# Early Impact of the COVID-19 Pandemic on Household Finances in Quebec

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La pandémie de maladie à coronavirus 2019 (COVID-19) a fait son apparition au début de mars 2020, le chômage ayant atteint des niveaux sans précédent en avril 2020. Les auteurs tracent un premier portrait des répercussions de la pandémie sur la situation financière des ménages du Québec, l'une des provinces les plus durement touchées par la COVID-19 quant au nombre de cas et au taux de chômage. Ils tentent également d'expliquer en quoi les programmes gouvernementaux de prestations d'urgence ont pu aider les ménages à surmonter leurs difficultés au cours de la phase initiale de la pandémie. Enfin, les auteurs s'appuient sur les données relatives aux attentes qu'ils tirent de leur sondage pour illustrer ce à quoi les ménages peuvent s'attendre pour le reste de 2020.

Mots clés : chômage, COVID-19, dette, situation financière des ménages, soutien du revenu

The coronavirus disease 2019 (COVID-19) pandemic surged in early March 2020, with unemployment reaching historic levels in April 2020. This study paints an early portrait of the pandemic's impact on the finances of households in Quebec, one of the hardest-hit provinces in terms of COVID-19 cases as well as unemployment levels. The article also provides an understanding of how government emergency benefit programs may have helped households get by during the early period of the pandemic. Finally, we draw on expectations data collected in a survey of 3,009 respondents living in Quebec to illustrate what households can expect for the rest of 2020.

Keywords: COVID-19, debt, household finances, income support, unemployment

Of the Canadian provinces, Quebec has seen the most coronavirus disease 2019 (COVID-19) cases. In fact, at the time of writing it accounts for more than half of the cases in Canada (Canada 2020).<sup>1</sup> With the goal of flattening the curve and preventing a collapse of the health system, the Quebec government mandated the closure

of daycares and educational facilities as of 13 March and the closure of all non-essential businesses as of 25 March. These closures put a considerable strain on the Quebec economy and on Quebec households. In Quebec, almost one in five jobs was lost between February and April 2020 (Statistics Canada 2020b), and many Canadian workers who kept their job have seen a reduction in their hours worked (Schirle, Milligan, and Skuterud 2020). To mitigate the economic impact of the public health crisis, federal and provincial governments have put into place several financial measures to support businesses and households, such as a transfer to Canadians who lost their job (the Canada Emergency Response Benefit, or CERB) and a wage enhancement for essential workers (the Incentive Program to Retain Essential Workers, or IPREW). There has also been an effort by private institutions to reduce the pressure on household budgets, for example by banks allowing a deferral of mortgage and credit card payments.

Because the situation has evolved so rapidly over the past three months, as of now there are few timely data available to assess the impact of COVID-19 on household finances. The data that are available provide information about isolated aspects of household finances in Canada concerning the employment situation (Schirle, Milligan, and Skuterud 2020), consumer spending (Guidman 2020; Ocampo 2020), or Canadians' perceived job security as well as their ability to meet financial obligations or the consequences for mental health (Statistics Canada 2020a). At the international level, several studies analyze the impact of COVID-19 on expectations and planned financial behaviour (Dietrich et al. 2020; Hanspal, Weber, and Wohlfart 2020), as well as on labour markets (Beland, Brodeur, and Wright 2020; Hamermesh 2020; Hensvik, Le Barbanchon, and Rathelot 2020). There is also evidence that the economic impact of COVID-19 differs by gender, industry, and ability to work from home, as well as across countries (Adams-Prassl et al. 2020).

What is missing in the literature, however, are comprehensive data on how COVID-19 affected household finances, namely assets, debts, and spending, as well as expectations regarding these quantities (which might in turn affect the reaction to a financial shock). Such data would allow us to assess how Canadians adapt their financial decisions to such unforeseen circumstances and whether the government programs to support Canadians are adequately designed. To fill this gap, we conducted a survey of 3,009 respondents in the province of Quebec. We conducted this survey in mid-May 2020, about two months after the first decisive measures were put in place to control the spread of COVID-19. Respondents answered questions about their employment situation, assets, debts, and spending. We refer to three different periods: 2019, which serves as a benchmark; April 2020, to quantify the impact of COVID-19; and the remainder of 2020, to measure expectations. We also collect some background information.

The remainder of this article is organized as follows: in the next section, we describe the survey that we fielded in May 2020. Then we present an analysis of our survey data, looking in particular at changes in households' employment and financial situations between 2019 and April 2020. We further analyze the profile of CERB applicants and respondents' expectations for the future and then conclude with some observations relevant to policy.

# Survey

# Methodology

To conduct the survey, we partnered with AskingCanadians, an online panel survey organization. The survey was fielded to residents of Quebec aged 25–64 years, and we aimed for an equal number of respondents in each of four age groups: 25–34, 35–44, 45–54, and 55–64. We further construct survey weights by age, gender, and education using the 2016 Census. This allows us to correct for under- and oversampling of certain subgroups. For questions for which we expected a significant proportion of missing information, such as income, we use unfolding brackets. We then use multiple imputation to assign missing values with information from the bracketing, conditional on basic socio-demographic covariates (age and gender). We also trim some variables to remove outliers at the 99th percentile.

Respondents could choose to answer the survey questionnaire in English or French. On completion of the questionnaire, respondents received a loyalty reward from their choice of retailer (respondents could choose from a list of major retailers such as Walmart, Petro-Canada, and Hudson's Bay). In total, 3,009 respondents completed the questionnaire between 8 and 20 May 2020, a period during which all non-essential businesses as well as schools and daycares were still closed by government order.

The questionnaire consists of five sections: (a) demographic questions, (b) pre-crisis (2019) employment and financial situation, (c) April 2020 employment and financial situation, (d) expectations for the future, and (d) preferences. The entire questionnaire can be found in the Appendix.

## **Representativeness**

A first important question is to assess whether our sample is representative, at least on observables, of the population it aims to make inferences about. In Table 1, we show an overview of our weighted sample and the corresponding information for the Quebec population for comparison with our sample, using the 2016 Census Public Use Microdata Files (PUMFs) and the 2016 Survey of Financial Security PUMF. There are no annual-level PUMFs on income and other outcomes that would allow us to match to our survey (in the next section, we look at employment changes in our survey compared with the Labour Force Survey). Because our comparisons are with 2019

Characteristic	Our Survey	Statistics Canada Surveys
Age		
25–34	23.06	23.76
35–44	23.97	24.26
45–54	26.04	24.98
55–64	26.92	26.99
Male, %	50.00	50.00
Marital status, %		
Single	28.19	23.74
Widowed, separated, or divorced	11.25	9.86
Married or common-law	60.55	66.41
Education, %		
High school or less	31.91	31.91
College or some university	42.65	42.65
Bachelor's degree or more	25.44	25.44
Working, %	75.96	75.57
Annual earnings (\$1,000s)	48.22	54.89
RRSP balance (\$1,000s)	60.50	60.66
TFSA balance (\$1,000s)	13.87	8.43
Home value (\$1,000s)	309.06	250.68
Mortgage value (\$1,000s)	103.13	90.01
Credit card debt (\$1,000s)	5.02	6.19
Other debt (\$1,000s)	12.28	19.47

**Table 1:** Baseline (2019) Characteristics in Our Survey inComparison with Data from Statistics Canada

Notes: This table compares baseline outcomes (for 2019) from the survey with comparable statistics from Statistics Canada's 2016 Census PUMFs and the 2016 Survey of Financial Security PUMFs. Statistics are weighted, with the weights provided for PUMFs and those constructed from the 2016 Census for the survey. The Consumer Price Index is used to inflate 2016 numbers for comparison. RRSP = registered retirement savings plan; TFSA = tax-free savings account; PUMFs = Public Use Microdata Files.

Source: Statistics Canada 2016 Census PUMFs and the 2016 Survey of Financial Security PUMFs.

outcomes, we inflate dollars to 2019 using the Consumer Price Index. Demographics for our sample with population weights applied align with values calculated from the 2016 Census. The percentage of single respondents in our survey is slightly larger than in the 2016 Census (28.19 percent vs. 23.74 percent). The working status and earnings of our respondents at the end of 2019 line up well with those from the 2016 Census. The percentage employed in our survey is 75.96 percent, compared with 75.57 percent in the Census. Average annual earnings are \$54,890 in the Census, compared with \$48,220 in our survey (the difference is not statistically significant). In terms of assets, the average registered retirement savings plan (RRSP) account balance is \$60,660 in the 2016 Survey of Financial Security (in 2019 dollars) compared with \$60,500 in the survey. For tax-free savings accounts (TFSAs), we find an average account balance of \$8,430 compared with \$13,870 in the Survey of Financial Security. Other outcomes, in terms of home value, mortgage value, credit card debt, and other debt also line up relatively well. There is no clear bias in any direction in terms of socio-economic status: our financial outcomes are sometimes lower and sometimes higher than those in the Statistics Canada surveys.

# Situation Changes in April 2020

# **Employment Situation**

Table 2 presents detailed changes to our respondents' situation in April 2020. First, the proportion employed drops by almost 21 percentage points. Close to one-third of households (29.5 percent) experienced a change in employment status. Besides the decrease in the proportion of respondents who report being employed, we also note a decrease of about 6 percent in the number of hours worked for those who were still working in April 2020. These numbers line up well with changes observed in the April 2020 LFS in which, compared with February 2020, there is a drop of 22.1 percentage points in the proportion employed (from 72.1 percent to 50.0 percent).

But who lost their jobs, and who saw reductions in hours and income? In Table 3, we present regression results for a logit regression of whether a respondent was laid off and whether the respondent worked fewer hours than in 2019 (Columns 1 and 2), as well as the results of a least squares regression of the difference in working hours between 2019 and April 2020 and of the difference in work income between the same periods (Columns 3-5).<sup>2</sup> The regressions in Columns 2 and 3 use observations only for those respondents who were working in April 2020. We see that women had a higher probability of being laid off, although the difference is not statistically significant. Also, conditional on still being employed in April 2020, women did not experience a significantly different reduction in working hours than men, nor did they lose more income than men, on average. We further observe that compared with the youngest age group (25–34 y), respondents in the oldest age group (55–64 y) were more likely to be laid off, whereas there was no difference between respondents from the middle age groups (35-44 y and 45-54 y) and the youngest age group. An interesting finding is that French speakers had a lower probability of being laid off but lost 1.19 more work hours than their English-speaking counterparts. One possibility is that English speakers are more present in the Montreal region, where the lockdown was perhaps more severe.

It is not surprising that the possibility of working from home significantly decreased the probability of being laid off (-8.2 percentage points). This confirms the finding by Adams-Prassl et al. (2020) that the ability to work from home has a significant impact on the probability of losing

#### Table 2: Changes in Employment and Hours: 2019 and April 2020

		%	
Employment Variable	2019	April 2020	Difference
Household in which the respondent is mostly employed	76.4	55.5	-20.9
Household in which the spouse is mostly employed	73.2	52.2	-21.0
COVID-19-caused employment status change-at least one spouse		29.5	
Respondents who report having been laid off as of April 2020			
Male		20.5	
Female		23.9	
Typical work hours per week, %			
Working respondents	37.8	35.4	-6.3
Working spouses	37.1	34.9	-5.9
Respondents who worked less in April 2020 because of COVID-19			
Male respondents		32.0	
Female respondents		32.0	
Reduction in hours in April 2020			
Male respondents		26.7	
Female respondents		29.5	

Notes: N = 3,009. To render the survey representative of the population of Quebecers aged 25–64 yr, statistical weights were constructed on the basis of the 2016 Census and applied to the raw data. Blank cells indicate that the respective time frame is not applicable to a variable. COVID-19 = coronavirus disease 2019.

Source: Retirement and Savings Institute–Research Chair in Intergenerational Economics–Centre Interuniversitaire de Recherche en Analyse des Organisations Web survey conducted from 8 to 20 May 2020 using the AskingCanadians panel.

one's job due to the pandemic, even controlling for other job characteristics. However, the possibility of working at a 2-metre distance from colleagues or customers – the distance the government recommends keeping during the pandemic – did not significantly affect outcomes. Income had a positive effect on keeping one's job, a negative effect on the probability of having to reduce working hours, and a negative effect on hours lost. The fact that lowerincome workers are more likely to lose their job is in line with findings by Cajner et al. (2020) and Galasso (2020). Some industries predict workers' exposure to employment changes during the pandemic. As shown in Table 2, construction and accommodation and food services are industries in which more people than average were laid off, whereas employees in public administration were particularly unlikely to lose their jobs. Respondents working in arts and in educational services were not more likely to be laid off than others, but they did reduce their hours by more. Because we control for the ability to work from home, the fact that the industry still affects the job outcome in some cases is probably due either to complete closure of some industries (e.g., construction), independent of the ability to work for home for some occupations within that industry, or to the demand for certain services (e.g., lower demand in the accommodation industry as a result of travel restrictions and in the arts industry because all museums were closed and cultural events were cancelled).

Because those who can work from home were at the lowest risk of being laid off, one could suspect that a large shift in work location occurred among those who are employed. Table 4 shows the distribution of workplaces for our Quebec sample in 2019 and in April 2020. The share of respondents working at a fixed location outside the home has almost been cut in half, from 79.93 percent to 40.43 percent. The shift has been mostly toward working from home, which was the reality for almost half of our respondents in April 2020 (47.18 percent). This is not surprising, because many organizations have been forced to implement telework for their employees. It is interesting to note, however, that the share of people working from home is only slightly larger than the share of respondents stating that working from home would have been possible, namely 44.94 percent.<sup>3</sup> Those who responded that they could not have worked from home in 2019 were 2.3 times as likely to have lost their job as those who stated they could have (or did) work from home, because their probability of losing their job was 27 percent versus 12 percent for those who stated that they could have worked from home.

## How Did Quebecers Respond Financially?

Given this changing landscape in the labour market, how did households react financially? We now turn to documenting changes in the respondents' financial situation. We look in turn at spending, saving, and debt. This allows

				Change in			
				Earni	ngs		
Regression Variable	Laid Off	Lost Work Hours	Hours	\$	%		
Female	0.031	-0.0068	0.28	31.5	0.0015		
	(0.02)	(0.02)	(0.57)	(73.00)	(0.02)		
35—44 у	0.016	0.026	-0.082	-77	-0.052		
	(0.03)	(0.03)	(0.77)	(92.10)	(0.05)		
45–54 у	0.031	-0.064**	0.92	- <b>I</b> 50.7 <sup>*</sup>	-0.068*		
,	(0.03)	(0.03)	(0.76)	(91.60)	(0.04)		
55–64 y	0.034	-0.011	0.17	-II6.7	-0.099**		
,	(0.03)	(0.04)	(0.95)	(89.90)	(0.05)		
Trade certificate or some college	0.014	-0.063*		-37.7	0.075*		
5	(0.03)	(0.04)	(0.90)	(100.80)	(0.04)		
University	-0.023	-0.0047	1.33	-100.3	0.037		
· · · · · · · · · · · · · · · · · · ·	(0.03)	(0.04)	(0.94)	(111.90)	(0.03)		
French (interview language)	-0.037	0.042	-1.21**	149.1	0.060**		
	(0.02)	(0.03)	(0.58)	(96.80)	(0.03)		
Work from home possible in 2019	-0.082***	-0.016	0.52	-42.6	0.079		
· · · · · · · · · · · · · · · · · · ·	(0.02)	(0.03)	(0.68)	(82.40)	(0.06)		
Work at a 2 m distance possible in 2019	-0.035	-0.0064	0.078	109.2	0.027		
	(0.03)	(0.03)	(0.71)	(92.00)	(0.06)		
Part time ( $\leq 30 \text{ hr/wk}$ )	0.033	0	0	-301.0*	-0.066		
	(0.07)	()	()	(165.60)	(0.07)		
Full time (≥ 30 hr/wk)	0.000043	0	-0.32	-230.5	0.0063		
	(0.06)	()	(1.00)	(159.60)	(0.07)		
l og of income	-0.023***	(·) _0 02 l**	0.51	-176 5***	-0.085		
	(0.01)	(0.01)	(0.41)	(30.00)	(0.05)		
Mining (ref agriculture)	0.091	-0.16	2 73	(30.00) _497.6	0.0094		
	(0.14)	(0.15)	(3.49)	(452.90)	(0.09)		
Itilities	(0.11)	-0.076	(3.17)	(152.70)	0.025		
Oundes	(0.09)	(0.14)	(3.50)	(112.50)	(0.025		
Construction	0.33***	0.0047	(5.50)	(112.50)	0.26***		
Construction	(0.11)	(0.16)	(4.96)	(272.60)	-0.20		
Manufacturing	0.14*	(0.13)	(1.00)	(272.00) 578 5***	(0.07)		
Thanulacturing	(0.10)	(0.14)	(3.47)	(156.90)	(0.08)		
Wholesale trade	(0.10)	(0.14)	(3.77)	(130.70)	(0.00)		
VVIIolesale trade	(0.12)	(0.19)	(2.91)	-1,413.2	-0.19		
Patail trada	(0.12)	(0.13)	(3.71)	(366.60)	(0.11)		
Retail trade	(0.10)	-0.11	3.20	-304.4	-0.088		
Transportation and would avair	(0.10)	(0.14)	(3.01)	(101.00)	(0.08)		
Transportation and warehousing	0.15	0.046	(2, (9))	-556.2	-0.078		
	(0.10)	(0.15)	(3.68)	(155.10)	(0.08)		
information and cultural industries	-0.044	-0.15	2.7	-256.6	-0.084		
<b>F</b> : 1.	(0.11)	(0.15)	(3.47)	(260.40)	(0.10)		
Finance and insurance	-0.067	-0.15	3.44	-27.2	0.0012		
	(0.09)	(0.14)	(3.45)	(149.90)	(0.08)		
Real estate and rental and leasing	0.061	0.027	-0.58	-36.3	0.037		
	(0.14)	(0.19)	(4.49)	(257.00)	(0.08)		
Protessional	-0.0025	0.061	-0.2	-561.9	-0.051		
	(0.09)	(0.14)	(3.47)	(154.50)	(0.10)		

#### Table 3: Who Was Hit in Terms of Labour Market Outcomes

(Continued)

#### Table 3: Continued

				Change in	
				Earnings	
Regression Variable	Laid Off	Lost Work Hours	Hours	\$	%
Management of companies and enterprises	-0.084	-0.091	2.48	-338.4	-0.052
	(0.11)	(0.17)	(3.55)	(325.40)	(0.11)
Administrative and support	0.12	-0.13	3.04	-59.2	-0.018
	(0.12)	(0.15)	(3.42)	(152.70)	(0.09)
Educational services	-0.03	0.069	-3.32	-150.1	-0.034
	(0.09)	(0.14)	(3.66)	(131.40)	(0.09)
Health care and social assistance	-0.075	-0.14	4	-78.I	0.016
	(0.09)	(0.14)	(3.52)	(127.10)	(0.08)
Arts	0.25**	0.46***	-6.07	-1,100.5	-0.30***
	(0.12)	(0.16)	(4.17)	(333.20)	(0.10)
Accommodation and food services	0.35***	0.037	-5.89	-867.8***	0.0024
	(0.11)	(0.20)	(6.97)	(200.70)	(0.27)
Other services (except public administration)	0.036	-0.046	2.75	-465.4***	-0.085
	(0.09)	(0.14)	(3.57)	(166.80)	(0.09)
Public administration	-0.11	-0.15	2.5	185.2	0.018
	(0.09)	(0.14)	(3.49)	(115.60)	(0.08)
R <sup>2</sup>	0.133	0.082	0.079	0.082	0.036
Ν	2,437	1,644	1,613	2,411	2,431

Notes: Values are point estimates with standard errors in parentheses. Regressions use sample weights. All regressions have a dependent variable that compares the respondent's situation in April 2020 with that in 2019. The sample size for each regression varies because of missing value patterns. (.) = variable omitted from regression; ref. = reference.

 $p^* < 0.1; p^* < 0.5; p^* < 0.01.$ 

Source: Retirement and Savings Institute–Research Chair in Intergenerational Economics–Centre Interuniversitaire de Recherche en Analyse des Organisations Web survey conducted from 8 to 20 May 2020 using the AskingCanadians panel.

us to look at different ways in which households have adapted to the pandemic.

## Adjustments to Spending

The first margin of adjustment for households in response to lower work income could be to decrease spending. We observe an average decrease in household spending

Table 4: Percentage of Workers by Where Work Takes Place

	Outside t	he Home		
Time Period	Fixed Location	No Fixed Location	At Home	Absent from Work
2019 April 2020	79.93 40.43	12.11	7.95 47.18	N/A 5.79

Notes: Percentages are weighted. N/A = not applicable.

Source: Retirement and Savings Institute–Research Chair in Intergenerational Economics–Centre Interuniversitaire de Recherche en Analyse des Organisation Web survey conducted from 8 to 20 May 2020 using the AskingCanadians panel. of 5.5 percent. In Table 5, we analyze who adjusted spending the most. An interesting finding is that spending increased when reported by a female respondent or an older respondent (compared with those aged 25–34 y). There is also evidence that those with higher earnings were less likely to increase spending. In terms of spending decreases, those with higher education and those with higher earnings were more likely to see their spending go down. Notably, those who could work from home were more likely to see their spending go down. Finally, those who were laid off were 17 percentage points more likely to decrease their spending. Hence, one important margin of adjustment was reduced spending. In terms of spending changes, those who were laid off reduced spending by 6.4 percent more than those who were not laid off.

As we show, part of the decrease in spending could be due to the fact that more people were working from home in April 2020 and that they incurred lower expenses (e.g., for transportation). We asked respondents how spending changed in different categories. The categories for which the largest share of respondents report a decrease in spending

	Spend	ding	Changes	Changes in Spending	
Regression Variable	Increased	Decreased	\$	%	
Female	0.035***	-0.002 I	31.6	0.0049	
	(0.014)	(0.021)	(29.4)	(0.0072)	
35–44 у	0.046***	0.030	-46.1	-0.0069	
	(0.017)	(0.028)	(38.0)	(0.0093)	
45–54 y	0.033*	0.034	-15.5	-0.0077	
	(0.017)	(0.028)	(33.7)	(0.0093)	
55–64 у	0.041**	0.012	-9.42	0.0033	
	(0.020)	(0.033)	(41.3)	(0.010)	
Trade certificate or some college	0.015	0.062**	17.4	-0.0093	
C C	(0.019)	(0.030)	(41.8)	(0.0098)	
University	-0.0044	0.14***	-81.1*	–0.03 I ***	
	(0.021)	(0.032)	(48.2)	(0.011)	
Homeowner	0.024*	0.021	-20.9	0.013*	
	(0.014)	(0.023)	(30.4)	(0.0080)	
Income 2019/\$10,000	-0.0047**	0.0069**	-20.3***	-0.0028	
	(0.0022)	(0.0031)	(5.74)	(0.0011)	
French interview	-0.028	-0.10***	101.1**	0.033***	
	(0.019)	(0.028)	(39.8)	(0.010)	
Can work from home?	-0.000038	0.095***	-l05.5***	-0.024***	
	(0.014)	(0.023)	(32.9)	(0.0075)	
Laid off	-0.010	0.17***	-I75.8***	-0.064***	
	(0.016)	(0.029)	(41.4)	(0.011)	
R <sup>2</sup>	0.027	0.056	0.050	0.058	
N	2,440	2,440	2,440	2,431	

Table 5: Who Adjusted	Spending in April 2020
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Notes: Regressions use sample weights. The first two columns of data report logit marginal effects, and the last two report linear regression point estimates. Standard errors are in parentheses. The sample size for the fourth regression differs because of missing value patterns.

\*p < 0.1; \*\* p < 0.5; \*\*\* p < 0.01.

Source: Retirement and Savings Institute–Research Chair in Intergenerational Economics–Centre Interuniversitaire de Recherche en Analyse des Organisation Web survey conducted from 8 to 20 May 2020 using the AskingCanadians panel.

are transport and restaurants (36 percent and 32 percent of respondents, respectively, report that spending decreased in these categories), whereas the categories for which the largest share of respondents report an increase are groceries and housing (52 percent and 20 percent of respondents, respectively, report that spending increased in these categories). This shift in spending categories is not surprising, because it reflects the fact that respondents started to work from home because of the pandemic. Part of this reduced spending is likely to be erased as the economy re-opens. For those who are laid off, however, it is unclear when they will be able to get back to pre-pandemic spending levels.

## Use of Savings

Another possible margin of adjustment for households that experienced a decrease in work income is to withdraw some of their savings to smooth their consumption. Table 6 presents the percentage of respondents who withdrew from their RRSP or TFSA savings in response to the COVID-19 pandemic. The first and second columns of data present the information for those who did not and who did lose their job, respectively. The third column presents the sample average, and the last column presents the percentage of respondents with savings in each account. This table is useful in understanding how households use their savings to smooth consumption after a job loss. The first-order effect seems to be that households are more reluctant to use RRSP than TFSA savings (8.0 percent vs 9.8 percent). This is especially true for respondents aged 35–54 years who lost their job. For these respondents, the likelihood of withdrawing from a TFSA account is 2.5 to 2.75 times that of withdrawing from an RRSP account. This is true despite the fact that these respondents are more likely to have an RRSP account than a TFSA account (62.4 percent and 59.9 percent vs. 49.4 percent and 47.7 percent). This is important to consider when evaluating alternative policies

	%						
Savings Plan and Age Group	No Loss	Job Loss	Total	With Account			
RRSP							
25–34	3.2	16.2	5.5	51.7			
35–44	4.0	4.2	4.1	62.4			
45–54	5.5	4.3	5.2	59.9			
55–64	16.1	11.0	15.3	68.0			
Total	8.0	8.1	8.0	60.7			
TFSA							
25–34	8.0	13.8	9.0	51.2			
35–44	4.5	10.3	5.7	49.4			
45–54	6.4	11.7	7.6	47.7			
55–64	15.7	13.9	15.4	55.5			
Total	9.2	12.3	9.8	51.0			

#### Table 6: Savings Accounts Usage

Notes: Statistics are weighted using weights from the 2016 Census. The table presents the proportion of respondents who have withdrawn some amount from their RRSP or TFSA, for those who had and did not have a job loss in April 2020. These proportions are computed among those with an account at the end of 2019. The last column provides the proportion of respondents with an account at the end of 2019. RRSP = registered retirement savings plan; TFSA = tax-free savings account.

Source: Retirement and Savings Institute–Research Chair in Intergenerational Economics–Centre Interuniversitaire de Recherche en Analyse des Organisations survey of 3,009 respondents aged 25–64 yr in Quebec.

that governments could put in place, such as having the possibility of withdrawing from an RRSP-type savings account tax free. Our results suggest that individuals are more reluctant to withdraw from RRSP accounts than TFSA accounts, which could hamper the efficiency of a policy that allows tax-free withdrawals from RRSP accounts.

We also perform a multivariate analysis of the impact that COVID-19 had on respondents. For binary variables, we run a logit specification and present average marginal effects. We use the same set of observable characteristics for each regression. These include sex, four age categories, education (three levels), language (English or French), 2019 earnings and work status, and dummy variables indicating whether respondents lost their jobs and whether it was possible to work from home. We weight the regressions using the 2016 Census.

Our first set of regressions presents the odds of withdrawing from personal savings (RRSP and TFSA) in response to the COVID-19 situation. The results are presented in Table 7 and suggest that older respondents were more likely to withdraw from both RRSPs and TFSAs.<sup>4</sup> Income and other observable characteristics do not seem to correlate with withdrawals from RRSPs and TFSAs.

## Use of Debt

Another way for individuals to adjust to lower income was to defer payments on their debt or contract new debt. Table 8 shows that, among homeowners, 5.4 percent missed a mortgage payment as a result of COVID-19, and 13.4 percent elected to defer a mortgage payment.

Table	7:	Regression	Analysis	of Savings	Withdrawals

	Withdrawal from			
Regression Variable	RRSP	TFSA		
Female	0.00090	0.017		
	(0.014)	(0.017)		
35–44 y	-0.019	-0.023		
	(0.018)	(0.022)		
45–54 y	-0.0049	-0.0044		
-	(0.020)	(0.024)		
55–64, y	0.071**	0.059*		
	(0.028)	(0.031)		
Income 2019/\$10,000	-0.00057	-0.0040		
	(0.0021)	(0.0025)		
Laid off?	0.024	0.038		
	(0.021)	(0.019)		
Can work from home?	-0.0021	-0.0088		
	(0.016)	(0.019)		
R <sup>2</sup>	0.044	0.046		
N	1,700	1,420		

Notes: Logit regressions use sample weights. Values are marginal effects with standard errors in parentheses. Regressions were done for those with an account at the end of 2019. Language and work status were included as control variables but are not reported here. RRSP = registered retirement savings plan; TFSA = tax-free savings account.

\*p < 0.1; \*\* p < 0.5.

#### Table 8: Defaults and Deferrals of Debt Payments

Owner Households That, Because of COVID-19	%
Proportion of owner households that, because of COVID-19	
Defaulted on a mortgage payment	5.4
Deferred a mortgage payment	13.4
Proportion of non-owner households that because of COVID-19	
Defaulted on or deferred a rent payment	4.2
Proportion of households that because of COVID-19	
Defaulted on a credit card or other loan payment	2.5
Deferred a credit card or other loan payment	7.3
Proportion of households having defaulted on, or deferred, at least one payment (total)	18.2

Notes: N = 3,009. To render the survey representative of the population of Quebecers aged 25–64 yr, statistical weights were constructed on the basis of the 2016 Census and applied to the raw data. COVID-19 = coronavirus disease 2019.

Source: Retirement and Savings Institute–Research Chair in Intergenerational Economics–Centre Interuniversitaire de Recherche en Analyse des Organisations Web survey conducted from 8 to 20 May 2020 using the AskingCanadians panel. Among non-owners, 4.2 percent said they had missed or deferred their rent payment. These findings suggest that homeowners used the option of deferring mortgage payments (as opposed to rent payments for households that did not own their primary residence) in response to their economic situation in April 2020. Households were also allowed to defer payments on other debts (such as credit card or term loan debts). Although only 2.5 percent of the respondents report missing such payment, 7.3 percent of households elected to defer a debt payment (13.8 percent among non-owners). The discrepancy between homeowners and non-homeowners points to the important role of mortgage deferrals, which has also been analyzed by, among others, Scharlemann and Shore (2016) in the context of a US program to reduce mortgage payments for distressed borrowers.

To further understand who missed or deferred debt payments, we regress our respondents' propensity to miss or defer a payment on their debt on the same set of observable characteristics as before. The results of that analysis are reported in Table 9. First, it is apparent that women are less likely to miss a payment on their mortgage. It has been documented that women are usually less likely to go bankrupt, potentially as a result of a higher

Regression Variable	Missed Mort- gage Payment	Missed Credit Card Payment	Missed Other Debt Payments	Missed or Deferred Any Debt Payment	Deferred Rent	Deferred Mortgage	Deferred Credit Card Payment	Deferred Other Debt Payment
Female	-0.038**	-0.0070	-0.018	0.010	-0.020	0.017	0.043	-0.00054
	(0.015)	(0.029)	(0.021)	(0.019)	(0.019)	(0.021)	(0.041)	(0.038)
35–44 y	-0.017	0.033	0.021	0.021	-0.035	0.033	0.062	0.057
	(0.018)	(0.034)	(0.022)	(0.027)	(0.021)	(0.029)	(0.048)	(0.049)
45–54 y	-0.024	0.00042	0.054**	-0.033	-0.019	0.0011	0.014	-0.087*
,	(0.019)	(0.040)	(0.027)	(0.026)	(0.024)	(0.029)	(0.052)	(0.046)
55–64 y	-0.072***	-0.041	-0.0022	-0.079	0.0027	-0.042	0.048	-0.043
,	(0.027)	(0.034)	(0.017)	(0.028)	(0.031)	(0.035)	(0.066)	(0.056)
Income	-0.0055**	-0.016**	-0.0079*	-0.0071**	-0.011**	-0.00019	-0.0081	-0.014
2019/\$10,000								
	(0.0028)	(0.0068)	(0.0041)	(0.0036)	(0.0054)	(0.0030)	(0.0080)	(0.0085)
Laid off?	0.024	0.058	0.018	0.14***	0.051*	0.10***	0.082	0.050
	(0.016)	(0.039)	(0.023)	(0.027)	(0.026)	(0.023)	(0.053)	(0.048)
Can work from home?	0.016	-0.022	-0.028*	-0.020	-0.0082	-0.042**	0.0058	-0.0041
	(0.017)	(0.026)	(0.016)	(0.020)	(0.020)	(0.021)	(0.042)	(0.037)
Ν	1,663	599	617	2,496	789	1,663	599	629

#### Table 9: Missed Debt Payments

Notes: N = 3,009. To render the survey representative of the population of Quebecers aged 25–64 y, statistical weights were constructed on the basis of the 2016 Census and applied to the raw data. Logit regressions are weighted. Values are marginal effects with standard errors in parentheses. For debt categories, the sample used is those who had the corresponding type of debt in 2019. For deferred rent, only renters in 2019 are considered.

\*р < 0.1; \*\* р < 0.5; \*\*\* р < 0.01.

Table 10: New Debt in Response to Panden	nic
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	Increased			
Regression Variable	Credit Card Debt	Other Debt		
Female	-0.053**	-0.0072		
	(0.017)	(0.013)		
35–44 y	-0.039	0.001		
	(0.024)	(0.018)		
45–54 y	-0.068**	-0.011		
	(0.024)	(0.018)		
55–64 y	-0.053*	-0.014		
	(0.028)	(0.022)		
Income 2019/\$10,000	-0.0002	0.0013		
	(0.0023)	(0.0019)		
Laid off?	0.042*	-0.0082		
	(0.023)	(0.016)		
Can work from home?	-0.0042	-0.0017		
	(0.017)	(0.014)		
N	2,496	2,496		

Notes: Logit regressions use sample weights. Values are marginal effects with *t*-statistics in parentheses.

\*р < 0.1; \*\* р < 0.01.

Source: Retirement and Savings Institute–Research Chair in Intergenerational Economics–Centre Interuniversitaire de Recherche en Analyse des Organisations Web survey conducted from 8 to 20 May 2020 using the AskingCanadians panel.

aversion to risky financial behaviour (Agarwal et al. 2018). Older individuals and those with higher income are also in general less likely to miss or defer a debt payment.<sup>5</sup>

We then look at who contracted new debt in response to the COVID-19 pandemic. We present the results for the use of credit card and other debts. The results are reported in Table 10 and show that women are less likely to increase their credit card debt, but not other types of debt. Moreover, older individuals are less likely to increase credit card debt, which could be explained by their higher propensity to withdraw from their savings. Those who were laid off were marginally pushed to increase credit card debt (4.2 percentage point increase).

Overall, the picture we can paint is that adjustments were made by two types of households: those who were forced to work from home and those who lost a job. For the first group, reduced spending was probably induced by the lockdown, forcing them to cut back on spending on leisure activities and transportation. They did not seem to adjust in other dimensions. For the second group, the picture is more complicated. First, they cut back on spending more than other households. They were not more likely to use savings to finance consumption, and our evidence points to arrangements with creditors, in particular for mortgages, to defer payments. There is also evidence that they contracted new credit card debt. What is missing from the picture, however, is that households, in particular those that lost a job, got significant help from the government to cushion against the loss in income. We look at this next.

# How Governments Helped Households Adjust

Our survey was designed to measure the actual and intended use of the various financial emergency measures aimed at households. The main one, the CERB, was an important focus. Other measures included the Canada Emergency Student Benefit (CESB), the enhanced goods and services tax credit, and the Quebec government's program for essential workers, IPREW. In this article, we focus on the CERB because the use of the other measures is – as intended – limited to rather small subgroups in our sample.

# Who Applied for the Canada Emergency Response Benefit?

In our sample, 15.3 percent of respondents declared that they had applied for CERB at the time of the survey. Among those who had not applied, 14.3 percent were mainly retired in 2019, whereas this share is only 5 percent among applicants. This is expected because CERB was targeted to workers, more specifically to those who had earned at least \$5,000 in the previous 12 months. As a consequence, in what follows we consider only the sample of respondents who were not mostly retired in 2019. Within this group, 16.7 percent of respondents had applied for CERB. It is difficult to compare the implied number receiving CERB in Quebec according to our survey with official statistics because there is no available breakdown of CERB applications by age and province.

Table 11 presents the demographic characteristics and the economic situation in 2019 of CERB applicants relative to non-CERB applicants, as well as the changes in their employment status and work income in April 2020. Regarding demographic characteristics, there are no significant differences between the two groups in terms of gender, age, or marital status. CERB applicants do, however, have lower educational attainments on average: they have a higher probability of having a high school diploma as their highest degree (41.3 percent vs. 32.5 percent) and a lower probability of having a college degree (52.4 percent vs. 61.8 percent).

The share of those whose main status changed to laid off (temporarily or permanently) or to looking for work is, perhaps not surprisingly, much higher among CERB applicants (71.6 percent) than among non-CERB applicants (19.7 percent).

In 2019, CERB applicants had a lower monthly work income with an average of \$3,758 per month compared with \$4,604 for non-CERB applicants. They also experienced a much sharper fall in work income in April 2020

Characteristic	<b>CERB</b> Applicants	Non-CERB Applicants	Difference
Female, %	48.1	50.0	-1.9
Age, yr	43.0	43.0	-0.0
In a couple, %	59.2	59.6	-0.4
Less than high school	6.3	5.8	0.6
High school	41.3	32.5	8.8***
More than high school	52.4	61.8	-9.4***
Laid off or looking for work due to COVID-19, %	71.6	19.7	51.9***
Deterioration of mental health,	42.3	36.2	6. I ***
Monthly household income in 2019, \$	7,053	8,574	-1,522***
Monthly work income in 2019, \$	3,758	4,604	846***
Change in monthly work income in April 2020, \$	-1,616	-318	-1,298
Monthly spending in 2019, \$	4,117	3,780	337
Change in monthly spending in April 2020, \$	-342	-191	-I 50***
Housing wealth (end of 2019), \$	178,361	201,331	-22,970*
Non-housing wealth (end of 2019), \$	69,850	104,558	-34,708***
Mortgage debt (end of 2019), \$	66,203	75,583	<b>9,379</b> *
Non-mortgage debt (end of 2019), \$	7,747	6,723	1,024
RRSP balance (end of 2019), \$	40,061	55,323	- <b>I</b> 5,262***
TFSA balance (end of 2019), \$	8,216	123,65	-4,149***
Other registered savings (end of 2019), \$	3,795	6,147	-2,352***
Other savings (end of 2019), \$	12,197	208,80	
Whether had more than \$8,000 in non-housing wealth (end of 2019), %	54.6	57.5	-2.9
Ν	423	2,245	

Notes: Only those who were not mostly retired in 2019 are considered (N = 2,668). To render the survey representative of the population of Quebecers aged 25–64 yr, statistical weights were constructed on the basis of the 2016 Census and applied to the raw data. CERB = Canada Emergency Response Benefit.

 $p^* < 0.1; p^* < 0.5; p^* < 0.01.$ 

Source: Retirement and Savings Institute–Research Chair in Intergenerational Economics–Centre Interuniversitaire de Recherche en Analyse des Organisations Web survey conducted from 8 to 20 May 2020 using the AskingCanadians panel.

(\$1,616 vs. \$318). We observe a similar pattern for spouses of CERB applicants, who had lower work income in 2019 and who had significantly higher reductions in work income in April 2020. Overall, CERB applicants declare an average household income in 2019 that is 18.4 percent lower than non-CERB applicants.

In terms of wealth and debt at the end of 2019, CERB applicants had on average lower housing wealth and mortgage debt (significant at the 10 percent level). This difference is also visible at the median (not reported), with housing wealth equal to \$125,000 for CERB applicants compared with \$160,000 for non-CERB applicants. CERB applicants also have lower average (and median) non-housing wealth: \$70,000 (\$11,000) versus \$105,000 (\$18,000). This is true for each component of non-housing wealth that we consider: RRSP, TFSA, other registered savings, and other savings. In terms of non-mortgage debt, CERB applicants have higher debt on average (\$7,747 vs. \$6,723), but the difference is not statistically significant.

Despite having lower income and wealth, average spending among CERB applicants is not significantly different from that among non-CERB applicants. Median figures are also similar: \$2,000 for CERB applicants and \$2,300 for non-CERB applicants. This supports the view that CERB receipt may have helped those who were laid off to maintain their standard of living.

Overall, we thus see that CERB applicants have lower income and wealth, so the CERB program, although conceived as a universal benefit, benefited more lower-income and lower-wealth individuals who have less ability to face the consequences of economic shocks. As can be seen in Figure 1, the rates of CERB applicants are particularly high in lower deciles of work income (the first income decile is mostly constituted of those who declare zero work income). In particular, CERB applicants are about three times as numerous in the second and third deciles as in the two upper deciles.<sup>6</sup>



**Figure 1:** Proportion of Respondents Who Applied for CERB at the Time of the Survey, by Earnings Decile in 2019 Notes:We first order respondents by the decile of their individual work income (earnings) in 2019.We then compute the share of respondents within each decile who have applied for CERB. Those statistics are weighted using weights produced using the 2016 Census PUMF. CERB = Canada Emergency Response Benefit; PUMF = public use microdata files.

Source: Retirement and Savings Institute–Research Chair in Intergenerational Economics–Centre Interuniversitaire de Recherche en Analyse des Organisations Web survey conducted from 8 to 20 May 2020 using the AskingCanadians panel.

Nonetheless, we still observe that around 10 percent of those in upper-income deciles applied for CERB. As shown in Figure 2, among CERB applicants average and median non-housing wealth is rather large in these upper deciles, so many CERB applicants could possibly have relied on savings to face the decrease in work income resulting from COVID-19, absent the CERB program. Overall, we observe that 54.6 percent of CERB applicants had more than \$8,000 in savings at the end of 2019, which corresponds to 16 weeks of CERB benefits. Of course, this raises the question as to whether, in the absence of CERB, these households would have simply adjusted by withdrawing from their savings.

# What Were the Margins of Adjustment for Canada Emergency Response Benefit Applicants?

Table 12 displays the share of those who had RRSP, TFSA, other registered savings, and other savings in 2019, as well as whether those who had them made withdrawals from some of these saving categories in April 2020 relative to the end of 2019. The conditional shares of those who withdrew are higher for CERB applicants, although the differences are not statistically significant. The share of respondents who declare an increase in debt is also

higher among CERB applicants, although the difference is not statistically significant.

Part of the adjustment seems to have come through a sharper reduction in spending, of \$342 on average for CERB applicants compared with \$191 for non-CERB applicants, and through substantially more missed or deferred payments on debts, mortgages, or rents. The share of those who declare having missed or deferred any payments on these is 31.7 percent for CERB applicants and 16.3 percent for non-CERB applicants, a substantial difference of 15.4 percentage points. This indicates that the CERB did benefit those who needed access to liquidity, because one can only assume that those eligible for the CERB would have accrued more missed debt payments had they not had access to the CERB, possibly resulting in substantial interest payments in the future or penalties.

# Canada Emergency Response Benefit Claims: Intentions

We asked respondents about their subjective probability of applying for CERB in the future. Overall, 10.86 percent of respondents say they will apply for the CERB in the future, meaning that the vast majority (89 percent) of respondents do not intend to claim CERB in the future. Of those intending to apply in the future, 74.35 percent have



#### Figure 2: Amount of Savings Held by CERB Applicants as of April 2020, by Employment Income Decile in 2019

Notes: We first order respondents by the decile of their individual work income (earnings) in 2019. We then compute the average and median savings (indicated by the black horizontal lines) for respondents receiving CERB within each decile. Those statistics are weighted using weights produced using the 2016 Census PUMF. CERB = Canada Emergency Response Benefit; PUMF = public use microdata files.

Source: Retirement and Savings Institute–Research Chair in Intergenerational Economics–Centre Interuniversitaire de Recherche en Analyse des Organisations Web survey conducted from 8 to 20 May 2020 using the AskingCanadians panel.

	%			
Characteristic	CERB Applicants	Non-CERB Applicants	Difference	
Has RRSP (end of 2019)	57.1	59.6	-2.5	
Withdrew RRSP conditional on having any in 2019	7.8	6.3	1.4	
Has TFSA (end of 2019)	46.5	49.0	-2.5	
Withdrew TFSA conditional on having any in 2019	10.3	8.3	2.0	
Has other registered savings (end of 2019)	16.5	21.9	-5.4***	
Withdrew other registered savings conditional on having any in 2019	8.2	6.7	1.5	
Has other savings (end of 2019)	40.3	46.8	-6.5**	
Withdrew other savings conditional on having any in 2019	15.3	12.0	3.4	
Change in spending, \$	-342.0	-191.0	-150.0***	
Increased debt	25.4	22.2	3.2	
Missed or deferred any debt, mortgage, or rent payment	31.7	16.3	15.4***	
N	423	2,245		

#### Table 12: Margins of Adjustment for CERB Applicants versus Other Respondents

Notes: Only those who were not mostly retired in 2019 are considered (N = 2,668). To render the survey representative of the population of Quebecers aged 25–64 y, statistical weights were constructed on the basis of the 2016 Census and applied to the raw data. CERB = Canada Emergency Response Benefit; RRSP = registered retirement savings plan; TFSA = tax-free savings account.

 $^{*}p < 0.1; ^{**}p < 0.5; ^{***}p < 0.01.$ 

already applied for CERB in the past. Taken together, these data imply that barely 2.6 percent of survey respondents planned to be new CERB applicants after the survey. We show the distribution of the probability of applying by CERB period in Figure 3. The results show that there is a peak of anticipated CERB applications in June and July with a probability of 36.02 percent, which decreases to 25.12 percent for September. Note that applicants have to apply for CERB separately for each four-week period. Because we fielded the survey in mid-May, this humpshaped curve of subjective probabilities of claiming the CERB probably reflects the fact that many respondents who have been affected by COVID-19 have already claimed the CERB in the past (hence the relatively low figures for periods until May) and may still have to apply for the CERB for June. The decrease in probability for the following periods is probably due in part to respondents reaching the maximum of four periods for which they can apply, as well as some respondents' expectations of going back to work, hence not needing the CERB anymore.

# How Do They See the Future?

Expectations drive several behaviours, such as saving and spending. Hence, we included a number of questions in the survey regarding what respondents expected for the remainder of 2020 and beyond. We did this in terms of both employment and income as well as in terms of health (respondents' expectations about their perceived risk of contracting COVID-19).

As shown, the employment and income situation of many respondents in our sample were affected by COVID-19. We look at respondents' outlook on their situation for the rest of the year. Figure 4 shows that most respondents (59 percent) anticipate that the COVID-19 crisis will have no impact on their ability to work in the remaining months of 2020. However, 28 percent believe they will not be able to work as much as before the crisis, and 13 percent believe that they will have to work more.

Those respondents who said that they expected to work more or less than they would like because of COVID-19 were then asked to evaluate the probability that their work situation would be back to normal within six months, one year, two years, and five years. Figure 5a shows the average likelihood assigned by respondents to each of these time frames. We see that, on average, individuals expect a return to normal within two years with a likelihood of 75 percent. In Figure 5b, we exploit the data at an individual level and show the distribution of respondents' subjective probability for a return to normal in 10 percent increments. Around 10 percent of respondents believe that their work situation will likely not return to normal within five years. Hence, there is significant heterogeneity in terms of expectations. At the time they responded to our survey, respondents were relatively pessimistic about the chances of a V-shaped recession. This is important because it probably means that respondents are likely to hold back on spending, for example on durables, because their outlook for the short term is relatively bleak.

After asking respondents about their perceived employment situation for the rest of the year, we asked a series of questions in which respondents assigned



**Figure 3:** Subjective Probability of Applying for Future CERB Periods, Conditional on the Intent to Apply (or Renew If Already Receiving) Notes: *N* = 3,009. To render the survey representative of the population of Quebecers aged 25–64 y, statistical weights were constructed on the basis of the 2016 Census and applied to the raw data. The figure reports the subjective probability (over 100) of applying for various periods, conditional on intending to apply in the future. Eleven percent report wanting to apply at some point in the future. CERB = Canada Emergency Response Benefit.



Figure 4: Effect of COVID-19 on Work Until the End of the Year

Notes: N = 3,009. To render the survey representative of the population of Quebecers aged 25–64 y, statistical weights were constructed on the basis of the 2016 Census and applied to the raw data. The figure reports the subjective probability attributed by respondents of the impact of the COVID-19 pandemic on their ability to work for the rest of 2020: no impact, expect will work less than desired, or expect to work more than desired. COVID-19 = coronavirus disease 2019.

Source: Retirement and Savings Institute–Research Chair in Intergenerational Economics–Centre Interuniversitaire de Recherche en Analyse des Organisations Web survey conducted from 8 to 20 May 2020 using the AskingCanadians panel.



**Figure 5:** Respondents' Subjective Evaluation of the Probability That Their Work Situation Will Be Back to Normal within Six Months, One Year, Two Years, and Five Years: (a) Average Likelihood It Will Come Back to What It Was before COVID-19 and (b) Distribution of Probability That It Will Come Back to What It Was before COVID-19.

Notes: N = 3,009. To render the survey representative of the population of Quebecers aged 25–64 y, statistical weights were constructed on the basis of the 2016 Census and applied to the raw data. The figure reports the subjective probability that the respondent's work situation will be back to normal over a certain horizon. Figure 5a shows the mean at different horizons. Figure 5b shows the distribution of reported probabilities. COVID-19 = coronavirus disease 2019.

subjective probabilities that earnings and spending would increase in 2020 relative to 2019; decrease by more than 10 percent; decrease by more than 20 percent; decrease by more than 40 percent; and decrease by more than 50 percent. We asked these questions for work income (for both respondents and their spouse, if applicable); for other income (again for both respondents and their spouse), and for household spending. In Table 13, we report the average subjective probability for various outcomes by whether or not respondents lost their job in the early pandemic period.

We find that respondents who did not lose their job expect their earnings to have a 34.8 percent chance of actually increasing, compared with a 17.5 percent chance of seeing a drop of more than 10 percent. This means

Table 13: Earnings and Spending Expectations for 2020

		%	
Earnings and Spending Variables	No Job Loss	Job Loss	Total
Earnings			
Increase	34.8	12.2	29.8
Decrease			
> 10%	17.5	47.5	24.I
> 20%	9.0	29.7	13.6
> 40%	5.3	17.4	8.0
> 50%	3.9	12.4	5.8
Spouse earnings			
Increase	30.7	23.6	29.1
Decrease			
> 10%	18.4	23.9	19.6
> 20%	9.9	13.8	10.7
> 40%	6.5	9.7	7.2
> 50%	5.0	7.2	5.5
Spending			
Increase	30.8	26.5	29.9
Decrease			
> 10%	18.7	23.3	19.8
> 20%	7.6	12.0	8.6
> 40%	3.7	6.7	4.4
> 50%	2.5	4.2	2.9

Notes: N = 3,009. To render the survey representative of the population of Quebecers aged 25–64 y, statistical weights were constructed on the basis of the 2016 Census and applied to the raw data. The table reports the average subjective probability that 2020 earnings, spouse earnings, and household spending will increase or decrease by more than a certain percentage. The mean subjective probability is reported for those who did not lose their job, for those who lost their job, and for the whole sample.

Source: Retirement and Savings Institute–Research Chair in Intergenerational Economics–Centre Interuniversitaire de Recherche en Analyse des Organisations Web survey conducted from 8 to 20 May 2020 using the AskingCanadians panel. that they attach a 47.7 percent chance to the possibility that their income will decrease by less than 10 percent at year's end. Hence, there is considerable uncertainty, even among those who did not lose their job. Among those who lost their job, the average perceived likelihood of a drop of more than 10 percent is 47.5 percent; for a decrease of 0-10 percent, it is at 40 percent. Hence, these respondents are relatively confident that their spending will go down for the year (on average, 87.8 percent likelihood). Similar results are found for spouses' earnings. An interesting finding is that spending expectations for those without job loss appear to be in line with earnings expectations, whereas they are quite different for those who lost a job. On average, this group attaches a probability of 23.3 percent to the possibility that their spending will decrease by more than 10 percent compared with a 47.5 percent probability that their income will decrease. Hence, these respondents expect, to some extent, having to smooth their spending in the months to come.

This general pessimism for the remainder of 2020 is reflected in terms of respondents' state of mental health. Table 14 shows the distribution of change in respondents' mental health by their current work status (in April 2020) and projected ability to work. First, layoffs are associated with an increase in the percentage of respondents who report a much worse mental health status. Almost more importantly, however, changes in mental health status are particularly worse for those who expect to work less in the remainder of 2020, with a reduction in the percentage who report no change in mental health status from 62.8 percent among those who predict no impact to 43.1 percent among those who think they will work less. Those who plan on working more also show worsening mental status, almost larger in magnitude than those who expect to work less. These results suggest that mental health may be particularly affected by the pandemic, at least in its early stage.

## **Conclusion and Policy Implications**

Besides its devastating death toll, the COVID-19 pandemic has had important effects on employment and household finances worldwide as a result of lockdowns and extensive mobility restrictions. We use survey data collected at the height of the pandemic in Quebec, the Canadian province that has experienced by far the most cases of and deaths from COVID-19, to quantify the economic impact that COVID-19 and the ensuing public health measures have had on households. Our survey data cover Quebec residents aged 25-64 years and contain information on pre-pandemic financial situation and employment, changes during the pandemic, and expectations for the rest of 2020. Our study confirms previous findings that many individuals have lost their jobs (22 percent) or reduced their working hours (-6.3 percent) as a result of the pandemic, resulting in a substantial loss of income for many

 Mental Health	Current Work Situation, %		How COVID-19 Will Affect Work Rest of Year, %		
	No Job Loss	Job Loss	No Impact	Work Less	Work More
Much better now	3.23	3.04	3.63	3.02	4.04
Somewhat better now	5.9	5.37	5.4	8.51	4.5
About the same	55.32	50.38	62.78	43.14	41.7
Somewhat worse now	27.85	28.31	23.89	33.1	34.1
Much worse	7.71	12.91	4.3	12.3	15.6

**Table 14:** Mental Health and Labour Market Expectations

Notes: N = 3,009. To render the survey representative of the population of Quebecers aged 25–64 y, statistical weights were constructed on the basis of the 2016 Census and applied to the raw data. The table reports the distribution of the change in mental health status by current work status (in April 2020) and expectations about ability to work for the remainder of 2020.

Source: Retirement and Savings Institute–Research Chair in Intergenerational Economics–Centre Interuniversitaire de Recherche en Analyse des Organisations Web survey conducted from 8 to 20 May 2020 using the AskingCanadians panel.

households. Overall, 30 percent of households in our sample experienced a change in employment status of at least one member of the household, and the average loss in monthly income for all polled households, including single and partnered respondents, is \$810.

The impact of COVID-19 is particularly severe for certain subgroups of the population, such as low-income households and workers in some industries (notably, construction, accommodation, and the arts). Our analysis further shows how multi-faceted households' response to a change in income is. An interesting finding is that those laid off have reduced spending but perhaps not by the full extent that might have been anticipated. Other households have also reduced spending, in particular because the lockdown has decreased the need for certain expenditures (leisure, transportation). Many households chose instead to withdraw savings, increase debt, and defer or miss mortgage or other debt payments to smooth spending. Among those laid off, deferring debt payments appears to have been an important margin of adjustment. In particular, homeowners used a deferral of their mortgage payment to adjust to a lower work income, because this option had been widely advertised and was easily available to homeowners-in contrast to renters, who did not have this option and had to rely on other, potentially more costly measures such as taking on new debt or missing debt payments. Moreover, our findings indicate that the government's CERB has mostly benefited lower-income households and households that reported having lost a job because of COVID-19. However, more than half of CERB recipients did hold savings equivalent to the maximum CERB benefits and could thus have adjusted by withdrawing savings. An important question to ask in the current context is whether it is the government's role to maintain the income of households with significant savings.

When Canada was first affected by COVID-19, the foremost goal was to field a financial assistance program

as quickly and unbureaucratically as possible. The downside to this approach is that it does not allow specific targeting of more vulnerable groups. As policy-makers adapt to the extended period during which many households need help (in fact, as of 15 June 2020, the CERB has been extended for another two months), and as they are preparing for the possibility of another wave of coronavirus hitting Canada, they can now draw on detailed data that allow them to distinguish between more vulnerable groups and those who have some financial leeway. In our opinion, targeting assistance measures as much as is feasible in the context should be a priority of future policies. Our data show that it is mostly low-income households with jobs that cannot be done from home and those who do not have savings or assets who have a limited ability to adjust to a temporary loss of income without government assistance. Moreover, the unequal impact on different population groups is likely to perpetuate existing inequality, as evidenced by the unequal expectations for future job and income prospects. Those who have lower income are more likely to lose their job, more likely to receive the CERB, and more pessimistic about their earnings prospects. This inequality should be addressed by policies targeted to particularly vulnerable groups, including specific industries whose employees are most affected. One policy avenue is to promote the Canada Emergency Wage Subsidy to specifically target harder-hit industries.

Another important conclusion for policy-makers is that future emergency measures should aim to incentivize the use of savings in addition to offering a transfer to those households that have little margin to adjust to a financial shock. For example, Australia has offered alternative governmental support that has been administered in the form of tax-advantageous withdrawals from registered savings accounts.<sup>7</sup> A third of respondents indicated that they would be willing to dip into their RRSP savings if these withdrawals were not taxed, and creating incentives to do so could help relieve the pressure of the emergency response on public budgets. Allowing this should not only reduce the dependence on government assistance but also reduce the incentive to increase debt—which can be a costly way of tiding oneself over in a financially challenging situation, especially when using easily available but high-interest debt such as credit cards. Moreover, loading up on debt also potentially entails that households will suffer from debt overhang long after the economy has started to open up again. These households would be left with interest payments and a possibly worsened credit score, with little room to increase consumption and help kickstart the economy.

Last, we witnessed the important role of financial institutions in smoothing the debt payments of individuals who need it the most. Inasmuch as is feasible, the option to defer a monthly payment should also be extended to renters, who currently do not have this margin and have to use other, potentially more expensive options to access liquidity.

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## Notes

- 1 As of 12 June 2020, Quebec accounted for 53,485 of 97,530 confirmed cases of COVID-19 and for 5,105 of 7,994 deaths related to COVID-19.
- 2 For the change in income, we compare the average monthly income in 2019 with that in April 2020.
- 3 Although we do not report the results here, we also analyzed who could work from home. As in previous studies, we also find that the ability to work from home varies by individual characteristics and industry (see Delaporte and Pena 2020; Deng, Morissette, and Messacar 2020; Dingel and Neiman 2020). Notably, higher-educated individuals with higher-paying jobs have a higher probability of being able to work from home, whereas workers in several industries (accommodation, health care, warehousing, retail trade) have a much lower probability of being able to work from home.
- 4 We also verify that these results hold for any savings account in general.
- 5 In unreported results, we find that although having higher income reduces the propensity to defer rent payments, it does not affect the deferral of mortgage, credit card, or other debt payment.
- 6 If we plot a similar figure splitting the sample by household income (divided by two if in a couple to account for differences in household size), we also observe that CERB rates tend to be higher in lower-income deciles than in higher ones.
- 7 For more information on this program, see Australian Taxation Office (2020).

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