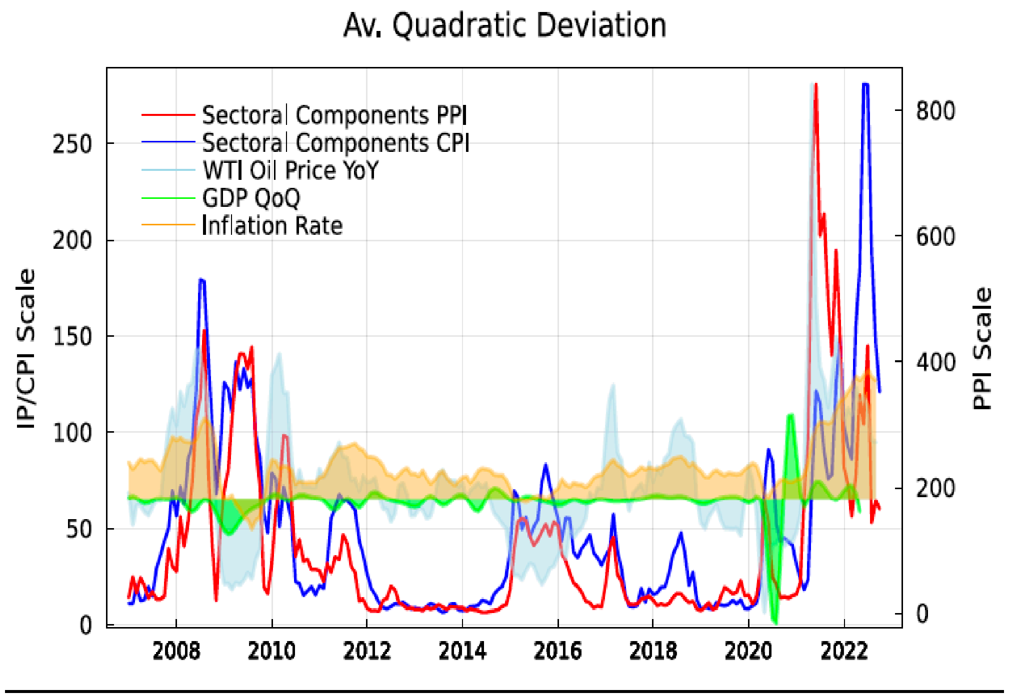
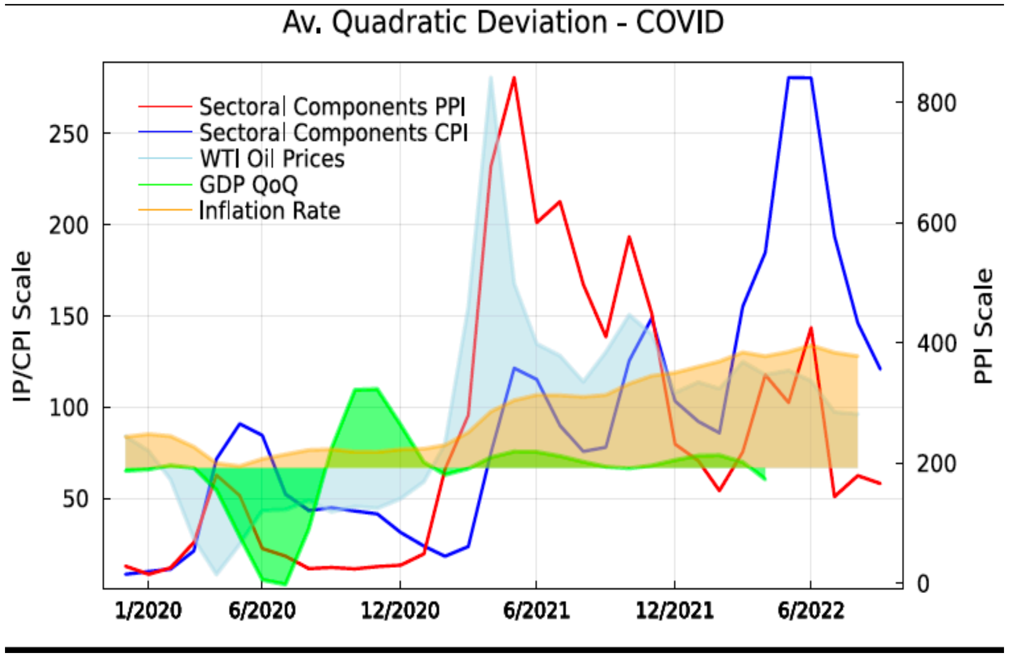
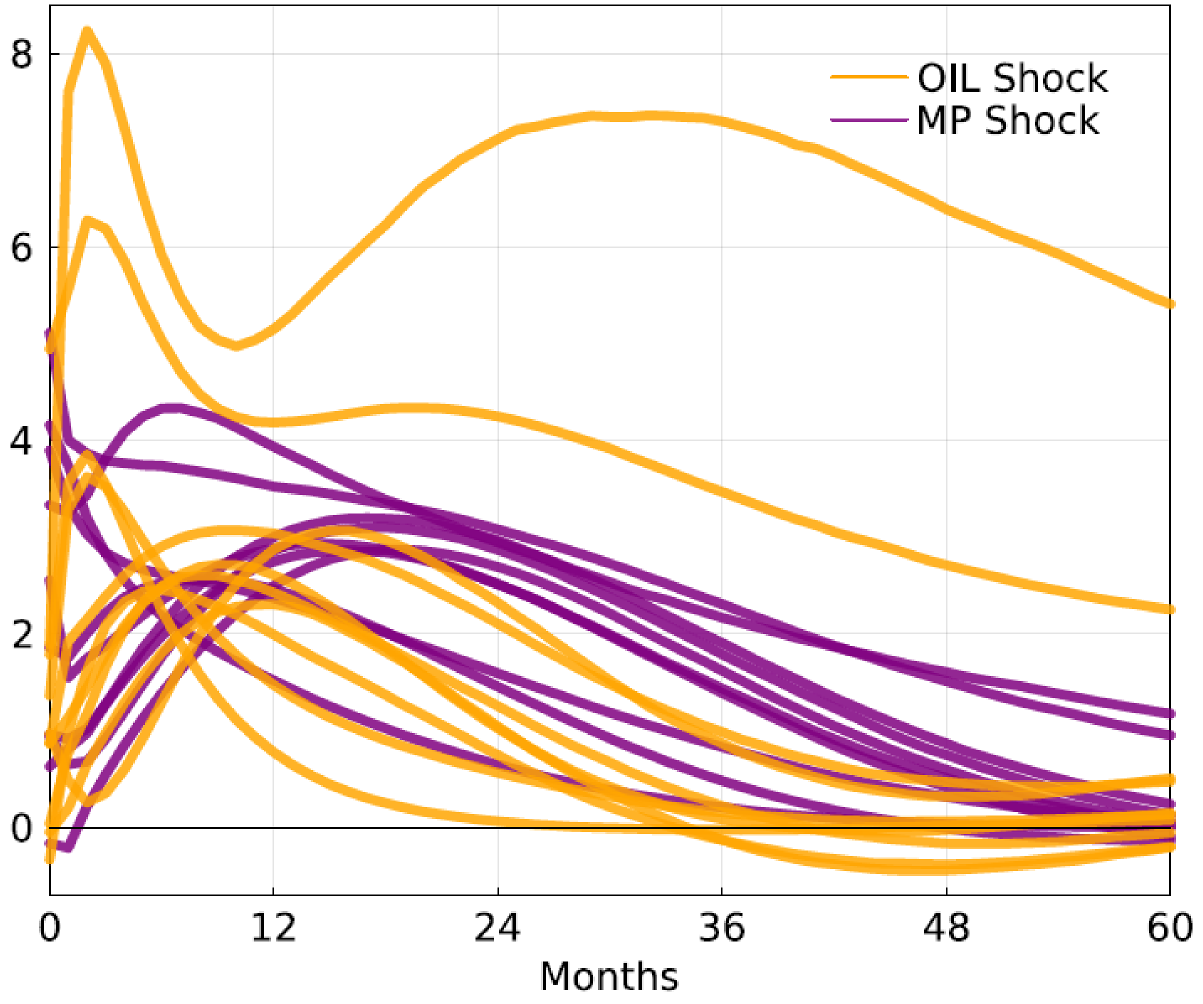
Covid and post covid
Large changes in relative prices – The US





Historical analysis - VAR based
Sectoral price response to oil shocks more heterogeneous than response to monetary shock

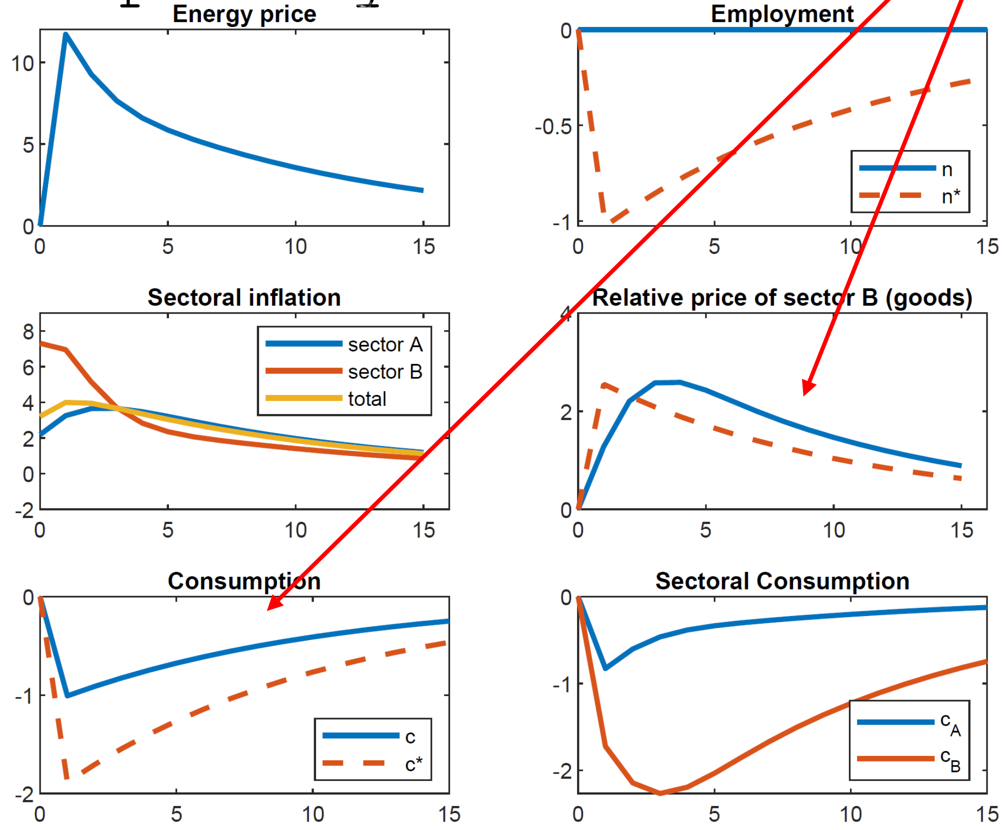


Loose vs tight monetary policy in response to an oil shock

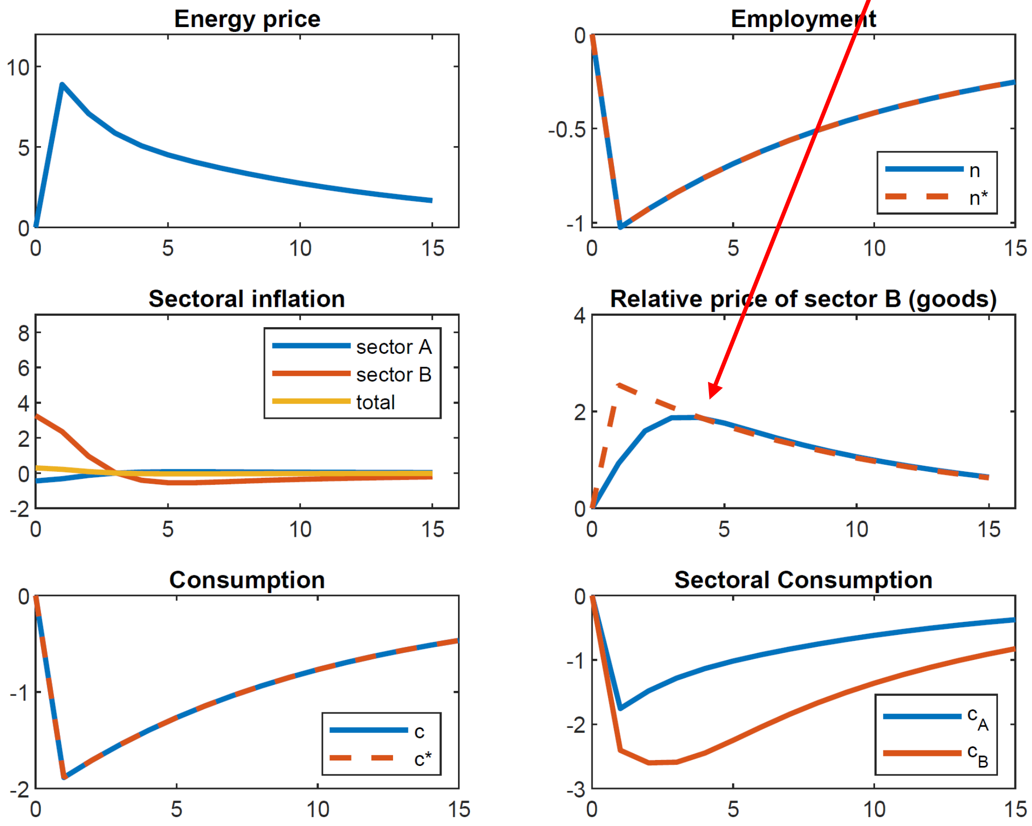
Flex vs Efficient path

Zero inflation but distortion in allocat

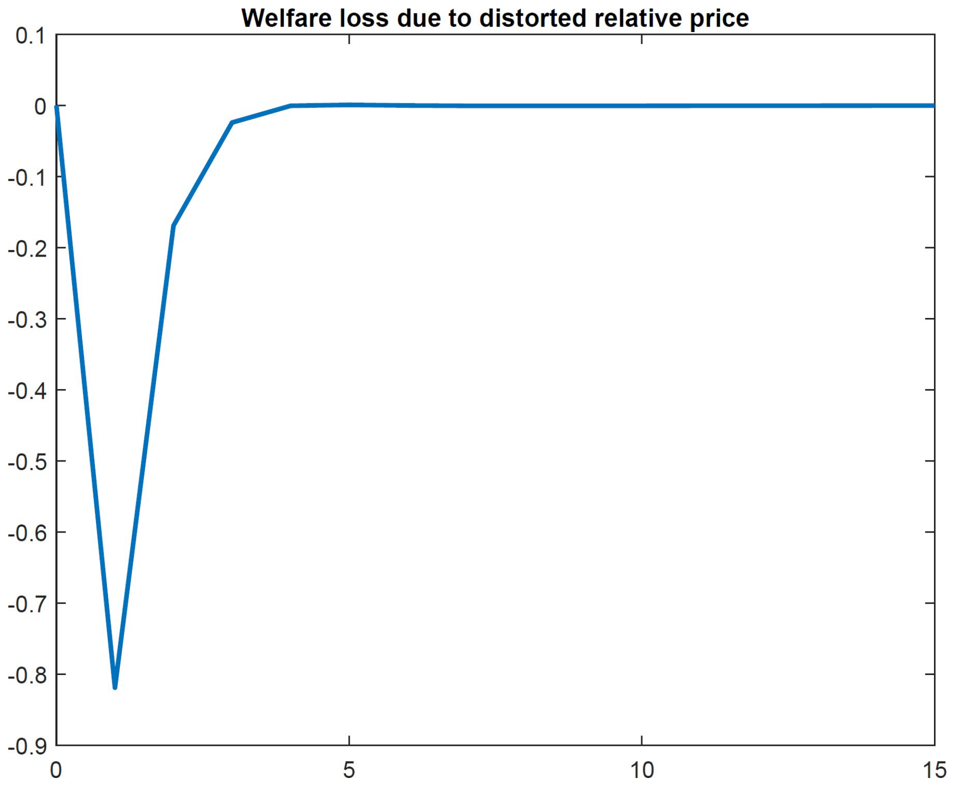
Loose monetary policy



Tight monetary policy



WELFARE LOSS DUE TO RELATIVE PRICES



Non-linear Phillips curve and negative supply shift

When supply shifts to the left, an increase in demand pushes the economy to the steep part of the supply curve

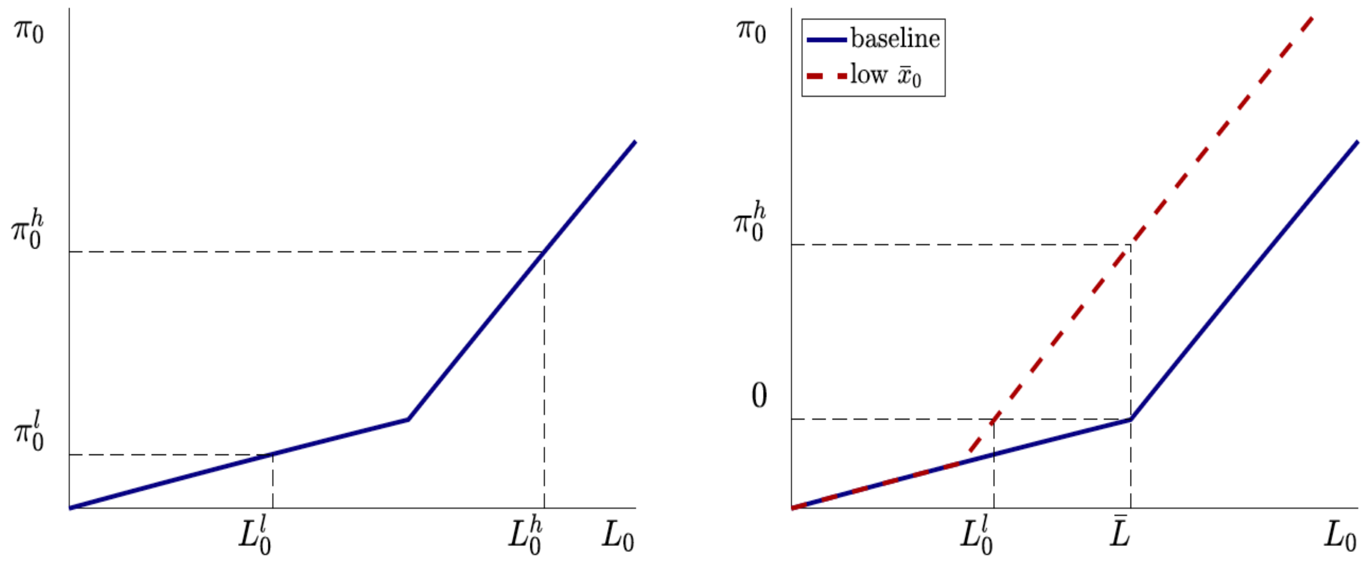


Figure 1: Phillips curve.

Effect of temporary dirty energy shortage – costly tradeoffs

- Under full-employment policy we have a recession because the tightness in access to dirty goods drives down productivity. Sharp rise in inflation

- Under inflation target, sharp decline in employment and deep recession. Also dampens relative price change needed for reallocation

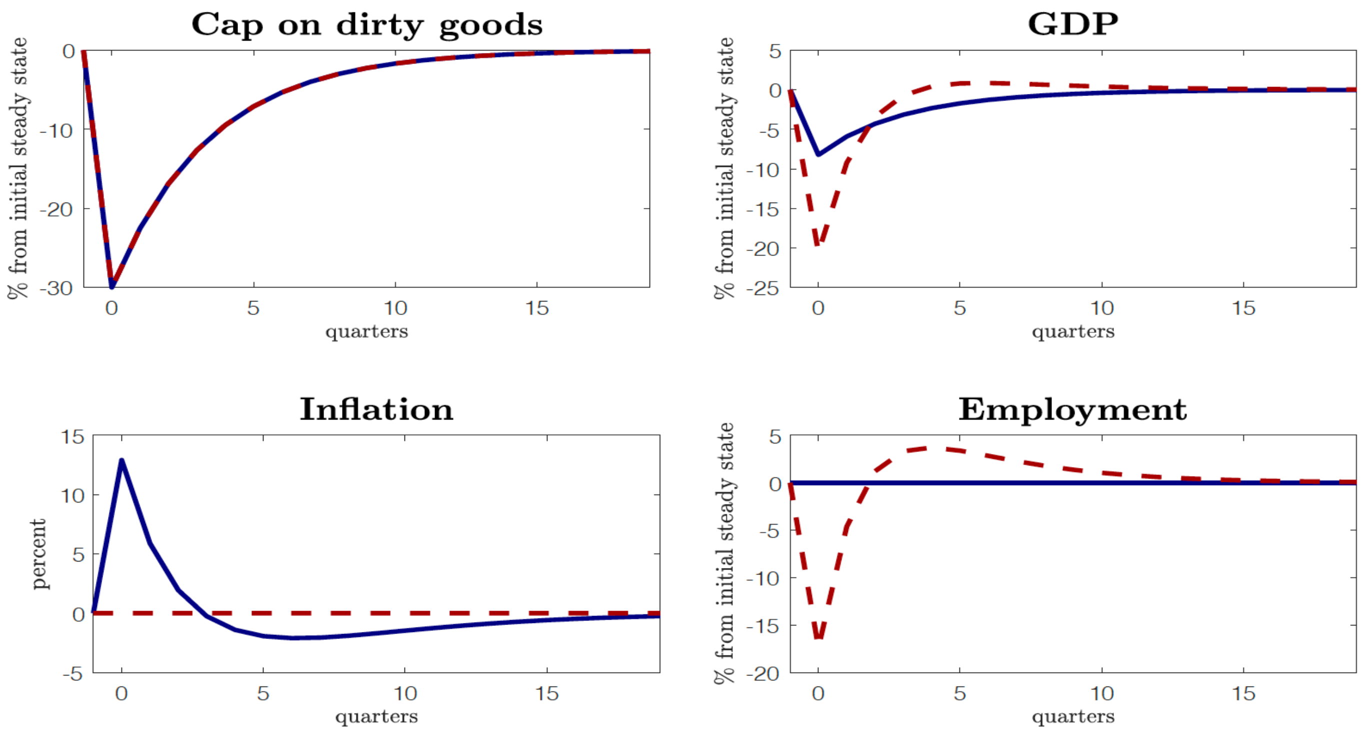


Figure 2: Temporary dirty-energy shortages.

Monetary contraction with and without endogenous growth

- Monetary tightening dampens inflation but the endogenous responses of investment and productivity lowers productivity growth creating inflationary pressures.
- In the medium run, the economy with endogenous investment features higher inflation, and lower output, compared to the fixed-investment economy.
- Endogenous investment in innovation creates an intertemporal inflation trade-off for the central bank.

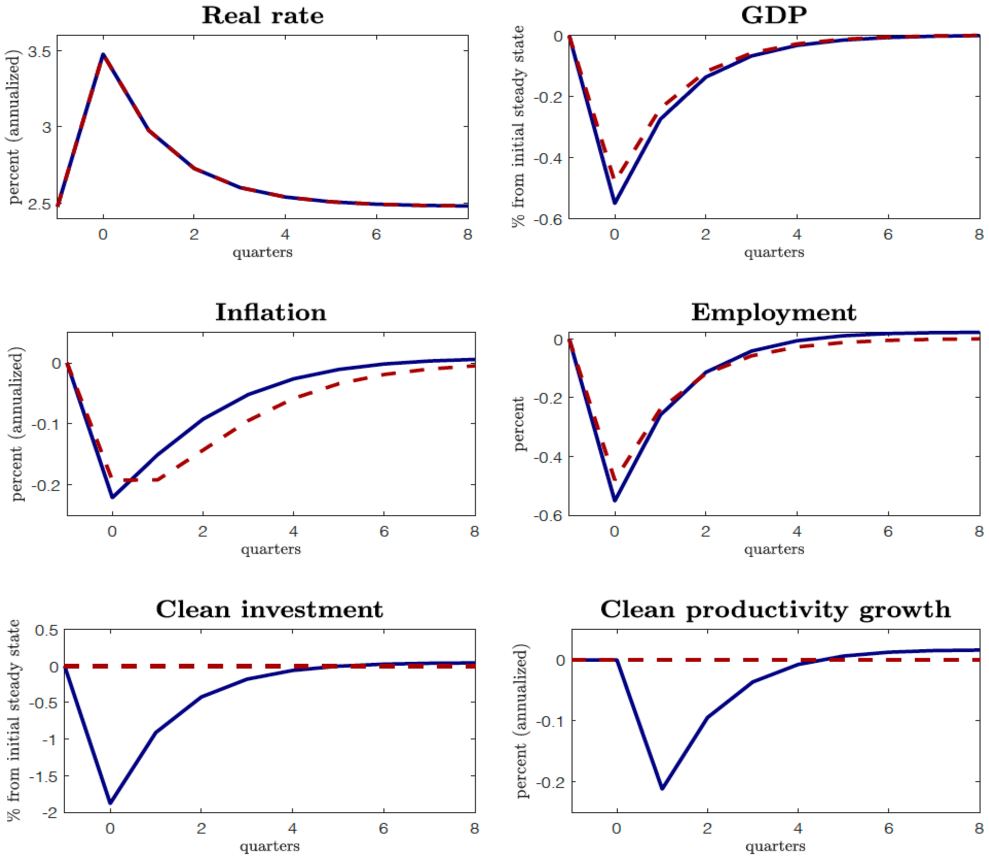


Figure 4: Impact of a monetary contraction. Notes: solid lines refer to the baseline model with endogenous investment, dashed lines refer to a counterfactual economy in which investment is fixed to its steady state value.