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Initial impacts of the COVID-19 pandemic on the Canadian labour market

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WORKING PAPER SERIES

Initial Impacts of the COVID-19 Pandemic on the Canadian Labour Market

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Initial Impacts of the COVID-19 Pandemic on the Canadian Labour Market

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Abstract

In this study we review the initial impacts of the COVID-19 pandemic on the Canadian labour market. We focus on changes in employment and aggregate hours worked between February 2020 and April 2020, while accounting for normal monthly changes in these indicators. We find that COVID-19 induced a 32 percent decline in aggregate weekly work hours among workers aged 20-64, alongside a 15 percent decline in employment. We characterize the distribution of work lost, finding that nearly half of job losses are attributed to workers in the bottom earnings quartile. Those most impacted by COVID-19 are in public-facing jobs in industries most affected by shutdowns (accommodation and food services), are younger workers, paid hourly, and non-union. The results provide context for policy development, with both supply and demand sides of the labour market to consider.

Resumé

Dans cette étude, nous examinons les premiers impacts de la pandémie de la COVID-19 sur le marché du travail canadien. Nous nous concentrons sur les changements en matière d'emploi et du nombre total d'heures travaillées entre Février 2020 et Avril 2020, tout en tenant compte des variations mensuelles normales de ces indicateurs. Nous constatons que la crise économique liée à la COVID-19 a entraîné une diminution de 32 pour cent du nombre total d'heures de travail hebdomadaires et de 15 pour cent des emplois chez les personnes âgées de 20 à 64 ans. Nous analysons la répartition des emplois perdus, constatant que près de la moitié des pertes d'emploi sont attribuées aux travailleurs du quartile inférieur des gains. Les baisses d'emploi les plus marquées ont été enregistrées dans les industries les plus touchés par les fermetures dans lesquelles la proximité physique est importante (services d'hébergement et de restauration), de même que parmi les jeunes travailleurs et les personnes occupant des emplois rémunérés à l'heure et non syndiqués. Les résultats de notre étude fournissent un contexte pour l'élaboration de politiques publiques qui tient compte des changements du côté de l'offre et de la demande de travail.

Introduction

The COVID-19 pandemic forced the Canadian economy into a "medically-induced coma" in March 2020. Businesses were shuttered, schools closed, and employees were pushed to work from home to manage the spread of the Coronavirus. It was immediately clear that the economic impact would be unlike any recession Canada has experienced in the past. The 2008-2009 recession was triggered by a financial crisis, and recessions in the early 1980s and 1990s were similarly sparked by shocks to global markets that manifested over several months. While every recession is unique in some way, the sharp drop off in economic activity in the COVID-19-induced recession is unprecedented in recorded economy history.

The labour market impact of the crisis is central to the changes at the macro level of GDP and also on the incomes of Canadian families. To give an immediate sense of the scale, the quickly-implemented Canada Economic Response Benefit intended for those who lost work saw 6.73 million unique applications by April 19th, representing about one third of the workforce.[1] The goal of this paper is to document and explain the patterns of this initial labour market decline.

In this paper, we review the initial impacts of the COVID-19 pandemic on the Canadian labour force using the April Labour Force Survey (LFS). The LFS offers a description of the impact on jobs and aggregate hours worked, both overall and within various segments of the workforce. We use the April LFS for two reasons. First, it was the most recent data available while preparing the manuscript. Second, the May LFS has now revealed that—on a national level—the April results likely reflected the worst of the crisis.[2] So, using April allows us to characterize the 'bottom' as a starting place for understanding the path to recovery.

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[1] This was the number of total unique applicants as of April 19, 2020, as reported on the Government of Canada website on April 21, 2020. The archived webpage is found using the Wayback Machine here: https://web.archive.org/web/20200421131223/https://www.canada.ca/en/services/benefits/ei/claims-report.html

[2] The analysis appearing in this paper was prepared in May, 2020. The May LFS was released on June 5th, 2020. The May numbers revealed a national bounce-back in hours compared to April of 13.7 percent and a 290,000 increase in employment. Across provinces, most were up slightly or flat. Quebec had a large increase and Ontario continued a decline.

We find that COVID-19 induced a 32 percent decline in aggregate weekly hours worked between February and April 2020, and a 15 percent decline in employment. Close to half the job losses can be attributed to workers with earnings in the bottom quartile. The largest losses can be attributed to industries and occupations most affected by closures (such as public facing occupations in accommodation and food services), and to workers who are younger, paid hourly, and non-union.

We proceed as follows. We begin with a description of the Labour Force Survey and the measures used to describe labour market impacts, emphasizing the limitations and challenges in this crisis situation of using traditional unemployment measures. We then offer our main results in the form of descriptive analysis of the April LFS compared to the pre-crisis February LFS. We conclude with a discussion of the relevance of our findings for policy development, and implications for the recovery from the initial impacts documented here.

Measuring COVID-19 Impacts in the Labour Force Survey

The LFS is a monthly survey administered by Statistics Canada, sampling about 54,000 households across Canada. The survey is longitudinal in nature, as each month 1/6 of the sample is dropped and a new group of Canadians is sampled. Sampling is non-random to ensure reliable estimates of labour market activity can be developed at a fairly small regional level. The LFS represents the highest-frequency survey that can be reliably and consistently used to track changes in the Canadian labour market. We focus our attention on the months of February, March and April 2020. We rely primarily on the public use microdata files but have also created some special tabulations using Statistics Canada's Real Time Remote Access (RTRA) system.

The LFS for each month measures outcomes for a single week in the labour market, typically the week that includes the 15th of the month. In our analysis, the timing of the LFS reference weeks

is important to contextualize results. Our results rely mostly on February-to-April comparisons, but we start here with the context for March to document the complete timing for how the COVID pandemic affected the Canadian labour market.

The March LFS represents the week of March 15 to March 21, a week of transition into shutdown and related policy responses. For example, in Ontario the week was preceded by announcements to close public schools (March 12), an expansion of job-protected leaves (March 16), and declaration of a state of emergency (March 17) that resulted in the cancellation of events, and the closure of non-essential businesses and public buildings. At the same time, there was a general push to work from home when possible, cancel travel plans, and self-isolate when potential exposure to the virus was a concern.

The April LFS represents the week of April 12 to April 18. By this time, further business closures and restrictions across provinces had been fully implemented. The end of the LFS reference week represents the period of the strictest COVID-19 restrictions on business operations and general movements of the population. Saskatchewan was the first province to announce re-opening plans on April 23, and into May provinces cautiously moved toward a phased re-opening of the economy as health risks appeared more manageable. The timing and details of these plans varied substantially by province, but none were in place by the April LFS. This is the basis for our expectation—subsequently confirmed by the May LFS release—that April represented the initial bottom of the national labour market decline.

We focus on two indicators of labour supply – employment and hours at work—rather than more traditional indicators such as unemployment. The LFS is well-designed to capture transitions from employment to unemployment and non-participation in the labour force in non-pandemic times. But, in a COVID-19 context many of the people who lost work were not necessarily moved out of employment. Instead moved from being employed and at work to employed but absent from work for at least part of the week (whether furloughed, on sick leave, using vacation time, or

having their work hours substantially reduced). For workers who lost employment entirely, they would be placed in the categories of unemployment or non-participation.

To be unemployed in the LFS, a person needs to report to have been temporarily laid off, have a job to start in the future, or have searched for work in recent weeks. In the context of this pandemic, it is not obvious how people would describe their COVID-related reasons for not searching or how their reason would be captured in the LFS questionnaire. With COVID-19 closures, many of the individuals laid off would be unable to search for work because their entire profession or industry was shut down. For those reporting temporary layoffs, it is not clear whether the respondents' view of "temporary" matches with the view of their employer, since the future path of the pandemic was very much in doubt at the time of job separation. These considerations affect not only the standard definition of unemployment, but also broader measures that include those not currently searching. As such, comparing measures of unemployment across months pre- and post-COVID onset will not offer a clearly interpretable result.

Many who lose work will find themselves in the residual category of non-participation. As Jones and Riddell (2019, 2006, 1999) have demonstrated, the distinction between the unemployed and nonparticipants is generally quite blurred. Many non-participants are marginally attached to the labour force and their behaviour (in terms of transitions into employment) appears to more closely mimic the unemployed than many other non-participants who lack attachment to the labour force. When investigating the impacts of COVID-19, we expect this distinction between the unemployed and non-participants to be even more blurred.

In focusing attention on labour market impacts, we think it is particularly important to characterize the total amount of work done by participants, which is captured best in measures of aggregate weekly work hours. Worksharing, furloughs, or reduced hours due to childcare responsibilities and other issues associated with work-from-home arrangements will be picked up by hours measures but missed by headcounts of employment or unemployment. Moreover,

aggregate hours is a more useful macroeconomic measure as an input to aggregate production functions.

In our February-to-April comparisons, we account for differences between the months that would not be COVID-19 related. Several issues for these adjustments arise. First, when examining employment levels, typical monthly increases partly reflect a general increase in population over time. If we didn't account for the population increase, we risk understating the loss in employment due to COVID-19. Second, the precise timing of holidays matters. The April LFS reference week in 2020 includes Easter Monday, but not Good Friday. Looking through recent years as candidates for a benchmark February–April difference in aggregate hours, the placement of Good Friday was clearly important for reported differences between usual and actual hours at work during the reference week. As a statutory holiday, Good Friday normally results in reduced hours at work. The April reference week in 2019 included Good Friday, such that using 2019 as a benchmark would result in understating the negative impacts of COVID-19 on hours worked. The April reference week for 2018 is preferred, since in 2018 the reference week did not include Good Friday. We considered other options that combined multiple years of data but decided a simple and transparent comparator was best.

With this in mind, the main estimates we provide for a COVID-19 impact on outcomes (Y) represent a difference-in-differences estimate, measured as

$$\text{COVID-19 Impact} = (Y_{April2020} - Y_{Feb2020})/Y_{Feb2020} - (Y_{April2018} - Y_{Feb2018})/Y_{Feb2018}$$

The difference is generally presented as a percentage difference in outcome Y. The double-differences represent the changes in 2020 over and above February-April changes that we would expect to normally occur over those months as proxied by the 2018 realizations.

Our sample represents individuals age 20-64, residing in the Canadian provinces. The results presented below show the COVID-19 impact across a variety of interesting splits of the data. We

consider how losses in hours and employment are distributed across individuals by socio-economic characteristics such as age, gender, the age of children in the home, and education. We also consider job characteristics, such as occupation and industry, job tenure, and whether a person is paid hourly or salaried. Finally, we consider the earnings quartile from which workers are laid off.

Results

The simplest way to summarize the overall impact of COVID-19 on the labour market is to examine the impact on aggregate weekly hours. In Figure 1, we present aggregate weekly hours of individuals aged 20-64, for each month since January 1976.[3] We can see large reductions in weekly hours in previous recessions (1981-82, 1990-92, and 2008-09). However, the magnitude of losses in previous recessions is dwarfed by the losses in 2020. Comparing February to April 2020 directly (in Table 1), aggregate hours dropped 29% between the months of February and April 2020. In Table 1, we also provide estimates that adjust this loss in hours for normal February-April changes based on 2018 aggregate hours. Once adjusted, we find the overall COVID-19 impact was a 32 percent decline in aggregate hours.

[3] Note what in Figure 1 we present aggregate weekly hours that are seasonally adjusted for expositional purposes, while other monthly aggregates presented in this paper are not seasonally adjusted.

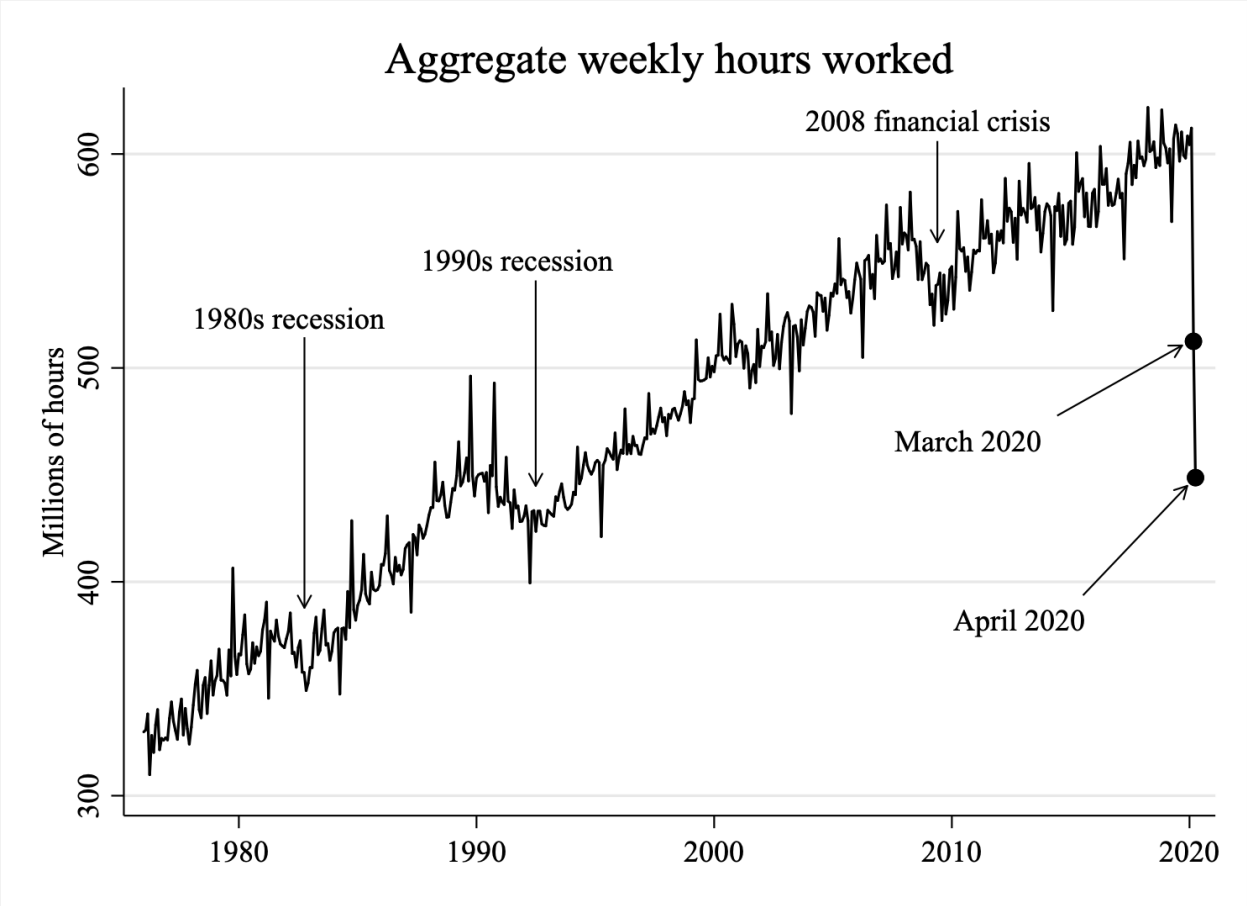

FIGURE 1. Aggregate weekly hours worked
Note: Actual weekly hours worked on all jobs among workers aged 20-64 in each month. Hours are seasonally adjusted by removing month fixed effects.
Source: Authors' tabulations using the LFS public use microdata files, 1976-2020.

Table 1. Aggregate Weekly Hours Worked and Demographics

Group:	2020 February (millions)	2020 April (millions)	2020 Difference (Apr-Feb)	2020 Percent	2018 Percent	COVID-19 Effect
All (age 20-64)	591.0	421.1	-169.9	-28.8%	3.6%	-32.3%
Gender						
Women	257.7	180.1	-77.7	-30.1%	3.6%	-33.7%
Men	333.2	241.0	-92.2	-27.7%	3.3%	-31.0%
Age						
20-29	116.7	76.5	-40.2	-34.5%	5.5%	-40.0%
30-39	150.2	106.5	-43.6	-29.0%	2.7%	-31.7%
40-49	142.8	106.0	-36.7	-25.7%	2.9%	-28.6%
50+	181.4	132.0	-49.3	-27.2%	3.1%	-30.3%
Age of youngest child						
Under 6	83.3	59.8	-23.5	-28.2%	0.8%	-29.0%
6-12	74.8	55.1	-19.7	-26.3%	4.1%	-30.4%
13-17	47.6	35.2	-12.4	-26.0%	-1.1%	-24.9%
18-24	46.1	35.3	-10.8	-23.4%	5.6%	-29.1%
No kids, age < 40	180.5	123.8	-56.8	-31.4%	4.5%	-35.9%
No kids, age 40+	158.7	111.8	-46.8	-29.5%	3.9%	-33.4%
Province						
NL	6.9	4.6	-2.3	-32.9%	2.1%	-35.1%
PE	2.4	1.8	-0.6	-24.9%	2.3%	-27.2%
NS	14.0	10.5	-3.5	-25.1%	5.2%	-30.3%
NB	11.2	8.5	-2.7	-24.4%	3.1%	-27.5%
QC	132.7	84.4	-48.3	-36.4%	0.9%	-37.3%
ON	234.2	167.5	-66.6	-28.5%	3.4%	-31.8%
MB	20.4	16.6	-3.8	-18.5%	4.5%	-23.0%
SK	17.7	13.7	-4.0	-22.7%	4.3%	-27.1%
AB	75.0	56.0	-19.0	-25.3%	2.1%	-27.4%
BC	76.5	57.5	-19.0	-24.9%	8.6%	-33.5%

Source: Authors' tabulations using the Labour Force Survey.

Table 2. Employment (at work or absent) and Demographics

Group:	2020 February (millions)	2020 April (millions)	2020 Difference (Apr-Feb)	2020 Percent	2018 Percent	Covid-19 Effect
All (age 20-64)	17.21	14.76	-2.45	-14.3%	0.8%	-15.0%
Gender						
Women	8.29	7.02	-1.26	-15.3%	0.9%	-16.1%
Men	8.93	7.74	-1.19	-13.3%	0.7%	-14.0%
Age						
20-29	3.69	2.83	-0.86	-23.4%	1.5%	-24.9%
30-39	4.30	3.77	-0.54	-12.4%	0.9%	-13.3%
40-49	3.98	3.54	-0.43	-10.9%	0.8%	-11.7%
50+	5.24	4.62	-0.62	-11.9%	0.2%	-12.1%
Age of youngest child						
Under 6	2.53	2.30	-0.24	-9.3%	-1.3%	-8.0%
6-12	2.10	1.87	-0.22	-10.6%	1.8%	-12.4%
13-17	1.28	1.18	-0.10	-8.1%	-3.4%	-4.7%
18-24	1.29	1.18	-0.11	-8.2%	3.3%	-11.5%
No kids, age < 40	5.36	4.27	-1.08	-20.2%	1.3%	-21.6%
No kids, age 40+	4.65	3.95	-0.70	-15.1%	1.2%	-16.3%
Province						
NL	0.20	0.17	-0.03	-14.2%	3.0%	-17.2%
PE	0.07	0.06	-0.01	-13.1%	0.4%	-13.5%
NS	0.41	0.35	-0.06	-14.2%	2.0%	-16.2%
NB	0.32	0.27	-0.04	-13.2%	1.6%	-14.8%
QC	3.93	3.26	-0.67	-17.1%	0.6%	-17.8%
ON	6.80	5.91	-0.89	-13.0%	0.8%	-13.8%
MB	0.59	0.52	-0.07	-11.6%	0.8%	-12.5%
SK	0.51	0.45	-0.06	-11.9%	0.6%	-12.5%
AB	2.12	1.82	-0.30	-14.2%	0.8%	-15.0%
BC	2.26	1.94	-0.33	-14.4%	0.4%	-14.8%

Source: Authors' tabulations using the Labour Force Survey.

The loss in work hours is comprised of two components. There are significant losses of jobs on the extensive margin and also reductions in hours worked on the intensive margin. (In Table 2 below, we present the overall loss in employment representing those at work or absent.) Between February and April 2020 nearly 2.5 million individuals between the ages of 20 and 64 lost their jobs, representing a 14 percent decline in employment. However, recognizing that population growth and seasonality will generally drive some part of the month-to-month change in employment, we also provide adjusted estimates based on 2018 changes. With this adjustment, we see the COVID-19 impact represents a 15 percent decline in employment.

In Tables 1 and 2, we further characterize the distribution of lost work by considering the loss of hours and employment within demographic groups. First, we see that the COVID-19 February – April job losses were quite evenly distributed across men and women. Overall, aggregate hours fell by 34 percent for women, and 31 percent for men. This lies in contrast to the initial impact of COVID-19 on jobs in March 2020, whereby women were clearly facing larger losses than men (see Milligan et al. 2020). In later sections of this paper, we return to the gendered nature of jobs affected when considering the longer-run impacts of the COVID-19 shutdowns and the occupations most affected. Second, we see that the largest impact is on younger workers, aged 20-29, whose aggregate hours fell 40 percent and employment fell 25 percent due to shutdowns. Hours and employment losses were smallest among those aged 40-49, who experienced a 12 percent drop in employment due to COVID-19. With respect to other characteristics in Tables 1 and 2, the patterns are similar. For example, while we see significant losses among individuals with young children, the losses are similar for those with adult children. With respect to regional differences, we see Quebec's loss of hours (37 percent) and employment (17.8 percent) exceeded that of other provinces. Manitoba's losses were the smallest, having seen a 23 percent reduction in hours and 12.5 percent loss in employment. However, there are no obvious patterns across regions.

The job losses we highlight in Table 2, however, are distributed unequally across the wage distribution. To examine impacts across wage groups, we first divide workers observed in

February 2020 into four equal-sized groups, ranked on the basis of weekly earnings. To gauge the magnitudes, the bottom quartile threshold is $646 per week. This bottom quartile includes, for example, individuals that work full time for minimum wage.[4] The February 2020 thresholds are used when measuring employment in April, while February 2018 thresholds are used for 2018.

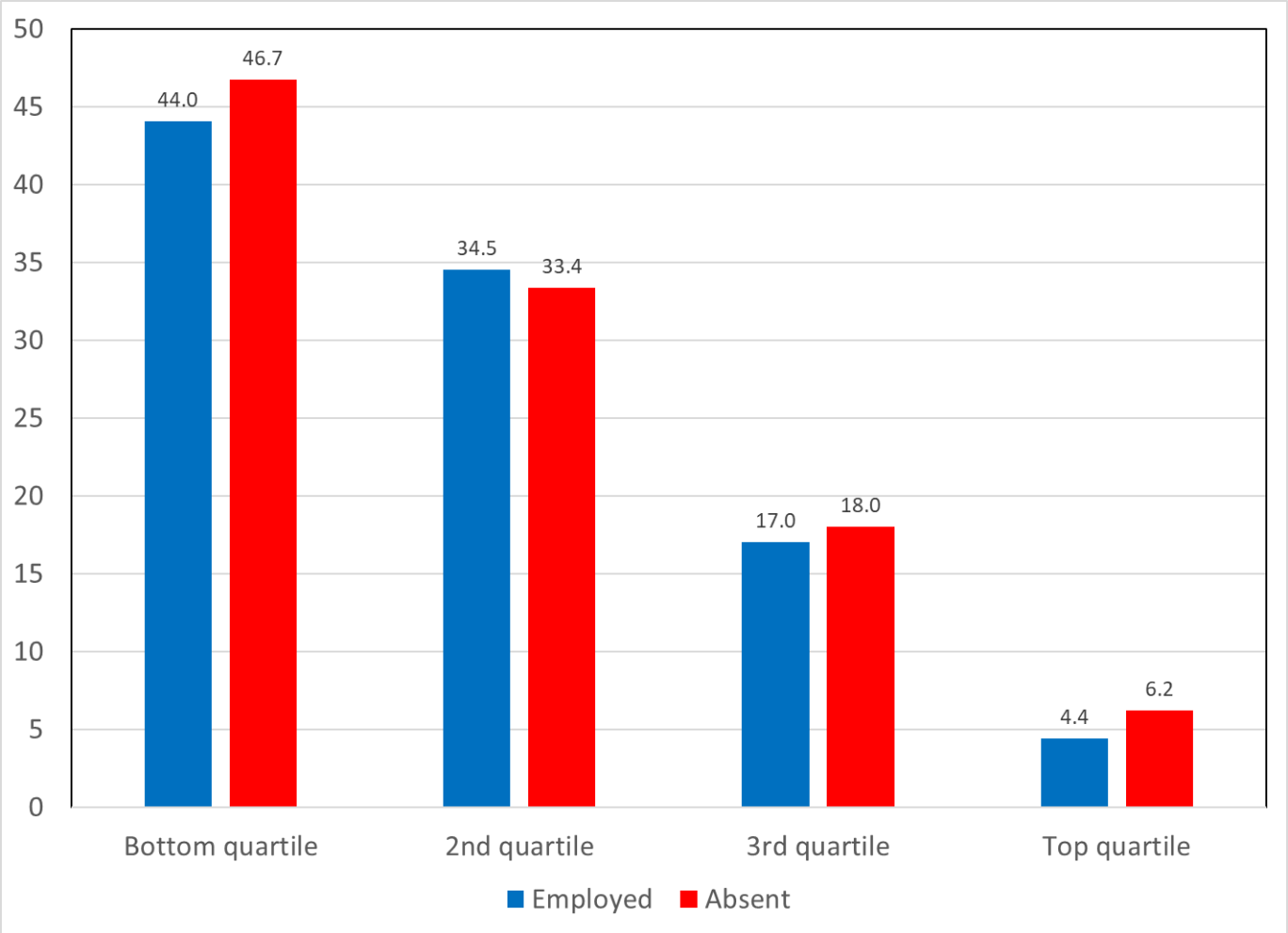

Figure 2. Employment Losses by Earnings Quartile
Notes: Earnings quartiles are based on the February distribution of weekly earnings, tabulated using usual hourly earnings and usual hours of work.
Source: Authors' tabulations using the Labour Force Survey

[4] As of May 14, 2020, the provincial minimum wage ranged from $11.15 in Newfoundland and Labrador to $15 in Alberta.

In Figure 2 we present the employment losses within each weekly earnings quartile. Here we see that nearly half of job losses were attributed to workers with earnings in the bottom quartile. Those with earnings in the bottom half of the weekly earnings distribution (in the bottom or 2nd quartile) account for almost 80 percent of job losses. Employment losses in the top quartile of weekly earnings represented only 4 percent of all losses. In Figure 2 we also present results for workers who moved from being employed and at work to being employed but absent with a substantial reduction in hours. Similar to employment losses, nearly half (47%) of those affected by the loss of work were in the bottom quartile of weekly earnings.

Table 3. Distribution of lost jobs in the lower quartiles, by employment sector

A. Bottom Quartile Losses	
Retail trade	20.0
Educational services	10.2
Health care and social assistance	8.8
Information, culture and recreation	6.0
Accommodation and food services	28.5
All other sectors	26.6
B. Second Quartile Losses	
Construction	8.8
Manufacturing, durable goods	10.9
Retail trade	13.2
Health care and social assistance	16.0
Accommodation and food services	9.5
All other sectors	41.7

Source: Authors' tabulations using the Labour Force Survey.

The employment losses within the lowest quartiles, illustrated in Figure 2, reflect heavy closures within some industries. We break down the losses for the bottom two earnings quartiles by industry in Table 3. For those in the lowest quartiles of earnings, jobs losses in retail trade and accommodation and food services account for nearly half the job losses (presented in the top panel of Table 3). The large loss of jobs in health care and social assistance, as well as education, largely reflects homecare providers and education support. The five industries combined represent nearly three quarters of the losses for workers in the lowest quartile.

When we look at job losses in the second quartile (in the second panel of Table 3), we see a substantial but smaller proportion of job losses attributed to some of the same industries. However, workers in this part of the earnings distribution were also affected by losses in construction and durable goods manufacturing, together accounting for 20 percent of job losses in this quartile.

A more comprehensive representation of the types of work lost due to COVID-19 is presented in Tables 4 and 5, where we present the loss in aggregate weekly hours and employment (respectively) by job characteristics. Given the industries facing large job losses (presented in Table 3), it is not surprising to see large declines in employment and hours in the most public-facing occupations. For example, sales and services occupations experienced a 45 percent decline in hours and 27 percent decline in employment (representing the largest loss in employment among occupation categories).

In Tables 4 and 5, we see a smaller but substantial reduction in aggregate hours lost in management occupations (of 19 percent) that is not matched by a loss in employment (at only 2 percent). We believe this is related to the significantly different experience of those paid hourly and those who are salaried (also presented in Tables 4 and 5). Among women paid hourly, there was a 39 percent reduction in hours due to COVID-19 and a 25 percent reduction in employment. For those salaried, however, women's hours only dropped 13.8 percent, and employment fell by only 5 percent. Whether individuals are unionized also appears associated with whether hours losses are also job losses. While the aggregate hours lost by union and non-union employees are similar in magnitude (29 and 26 percent, respectively), their employment losses are not—non-union workers experience a 20 percent decline in employment while unionized workers lost only 12 percent of their jobs. The experience of non-union workers is worsened when combined with other characteristics. For example, we found that women who were non-union and hourly-paid experienced a 44 percent reduction in work hours, and 32 percent reduction in employment.

Table 4

Aggregate Weekly Hours Worked by job characteristics

Group:	2020 February (millions)	2020 April (millions)	2020 Difference (Apr-Feb)	2020 Percent	2018 Percent	Covid-19 Effect
All (age 20-64)	591.0	421.1	-169.9	-28.8%	3.6%	-32.3%
Occupation						
Management	61.8	52.0	-9.8	-15.9%	3.3%	-19.2%
Business, finance and administration	95.0	79.1	-15.9	-16.7%	6.1%	-22.8%
Natural and applied sciences	56.2	49.2	-7.0	-12.4%	-1.9%	-10.5%
Health	42.0	33.4	-8.6	-20.4%	0.3%	-20.7%
Educ, law, social/comm/gov services	65.9	49.0	-16.9	-25.6%	4.7%	-30.3%
Art, culture, recreation and sport	12.7	7.0	-5.7	-44.9%	-0.3%	-44.6%
Sales and services	114.0	65.4	-48.6	-42.6%	2.0%	-44.7%
Trades, transport and equipment operators	91.8	55.5	-36.3	-39.5%	6.7%	-46.2%
Natural resources and agriculture	10.7	7.7	-2.9	-27.6%	12.9%	-40.6%
Manufacturing and utilities	28.3	17.7	-10.6	-37.4%	-0.9%	-36.5%
Hourly and salaried workers						
Men - Hourly paid	158.5	105.0	-53.5	-33.8%	3.5%	-37.3%
Men - Salaried	109.2	101.1	-8.0	-7.4%	2.8%	-10.2%
Women - Hourly paid	129.6	83.9	-45.7	-35.3%	3.7%	-39.0%
Women - Salaried	91.5	82.5	-9.0	-9.8%	4.0%	-13.8%
Union Status						
Unionized or Covered	339.1	249.1	-90.0	-26.5%	2.4%	-28.9%
Non-union	154.9	119.9	-35.0	-22.6%	3.8%	-26.4%
Class of worker						
Public sector	119.6	102.5	-17.1	-14.3%	1.3%	-15.7%
Private sector	374.4	266.6	-107.9	-28.8%	3.3%	-32.1%
Self-employed	84.0	46.8	-37.3	-44.4%	6.8%	-51.1%

Source: Authors' tabulations using the Labour Force Survey.

Table 5

Employment (at work or absent) by job characteristics

	2020				2018	Covid-19
Group:	February	April	Difference	Percent	Percent	Effect
All (age 20-64)	17.2	14.8	-2.5	-14.3%	0.8%	-15.0%
Occupation						
Management	1.6	1.5	-0.1	-4.7%	-2.8%	-1.9%
Business, finance and administration	2.9	2.6	-0.3	-9.0%	1.2%	-10.2%
Natural and applied sciences	1.5	1.5	-0.1	-4.2%	-3.5%	-0.7%
Health	1.4	1.3	-0.1	-5.8%	-0.6%	-5.2%
Educ, law, social/comm/gov services	2.1	1.9	-0.2	-9.5%	3.1%	-12.7%
Art, culture, recreation and sport	0.4	0.4	-0.1	-16.8%	-0.6%	-16.3%
Sales and services	3.8	2.7	-1.0	-27.4%	-0.3%	-27.1%
Trades, transport and equipment operators	2.4	2.0	-0.5	-19.6%	5.1%	-24.8%
Natural resources and agriculture	0.3	0.3	0.0	-8.6%	10.3%	-18.9%
Manufacturing and utilities	0.8	0.6	-0.2	-21.6%	-1.1%	-20.5%
Hourly and salaried workers						
Men - Hourly paid	4.5	3.5	-1.0	-22.7%	0.8%	-23.5%
Men - Salaried	2.9	2.7	-0.1	-4.8%	0.3%	-5.2%
Women - Hourly paid	4.6	3.5	-1.1	-24.5%	0.3%	-24.8%
Women - Salaried	2.7	2.6	-0.1	-4.2%	1.2%	-5.4%
Union Status						
Unionized or Covered	10.0	8.1	-1.9	-19.5%	0.0%	-19.5%
Non-union	4.7	4.3	-0.5	-9.9%	1.9%	-11.8%
Class of worker						
Public sector	3.8	3.6	-0.2	-5.1%	-0.3%	-4.8%
Private sector	11.0	8.7	-2.2	-20.3%	0.9%	-21.2%
Self-employed	2.5	2.4	0.0	-1.7%	1.6%	-3.3%

Source: Authors' tabulations using the Labour Force Survey.

Looking at classes of workers, Tables 4 and 5 show similar interesting differences. Those working in the public sector saw the smallest decline in hours worked (at 16 percent) and employment (5 percent). We see a 32 percent loss in hours, and 21 percent loss in employment, for those in the private sector. Aggregate hours lost was greatest among the self-employed (at 51 percent), but this only results in a loss of 3 percent of employment. Examining the self-employed reinforces our view that it is important to examine both the losses in aggregate weekly hours worked and employment.

Policy Discussion

Our results describing the initial impact of the COVID-19 pandemic on the Canadian labour market provide context for the active policy discussions underway now and into the future about how to design policy to support economy recovery. To organize our thoughts, we separate our discussion into supply and demand considerations.

On the supply side of the labour market, three important factors arise.

First, and most obviously, is the health implications of the pandemic. Concern for one's own health or for those living with heightened risk factors (for example age or immune deficiencies) will change the labour market decisions of some. Our results show that the labour market impact of the COVID-19 pandemic has been harsher on those workers who hold the least bargaining power – think of non-union, low wage, women, hourly paid. The policy implication is that these affected workers rely most heavily on government regulation to keep their workplaces safe, so provincial and federal labour market regulations about safe work will become paramount to ensure workers are safe and feel safe when providing labour.

Second, our results indicate that the hours worked and employment of those with pre-school and school-aged kids dropped substantially. As the economy moves to recovery, the lack of regular childcare and schooling will make it much harder for these families to supply labour; and

this is most likely to hit women much harder. As firms partially reopen, it is particularly important to consider which of their employees are called back. Without policy that addresses caring needs, any partial recovery will leave some workers behind. The detrimental impact of being left behind on work experience and human capital can have long-run implications for career paths and earnings.

Third, our results show the largest impact across weekly earnings was on the lowest earnings quartile. For many of these low earners, the value of government income relief measures will come close to or exceed the wages from work. For example, the Canada Emergency Response Benefit provides $500 per week, while the earnings cutoff for the bottom quartile was $646. This suggests that a substantial portion of the bottom quartile has potential earnings in the range of the $500 per week benefit Finding the balance between needed income support and economic incentives to work will again emerge as a difficult policy question.

In addition to the above supply factors, there are three main impacts to consider from the labour demand side of the labour market.

First, with dropping GDP the standard business cycle impacts on aggregate demand will come to bear on the demand for labour. With lower national income, less labour will be demanded. On this front, the COVID-19 pandemic will restart the usual macroeconomic debates about how to swing the business cycle back to an upward trajectory and regenerate aggregate labour demand.

Second, within industries there will be shifts in production inputs. For example, the push to automatic checkouts and online shopping will decrease the demand for front-line retail workers. On the other hand, there may be increased demand for workers to do cleaning and create more extensive online retail infrastructure. For other industries such as restaurants, the mix of inputs may not change, but the scale of operation will shrink because of seating-area restrictions.

Third, there will be large shifts across industries. Because of public health restrictions against international travel and large gatherings, those working in hospitality, large event planning, or live arts and entertainment will see a dramatic decrease in labour demand that may last years. This cross-industry labour reallocation can be facilitated with labour market policy that supports search, retraining, and efficient labour market matching.

Conclusions/Future research

This paper has documented the initial impacts of the COVID-19 pandemic on the Canadian labour market, using data available through April 2020. We find COVID-19 drove a 32 percent reduction in aggregate weekly hours worked between February and April 2020, alongside a 15 percent reduction in employment. More than one half of job losses are attributed to workers in the bottom quartile of weekly earnings, and these losses largely represent public-facing jobs in industries hardest hit by COVID-19 shutdowns such as accommodation and food services and retail services. Moreover, those who lost work are over-represented among workers paid hourly (as oppose to salaried), younger workers, and non-union workers.

Going forward, the impact of the pandemic on both labour supply and demand will be large and labour market policy that responds appropriately can assist the recovery by facilitating fast and efficient matches in the changed labour market. Future research using the longitudinal aspect of the LFS, linked with the supplementary questions about the impacts of COVID-19 (collected May 17-26, 2020), will be useful for getting the hindsight-20-20 review of how the labour market responded and where policy may have left gaps.

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