canada (see also [Koebel and Pohler 2020](#); [Lemieux et al. forthcoming](#)). They find that COVID-19 had drastic negative effects, especially on younger, not married, and less-educated workers. They also investigate COVID-19's impact by occupation using indices for (1) exposure to disease, (2) work in proximity to coworkers, (3) essential workers, and (4) ability to 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 4.⁵ Our article documents the number of active small business owners in Canada and investigates heterogeneity on the basis of characteristics. Our results can help provide guidance for policy recommendations and highlight which self-employed workers are most in need of assistance.

Data: Labour Force Survey

The Canadian LFS presents a picture of the current state of the Canadian labour market. LFS data are collected by Statistics Canada on a monthly basis and include respondent-level information on employment status, weekly hours worked, and labour force status.⁶ It also includes respondent characteristics such as gender, age, education level, marital status, and immigration status. It is a nationally representative survey.

The population surveyed includes non-institutionalized individuals aged 15 years 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 are 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. Because of 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 who are classified as self-employed at their main job. Similar to [Fairlie \(2020\)](#), we largely interpret self-employed workers as small business owners.⁷ The LFS also allows us to answer how COVID-19 has affected the labour market outcomes of the remaining active self-employed workers and to investigate the 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 collected from respondents between January 2016 and May 2020.

Tables 1 and 2 provide a description of our dataset. Table 1 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 and total actual hours of work are

Table 1: Summary Statistics for Labour Market Variables

Labour Market Variables	Mean (SD)	Range (Min–Max)
Unemployed	0.01 (0.08)	0.00–1.00
Labour force participation	0.97 (0.18)	0.00–1.00
Total actual hours of work	35.11 (22.33)	0.00–99.00

Note: All observations are of self-employed persons.

Source: Authors' calculations using the Labour Force Survey between January 2016 and May 2020.

Table 2: Summary Statistics for Individual Variables

Sample Characteristics	In Labour Force (%)
Incorporation Status	
Unincorporated	55.0
Incorporated	45.0
Sex	
Male	62.7
Female	37.3
Age categories	
15–34	17.2
35–54	46.3
≥ 55	36.5
Highest educational attainment	
Less than high school	8.8
High school or some college	22.5
Post-secondary accreditation	68.7
Women	
No kids	56.1
With kids	43.9
Immigration	
≤ 10 y ago	6.4
> 10 y ago	23.5
Non-immigrant	70.1
Marital status	
Not married	38.1
Married	61.9

Note: All observations are of self-employed persons.

Source: Authors' calculations using the Labour Force Survey between January 2016 and May 2020.

restricted to self-employed persons in the labour force, whereas the labour force participation is the whole sample of self-employed persons. We focus on self-employed individuals aged between 15 and 69 years.

Table 2 shows the various demographic characteristics of self-employed persons for the sample associated with the labour force participation market outcome in Table 1. The LFS categorizes respondents into one of four different categories for the self-employed which we collapse into incorporated and unincorporated (see Note 7). Table 2 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.

Results

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 3 shows changes in relevant variables from February 2020 through May 2020. We interpret the number of self-employed persons as the number of active small businesses in the representative sample.⁸ The first data column of Table 3 shows that the number of unincorporated businesses decreased by 10.1 percent in the period between February and May 2020. The number of incorporated businesses decreased by a larger amount of 14.8 percent. Table 3 also shows the evolution of the

number of small business owners employed over time as the consequences of COVID-19 became more dire. The Paid Help columns outline the total number of active self-employed individuals with and without paid help. Between February and May 2020, we see a decrease of approximately 10.1 percent in the number of business owners who report being employed with paid help and of 17.7 percent for those who report being employed without paid help. To investigate how much less self-employed workers are working, we show the number of full-time (≥ 30) and part-time (< 30) aggregated hours worked at the main job. We find a 34.4 percent decrease in aggregate hours for full-time self-employed workers and an 18.7 percent decrease for part-time self-employed workers. Moreover, we see a 12.6 percent decrease in the number of business owners in the labour force between February and May 2020. One potential concern with our analysis is related to the fact that the number of active small business owners might have a seasonality component. To investigate this, we also report the changes from February 2019 to May 2019, and we compute a double difference. Table 3 shows an increase in the number of business owners between February 2019 and May 2019; therefore, all our double-difference estimates are significantly higher. We find that these calculations, using changes from February to May 2020, could be a lower bound of the effect of COVID-19 on self-employed business owners.

Table 4 outlines the number of business owners by owner characteristics (gender, immigrant status, marital status, kids or no kids, education, and age). Table 4 shows a larger decrease in ownership for female (–12.9 percent)

Table 3: Number of Self-Employed Persons in Active Small Business before and after COVID-19

Time Period	Unincorporated	Incorporated	Paid Help		Aggregated Hours Worked (Millions)		In Labour Force
			With	Without	≥ 30	< 30	
2020							
January	4,768	4,115	6,318	2,565	77.2	11.1	8,931
February	4,693	4,102	6,254	2,540	78.2	11.0	8,822
March	4,417	3,761	5,925	2,253	53.8	10.0	8,211
April	4,300	3,469	5,654	2,115	42.5	7.8	7,793
May	4,218	3,495	5,622	2,091	51.3	8.9	7,712
2019							
February	4,775	4,107	6,370	2,512	75.0	11.0	8,945
May	5,009	4,142	6,427	2,724	85.8	11.4	9,216
Δ%							
May–Feb 2020	–10.12	–14.80	–10.11	–17.69	–34.38	–18.71	–12.59
May–Feb 2019	4.92	0.83	0.90	8.42	14.40	3.36	3.02
2020–2019	–15.04	–15.63	–11.01	–26.12	–48.77	–22.07	–15.61

Notes: Observations are only of those who are self-employed. Weights are applied to all measures. Counts are weighted within the sample, and hours worked are weighted up to the population.

Source: Authors' calculations. Data from the Canadian Labour Force Survey.

Table 4: Number of Business Owners by Individual Characteristics before and after COVID-19

Time Period	Gender		Immigration Status		Marital Status		Women		Education Level			Age Category		
	Male	Female	Not Immigrant	Immigrant	Not Married	Married	No Kids	With Kids	Less Than High School	High School or Some College	Post- Secondary Accreditation	15–34	35–54	≥55
2020														
January	5,638	3,245	6,085	2,798	3,362	5,521	1,864	1,443	735	1,883	6,266	1,459	4,153	3,271
February	5,492	3,303	6,028	2,767	3,255	5,540	1,855	1,489	698	1,855	6,242	1,414	4,142	3,240
March	5,092	3,086	5,762	2,416	3,090	5,088	1,700	1,429	630	1,774	5,774	1,357	3,857	2,964
April	4,866	2,903	5,387	2,382	2,889	4,880	1,610	1,346	595	1,708	5,466	1,338	3,588	2,843
May	4,835	2,878	5,391	2,322	2,755	4,958	1,568	1,353	574	1,650	5,489	1,313	3,571	2,829
2019														
February	5,615	3,267	6,222	2,660	3,405	5,477	1,810	1,431	710	1,947	6,225	1,511	4,112	3,259
May	5,714	3,437	6,480	2,671	3,609	5,542	1,887	1,534	744	2,070	6,337	1,540	4,331	3,280
Δ%														
May–February 2020	–11.97	–12.86	–10.56	–16.09	–15.37	–10.50	–15.45	–9.16	–17.81	–11.03	–12.06	–7.17	–13.77	–12.67
May–February 2019	1.76	5.21	4.16	0.39	6.00	1.18	4.25	7.20	4.70	6.34	1.80	1.90	5.34	0.64
2020–2019	–13.72	–18.07	–14.72	–16.48	–21.37	–11.68	–19.71	–16.36	–22.51	–17.38	–13.86	–9.07	–19.10	–13.31

Note: Observations are only of those who are self-employed.

Source: Authors' calculations. Data from the Canadian Labour Force Survey with within-sample weights applied.

versus male (–12.0 percent) owners from February 2020 to May 2020. It indicates a higher decrease in ownership for immigrants (–16.1 percent) than non-immigrants (–10.6 percent), and a higher decrease for not married (–15.4 percent) individuals than married (–10.5 percent) individuals over the same period. A smaller decrease is found for women with kids (–9.2 percent) than without kids (–15.5 percent). This suggests that day cares and schools being closed might not be the primary reason for the decrease in business ownership by women.

Table 4 also presents results by education and age. 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 35–54 years age group (–13.8 percent). Table 4 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 that are substantially larger in magnitude.

Table 5 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 5 shows 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 (–28.9 percent), and younger workers (35.3 percent for those aged 15–34 y and –35.0 percent for those aged 35–54 y) from February 2020 to May 2020. We also present a double-difference calculation, and the effects of COVID-19 are significantly larger using this method. Moreover, the double-difference calculation does not alter which self-employed workers were more negatively affected by COVID-19.⁹

Table 6 presents the effect of COVID-19 on the number of active small businesses by occupational category. It compares the first five months of 2020 with the first five months of 2019 and shows a reduction in the number of small businesses for most occupational categories. One important exception is in health, where small businesses increased by 11.4 percent for the first five months of 2020 compared with the first five months of 2019. The occupational categories with the largest decreases are art, culture, recreation, and sport (–14.8 percent); education, law, and social, community, and government services (–13.6 percent); and sales and service occupations (–12.8 percent).

Graphical Analysis of the Labour Market Outcomes of Active Self-Employed Business Owners before and after COVID-19

Next, we present graphical evidence to study changes in labour market outcomes for active self-employed workers from January 2016 to May 2020. The LFS gives us critical labour market information about self-employed persons,

including whether they are employed, whether they are in the labour force, and their total actual hours of work.¹⁰ We construct our figures through weighted 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 aged between 15 and 69 years. Our analysis can help highlight the active self-employed most in 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–May 2020.¹¹

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 96.3 to 93.8 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 who remained in the labour force.

Figure 2 distinguishes between self-employed persons who are incorporated (working for themselves in corporate entities) and those who are unincorporated (working for themselves in other entities). Both incorporated and unincorporated self-employed persons are 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. The effect of COVID-19 is significantly larger (for unemployment, labour force participation, and actual hours worked) for self-employed persons without paid help. This could be because their businesses are 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 these differences could help target any additional policy aimed at helping small business owners. Figures 4–9 illustrate the outcome variables by gender, age group, marital status, education, immigration status, and years since immigration, respectively.

Figure 4 shows the three main outcome variables by gender. 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 persons, possibly because their business was less established. Figure 6 presents the impact of COVID-19 by marital status. COVID-19 has had a negative impact for

Table 5: Aggregate Hours Worked before and after COVID-19 by Individual Characteristics

Time Period	Gender		Immigration Status		Marital Status		Women		Education Level			Age Category		
	Male	Female	Not Immigrant	Immigrant	Not Married	Married	No kids	With kids	Less Than High School	High School or Some College	Post-Secondary Accreditation	15-34	35-54	≥55
2020														
January	61.4	26.9	59.7	28.6	32.5	55.8	13.9	13.0	6.6	18.8	62.8	14.6	47.0	26.6
February	60.7	28.5	60.9	28.3	32.9	56.3	14.5	14.0	6.9	18.9	63.5	14.6	47.4	27.2
March	46.4	17.3	46.1	17.7	22.8	41.0	9.2	8.0	5.2	14.3	44.2	10.5	32.9	20.3
April	36.8	13.5	36.9	13.4	16.9	33.4	6.9	6.6	4.1	11.0	35.2	7.9	25.1	17.2
May	44.2	16.1	44.5	15.8	20.4	39.9	8.1	8.0	4.9	13.6	41.7	9.4	30.8	20.0
2019														
February	59.3	26.7	59.0	27.0	32.9	53.1	14.0	12.7	6.7	18.5	60.8	15.1	45.1	25.7
May	66.3	30.9	69.1	28.0	38.1	59.0	15.6	15.2	7.7	22.8	66.6	17.5	50.6	29.0
Δ%														
May-February 2020	-27.28	-43.46	-26.95	-44.26	-38.16	-29.10	-44.06	-42.82	-28.88	-27.67	-34.25	-35.34	-35.04	-26.37
May-February 2019	11.76	15.71	17.17	3.82	15.91	11.17	11.41	20.47	15.65	23.52	9.49	15.75	12.09	12.93
2020-2019	-39.04	-59.16	-44.12	-48.08	-54.07	-40.27	-55.48	-63.29	-44.52	-51.19	-43.75	-51.09	-47.13	-39.30

Notes: All values are in millions of hours. Observations are of only those who are self-employed.

Source: Authors' calculations. Data from the Canadian Labour Force Survey, weighted up to the population.

Table 6: Small Business Statistics by Occupational Categories, January–May

Occupational Category	2018	2019	2020	2020–2019, Δ%
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
Art, culture, recreation, and sport occupations	3,559	3,592	3,059	–14.84
Education, law, and social, community, and government services occupations	3,646	3,578	3,090	–13.64
Manufacturing and utilities occupations	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

Note: Observations are only those who are self-employed.

Source: Authors' calculations. Data from the Canadian Labour Force Survey with within-sample weights applied.

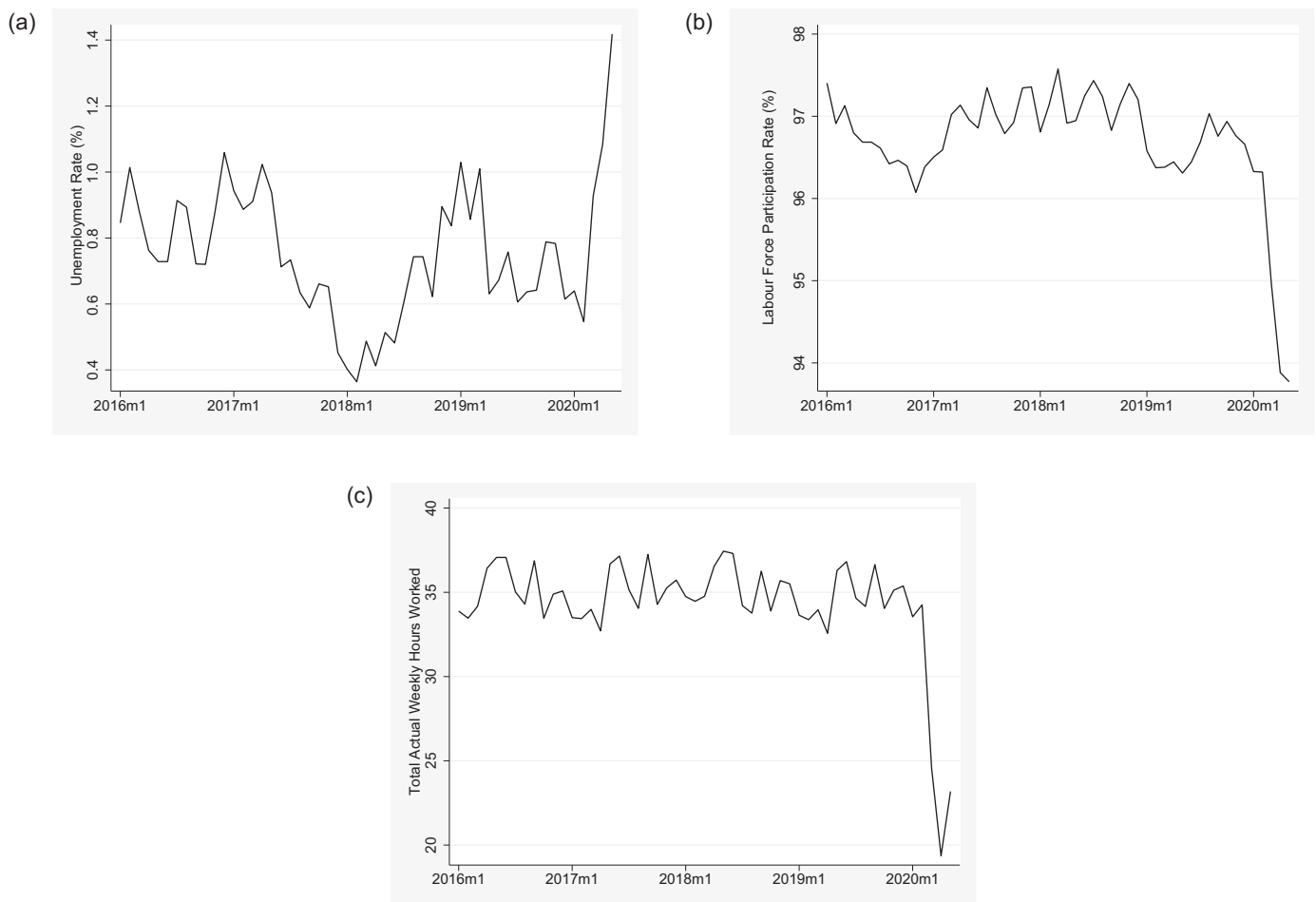


Figure 1: Unemployment Rate, Labour Force Participation, and Hours of Work for Self-Employed Persons: (a) Unemployment Rate, (b) Labour Force Participation, and (c) Hours of Work

Note: The time period is January 2016 to May 2020.

Source: Authors' calculations. Data from the Canadian Labour Force Survey.

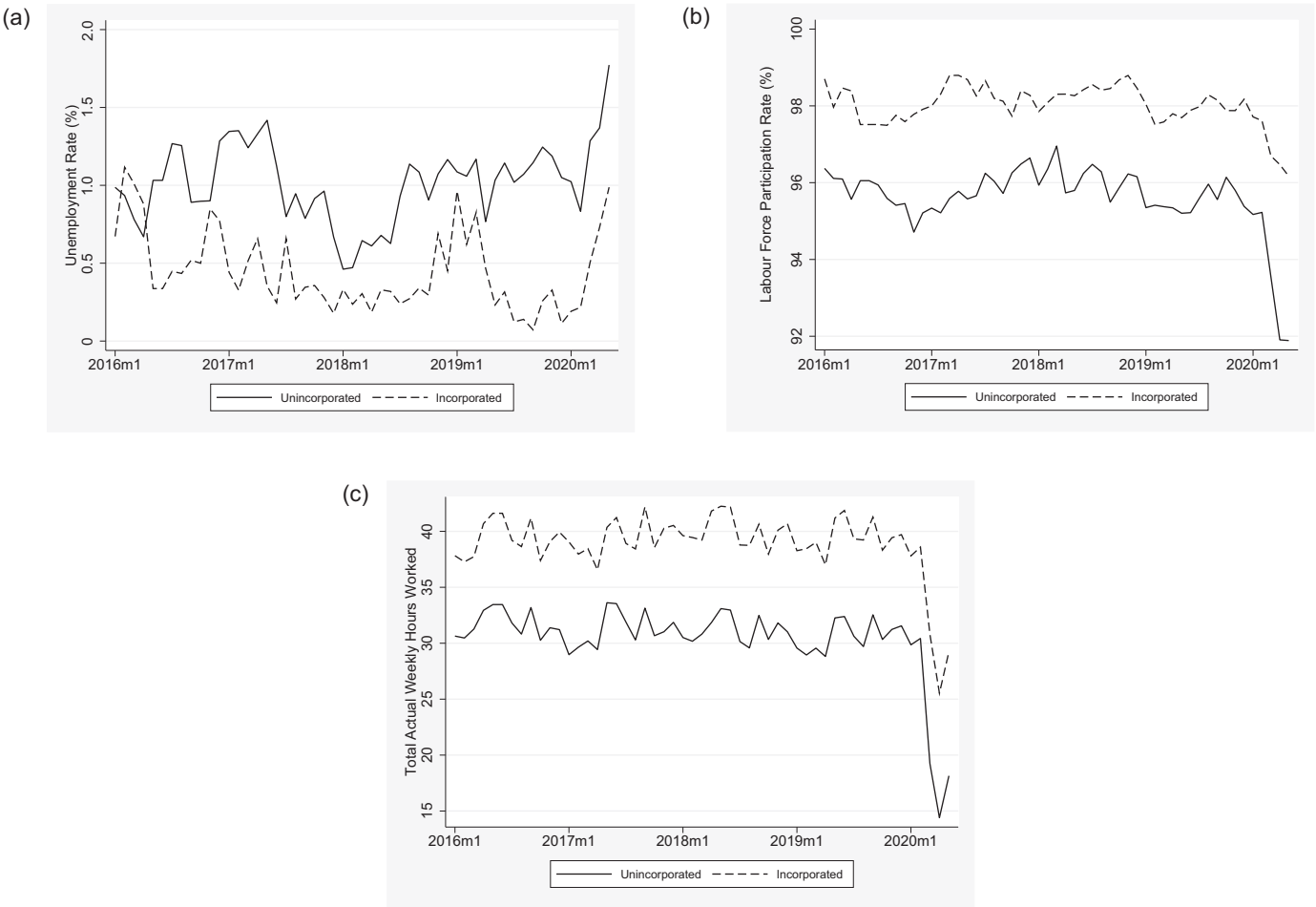


Figure 2: Unemployment Rate, Labour Force Participation, and Hours of Work for Self-Employed Persons by Incorporation Status: (a) Unemployment Rate, (b) Labour Force Participation, and (c) Hours of Work

Note: The time period is January 2016–May 2020.

Source: Authors' calculations. Data from the Canadian Labour Force Survey.

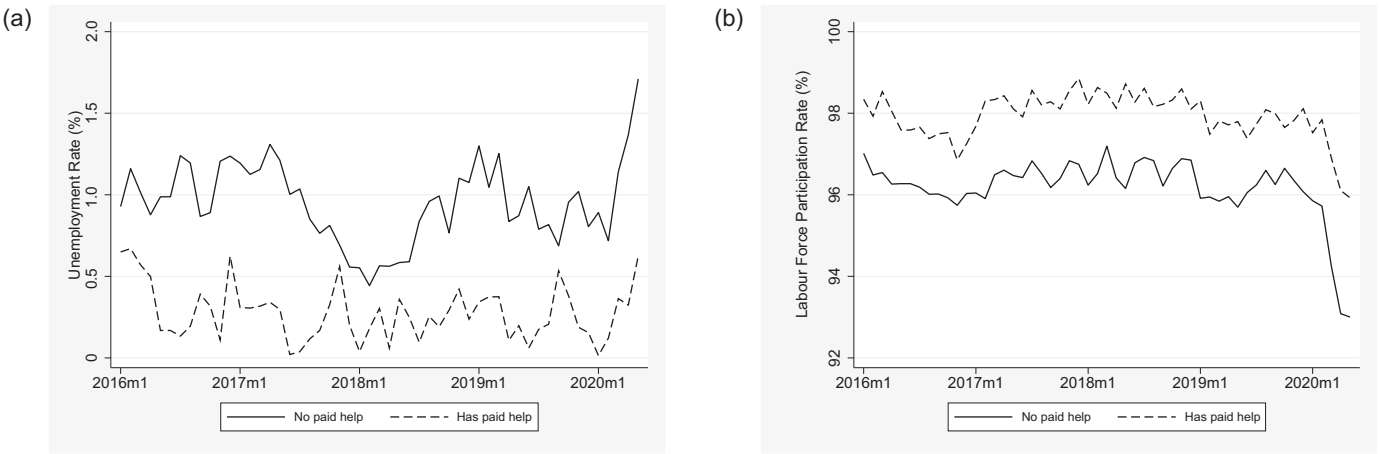


Figure 3: Unemployment Rate, Labour Force Participation, and Hours of Work for Self-Employed Persons by Those with Paid Help: (a) Unemployment Rate, (b) Labour Force Participation, and (c) Hours of Work

Note: The time period is January 2016–May 2020.

Source: Authors' calculations. Data from the Canadian Labour Force Survey.

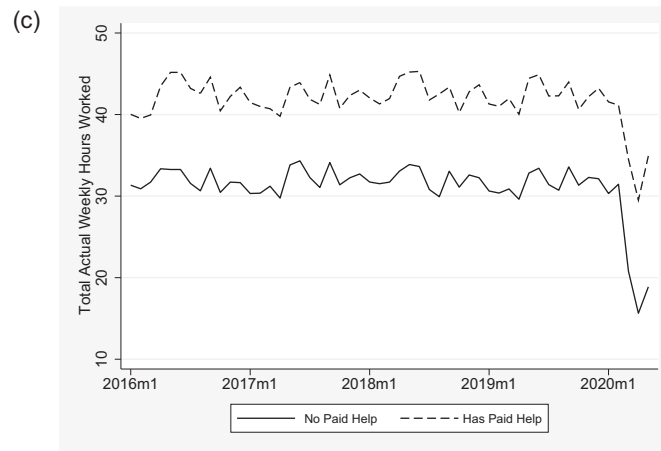


Figure 3: (Continued)

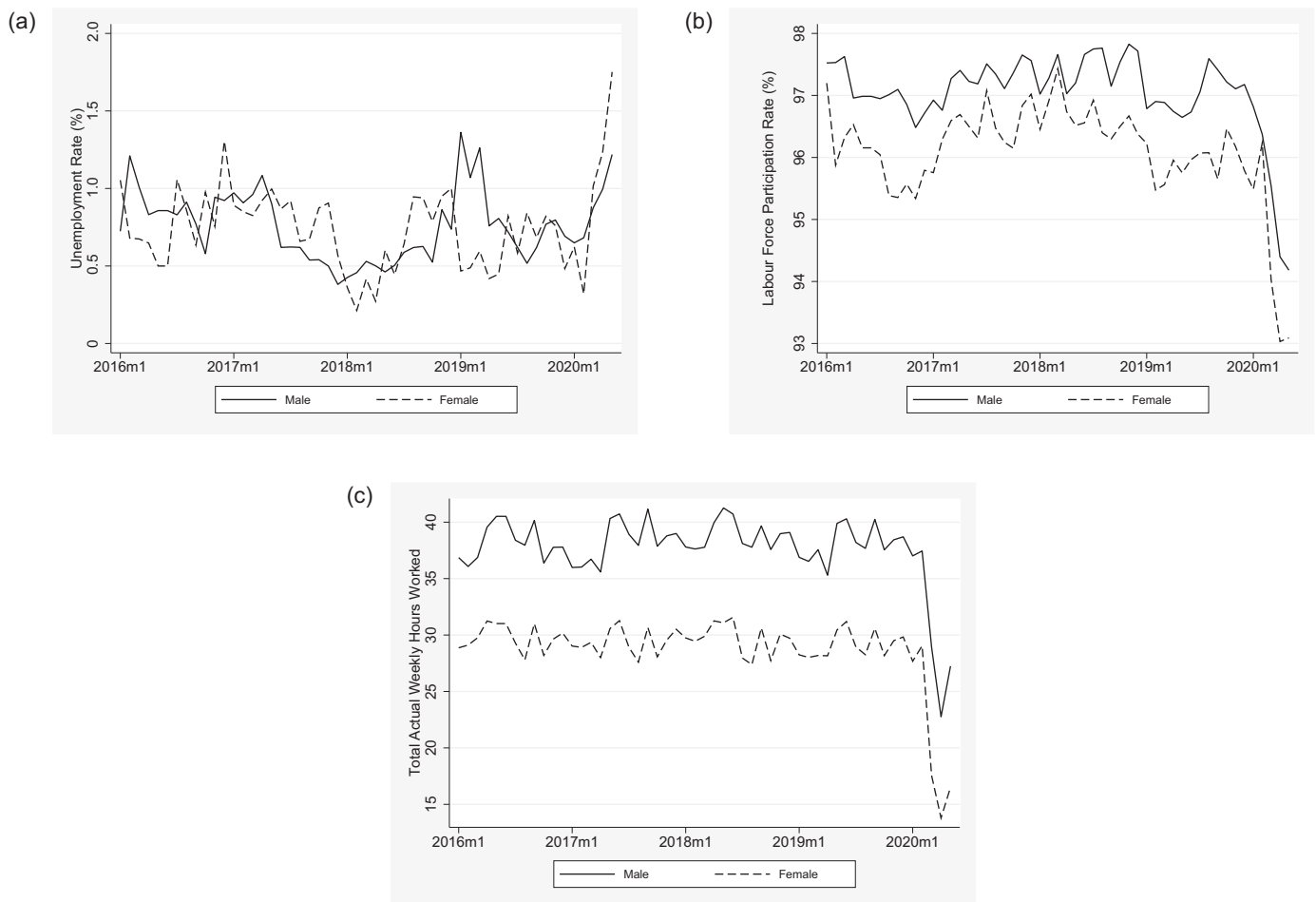


Figure 4: Unemployment Rate, Labour Force Participation, and Hours of Work for Self-Employed Persons by Sex: (a) Unemployment Rate, (b) Labour Force Participation, and (c) Hours of Work

Notes: The time period is January 2016–May 2020. Observations are of only those who are self-employed.

Source: Authors' calculations. Data from the Canadian Labour Force Survey.

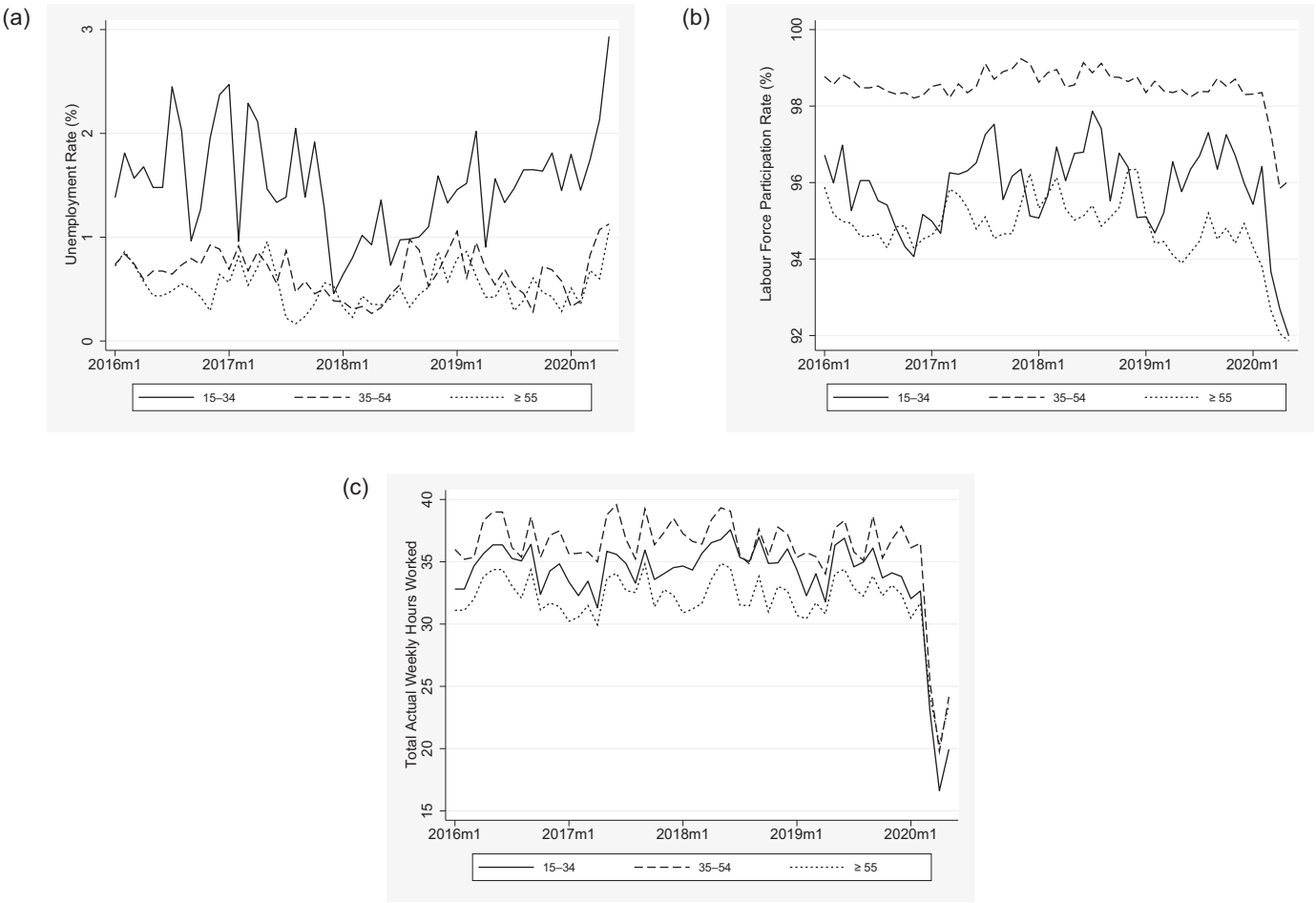


Figure 5: Unemployment Rate, Labour Force Participation, and Hours of Work for Self-Employed Persons by Age Group: (a) Unemployment Rate, (b) Labour Force Participation, and (c) Hours of Work

Notes: The time period is January 2016–May 2020. Observations are of only those who are self-employed.

Source: Authors' calculations. Data from the Canadian Labour Force Survey.

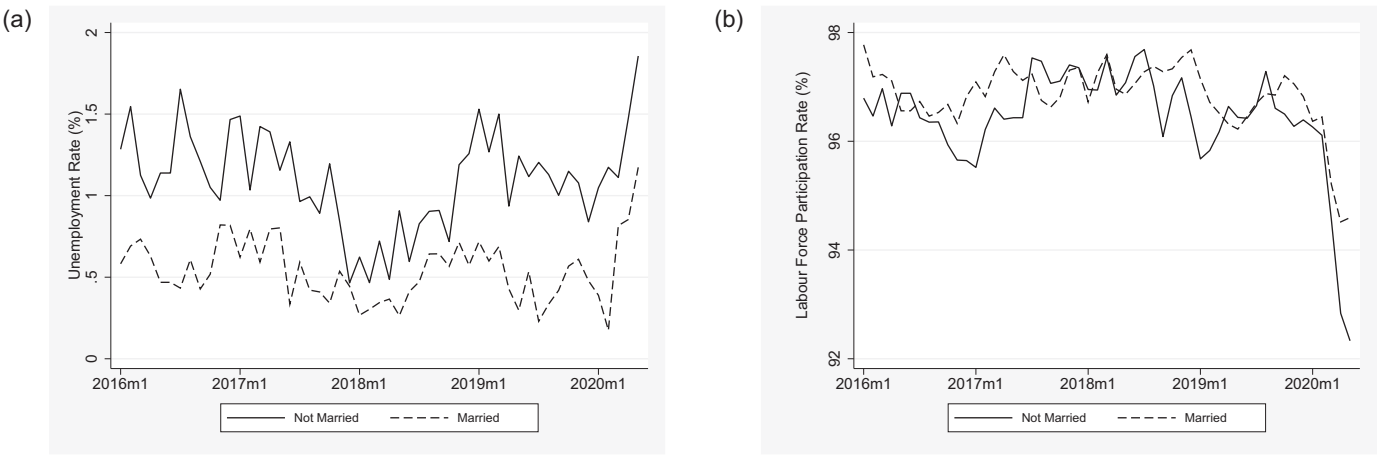


Figure 6: Unemployment Rate, Labour Force Participation, and Hours of Work for Self-Employed Persons by Marital Status: (a) Unemployment Rate, (b) Labour Force Participation, and (c) Hours of Work

Notes: The time period is January 2016–May 2020. Observations are of only those who are self-employed.

Source: Authors' calculations. Data from the Canadian Labour Force Survey.

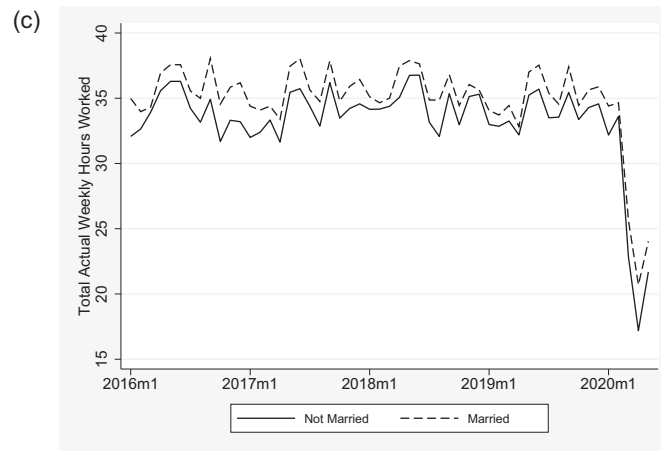


Figure 6: (Continued)

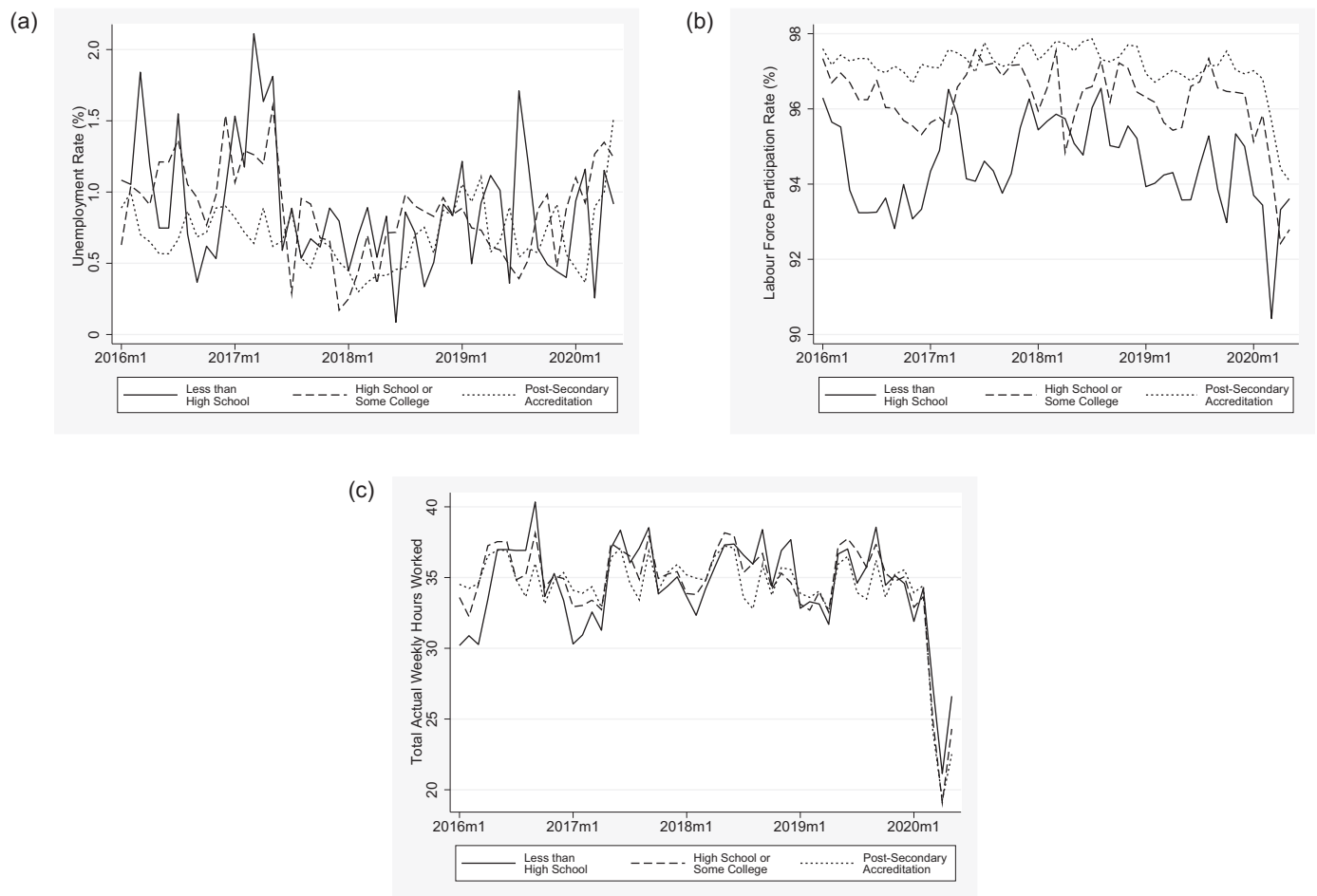


Figure 7: Unemployment Rate, Labour Force Participation, and Hours of Work for Self-Employed Persons by Education: (a) Unemployment Rate, (b) Labour Force Participation, and (c) Hours of Work

Notes: The time period is January 2016–May 2020. Observations are of only those who are self-employed.

Source: Authors' calculations. Data from the Canadian Labour Force Survey.

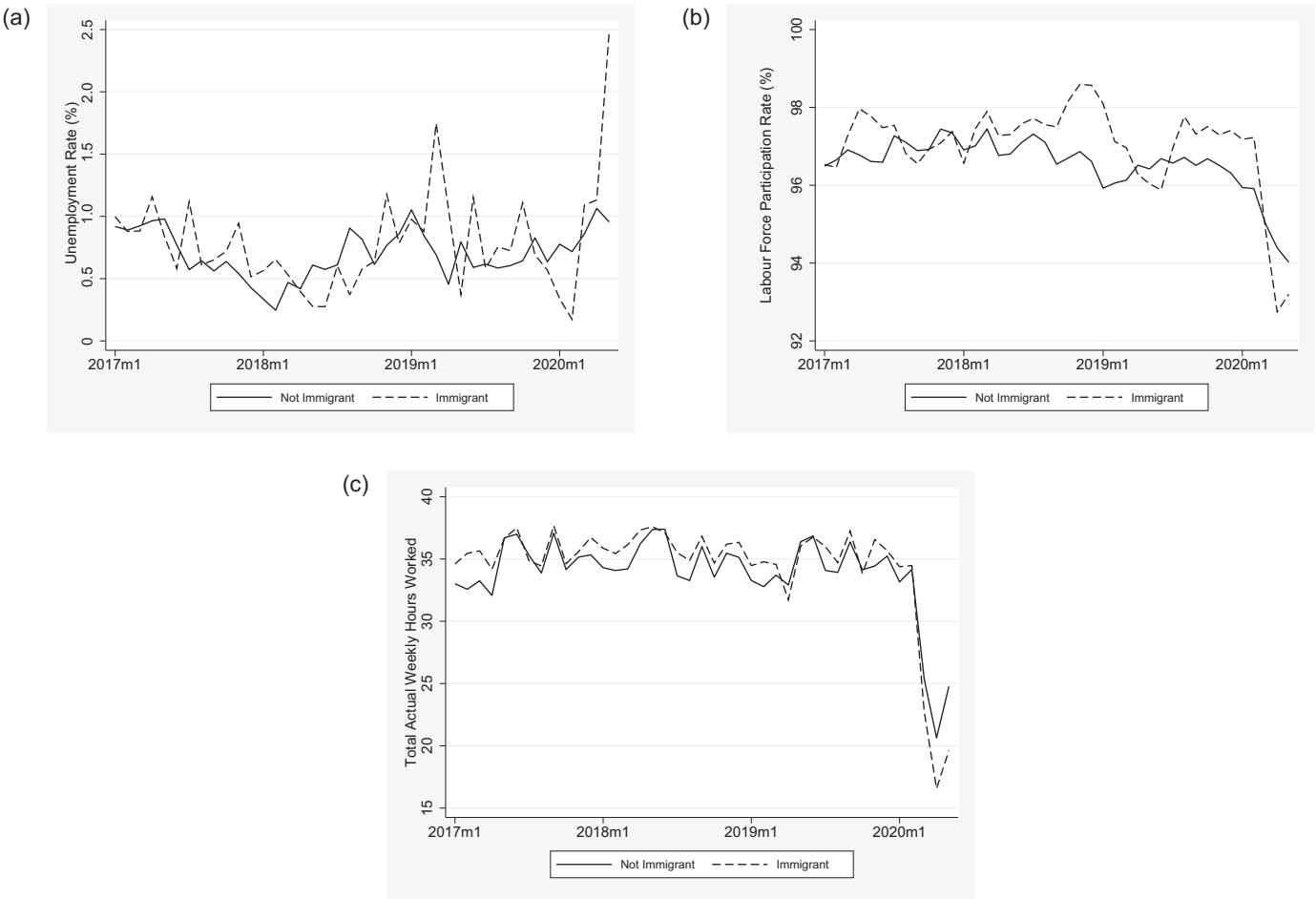


Figure 8: Unemployment Rate, Labour Force Participation, and Hours of Work for Self-Employed Persons by Immigration Status: (a) Unemployment Rate, (b) Labour Force Participation, and (c) Hours of Work

Notes: The time period is January 2017–May 2020. Observations are of only those who are self-employed.

Source: Authors’ calculations. Data from the Canadian Labour Force Survey.

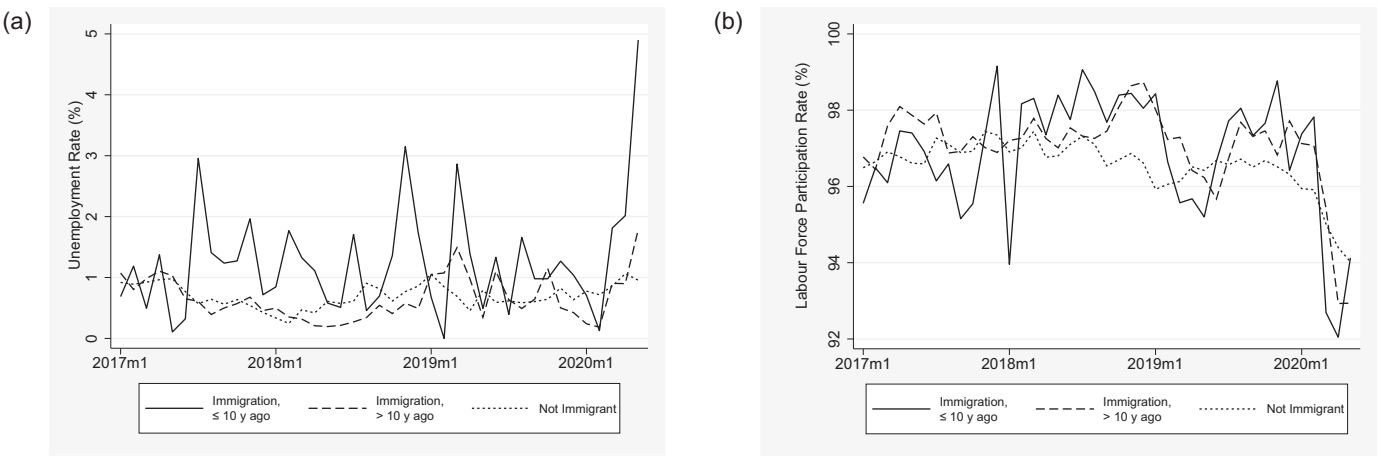


Figure 9: Unemployment Rate, Labour Force Participation, and Hours of Work for Self-Employed Persons by Years Since Immigration: (a) Unemployment Rate, (b) Labour Force Participation, and (c) Hours of Work

Notes: The time period is January 2017–May 2020. Observations are only those who are self-employed.

Source: Authors’ calculations. Data from the Canadian Labour Force Survey.

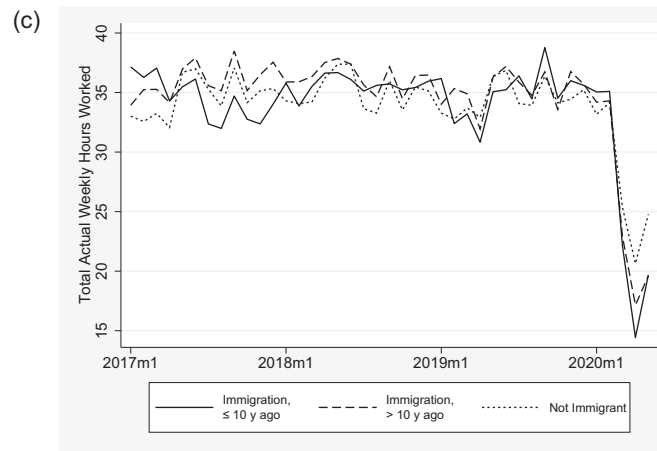


Figure 9: (Continued)

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. COVID-19 had a negative impact on all groups. Figure 8 shows the 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 because their business is less established.

Conclusion

In this article, 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 (see, e.g., Bensadoun 2020).

We use the LFS, 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 whether 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 larger decrease in ownership for immigrants (–16.1 percent), women (–12.9 percent), and 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 (–28.9 percent). The occupational categories with the largest decreases are in art, culture,

recreation, and sport (–14.8 percent); education, law, and social, community and government services (–13.6 percent); and sales and service occupations (–12.8 percent).

The federal government has been responding to fear of long-term negative effects on businesses by means of several programs. Despite this help, we document considerable negative short-term effects on small businesses. We also document several heterogeneity based on owners' characteristics that can provide guidance to target additional help. Future research needs to closely follow what happens to small businesses and investigate whether the shutdown of businesses is short term or permanent. The length of the shutdowns can potentially have a long-term impact on the Canadian economy and on job creation.

Notes

- 1 A list of different policies implemented by the Canadian federal government is available at <https://www.canada.ca/en/departement-finance/economic-response-plan.html>.
- 2 For a complete list, see <https://www.canada.ca/en/departement-finance/economic-response-plan.html>. It is also worth noting that provinces also created different programs to help small business owners.
- 3 Although the LFS does not include data on race, we find that immigrants are significantly more affected than those who are Canadian born.
- 4 A large literature study the determinants of entrepreneurship. These determinants include family background and race (e.g., Fairlie and Robb 2010; Hout and Rosen 2000), 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, Dohmen, and Kriechele 2014), and economic conditions (e.g., Fairlie 2013). See Beland and Unel (2019) for a complete literature review.
- 5 Using the Canadian Perspective Survey, they also show that reported mental health is significantly lower among the most affected workers. Beland et al. (2020b) study graphically self-employed workers and distinguish between in-

- corporated and unincorporated businesses. Here, we study how the effects of COVID-19 affect the self-employed on the basis of sociodemographic characteristics, such as gender, age, education, marital status, and immigration status.
- 6 The public files of the LFS do not have information on hourly wages or earnings for self-employed persons. This information is available for individuals working in the public or private sectors.
 - 7 The literature argues that incorporated entities is a better proxy for entrepreneurship (e.g., Beland and Unel 2019; Levine and Rubinstein 2017).
 - 8 It 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.
 - 9 Similarly to Beland et al. (2020b), who study the effect of COVID-19 on the Canadian labour market, we find a pronounced impact on younger and less educated self-employed workers. The larger impact on immigrants and women seems to be specific to the self-employed.
 - 10 As mentioned earlier, the public data files of the LFS do not have information on hourly wages or earnings for self-employed persons, precluding analysis of changes in wage rates over time. It is possible that COVID-19 affects earnings differently depending on incorporation status.
 - 11 Data 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.

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