Exercise 1: Tariffs and Passthrough

Paper: "Tarriff Passthrough at the Border and at the Store: Evidence from US Trade Policy" by Cavallo, Gopinath, Neiman, and Tang, *AER Insights*, 2020

Objective: Modify the replication code to show that Chinese and Non-Chinese goods had similar price trends after the tariffs. The solution graph should be similar to Figure 3a in the paper, but with only 2 price indices (with no distinction between affected and not affected categories.) Then try this separately for Retailer 1 and Retailer 2.

Steps:

1) Download the replication data from https://doi.org/10.7910/DVN/JV7FCH

2) Open the do file "RETAIL\CODE\main_china_index_month.do" and modify it to compute and graph the required indices. You will also need to understand and run the do file called RETAIL\MAIN_RETAIL.do

3) Your graphs should look similar to these:

Both Retailers

Retailer 1

Retailer 2

Exercise 2: Law of One Price

Paper: "Currency Unions, Product Introductions, and the Real Exchange Rate" by Cavallo, Neiman, and Rigobon, *Quarterly Journal of Economics*, 2014

Objective: Replicate Figure V for Apple (page 551 of QJE paper). You can ignore the red line in the original graphs.

Steps:

1) Download data from

https://doi.org/10.7910/DVN/NV26Z6

Two files are needed. CNR_QJE_apple.dta (price data) and long_exchange.dta (exchange rates)

2) Load the price data, merge the exchange rates. Note that the exchange rate file has usdx (us dollars per currency x), where x is the country in that particular row of the data.

3) Note that to replicate Figure V, you need to compute **q with respect to Spain** (j is country “es”). So you will first **need to transform the exchange rate data to obtain the bilateral rate between each country and the euro**.
4) Compute q, the good level real exchange rate, as defined in section III of the paper. Note that in that equation the variable “e” is defined as the log the units of currency i per each unit of the euro.
5) To match the figure, drop observations where the absolute value of q>=0.75.
6) Create a loop that generates a histogram of q for each country, save each individual graph. With STATA’s hist command, use options “bin(100) percent”.
7) Create a combined graph for countries at, dk, de fi, fr, ie, it, nl, no, pt, se, us.

Solutions

The STATA solution codes for both exercises can be downloaded here:

https://www.dropbox.com/sh/2mrwwt8epo35q49/AABAip1kfBuqveqiAbvA1aJja?dl=1

Exercise 1: Tariffs and Passthrough

Starting with the original replication code, follow these steps:

-Open MAIN_RETAIL.do and change the location of the replication data in line 12 to the folder in your drive where you saved it.

-Open STATA

-Run MAIN.RETAIL.do until line 42.

-Open main_china_index_month.do and:

-Replace line 11 with these two lines

```
foreach retailer in "ALL R1 R2" {
global retailer `retailer' {
```

-Add the closing } at the end of the loop (end of page)

-Note that the code already creates the price indices you need, with variables called c9 and n9.

-Change the code generating the graph to start with

```
line norm_index_c9 norm_index_n9  date
```

-Change the filename of the graph so that it saves a different file for each retailer when it is running the loop.

```
graph export ${dir_graphs}\\Figure_A_${retailer}.pdf , replace
```

-Run the code

-In the GRAPHS folder you should be able to see the 3 graphs for the solution.

Exercise 2: Law of One Price

See solution code for details.