README: The Short-Term Economic Consequences of COVID-19: Occupation Tasks and Mental Health in Canada*

Louis-Philippe Beland Abel Brodeur Derek Mikola Taylor Wright

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Abstract

This file documents the procedure necessary to reproduce the findings from the paper.

KEYWORDS: COVID-19 - unemployment - wages - remote work - essential workers - exposure to disease - mental health

JEL CODES: I14, I18, J21.

*Authors: Beland: Carleton University. Email: louisphilippe.beland@carleton.ca; Brodeur: University of Ottawa and IZA. Email: abrodeur@uottawa.ca; Mikola: Carleton University. Email: derekmikola@cmail.carleton.ca; Wright: University of Ottawa. Email: taylorjohn.wright@gmail.com.

1 Data Availability and Provenance Statements

All data sources are publicly available.

1.1 Statement about Rights

- ✓ I certify that the author(s) of the manuscript have legitimate access to and permission to use the data used in this manuscript.

1.2 Summary of Availability

All data are publicly available.

1.3 Details on each Data Source

This is provided below for specific datasets.

2 Instructions for Replicators

All of the figures and tables should be reproduced after running the *Main.do* file. In order to run the *Main.do* file, one must adjust the pathways at the beginning and execute that script. *Main.do* will successively call the scripts. The first scripts in *Main.do* which clean and merge the appropriate data are commented out because the raw data is omitted. That is, we provide only the cleaned datasets from the cleaning and merging process that allows the reconstruction of all the tables and figures.

2.1 Details

There are four subfolders within the replication folder: ado, Data, DoFiles, Figures and Tables. These four folders house their respective materials including additional subfolders. These folders come already populated with the tables and figures. Running the *Main.do* will overwrite the files.

2.1.1 ado

This subfolder contains the important packages which need to be installed in order for the *Main.do*. It is called at the beginning of the *Main.do* when setting up the environment.

2.1.2 Data

This subfolder contains the important derived data created and used from this project. We keep a version with all of the raw data in the correct spots and leave the folders in for those wishing to "start from scratch."

We are happy to provide the fuller version with all of the appropriate raw data.

2.1.3 DoFiles

This subfolder contains all of the program files used to create or manipulate data as well as creating figures and tables. do-files which manipulate raw data will not work because the raw data is currently omitted.

2.1.4 Figures

This subfolder is where we store all created figures. There is a subfolder called RenamedFigures which better labels the figures to align with our final version of the paper.

2.1.5 Tables

This subfolder is where we store all created tables. All tables - excepting Appendix Table 1 - are created using the data provided in this replication. All tables are saved as *.tex files. These can easily be viewed in a text editor such as notepad or wordpad.

We will happily provide a *.tex file which converts the figures and the tables into a LaTeXdocument.

3 Computational Requirements

The computer used for the analysis has the following specifications. As such, all results ought to be benchmarked to these specifications. All physical parts are under two years old.

COMPUTER 1 (labelled below as CPU 1)

Operating System:	Microsoft Windows 10 Education
System Type:	x64-based PC
Processor:	Intel(R) Core(TM) i5-9600K CPU 3.70GHz, 3696 Mhz, 6 Core(s), 6 Logical Processor(s)
Motherboard:	Z390-A PRO (MS-7B98)
Memory (RAM)):	32.0 GB
Graphics Card:	Integrated on CPU.

The files are also reproduced on a separate computer with the following specification which is less than one year old:

COMPUTER 2 (labelled below as CPU 2) – Dell XPS 13 7390

Operating System:	Microsoft Windows 10 Home
System Type:	x64-based PC
Processor:	Intel(R) Core(TM) i7-10710U CPU 1.10GHz, 1608 Mhz, 6 Core(s), 12 Logical Processor(s)
Memory (RAM)):	16.0 GB
Graphics Card:	Integrated on CPU.

3.1 Software Requirements

All of the statistical analysis was completed using Stata. In particular, we began the analysis using Stata 15 but our most recent run of the files are using Stata 16 while Stata 17 is now out. Some of the updates in Stata 17 indicate that commands like *collapse* and *reshape* are likely to be faster, meaning our approximate times on the machines we used are likely to be upper bounds with Stata 17. We have not run the replication folder with Stata 17 and therefore impose a version 16 in the *Main.do* file.

Our project uses packages which need to be downloaded into Stata. To figure out which packages we needed to provide, we deleted all of our previously downloaded packages and were forced to download the following packages in order for all of our *Main.do* to run:

- *estout* (used to construct our tables in LaTeX) by Jann (2005, 2007)
- *boottest* (used for our bootstrapped standard errors) by Roodman et al. (2019)
- *coefplot* (used for our event study analysis) by Jann (2014)
- *unique* (used for data cleaning) by Hills and Brady (201)
- *blindschemes* (used in the construction of our time series graphs) by Bischof (2016)
- *grstyle* (used in the construction of our time series graphs) by Jann (2018a,c)
- *palettes* (used in the construction of our time series graphs) by Jann (2018b)
- *colrspace* (used in the construction of our time series graphs) by Jann (2019)

3.2 Memory and Runtime Requirements

The run time requirements on the above product will likely take the between one and three work days if one were to "start from scratch." The majority of the time revolves around cleaning the data, creating figures, and constructing our bootstrapped p-values.

It is projected to take just shy off 8 hours with a moderately powerful computer (CPU 1 – 6 cores and 32 GB of total RAM). On a more reasonable computer (CPU 2 – 6 cores and 16 GB of total RAM) the process take 2 to 3 times longer.

3.2.1 Summary

The packages required to completely recreate the tables are downloaded (and replaced) at the beginning of the *Main.do* file. In this way, users should have the "environment" set up for them.

The runtime is considerable due to the size of the dataset (typically $>$ 3 million observations). This, combined with the fact that many aggregate measures are done by "collapsing" that dataset into province by year by month by *variable* cells, yields a relatively slow process. The advantage of *not* saving these aggregate datasets is that they would take up space and be of relatively small use outside of the construction of the figures. Therefore, the creation of figures takes a considerable amount of time. Estimation of coefficients also takes considerable time. The process naturally slows when estimating bootstrapped and multiway p-values.

4 Description of Programs and Code

This section documents all of the programs and code written for this project. The first program, labelled *Main.do*, is the most important since it sets up the environment and executes all

successive do-files in the correct order. As such, *Main.do* is first described.

All of the data cleaning files will not execute since the raw data is no provided. They are commented out.

All do-files are contained in the DoFiles folder. The order of the programs expressed in *this* document are sorted by filename in the subfolder and is not the same ordering as how they are executed. In many instances, outside of data cleaning, ordering doesn't matter since they all call the same dataset.

Do-files are split up based on the type of figures or tables being created. In this way, users can see how specific things are created without having to read through many lines of code. Individual do-files are described in the List of Programs section.

4.1 A Note about Starting from Raw Data

It should be noted that we provide only the cleaned data in the replication folder. The advantage of this is that the cleaning - one of the most taxing parts on a computer - is already completed. These do-files are commented out automatically. If one, however, wishes to verify from *raw data* to finished products, one would have to download the appropriate datasets and put them in the correct folders. We leave the folders in as a guide if one wishes to do this directly.

We are happy to provide all of the raw data in the correct folders to those interested in redoing all of this analysis.

It should be noted that some do-files which clean the data skip many of the cleaning steps if the *.dta file already exists. In this case, one would have to delete the created *.dta files in order to "start from scratch." The files which have to be deleted (though many of them are not provided, meaning deleting the provided datasets would make the *main.do* throw errors) are the following.

- *dta/LFS/ ...* all files in this directory (NOT INCLUDED)
- *dta/lfs_2016jan_to_2020December.dta* (NOT INCLUDED)
- *dta/lfs_2016Jan_to_2020december_withE.dta* (NOT INCLUDED)
- *dta/lfs_2016Jan_to_2020december_checkedData.dta* (NOT INCLUDED)
- *dta/twoDigit_indices.dta*
- *dta/mainDataset.dta*
- *dta/EventStudy.dta* (NOT INCLUDED - but created)
- *dta/cpss_cleanedDataset.dta* (NOT INCLUDED)
- *dta/mainDataset_CPSS.dta*

One can, in addition to this, delete all of the figures and the tables since all of the programs are written to overwrite the last one which was produced.

5 Dataset List (Sorted by Name of File) - Cleaned Data

The most important datasets for this replication are:

- Data/dtaFiles/mainDataset.dta
- Data/dtaFiles/mainDataset_CPSS.dta

which together are necessary for all of the analysis. These two files represent the data after cleaning and merging all useful information. Both of these datasets are provided. Most of the do-files which create tables and figures call one or both of these datasets into Stata's memory.

DingleNeiman_workFromHome.dta

Description:	The indexes provided by Dingel and Neiman (2020).
Location of File(s):	*Data/dtaFiles/DingleNieman_workFromHome_onet.dta*
File Extension:	.dta
Source:	Derived - multiple sources.
Provided:	PROVIDED

EventStudy.dta

Description:	This file is derived from the mainDataset.dta file and is made for convenience. The programs provided will recreate and overwrite this file.
Location of File(s):	Data/dtaFiles/EventStudy
File Extension:	.dta
Source:	Derived from *Data/dtaFiles/mainDataset.dta*
Provided:	PROVIDED

mainDataset.dta

Description::	This is our final dataset for the replication of all analysis and figures which use the Canadian Labour Force Surveys (Statistics Canada, 2021) .
Location of File(s):	*Data/dtaFiles/mainDataset.dta*
File Extension:	.dta
Source:	Derived - multiple sources.
Provided:	PROVIDED
Additional Notes:	This dataset cannot be recreated from the data given in the replication folder. This is because we exclude some inputs (all months of the LFS). All do-files which arrive to this point are included but commented out in the *main.do*.

mainDataset_CPSS.dta

Description:	This is our final dataset for the replication of all analysis and figures which use the Canadian Perspectives Survey Series by Statistics Canada (2020)
Location of File(s):	Data/dtaFiles/mainDataset_CPSS.dta
File Extension:	.dta
Source:	Statistics Canada
Provided:	PROVIDED
Additional Notes:	This dataset cannot be recreated from the data given in the replication folder. This is because we exclude the raw data. All do-files which arrive to this point are included but commented out in the *main.do*.

toBeMerged_allItemsCPI_Jan2018_Dec2020.dta

Description:	This represents the cleaned CPI data from Statistics Canada (n.d.b)
Location of File(s):	Data/dtaFiles/toBeMerged_allItemsCPI_Jan2018_Dec2020.dta
File Extension:	.dta
Source:	Statistics Canada
DOI:	https://doi.org/10.25318/1810000401-eng
Provided:	PROVIDED

twoDigit_indices.dta

Description:	This single dataset contains the summary measures for the NOC occupations.
Location of File(s):	Data/dtaFiles/twoDigit_indices.dta
File Extension:	.dta
Source:	Derived - Multiple sources.
Provided:	PROVIDED
Additional Notes:	While the file to create this is commented out, replicators can recreate this file.

6 Dataset List (Sorted by Name of File) - Raw Data

In this section we list the *raw datasets* which are used for the construction of this project. This provides a useful summary of required materials individuals need to fully reproduce this research.

It is important to note that much of this data is cleaned and produces many additional datasets. These additionally created datasets are documented in the Description of Programs and Code in section 4.

It should be noted that many of the raw data we do not include in this replication folder. Much of this is available online and can be readily downloaded.

Canadian Labour Force Survey (LFS)

Data File(s):	There are 60 in total, starting in January 2016 and ending in December 2020 provided by Statistics Canada (2021). For the location of the files, we use the bold **year** which represents a year between 2016 and 2020, inclusive, and **month** which represents a month between January and December, inclusive.
Location of File(s):	*Data/LFS/**year**/lfs-71M0001-E-**year-month**/ LFS-71M0001-E-**year-month**_F1.sav*
File Extension:	.sav
Source:	Statistics Canada
DOI:	https://doi.org/10.25318/71m0001x-eng
Provided:	NOT PROVIDED
Additional Notes:	Each observation represents an individual who has filled out the LFS for their respective month. We are using the public-use micro-data files as provided through <odesi>. In particular, Carleton University's MacOdrum library supplied us with all of the LFS PUMFs January 2016 to about March 2020, while we personally downloaded the remaining of the datasets. One will likely have to change the file and folder names in order to match the style above. That is, our programs are case sensitive.

Canadian Perspective Survey Series - Series 1: Impacts of COVID-19

Data File(s):	There is one dataset in total from Statistics Canada (2020).
Location of File(s):	*Data/CPSS/PUMF2020_CPSS_SEPC_S1.txt*
File Extension:	.txt
Source:	Statistics Canada
DOI:	https://doi.org/10.25318/45250004-eng
Provided:	NOT PROVIDED
Additional Notes:	Each observation represents an individual who has filled out the CPSS. We were given access to the data as it was released in early May 2020. The (presumably) same public-use micro-data files are provided through <odesi> under the COVID-19 tab. The version that we were given as accompanied with four do-files (extension *.do*) and a single dictionary-file (extension *.dct*) which were necessary for reading the data into Stata. These additional do-files are not described in this README, though are used in the *DataCleaning_CPSS.do*.

O*NET Indexes

Data File(s):	There are two datasets which provide us the information used to construct our indices and provided by National Center for O*NET Development (2020a,b).
Location of File(s):	*Data/dtaFiles/onetExposure_diseaseAndInfection.dta* *Data/dtaFiles/onetExposure_physicalProximity.dta*
File Extension:	.dta
Sources:	O*Net https://www.onetonline.org/ Physical Proximity: https://www.onetonline.org/find/descriptor/result/4.C.2.a.3 Exposed to Infection and Disease: https://www.onetonline.org/find/descriptor/result/4.C.2.c.1.b
Provided:	PROVIDED
Additional Notes:	Both of these datasets were downloaded into MS Excel before being converted into *.dta files. We provide only the *.dta files.

Dingel and Neiman Work from Home Index

Data File(s):	There is one dataset which provides us the information to construct our indices from Dingel and Neiman (2020).
Location of File(s):	*Data/dtaFiles/DingleNieman_workFromHome.dta*
File Extension:	.dta
Source:	https://github.com/jdingel/DingelNeiman-workathome
Provided:	PROVIDED
Additional Notes:	This is a version which we downloaded on May 5, 2020 from the authors' GitHub page. We provide only the *.dta file, although it was downloaded as a *.csv.

LMI Critical Workers Index

Description:	This single dataset contains critical workers index used in this paper from Labor Market Information Institute (2020).
Location of File(s):	Data/dtaFiles/SOC_criticalInfrastructureWorkers.dta
File Extension:	.dta
Source:	https://www.lmiontheweb.org/more-than-half-of-u-s-workers-in-critical-occupations-in-the-fight-against-covid-19/.
Provided:	PROVIDED
Additional Notes:	This file was downloaded directly from the link provided above on May 4. 2020. We provide the extracted sheet as a *.dta file.

Crosswalk between NOC and O*Net

Data File(s):	There is one dataset in total which allows us to merge O*Net measures using the crosswalk from the American SOC to the Canadian NOC.
Location of File(s):	*Data/dtaFiles/onetToNoc.dta*
File Extension:	PROVIDED
Source:	Brookfield Institute for Innovation and Entrepreneurship (2018)
Website:	https://github.com/BrookfieldIIE/NOC_ONet_Crosswalk
Provided:	PROVIDED
Additional Notes:	We downloaded the comma-separated values file from the GitHub and then converted it into a dta-file.

LMiC Index

Data File(s):	There is one dataset in total used to create the essential workers index by Labour Market Information Council (LMiC).
Location of File(s):	*Data/PanCanadianEssentialServicesList.xlsx*
File Extension:	.xlsx
Source:	Labour Market Information Council (LMIC)
Website:	https://lmic-cimt.ca/essential-services-and-occupations-a-pan-canadian-list/
Provided:	PROVIDED

Canadian National Occupation Classification Class of Worker (2016)

Data File(s):	There is one dataset in total by Statistics Canada (n.d.a) which provides population estimates by NOC categories.
Location of File(s):	*Data/cleaner_NOC500_2016Census.csv*
File Extension:	.csv
Source:	Statistics Canada
Website:	https://www150.statcan.gc.ca/n1/en/catalogue/98-400-X2016291
Provided:	PROVIDED
Additional Notes:	After going to the website, one must follow the "HTML" hyperlink to get to the page where one is able to download the correct product. The format which the current comma-separated values file is in comes after restricting the dataset to the fields we used in our analysis. At the same time, the "cleaner" prefix is used to denote the lopping off of rows which cannot be read into Stata in a usable manner.

Canadian All-Items CPI

Data File(s):	There is one dataset in total which comes from Statistics Canada (n.d.b).
Location of File(s):	*Data/allItemsCPI_March2020.csv*
File Extension:	.csv
Source:	Statistics Canada
DOI:	https://doi.org/10.25318/1810000401-eng
Provided:	PROVIDED
Additional Notes:	The format which the current comma-separated values file is in comes after restricting the dataset to the correct months and years while also restricting to only provinces for the all-items (2002) CPI.

COVID-19 Mortality and Case Counts

Data File(s):	There are two datasets total which come from Berry et al. (2020).
Location of File(s):	*Data/cases_timeseries_prov_April3.csv* *Data/mortality_timeseries_prov_April3.csv*
File Extension:	.csv
Source:	COVID-19 Canada Open Data Working Group
Website:	https://raw.githubusercontent.com/ccodwg/Covid19Canada/master/
DOI:	https://doi.org/10.1503/cmaj.75262
Provided:	PROVIDED
Additional Notes:	For much of the project, we imported data directly from the GitHub page where it is updated. The last time we downloaded the data was April 3 2021. It is possible that the data can be changed retroactively, but, given our analysis ends in December 2020, it is unlikely to be the case.

7 List of Programs

Main.do

Description:	This file runs all of the do-files necessary to reproduce all the output contained in the current version of the paper.
User Inputs:	The user has to update the *masterPathway* before executing the do-file in order for all output to be created.
Input:	NONE
Output:	Every Figure, Table, Appendix Figure and Appendix Table
Additional Notes:	The datasets are provided and allow users to run any of the do-files in any order. The runtime below only includes the time it takes to execute the tables and figures. We still give an approximate time for the time it takes to clean the data on our machines.
Runtime (CPU 1):	3729.21 seconds (62 minutes) for all do-files excluding the data cleaning files which have been commented out.
Runtime (CPU 2):	4485.62 seconds (74 minutes) for all do-files excluding the data cleaning files which have been commented out.

DoFiles/Append_LFS.do

Description:	Decodes and appends all of the variables from all of the Labour Force surveys between January 2016 and December 2020.
User Inputs:	NONE
Input:	All months and years of the LFS as **.sav*.
Output:	All months and years of the LFS as **.dta*. *lfs_2016jan_to_2020December.dta*
Additional Notes:	Variables are decoded since coding across LFSs are not always consistent. In this way, we will recode the strings to their appropriate categories.
Runtime (CPU 1):	202.09 seconds
Runtime (CPU 2):	512.26 seconds

DoFiles/CheckingData_LFS.do

Description:	Acts as a first pass at cleaning the dataset.
User Inputs:	NONE
Input:	*lfs_2016jan_to_2020December.dta*
Output:	*Data/dtaFiles/lfs_2016Jan_to_2020december_checkedData.dta*
Additional Notes:	There are additional files which are created in intermediate steps but are never used again. This file is used to check the coding of the various elements of the LFS. It should be noted that Stata appends (some) values of variables incorrectly across different years of the LFS. In order to overcome this, we create new variables which take the old, appended variables, and convert their labels to unique categories as strings. From here, we manually group the categories of the variables which have the same categories but minor discrepancies. An example of this is something like class of worker, where after our append, we have 20 groups all with different values and different labels. The key is that the LFS only has ever had 7 groups across our time period (Private, Public, four types of self-employed, and unpaid family work). Inspecting the value labels confirms this. So we regroup them appropriately.
Runtime (CPU 1):	537.77 seconds
Runtime (CPU 2):	Not run - likelyless than < 1 hour

DoFiles/CleaningCPI.do

Description:	CleaningCPI.do takes in a CANSIM table for all-items between 2016 and 2020 and makes tidier the dataset so we can merge it with our main dataset later on.
User Inputs:	NONE
Input:	Data/allItemsCPI_March2020.csv
Output:	Data/dtaFiles/toBeMerged_allItemsCPI_Jan2018_Dec2020.dta
Additional Notes:	The input filename is an indication that we downloaded it last in March of 2020. A few basic steps were taken to clean everything up to make an easier synch with the LFS in the merge.
Runtime (CPU 1):	< 0.1 seconds
Runtime (CPU 2):	0.1 seconds

AdditionalDataCleaning_LFS.do

Description:	This acts as the final dataset which will be used in all successive analysis. In keeping with that idea, this takes in the LFS data, the index data, and the CPI data and merges them together. Additional variables which are key to the analysis and derived from other variables are constructed in this do-file.
User Inputs:	NONE
Input:	*Data/dtaFiles/lfs_2016Jan_to_2020december_checkedData.dta* *Data/dtaFiles/toBeMerged_allItemsCPI_Jan2018_Dec2020.dta* *Data/dtaFiles/twoDigit_indices.dta*
Output:	*Data/dtaFiles/mainDataset.dta*
Additional Notes:	Key variables are created here, including most of our dependent variables and the standardized index.
Runtime (CPU 1):	113.84 seconds
Runtime (CPU 2):	Not run - likely less than 5 minutes.

DataCleaning_CPSS.do

Description:	This file cleans the CPSS data and creates the relevant varaibles
User Inputs:	NONE
Input:	*Data/CPSS/Pumf2020_cpss_sepc_s1.dct* *Data/dtaFiles/CPSS/PUMF2020_CPSS_SEPC_S1.txt* *Data/dtaFiles/CPSS/Pumf2020_cpss_sepc_s1_infmt.do* *Data/dtaFiles/CPSS/Pumf2020_cpss_sepc_s1_lbe.do* *Data/dtaFiles/CPSS/Pumf2020_cpss_sepc_s1_vale.do* *Data/dtaFiles/CPSS/Pumf2020_cpss_sepc_s1_fmt.do*
Output:	*Data/dtaFiles/mainDataset_CPSS.dta*
Additional Notes:	NONE
Runtime (CPU 1):	1.27 seconds
Runtime (CPU 2):	Not run - likely less than three seconds.

Figures_CasesAndMortalities.do

Description:	This file creates all subfigures in Figures 1, as well as all subfigures in Appendix Figures A1 through A3.
User Inputs:	NONE
Input:	*Data/cases_timeseries_prov_April3.csv*
Output:	*Figures/CumCases_allProv.pdf* *Figures/logCumCases_allProv.pdf* *Figures/CumCases_4Prov.pdf* *Figures/logCumCases_4Prov.pdf* *Figures/Cumdeaths_allProv.pdf* *Figures/logCumdeaths_allProv.pdf* *Figures/Cumdeaths_4Prov.pdf* *Figures/logCumdeaths_4Prov.pdf*
Additional Notes:	Before the data is imported, there is a commented out two lines which show the (possibly still active) links from which the dataset may be downloaded.
Runtime (CPU 1):	6.55 seconds
Runtime (CPU 2):	8.61 seconds

Figures_TimeSeriesAndBubbles.do

Description:	This file creates all the subfigures in Figures 2 through 5 and Appendix Figures A4 through to A15. These files are saved as *.pdfs.
User Inputs:	NONE
Input:	*Data/dtaFiles/mainDataset.dta*
Output:	Figures 2 - 5; Appendix Figures A4 to A15. Figures are stored in the Figures folder.
Additional Notes:	Unemployment rate figures are labelled as *alt_w_unempRate_*.pdf.* Labour Force Participation rate are labelled as *alt_w_lfp_*.pdf.* Hours worked figures are labelled as *alt_actualHrsWorked_*.pdf* Hourly wage figures are labelled as *alt_w_hrWage_*.pdf.* The files with the bubbles are named with the word "bubbles" as a prefix.
Runtime (CPU 1):	437.01 seconds
Runtime (CPU 2):	566.81 seconds

Figures_Difference_Occupations.do

Description:	This file creates all the subfigure associated with Figure 6.
User Inputs:	NONE
Input:	*Data/dtaFiles/mainDataset.dta*
Output:	*Figures/occ_physProx_unemp.pdf* *Figures/occ_exposure_unemp.pdf* *Figures/occ_critWork_unemp.pdf* *Figures/occ_homeWork_unemp.pdf*
Additional Notes:	NONE
Runtime (CPU 1):	16.83 seconds
Runtime (CPU 2):	7.67 seconds

Figures_EventStudies_Indexes.do

Description:	This file creates all subfigures found in Figures 7 and 8 as well as all subfigures found in Appendix Figures A16 and A17.
User Inputs:	NONE
Input:	*Data/dtaFiles/mainDataset.dta*
Output:	*Data/dtaFiles/EventStudy.dta* *Figures/eventStudy_unemp_index.pdf* *Figures/eventStudy_lfp_index.pdf* *Figures/eventStudy_wages_index.pdf* *Figures/eventStudy_hours_index.pdf*
Additional Notes:	In the above writing of the saved files, the *index* is a place-holder for the various indices. This do-file also creates a dataset which defines some of the useful variables for the Event Study which is constructed. While now redundant, it was created for convenience and speed.
Runtime (CPU 1):	186.05 seconds
Runtime (CPU 2):	239.47 seconds

DoFiles/Index_Construction.do

Description:	Index_Construction.do takes in our O*Net measures, the Dingle-Neiman measures, and the essential workers measures and then creates a single file which can be merged.
User Inputs:	NONE
Input:	Data/Cleaner_NOC500_2016Census.csv Data/PanCanadianEssentialServicesList.xlsx Data/dtaFiles/onetToNoc.dta Data/dtaFiles/onetExposure_physicalProximity.dta Data/dtaFiles/onetExposure_diseaseAndInfection.dta Data/dtaFiles/SOC_criticalInfrastructureWorkers.dta Data/dtaFiles/DingleNieman_workFromHome_onet.dta
Output:	Data/dtaFiles/twoDigit_indices.dta
Additional Notes:	Then first section of the file brings in the crosswalk between the NOC and the SOC codes. After doing this, we merge all our O*Net measures. Following the merge, we create our aggregate measures as outlined in our online appendix. This is done by successively aggregating index values.
Runtime (CPU 1):	0.56 seconds
Runtime (CPU 2):	0.41 seconds

Tables_ComparingLFS_And_CPSS.do

Description:	Creates Appendix Table A3.
User Inputs:	NONE
Input:	*Data/dtaFiles/mainDataset.dta* *Data/dtaFiles/mainDataset_CPSS.dta*
Output:	*Tables/lfs_cpss_comparison_summaryStatistics_v1.tex*
Additional Notes:	Minor touch-ups may be necessary in order to make the tables *look* identical to those in the paper. No numbers should differ.
Runtime (CPU 1):	14.25 seconds
Runtime (CPU 2):	20.24 seconds

Tables_Regressions_BeforeAndAfter.do

Description:	Creates Table 4 and Table 5.
User Inputs:	NONE
Input:	*Data/dtaFiles/mainDataset.dta*
Output:	*Tables/March_beforeAndAfter_Canada.tex* *Tables/March_beforeAndAfter_QcOnAbBc.tex*
Additional Notes:	The user may have to manually input the bootstrapped standard errors. This should not be too taxing since they are displayed in Stata once the file completes. LaTeXwill not compile if the user does not manually put these in.
Runtime (CPU 1):	996.94 seconds
Runtime (CPU 2):	1187.06 seconds

Tables_Regressions_BeforeAndAfter_appendix.do

Description:	Creates Appendix Table A4 and A5.
User Inputs:	NONE
Input:	*Data/dtaFiles/mainDataset.dta*
Output:	*Tables/March_beforeAndAfter_Canada_appendix.tex* *Tables/March_beforeAndAfter_QcOnAbBc_appendix.tex*
Additional Notes:	The user may have to manually input the bootstrapped standard errors. This should not be too taxing since they are displayed in Stata once the file completes.
Runtime (CPU 1):	394.89 seconds
Runtime (CPU 2):	637.26 seconds

Tables_Regressions_CPSS.do

Description:	This file creates all of the CPSS tables (both regressions and summary statistics). That is, Table 8, Table 9, Appendix Table 2 and Appendix Table 15 are created using this file.
User Inputs:	NONE
Input:	*Data/dtaFiles/mainDataset_CPSS.dta*
Output:	*Tables/CPSS_MentalHealth.tex* *Tables/CPSS_LabourConcerns.tex* *Tables/CPSS_Health.tex* *Tables/CPSS_SummaryStatistics.tex*
Additional Notes:	Minor touch-ups may be necessary in order to make the tables *look* identical to those in the paper. No numbers should differ.
Runtime (CPU 1):	2.15 seconds
Runtime (CPU 2):	2.66 seconds

Tables_Regressions_Heterogeneity_appendix.do

Description:	This file creates the heterogeneity analysis which can be found in Appendix Tables A11 through A14.
User Inputs:	NONE
Input:	*Data/dtaFiles/mainDataset.dta*
Output:	*Tables/March_hetero_unemp_postCovid.tex* *Tables/March_hetero_lfp_postCovid.tex* *Tables/March_hetero_wage_postCovid.tex* *Tables/March_hetero_hours_postCovid.tex*
Additional Notes:	Minor touch-ups may be necessary in order to make the tables *look* identical to those in the paper. No numbers should differ.
Runtime (CPU 1):	343.63 seconds
Runtime (CPU 2):	418.32 seconds

Tables_Regressions_Indexes_Interacted.do

Description:	This file creates Table 6.
User Inputs:	NONE
Input:	*Data/dtaFiles/mainDataset.dta*
Output:	*Tables/March_indexesInteracted.tex*
Additional Notes:	Minor touch-ups may be necessary in order to make the tables *look* identical to those in the paper. No numbers should differ.
Runtime (CPU 1):	111.79 seconds
Runtime (CPU 2):	141.29 seconds

Tables_Regressions_Indexes_Interacted_AlternativeIndexForEssentialWorker.do

Description:	This file creates Appendix Table A9.
User Inputs:	NONE
Input:	*Data/dtaFiles/mainDataset.dta*
Output:	*Tables/March_indexesInteracted_essWorker.tex*
Additional Notes:	Minor touch-ups may be necessary in order to make the tables *look* identical to those in the paper. No numbers should differ.
Runtime (CPU 1):	129.57 seconds
Runtime (CPU 2):	143.05 seconds

Tables_Regressions_Indexes_Interacted_AlternativeIndexForEssentialWorker_appendix.do

Description:	This file creates Appendix Table A10.
User Inputs:	NONE
Input:	*Data/dtaFiles/mainDataset.dta*
Output:	*Tables/March_indexesInteracted_appendix_essentialWorkers.tex*
Additional Notes:	Minor touch-ups may be necessary in order to make the tables *look* identical to those in the paper. No numbers should differ.
Runtime (CPU 1):	118.47 seconds
Runtime (CPU 2):	128.97 seconds

Tables_Regressions_Indexes_Interacted_appendix.do

Description:	This file creates Appendix Table A7.
User Inputs:	NONE
Input:	*Data/dtaFiles/mainDataset.dta*
Output:	*Tables/March_indexesInteracted_appendix.tex*
Additional Notes:	Minor touch-ups may be necessary in order to make the tables *look* identical to those in the paper. No numbers should differ.
Runtime (CPU 1):	98.79 seconds
Runtime (CPU 2):	129.23 seconds

Tables_Regressions_Indexes_Interacted_nonHealthCareWorkers.do

Description:	This file creates Table 7.
User Inputs:	NONE
Input:	*Data/dtaFiles/mainDataset.dta*
Output:	*Tables/March_indexesInteracted_nonHealthCare.tex*
Additional Notes:	Minor touch-ups may be necessary in order to make the tables *look* identical to those in the paper. No numbers should differ.
Runtime (CPU 1):	106.66 seconds
Runtime (CPU 2):	137.04 seconds

Tables_Regressions_Indexes_Interacted_nonHealthCareWorkers_appendix.do

Description:	This file creates Appendix Table A8.
User Inputs:	NONE
Input:	*Data/dtaFiles/mainDataset.dta*
Output:	*Tables/March_indexesInteracted_nonHealthCare_appendix.tex*
Additional Notes:	Minor touch-ups may be necessary in order to make the tables *look* identical to those in the paper. No numbers should differ.
Runtime (CPU 1):	100.16 seconds
Runtime (CPU 2):	122.57 seconds

Tables_Regressions_ReasonAwayFromWork.do

Description:	This file creates Appendix Table A6.
User Inputs:	NONE
Input:	*Data/dtaFiles/mainDataset.dta*
Output:	*Tables/March_diffLM_Outcomes.tex*
Additional Notes:	Minor touch-ups may be necessary in order to make the tables *look* identical to those in the paper. No numbers should differ.
Runtime (CPU 1):	68.20 seconds
Runtime (CPU 2):	92.99 seconds

Tables_SummaryStatistics_demographics.do

Description:	This file creates Table 3.
User Inputs:	NONE
Input:	*Data/dtaFiles/mainDataset.dta*
Output:	*Tables/March_SummaryStatistics_indexes_demographics.tex*
Additional Notes:	Minor touch-ups may be necessary in order to make the tables *look* identical to those in the paper. No numbers should differ. Notes on how to perfectly recreate the tables are at the bottom of the do-files.
Runtime (CPU 1):	75.82 seconds
Runtime (CPU 2):	109.68 seconds

Tables_SummaryStatistics_MainRegressions.do

Description:	This file creates Table 1.
User Inputs:	NONE
Input:	*Data/dtaFiles/mainDataset.dta*
Output:	*Tables/March_SummaryStatisticsForOutcomes_actualHours.tex*
Additional Notes:	Minor touch-ups may be necessary in order to make the tables *look* identical to those in the paper. No numbers should differ. Notes on how to perfectly recreate the tables are at the bottom of the do-files.
Runtime (CPU 1):	13.89 seconds
Runtime (CPU 2):	17.16 seconds

Tables_SummaryStatistics_NOC_Difference_BeforeAndAfter_appendix.do

Description:	This file creates Appendix Table A16 and Appendix Table A17.
User Inputs:	NONE
Input:	*Data/dtaFiles/mainDataset.dta*
Output:	*Tables/March_beforeAndAfter_SummaryStatistics_NOC_40_unempLFP.tex* *Tables/March_beforeAndAfter_SummaryStatistics_NOC_40_wageHours.tex*
Additional Notes:	Minor touch-ups may be necessary in order to make the tables *look* identical to those in the paper. No numbers should differ. Notes on how to perfectly recreate the tables are at the bottom of the do-files.
Runtime (CPU 1):	282.79 seconds
Runtime (CPU 2):	339.85 seconds

Tables_SummaryStatistics_NOCMeans.do

Description:	This file creates Table 2.
User Inputs:	NONE
Input:	*Data/dtaFiles/mainDataset.dta*
Output:	*Tables/March_SummaryStatistics_indexes_noc10.tex*
Additional Notes:	Minor touch-ups may be necessary in order to make the tables *look* identical to those in the paper. No numbers should differ. Notes on how to perfectly recreate the tables are at the bottom of the do-files.
Runtime (CPU 1):	24.63 seconds
Runtime (CPU 2):	29.97 seconds

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