Discussion of Results

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Shares of FEV of TFP

Differenced relative prices (inflation of IT price index over CPI-inflation)
IT: 51.60%
News: 19.63%

Log level of capital prices (differencing here seems to overdo it)
IT: 28.47%
News: 28.31%

IRFs - ratio of inflations (i.e relative prices)

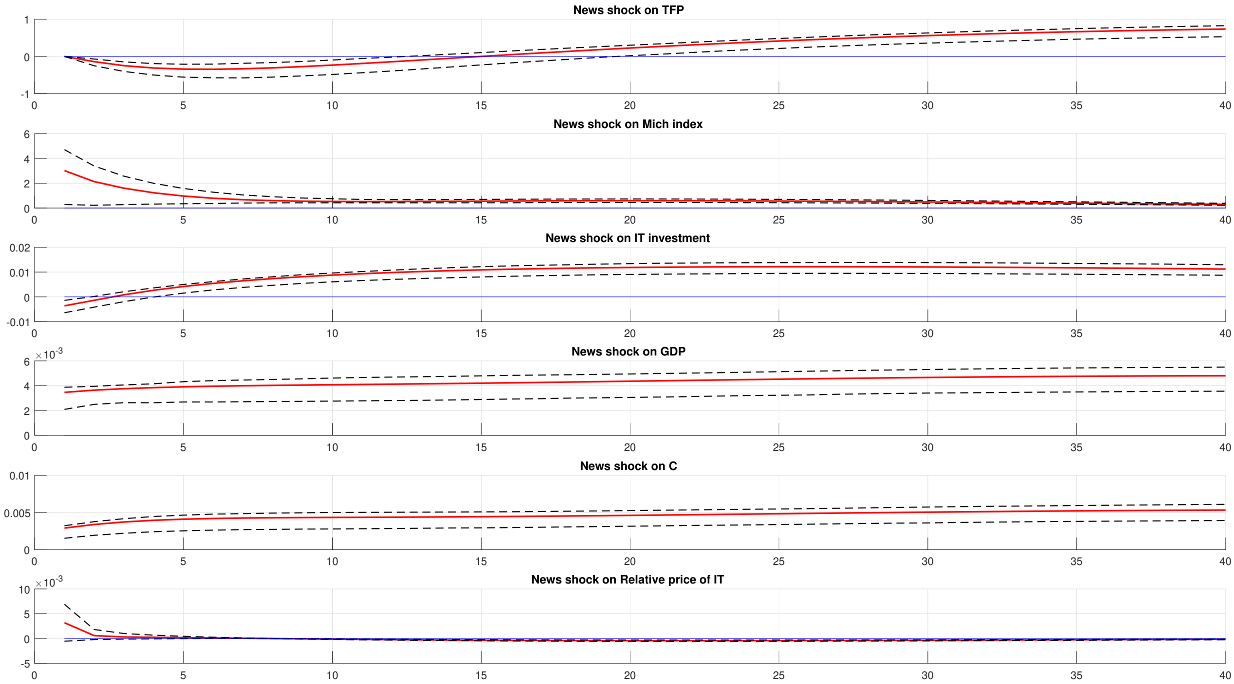

Figure 1: News shock - ratio of inflations

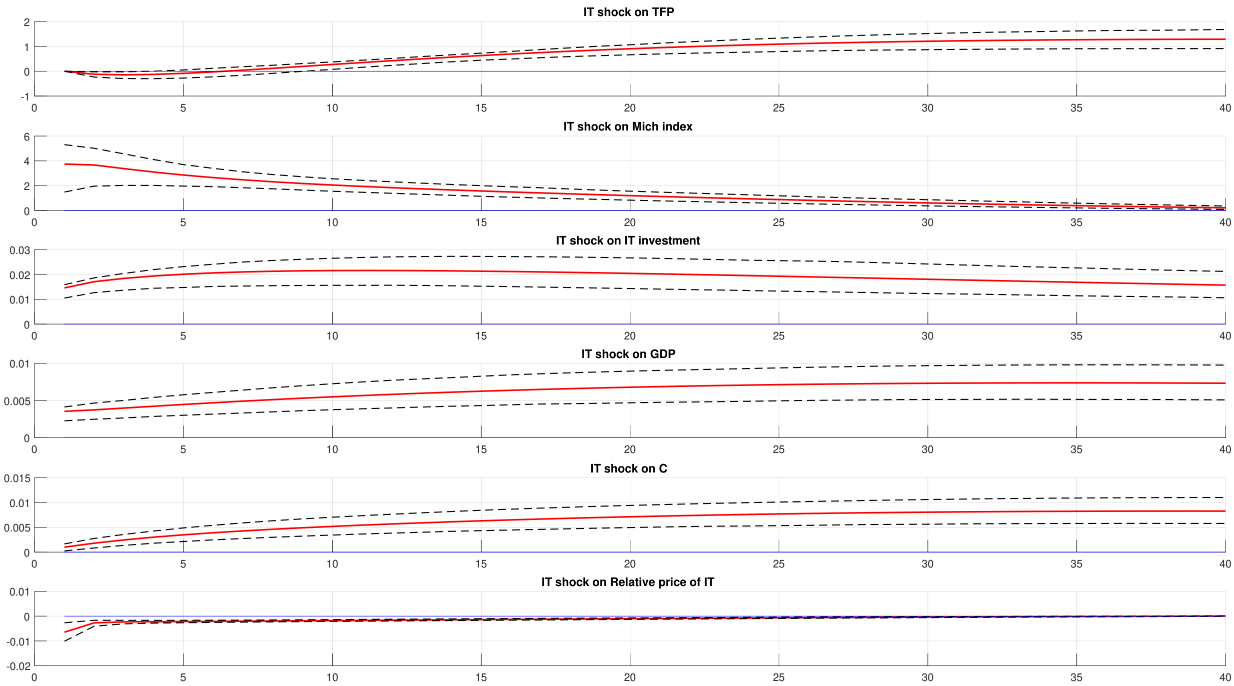

Figure 2: IT shock - ratio of inflations

IRFs - log level of capital prices

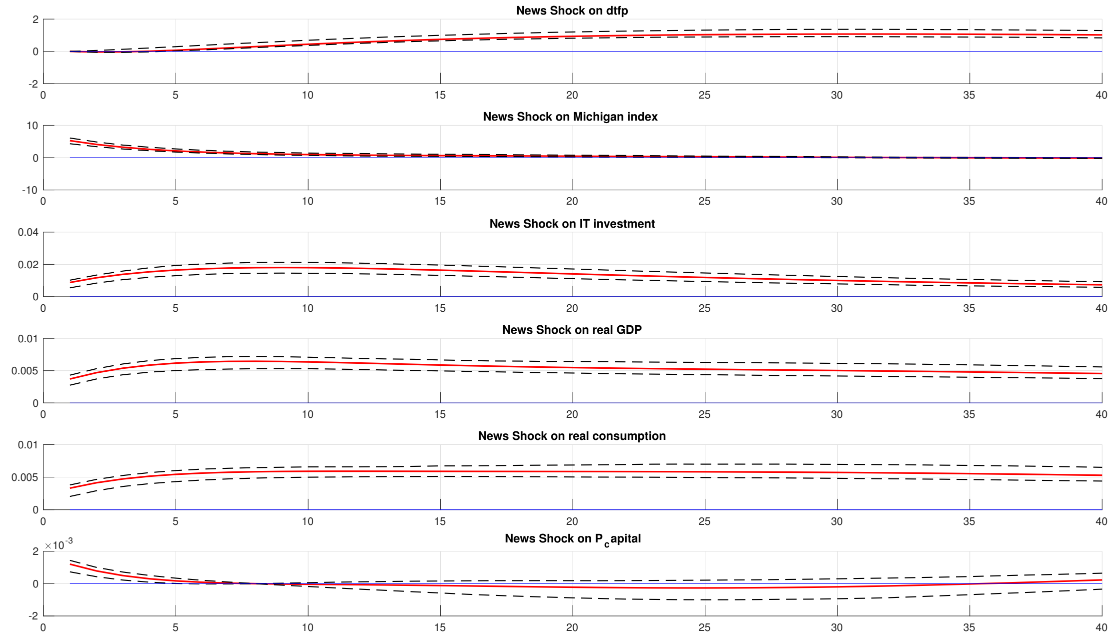

Figure 3: News shock - log level of capital prices

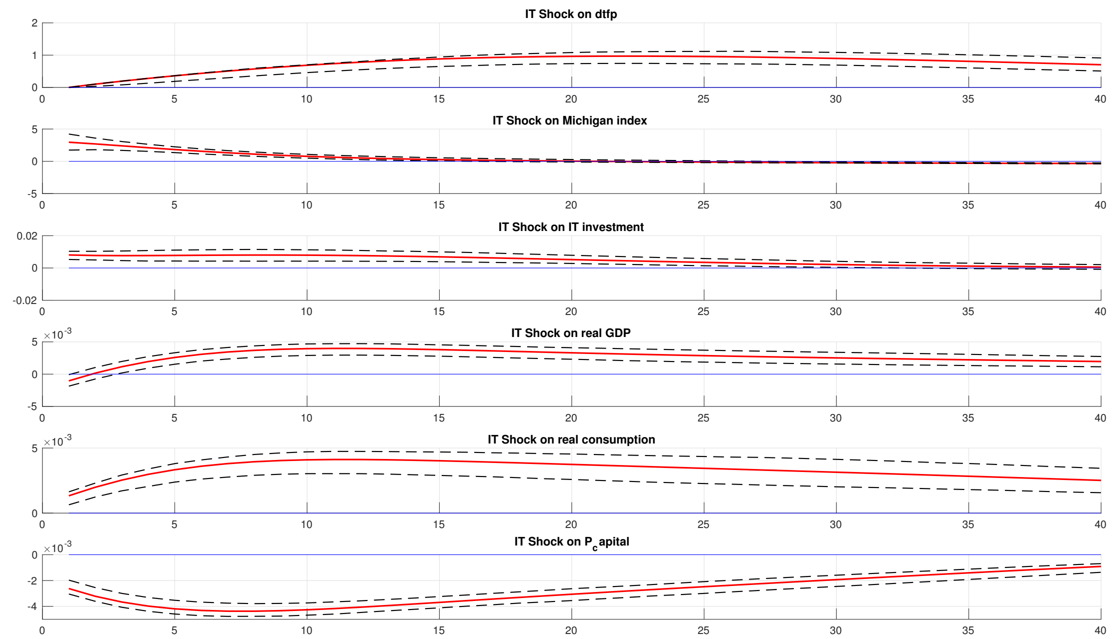

Figure 4: IT shock - log level of capital prices

Recap and interpretation

- One big motivation for the entire research project is the puzzling decrease in TFP growth, which - as we have also documented - started *before* the Great Recession.
- The sudden decrease in IT investment after the burst of the IT bubble around 2000-2002 coincides with this slowdown in TFP growth, which led us to investigate the effect of IT investment on TFP.
- We run a structural VAR to estimate the effect of an IT productivity shock on TFP and other main macroeconomic variables.
- This identification poses a challenge because we need to confront the view that there is an endogenous channel in the evolution of TFP with the widely accepted view that TFP is driven by news. Since both are similar in the way they affect TFP only with lags, we need an additional restriction to disentangle the two.
- The additional restriction we use is that news shocks should have no effect on relative IT prices at a certain (long) horizon, because they behave like demand shocks.

  What the results seem to suggest:

1) News and IT shocks together explain more of the FEV of TFP than news does alone in Barsky & Sims (around 70% vs approximately 40% in Barsky & Sims). (Compare with capital prices specification too.)
2) News still explains a considerable fraction, but IT shocks explain more. (Compare with capital prices specification too.)

   → we read this as evidence that both news and the endogenous channel via IT investment plays an important role in explaining TFP over the business cycle and the medium run.

Comments? Thoughts? Does this make sense to you? Is it presentable in its current form?