Meeting

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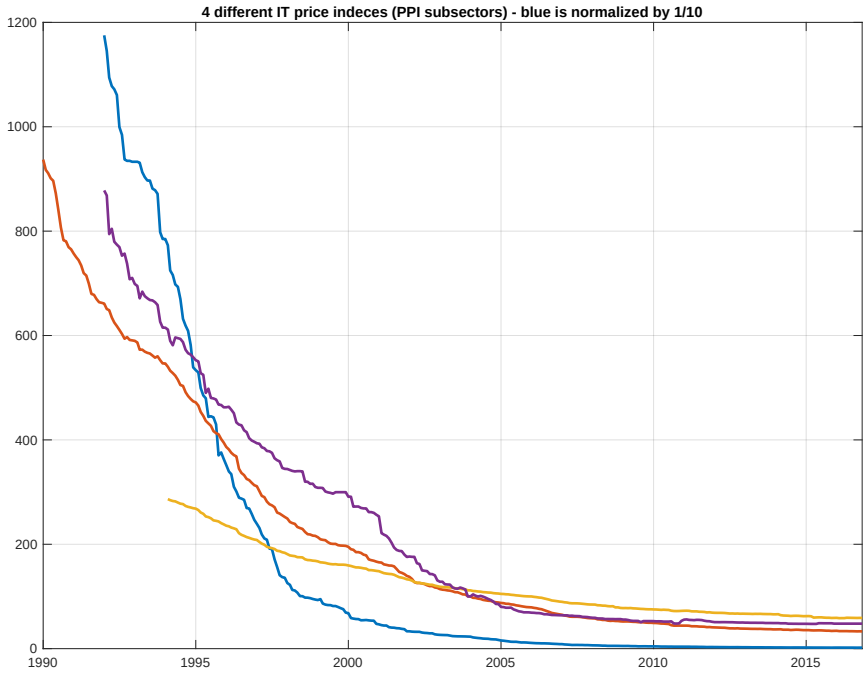

Figure 1: IT price indeces (PPI of various IT subcategories)

1 Where we're right now

We are "polishing" the results of your identification strategy for a while now.

Short recap: Your identification strategy was doing Barsky and Sims-style FEV-max on news s.t. the LR that news has no effect on the relative price of IT in the LR; and then let IT max the remaining FEV of TFP.

What is there to "polish"? → this identification strategy needs the relative price series to be reliable. However, we have several reasons to believe that the relative price series in its current form is not "good enough" (or we're not dealing with it correctly):

1. There is a strong negative trend in IT prices. (See figure 1.)
    - This could be problematic not because it goes the other way than the trends of the other variables (GDP, C etc.) but also because it may be trending *independently* from those series.

2. (Potentially, there is a break in this trend. We did not test for that, but eyeballing and parts of the literature suggest that there is a break starting around 2000. Again looking at Fig. 1, the negative trend in the IT prices becomes strikingly flatter around 2000. We read into the issue of trend and trendbreaks in IT prices and it seems that there is an explanation for the slowdown in the falling of IT prices related to what is technologically feasible.)

3. IT prices seem very acyclical. $\leftrightarrow$ if we remove the trend, the remaining cyclical component is very small.

2 What we've done to try to address this issue

1. Detrend price series using different detrending methods and compare IRFs. So far we've done an HP-detrended version and are comparing that to the levels. See Figs. 2-5.

2. Since we notice that the IRFs' CI are mirrored, we came to the following thought:

   The FEV-max is just maximizing "squared IRFs", so the solution to that maximization is not unique: both γ and $-\gamma$ solve this problem - with the difference in interpretation that γ corresponds to a positive shock, $-\gamma$ to a negative one. Since the bootstrap is just the same strategy on a large number of simulated datasets, some bootstrapped responses are for γ, others for $-\gamma$. $\rightarrow$ We just need a good way to discard the IRFs that correspond to $-\gamma$.

Comparison of IRFs and of FEV-explained

The share of FEV of TFP explained are, rounded (news and IT, news, IT):

Version in levels: (0.7, 0.1, 0.6)

HP-detrended version: (0.62, 0.08, 0.54)

Figure 2: News shock, level rel. prices

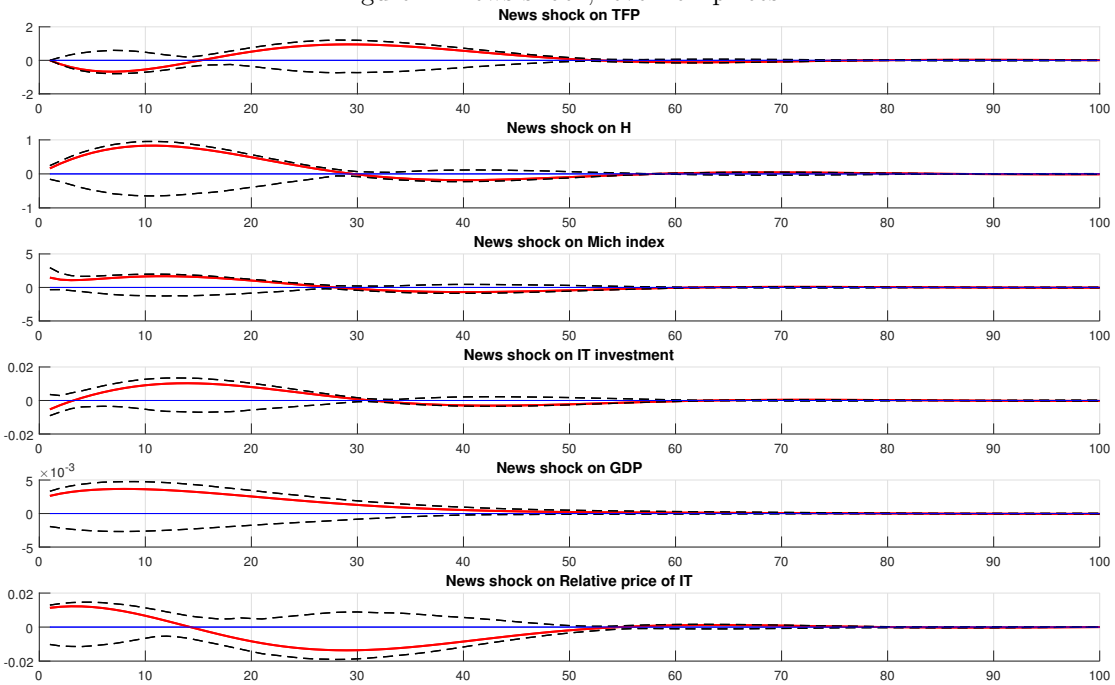

Figure 3: IT shock, level rel. prices

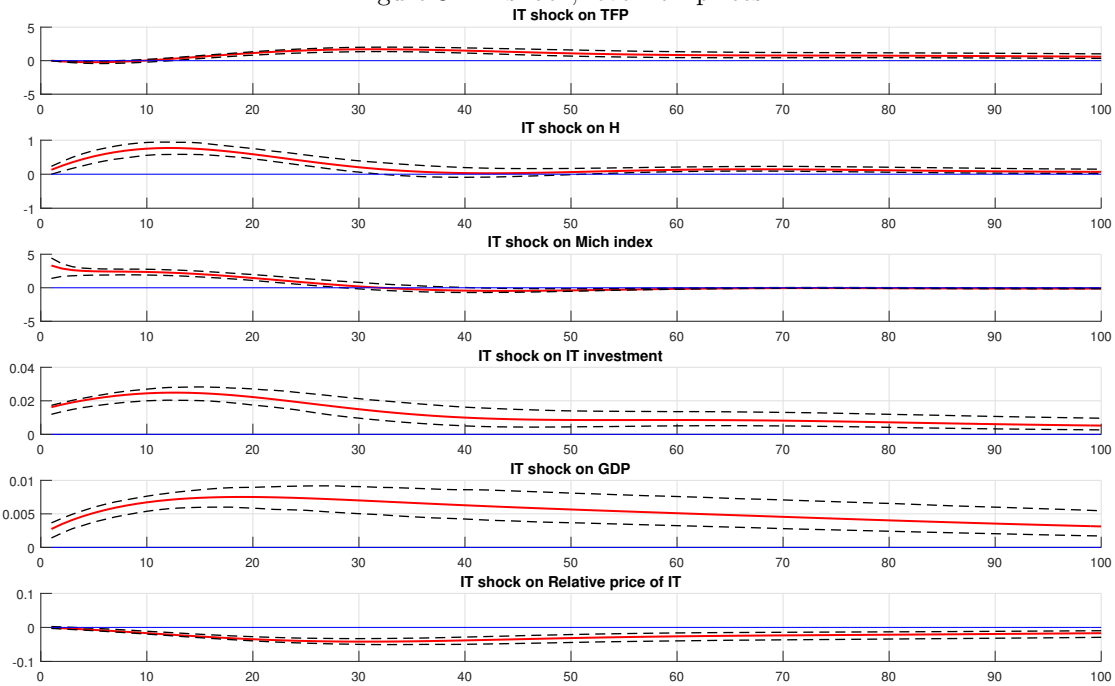

Figure 4: News shock, HP-filtered rel. prices

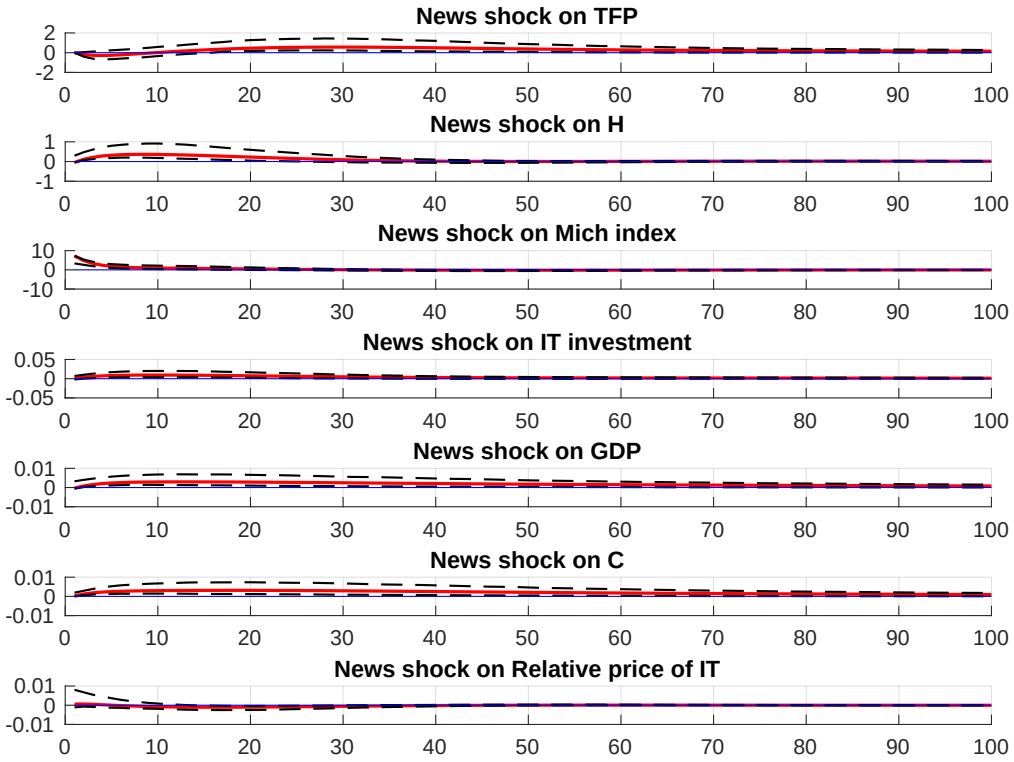

Figure 5: IT shock, HP-filtered rel. prices