

Replication Package for “The Cost of Wage Rigidity”

By Ester Faia and Vincenzo Pezone

This package includes all the do-files needed for the replication of the paper “The Cost of Wage Rigidity,” by Ester Faia and Vincenzo Pezone. The research was conducted using the server of the Italian Institute of Social Security (INPS) using the statistical software Stata, and part of the analysis requires confidential data. We first describe our data sources and, for datasets licensed or confidential that we cannot share in this package, provide information on how to access them. We then describe in detail the codes and list the datasets used for the analysis.

Should you have any questions, feel free to email Ester Faia at faia@wiwi.uni-frankfurt.de or Vincenzo Pezone at v.pezone@tilburguniversity.edu.

Data Availability Statement

The employer-employee data are available in the INPS server. Researchers interested in accessing the data can apply through the *Visitinps* project. Calls for proposals are held roughly every year, and around 60 projects are usually selected. More information is available at the following link: <https://www.inps.it/gss/default.aspx?imenu=120>.

Accounting information for publicly listed firms is available from Compustat Global, and the firm fiscal identifiers were obtained through Bureau Van Dijk. Both datasets are often included in subscription packages with the online platform WRDS, which can be accessed by researchers in several universities.

Intraday data for Italian listed firms on ECB announcement dates were purchased from Tickdata. More information is available at its website: <https://www.tickdata.com/>.

The dataset on announcement surprises was kindly shared by Giancarlo Corsetti, Joao Duarte, and Samuel Mann (see Corsetti, Duarte, and Mann, 2022).

The monetary policy shocks constructed by Altavilla, Brugnolini, Gürkaynak, Ragusa, and Motto (2019) can be downloaded at <http://refet.bilkent.edu.tr/research.html>.

Quarterly and yearly Italian GDP growth data are available at the website of ISTAT, www.dati.istat.it (datasets *Conti trimestrali versione 2014 - Conto economico delle risorse e degli impieghi e contributi alla crescita del Pil - edizioni ottobre 2014 - agosto 2019 : Prodotto interno lordo e variazioni (stima preliminare) - edizioni maggio 2016 - luglio 2019 – version*

Luglio 2018 and Prodotto interno lordo e principali componenti - edizioni ottobre 2014 - aprile 2019 - valori concatenati con anno di riferimento 2010 - version Aprile 2018).

The information on firms that experienced bankruptcy or liquidation procedures was hand-collected from the authors from the website of Consob (www.consob.it), the government authority of Italy responsible for regulating the Italian securities market.

The information on time to renewal was hand-collected by the authors from the website of CNEL, the National Council for Economics and Labour (see <https://www.cnel.it/Archivio-Contratti>).

The information on second-level contracts was hand-collected by the authors. The sources are two datasets kindly made available by ADAPT (Association for International and Comparative Studies in Labor and Industrial Relations) and CISL (Confederazione Italiana Sindacati Lavoratori).

Minimum wages for collective bargaining agreements were hand-collected by the authors with the help of the INPS staff, and, in particular, Maria Cozzolino. The file was uploaded into the INPS server and can be requested by researchers with access to the Visitinps data.

Information on the Codes

The do-files run on several directories:

- “G:\Dati_Visitins\2.mercato del lavoro\1.dati lavoratori privato extra agricoli\2.mensili\visitins_rapporto_lavoro_mensile_2005_2006_2007_2008\”, “G:\Dati_Visitins\2.mercato del lavoro\1.dati lavoratori privato extra agricoli\2.mensili\visitins_rapporto_lavoro_mensile_2009_2010_2011”, and “E:\DatiVisitins\Dati dta\Mensili_Italia” are folders that have employer-employee matched data for the universe of Italian workers and firms with monthly frequency;
- “E:\Visitins2\pezone\files_uploaded” is the folder that includes all the files that we uploaded into the INPS server, described below.
- “E:\Visitins2\pezone\replication” is the folder where all the datasets generated to conduct the analysis are stored. It also includes three subfolders:
 - “codes” stores all the do-files;
 - “figures” stores all the figures (in .png format), or the data imported in Latex to generate the figures that appear in the paper (in .csv, .xls, or .txt format);

- “tables” stores all the tables that appear in the paper (in .tex format, except for Table 1, which is in .xls format, and whose information is then imported into Latex).

The do-files can be run, in the correct order, by running the do-file “main_replication.do.” It also generates the log-file “wage_rigidity,” included in this package. The software used was Stata-MP 64, version 16, and the entire analysis (preparation of the dataset and regressions) took about 19 hours to run. To run the regressions we made extensive use of the user-written package *reghdfe*, developed by Correia (2017) and to export tables we use *estout*, developed by Jann (2005, 2007).

We run the codes on a Windows machine with 1.00 TB of installed RAM. The four processors had the following characteristics: Intel(R) Xeon(R) CPU E7-4850 v3 @ 2.20GHz 2.19 GHz.

More in detail, the do-files *import*, *extract_idnrs*, *short_full*, *corsetti_swaps*, *wr_measure*, *altavilla_shocks*, *stock_return_dataset*, and *employment_dataset*, import the raw data and generate all the datasets needed for the analysis. The table below maps each of the remaining do-files to the figures or tables present in the paper.

<i>figure_1</i>	Figure 1
<i>figure_2</i>	Figure 2
<i>figure_3</i>	Figure 3
<i>figure_4</i>	Figure 4
<i>figures_6_8</i>	Figures 6, 7, and 8
<i>table_1</i>	Table 1
<i>tables_2_8</i>	Tables 2, 3, 4, 5, 6, 7, and 8
<i>table_9</i>	Table 9

Information on the Datasets Used

The files that we uploaded into the INPS server, and that we can share in this package, are the following:

- *gdp_g_quarterly.dta*: quarterly GDP data;
- *gdp_y.dta*: yearly GDP data;

- contract2.dta: hand-collected information on firms with second-level contracts;
- failed.dta: hand-collected information on firms that went through bankruptcy or restructuring procedure;
- panel_ecn.dta: hand-collected information on time to renewal.

Additional datasets we used are:

- visitinps_rapporto_lavoro_mensile_year, where *year* should be replaced with the relevant year needed for the analysis, are the employer-employee matched data available in the INPS server;
- Compustat_to_upload_Pezzzone.csv (*sic*): accounting variables from Compustat. Before uploading the file, we manually create a crosswalk between the Compustat identifiers (*gvkey*) and the Bureau van Dijk identifiers (*idnr*). The latter, without the two letters “IT”, corresponds to the firm fiscal identifier, that is, the employer identifier used in INPS. The mapping can be implemented by researchers by using the file crosswalk_gvkey.dta, which we share in this replication package;
- Visitinps_returns_to_upload.csv has intraday returns for Italian publicly listed firms (from Tickdata);
- Visitinps_ret_daily_to_upload.csv has daily returns for Italian publicly listed firms (from Compustat);
- daily_shocks.dta and swaps.txt include data on monetary policy shocks from Corsetti, Duarte and Mann (2022);
- Copy of EA-MPD.xlsx has the monetary policy shocks constructed by Altavilla, Brugnolini, Gürkaynak, Ragusa, and Motto (2019).
- minimum_wages.dta includes minimum wages for collective bargaining agreements.

References

- Correia, Sergio. 2017. “Linear Models with High-Dimensional Fixed Effects: An Efficient and Feasible Estimator” *Working Paper*. <http://scorreia.com/research/hdfe.pdf>
- Corsetti, G., Duarte, J. B., & Mann, S. (2022). One Money, Many Markets. *Journal of the European Economic Association*, 20(1), 513-548.
- Jann, Ben (2005): Making regression tables from stored estimates. *The Stata Journal* 5(3), 288-308.
- Jann, Ben (2007): Making regression tables simplified. *The Stata Journal* 7(2), 227-244.

Data References

Altavilla, C., Brugnolini, L., Gürkaynak, R. S., Motto, R., & Ragusa, G. (2019). “EA-MPD (Euro Area Monetary Policy Event Study Database)” available at <http://refet.bilkent.edu.tr/research.html>.

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S&P Global Market Intelligence (2018). “Compustat Global” available at www.spglobal.com.

Tickdata (2018). “Historical Intraday Market Data” available at www.tickdata.com.