Replication Package: "Subsidizing Labor Hoarding in Recessions: The Employment & Welfare Effects of Short Time Work"

Giulia Giupponi
Bocconi University

Camille Landais
London School of Economics

August, 2022

Table of Contents

Foreword 2
Data availability statement 2
List of datasets used 2
Computational requirements and STATA packages used 3
Structure of replication package 4
Description of datasets used 4
Instructions for data preparation 6
Instructions to reproduce figures, tables and statistics reported in text 6
References 11

Foreword

This replication package reproduces graphs and tables of Giupponi and Landais "Subsidizing Labor Hoarding in Recessions: The Employment & Welfare Effects of Short Time Work".

Data availability statement

We certify that the authors of the manuscript have legitimate access to and permission to use the data used in this manuscript.

Part of the data used in this project (INPS, 2016a-i) are property of the Italian Social Security Institute (INPS) and are accessible by researchers at the INPS premises through the VisitInps program (see https://www.inps.it/dati-ricerche-e-bilanci/attivita-di-ricerca/programma-visitinps-scholars). To access data for replication purposes, researchers should contact INPS DC Research (dcstudiericerche@inps.it). The data are confidential, but may be obtained from INPS by submitting a research project application to the VisitInps Program (see https://www.inps.it/dati-ricerche-e-bilanci/attivita-di-ricerca/programma-visitinps-scholars/bandi-per-le-borse-di-studio/bandi-attivi). Researchers interested in the VisitInps program may contact dcstudiericerche@inps.it. Data access is free of charge.

The CERVED (2016) data used in this project have been licensed to the authors on the basis of a non-disclosure agreement signed in 2017. The same data is now available to researchers via the VisitInps Program (see https://www.inps.it/docallegatiNP/Mig/Dati_analisi_bilanci/Attivita_ricerca/Visitinps_scholars/Banche_dati%20_English_version.pdf).

The data used to produce Figures 1 and 2 (Giupponi et al., 2022) are provided in the replication package. All codes and underlying data sources can be found in the replication package of Giupponi et al., 2022, available at DOI 10.3886/E153881V1 https://doi.org/10.3886/E153881V1.

All replications scripts, including detailed explanations of data construction, etc. are available at the following DOI: **10.5281/zenodo.6951801**.

List of datasets used

CERVED. 2016. "Bilanci [database]". Accessed 2022.

Giupponi, Giulia, Camille Landais, and Alice Lapeyre. 2022. "Replication Package: Should We Insure Workers or Jobs during Recessions? [replication package]" Journal of Economic Perspectives, 36(2): 29–54. Accessed 2022.

INPS. 2016. “VisitInps Anagrafica Aziende [database]”. Microdata Access at Istituto Nazionale di Previdenza Sociale (INPS). Accessed 2022.

INPS. 2016. “VisitInps Anagrafica Lavoratori [database]”. Microdata Access at Istituto Nazionale di Previdenza Sociale (INPS). Accessed 2022.

INPS. 2016. “VisitInps Autorizzazioni Cassa Integrazione Guadagni, 2005-2015 [database]”. Microdata Access at Istituto Nazionale di Previdenza Sociale (INPS). Accessed 2022.

INPS. 2016. “VisitInps Complete Geographic Information [database]”. Microdata Access at Istituto Nazionale di Previdenza Sociale (INPS). Accessed 2022.

INPS. 2016. “VisitInps Aziende Dati Annuali, 1995-2015 [database]”. Microdata Access at Istituto Nazionale di Previdenza Sociale (INPS). Accessed 2022.

INPS. 2016. “VisitInps Rapporti Lavoro Dati Annuali, 1995-2015 [database]”. Microdata Access at Istituto Nazionale di Previdenza Sociale (INPS). Accessed 2022.

INPS. 2016. “VisitInps Differenze Accredito, 2005-2015 [database]”. Microdata Access at Istituto Nazionale di Previdenza Sociale (INPS). Accessed 2022.

INPS. 2016. “VisitInps Pagamenti Diretti Cassa Integrazione Guadagni, 2005-2015 [database]”. Microdata Access at Istituto Nazionale di Previdenza Sociale (INPS). Accessed 2022.

INPS. 2016. “VisitInps Raccordo Comuni-Sistemi Locali del Lavoro [database]”. Microdata Access at Istituto Nazionale di Previdenza Sociale (INPS). Accessed 2022.

Computational requirements and STATA packages used

The INPS server on which the analyses have been run has the following specs:
Windows Server 2019 Standard
Processor: Intel(R)Xeon(R) CPU E7-4850 v3 - 2.20GHz - 2.19GHz (4 processor)
RAM: 1,00 TB

The replicator should expect the code to run for about two weeks.

The software used is STATA/MP version 16.

The following STATA packages are used in the replication files:
binscatter

- Installation: ssc install binscatter

reghdfe and ftools

- Installation: ssc install reghdfe, ssc install ftools

Structure of replication package

The replication package is made of three folders:

- Code: this folder includes all do files for data preparation and output replication
- Data: this folder includes two subfolders, "Raw" and "Derived". The folder Raw includes subdirectories that can be replicated in the Visitinps server. The folder Derived includes the data used to produce Figure 1 and Figure 2
- Output: this folder is the destination directory for all output (figures and tables) produced in the replication package[1]

To run the code, the replicator can use either the master do file (_master.do) available in the Code folder, or run each single do file in the order indicated in the master do file. In either case, the replicator should insert their main directory at the beginning of _master.do and run the lines of code that define the macros for the main directory and subdirectories. If the replicator wishes to reproduce only selected pieces of output, they should follow the output-specific instructions reported under "Instructions to reproduce figures, tables and statistics reported in text" below. The replicator will find a list of STATA packages required to run the code at the beginning of _master.do.

Description of datasets used

CERVED. 2016. "Bilanci [database]".
The dataset is a firm register containing balance-sheet information of all limited liability companies in Italy. The CERVED (2016) data used in this project have been licensed to the authors on the basis of a non-disclosure agreement signed in 2017. The same data is now available to researchers via the VisitInps Program. See "Data availability statement" for more details.

Giupponi, Giulia, Camille Landais, and Alice Lapeyre. 2022. "Should We Insure Workers or Jobs during Recessions? [replication package]" Journal of Economic Perspectives, 36(2): 29–54.
The data used to produce Figures 1 and 2 are taken from Giupponi et al. (2022)'s replication package and are provided in this replication package. More information on the sources to construct the data can be found in Giupponi et al. (2022)'s replication package available at DOI 10.3886/E153881V1 https://doi.org/10.3886/E153881V1. For the period from March to December 2020, monthly data on short-time work have been provided by the OECD Directorate for Employment, Labour and Social Affairs (OECD, 2022). The data are not publicly available. To request access and obtain permission to use the data,

[1] The replication package includes empty .txt files named 'placeholder.txt' in each of the empty subfolders that otherwise could not be compressed.

researchers should contact the OECD Directorate for Employment, Labour and Social Affairs at els.contact@oecd.org.

INPS. 2016. "VisitInps Anagrafica Aziende [database]". Microdata Access at Istituto Nazionale di Previdenza Sociale (INPS).
The dataset is a firm register including time invariant characteristics of all firms in the INPS data. The data is not publicly available. See "Data availability statement" herein for more details.

INPS. 2016. "VisitInps Anagrafica Lavoratori [database]". Microdata Access at Istituto Nazionale di Previdenza Sociale (INPS).
The dataset is an individual register including time invariant characteristics of all individuals in the INPS data. The data is not publicly available. See "Data availability statement" herein for more details.

INPS. 2016. "VisitInps Autorizzazioni Cassa Integrazione Guadagni, 2005-2015 [database]". Microdata Access at Istituto Nazionale di Previdenza Sociale (INPS).
The dataset is a register of all applications for Cassa Integrazione Guadagni by firms, including information on the timing and amount of short-time work hours requested, the outcome of the application and the timing and amount of short-time work hours granted to the firm. The data is not publicly available. See "Data availability statement" herein for more details.

INPS. 2016. "VisitInps Complete Geographic Information [database]". Microdata Access at Istituto Nazionale di Previdenza Sociale (INPS).
The dataset provides a comprehensive mapping of administrative geographies in Italy. It maps each municipality to the province and region to which it belongs. The data is not publicly available. See "Data availability statement" herein for more details.

INPS. 2016. "VisitInps Aziende Dati Annuali, 1995-2015 [database]". Microdata Access at Istituto Nazionale di Previdenza Sociale (INPS).
The dataset is a firm register including information on firm employment counts at yearly frequency. The data is not publicly available. See "Data availability statement" herein for more details.

INPS. 2016. "VisitInps Rapporti Lavoro Dati Annuali, 1995-2015 [database]". Microdata Access at Istituto Nazionale di Previdenza Sociale (INPS).
The dataset is a worker register including information on worker's employment spells in each firm at yearly frequency. It includes information on contract type, weeks worked and total earnings.The data is not publicly available. See "Data availability statement" herein for more details.

INPS. 2016. "VisitInps Differenze Accredito, 2005-2015 [database]". Microdata Access at Istituto Nazionale di Previdenza Sociale (INPS).
The dataset is a worker register including information on worker's in-work benefits in each firm at yearly frequency. It includes information on Cassa Integrazione Guadagni payments that are paid to the workers directly by the firm (which is then reimbursed by INPS). The data is not publicly available. See "Data availability statement" herein for more details.

INPS. 2016. "VisitInps Pagamenti Diretti Cassa Integrazione Guadagni, 2005-2015 [database]". Microdata Access at Istituto Nazionale di Previdenza Sociale (INPS).
The dataset is a worker register including information on Cassa Integrazione Guadagni payments that are paid to the workers directly by INPS. The data is not publicly available. See "Data availability statement" herein for more details.

INPS. 2016. "VisitInps Raccordo Comuni-Sistemi Locali del Lavoro [database]". Microdata Access at Istituto Nazionale di Previdenza Sociale (INPS).
The dataset provides a comprehensive mapping of Italian municipalities into local labor markets (sistemi locali del lavoro). The data is not publicly available. See "Data availability statement" herein for more details.

Instructions for data preparation

The folder Code includes four sets of do files for data preparation.

1. datacigXX.do, for XX = {01,…,04}: using data on Cassa Integrazione Guadagni authorizations and payments, the code produces datasets of STW events by type of STW at yearly frequency, at the worker and the firm level
2. datafirmXX.do, for XX = {01,…,08}: using data on firm registers (employment counts and balance sheet), STW events at the firm level and information on contract types derived from the worker registers, the code produces longitudinal data on firm employment, financials and STW utilization used in the firm level analysis (diff-in-diff)
3. dataspillXX.do, for XX = {01,…,10}: using data on firm registers (employment counts and balance sheet), STW eligibility and utilization at the firm and worker level, the produces longitudinal data at the firm level and the local labor market level used in the analysis of spillover/reallocation effects
4. dataworkXX.do, for XX = {01,…,05}: using data on worker registers (working histories), STW events at the worker level and information firm eligibility derived from the firm registers, the code produces longitudinal data on workers' employment and STW utilization used in the worker level analysis (diff-in-diff and event studies)

The preamble of each do file reports the input dataset(s) required for the code to run and the output dataset(s) produced by the code.

Instructions to reproduce figures, tables and statistics reported in text

The following table reports detailed instructions for how to reproduce figures, tables and statistics reported in text using the do files reported in the folder Code:

- Column 1 identifies the relevant output in the paper
- Column 2 lists the sequence of data preparation do files required to produce the data for the analysis, if any
- Column 3 lists the do files that produce the final output
- Column 4 reports the name of the output

The replicator should first run the code listed in column 2, following the exact order in which the do files are listed. Second, they should run the code listed in column 3.

Figure/Table number or text location in manuscript (1)	Data preparation code [saved under folder Code] (2)	Replication code [saved under folder Code] (3)	Output [to be saved under folder Output] (4)
Figure 1	-	fig1.do	fig1.pdf
Figure 2	-	fig2.do	fig2.pdf
Figure 3	datacig01.do datacig02.do datacig03.do datacig04.do datafirm01.do datawork01.do datafirm02.do datafirm03.do datafirm04.do datawork02.do	fig3.do	fig3a.pdf fig3b.pdf
Figure 4	datacig01.do datacig02.do datacig03.do datacig04.do datafirm01.do datawork01.do datafirm02.do datafirm03.do datafirm04.do	fig4.do	fig4a.pdf fig4b.pdf fig4c.pdf fig4d.pdf
Figure 5	datacig01.do datacig02.do datacig03.do datacig04.do datafirm01.do datawork01.do datafirm02.do datafirm03.do datafirm04.do	fig5.do	fig5a.pdf fig5b.pdf
Figure 6	datacig01.do datacig02.do datacig03.do datacig04.do datafirm01.do datawork01.do datafirm02.do datafirm03.do datafirm04.do	fig6.do	fig6a.pdf fig6b.pdf fig6c.pdf fig6d.pdf

Figure/Table number or text location in manuscript (1)	Data preparation code [saved under folder Code] (2)	Replication code [saved under folder Code] (3)	Output [to be saved under folder Output] (4)
Figure 7	datacig01.do datacig02.do datacig03.do datacig04.do datafirm01.do datawork01.do datafirm02.do datafirm03.do datafirm04.do	fig7.do	fig7.pdf
Figure 8	datacig01.do datacig02.do datacig03.do datacig04.do datafirm01.do datawork01.do datafirm02.do datafirm03.do datafirm04.do datawork01.do datawork02.do datawork03.do datawork04.do	fig8.do	fig8a.pdf fig8b.pdf fig8c.pdf
Figure 9	datacig01.do datacig02.do datacig03.do datacig04.do datafirm01.do datawork01.do datafirm02.do datafirm03.do datafirm04.do datawork01.do datawork02.do datawork03.do datawork05.do	fig9.do	fig9a_left.pdf fig9a_right.pdf fig9b_left.pdf fig9b_right.pdf

Figure/Table number or text location in manuscript (1)	Data preparation code [saved under folder Code] (2)	Replication code [saved under folder Code] (3)	Output [to be saved under folder Output] (4)
Figure 10	datacig01.do datacig02.do datacig03.do datacig04.do datafirm01.do dataspill01.do dataspill02.do dataspill03.do dataspill04.do dataspill05.do dataspill06.do dataspill07.do dataspill08.do	fig10.do	fig10a.pdf fig10b.pdf
Table 1	datacig01.do datacig02.do datacig03.do datacig04.do datafirm01.do datawork01.do datafirm02.do datafirm03.do datafirm04.do	tab1.do	tab1.tex
Table 2	datacig01.do datacig02.do datacig03.do datacig04.do datafirm01.do datawork01.do datafirm02.do datafirm03.do datafirm04.do datafirm05.do datafirm06.do datafirm07.do datafirm08.do	tab2.do	tab2.tex

Figure/Table number or text location in manuscript (1)	Data preparation code [saved under folder Code] (2)	Replication code [saved under folder Code] (3)	Output [to be saved under folder Output] (4)
Table 3	datacig01.do datacig02.do datacig03.do datacig04.do datafirm01.do dataspill01.do dataspill02.do dataspill03.do dataspill04.do dataspill05.do dataspill06.do dataspill07.do dataspill08.do dataspill09.do dataspill10.do	tab3.do	tab3.tex
Text	-	text.do	

Note on text.do:

This code replicates statistics that are described in the manuscript text.

- Footnote 4 “Using data on CIGS applications and authorizations, we found that in practice, applications are never rejected: 99.99% of applications are authorized by the Ministry of Labor”
- Text after footnote 6 “In practice, almost all firms use CIGS for exactly 12 months – the median and average duration of CIGS take-up being approximately equal to 52 weeks.”

References

CERVED. 2016. “Bilanci [database]”. Accessed 2022.

Giupponi, Giulia, Camille Landais, and Alice Lapeyre. 2022. “Should We Insure Workers or Jobs during Recessions?” Journal of Economic Perspectives, 36(2): 29–54.

Giupponi, Giulia, Camille Landais, and Alice Lapeyre. 2022. “Replication Package: Should We Insure Workers or Jobs during Recessions? [replication package]” Journal of Economic Perspectives, 36(2): 29–54. Accessed 2022.

INPS. 2016a. “VisitInps Anagrafica Aziende [database]”. Istituto Nazionale di Previdenza Sociale (INPS). Accessed 2022.

INPS. 2016b. “VisitInps Anagrafica Lavoratori [database]”. Istituto Nazionale di Previdenza Sociale (INPS). Accessed 2022.

INPS. 2016c. “VisitInps Autorizzazioni Cassa Integrazione Guadagni, 2005-2015 [database]”. Istituto Nazionale di Previdenza Sociale (INPS). Accessed 2022.

INPS. 2016d. “VisitInps Complete Geographic Information [database]”. Istituto Nazionale di Previdenza Sociale (INPS). Accessed 2022.

INPS. 2016e. “VisitInps Aziende Dati Annuali, 1995-2015 [database]”. Istituto Nazionale di Previdenza Sociale (INPS). Accessed 2022.

INPS. 2016f. “VisitInps Rapporti Lavoro Dati Annuali, 1995-2015 [database]”. Istituto Nazionale di Previdenza Sociale (INPS). Accessed 2022.

INPS. 2016g. “VisitInps Differenze Accredito, 2005-2015 [database]”. Istituto Nazionale di Previdenza Sociale (INPS). Accessed 2022.

INPS. 2016h. “VisitInps Pagamenti Diretti Cassa Integrazione Guadagni, 2005-2015 [database]”. Istituto Nazionale di Previdenza Sociale (INPS).

INPS. 2016i. “VisitInps Raccordo Comuni-Sistemi Locali del Lavoro [database]”. Istituto Nazionale di Previdenza Sociale (INPS).