Findings among Code diving

Part 1. How values are calculated:

Below is how certain values is calculated among Matlab code, one of the biggest difference with our own attempts is almost every term is expressed in a relative log term.

## Real effective exchange rate:

In order to calculate the Real effective exchange rate, they follow the following steps:

First they calculate the Relative CPI (denoted as rpi) as follows:

Notice that TW stands for trade weights. Afterwards they calculate the Nominal effective exchange rate (NER):

If NER increase this denotes the appreciation of the domestic currency. Then via combining NER and rpi we can get the Real effective exchange rate:

## GDP (in relative terms)

## Terms of Trade (in relative terms)

## Relative NFA:

# Procedures for Forecasting

The forecasting method they use in the paper contain two main steps:

Step 1. Getting the Equilibrium RER: This step is straight forward, one can use either PPP or BEER models.

Step 2. Plug the equilibrium into the Half-life models: Consider the following formula

Erer stands for the equilibrium real exchange rate from step 1, while ρ is an obligatory value following Ca’Zorzi, M., & Rubaszek, M. (2020). Exchange rate forecasting on a napkin. The calculation is as follows:

The 12 is due to a 12 quarters of Half-life over a three year period. According to the paper, this value works the best among the forecasting. H stands for the horizon of the predictions, meaning how many steps ahead. In the paper the steps is always 20, while they gradually shift it from 1995 to 2018.