Readme file for replication of results: Stata and R codes and data files

Carbon Taxes and CO_2 Emissions: Sweden as a Case Study (*AEJ: Economic Policy*)
Julius J. Andersson

1. Descriptive Figures and Possible Confounder

To replicate Figures 1-3 and 11-12, use the code in the R file: descriptive

The data file needed is: descriptive_data.dta

Data on gasoline fuel tax rates and prices in Sweden are from Statistics Sweden, The Swedish Tax Agency, and Svenska Petroleum och Biodrivmedel Institutet (SPBI). Consumption of gasoline and diesel, and data on CO_2 emissions from transport are obtained from the World Bank. GDP data is collected from the Penn World Table. Lastly, data on gaps in GDP per capita and CO_2 emissions from transport are computed as the gap between Sweden and synthetic Sweden.

2. Main Results

To replicate Figures 4-10 and Tables 1-2, use the code in the R file: carbontax

There are four data files needed: (1) carbontax_data.dta (2) leave_one_out_data.dta (3) carbontax_fullsample_data.dta, and (4) fullsample_figures.dta

The Stata do-file for the tax incidence analysis is: taxincidence.do

The data file needed is: tax_incidence_data.dta

Data on number of motor vehicles are from Dargay, Gately and Sommer (2007). Urban population is measured as percentage of total population and the data source is the World Bank. Crude oil price data is obtained from the U.S. Energy Information Administration (EIA), and used together with data on USD to SEK exchange rates from Federal Reserve Economic Data (FRED).

3. Disentangling the Carbon Tax and VAT

To replicate Table 3, use the Stata do-file: disentangling_regression.do

The data file needed is: disentangling_regression_data.dta

To replicate Figures 13-14, use the code in the R file: disentangling

The data file needed is: disentangling_data.dta

GDP per capita and unemployment data for Sweden is collected from Statistics Sweden. The do-file disentangling_regression.do explains how the data set disentangling_data.dta is created.