

Marek Chadim - October 2024: Markups and Public Procurement
Young Economist of the Year Award, The Czech Economic Society

Markups

Reference: De Loecker, Jan, Jan Eeckhout, and Gabriel Unger.
"The Rise of Market Power and the Macroeconomic Implications."
The Quarterly journal of economics (2020)

1. Code: "make_paper.do" is the master file that takes
 - * "Create_Data.do": reads in data
 - * "Create_Temp.do": creates temp file for analysis
 - * "Create_Output.do": creates figures
2. Data: contains external datasets:
 - * MagnusWeb data (Czech construction sector)
 - * OECD deflators for Czech Republic
 - * Czech public procurement tender data
 - * Dir "\\PF" contains output elasticity and markup estimates under firm-year Translog specification
3. Output: empty folder with subdirectory \figures to store output
4. Temp: folder to store temp file (automatically deleted at the end of the master file)

Public Procurement

Reference: De Loecker, Jan, and Frederic Warzynski. "Markups and Firm-Level Export Status." The American economic review (2012)

Code is provided in "DLW_mastercode". This file produces all the tables and results presented in the final version of the paper. It generates the estimated markups using the suggested procedure, which is called from file DLW_procedure.do. The code is in STATA. Do note that there are now various publicly available programs available to estimate production functions (with levpct, and the Wooldridge version (ivreg2 in Stata) the most well-known). However, the DLW approach goes beyond the Cobb-Douglas case and even compared to the more flexible function Stata function prodest, the details are different. Also, an estimate of the first stage error term is required to purge the revenue shares from this variation.

Data Appendix

In this note, I describe the firm-level data used in more detail. The financial statements data are taken from the MagnusWeb database and are company accounts of firms operating in the Czech construction sector between 2005-2021.

The data on government tenders runs from 2006 and comes from a Czech IT company Datlab s.r.o. Related work using the same procurement data source includes Baranek and Titl (2020).

The estimation data information is on 1,521 firms and it is an unbalanced panel with information on public procurement entry, exit and status. The latter - at every point in time - provides information whether a firm is operating in the private market only, starts receiving sales from procurement or a continuing government contractor.

Considering only observations for which, and markups are estimated (first lag of data exists) the sample consists of 1,297 firms or 7,261 observations over the period 2006-2021.

The CZ-NACE F industry code classifies the construction sector as Construction of buildings (41), Civil engineering (42) and Specialized construction activities (43).

All monetary variables are deflated by the appropriate industry deflators. The variables used in the analysis are

- * Sales: Total operating revenue,
- * Capital: Total fixed assets in book value,
- * Costs of goods sold, and
- * Procurement status at each point in time.

Finally, the firm-level data set has information on the institutional sector and ownership. In the sample around 92 (592 in 2021) percent of firms are privately owned and half of them are government contractors (301 in 2021).

Of course, any comments/questions are more than welcome and please send them to chadimarek@gmail.com