# Inflation Outlook

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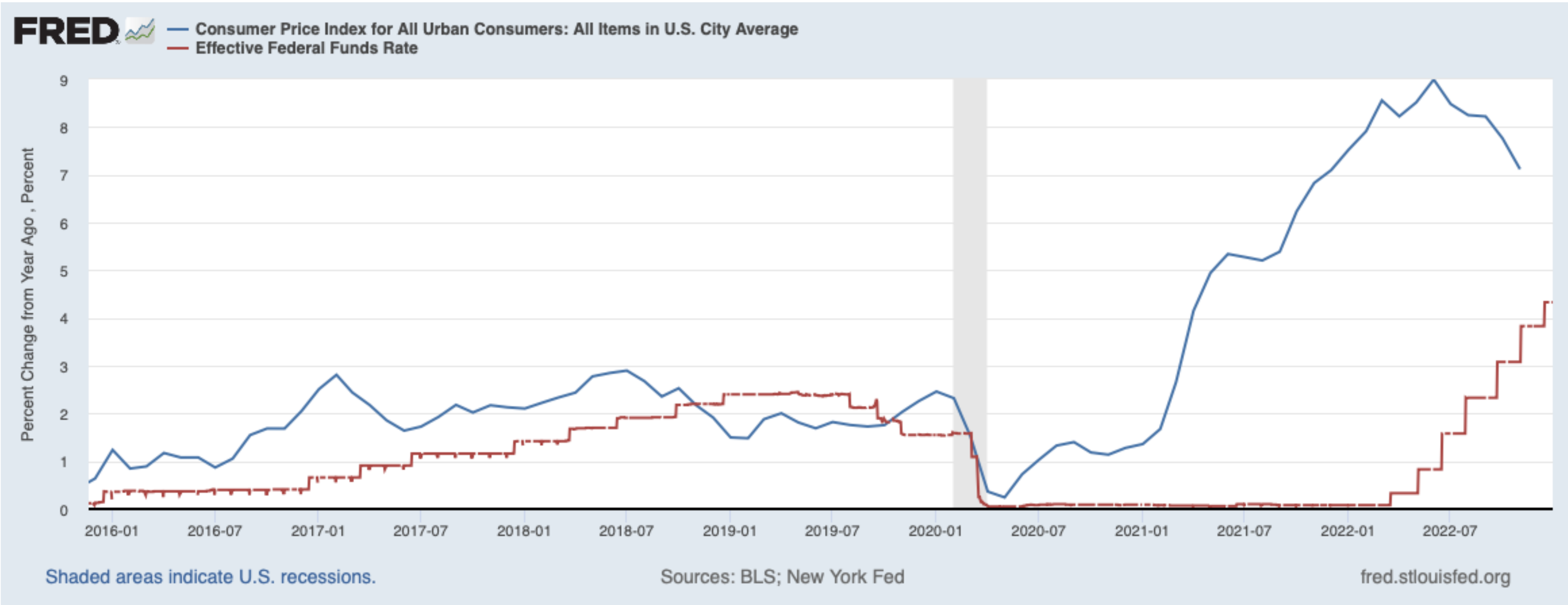
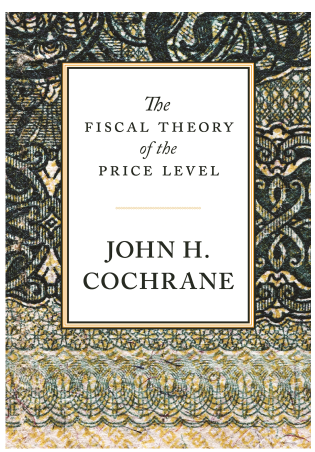
# Where we are




# Approach

THE UNIVERSITY OF CHICAGO + 

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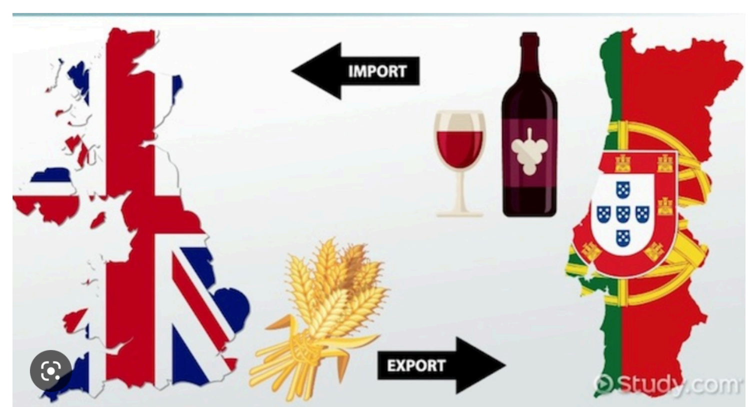
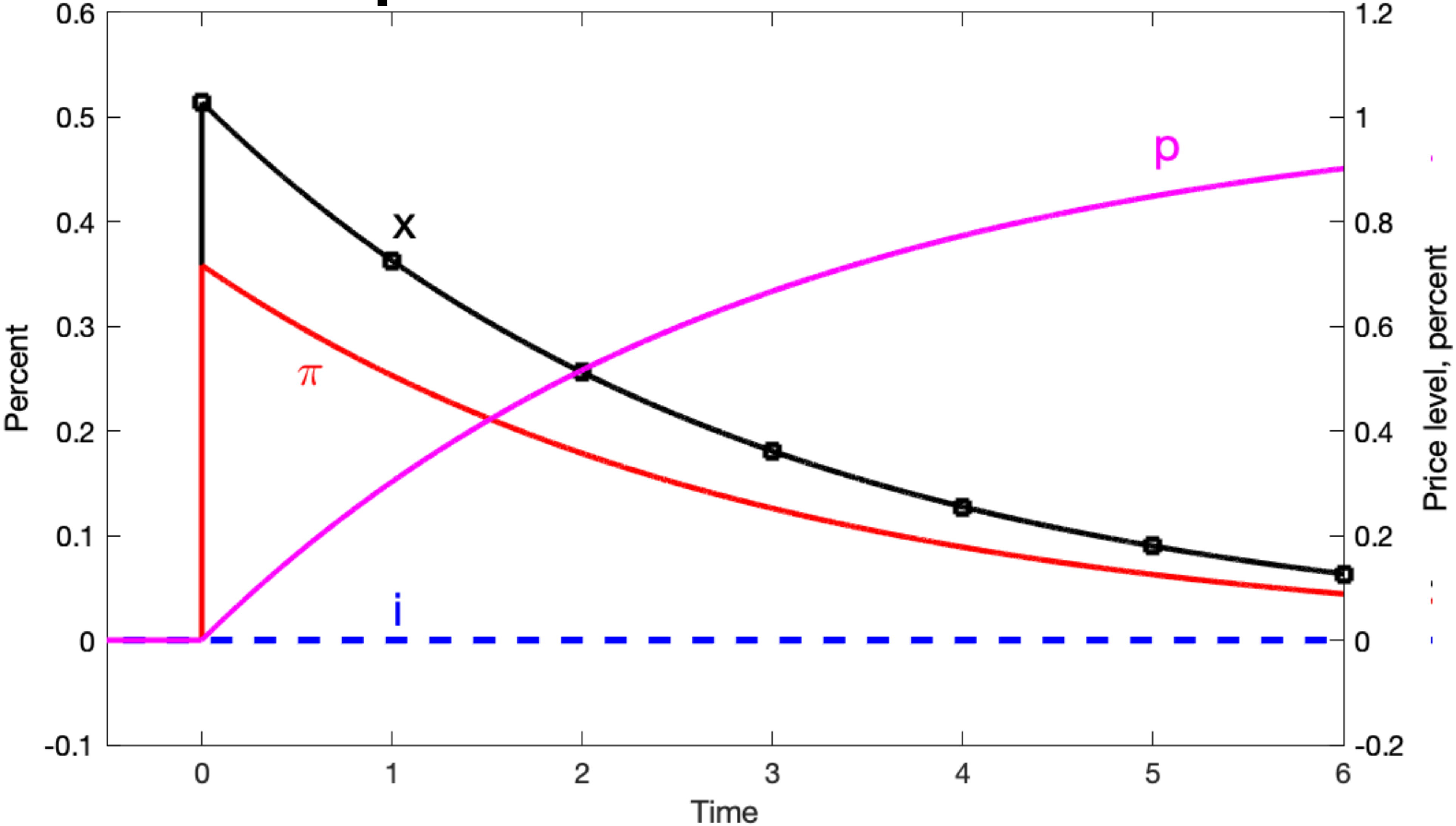
+ 

# Response to 1% Fiscal Shock

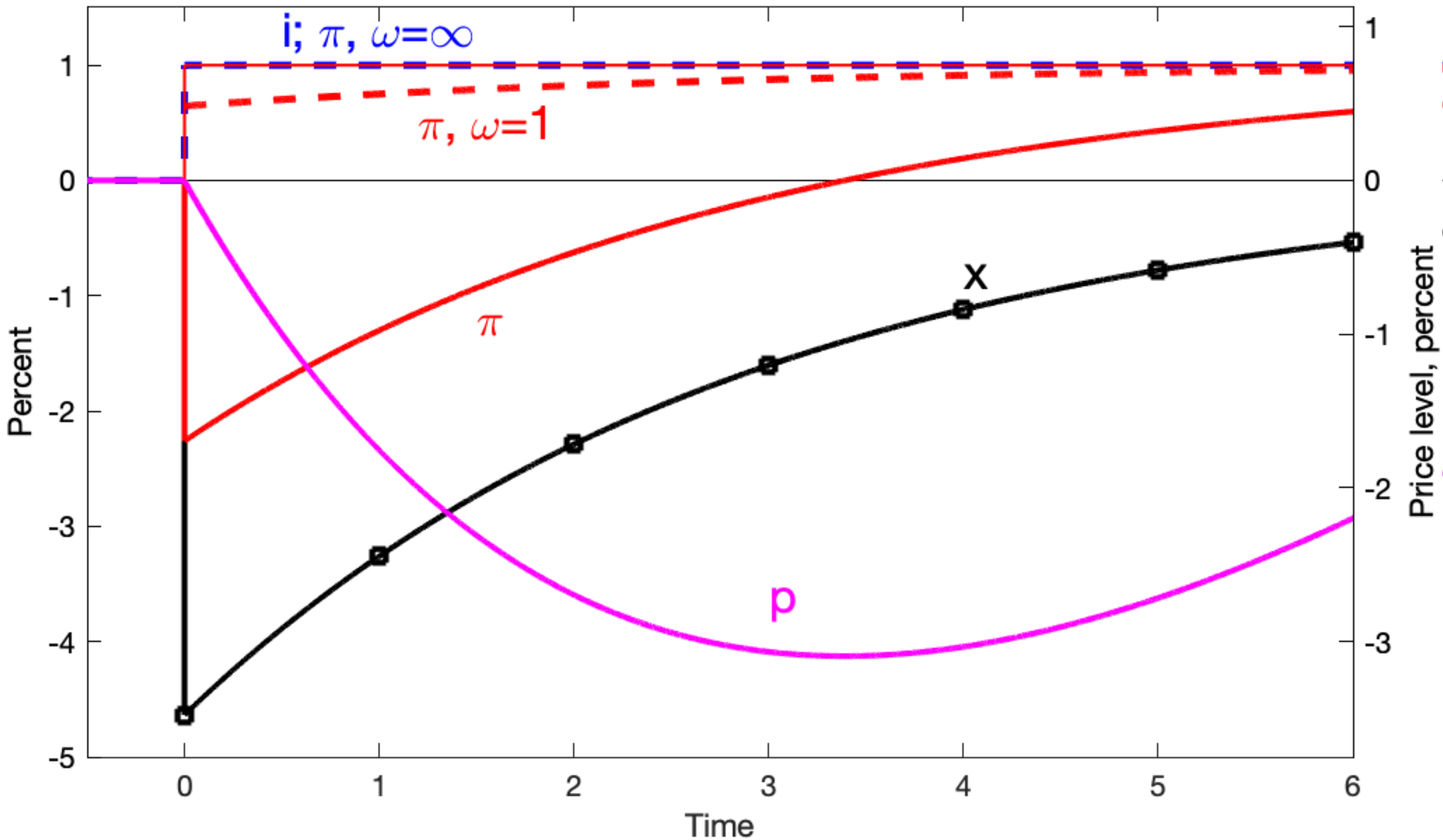



Model:

$$E_t dx_t = \sigma(i_t - \pi_t)dt$$
$$E_t d\pi_t = (\rho\pi_t - \kappa x_t)dt$$
$$dv_t = (rv_t + i_t - \pi_t - \tilde{s}_t)dt$$

Shock to $\tilde{s}_t$ with no change in interest rate $i_t$.

# Response to 1% Interest Rate Rise




$$E_t dx_t = \sigma(i_t - \pi_t)dt$$

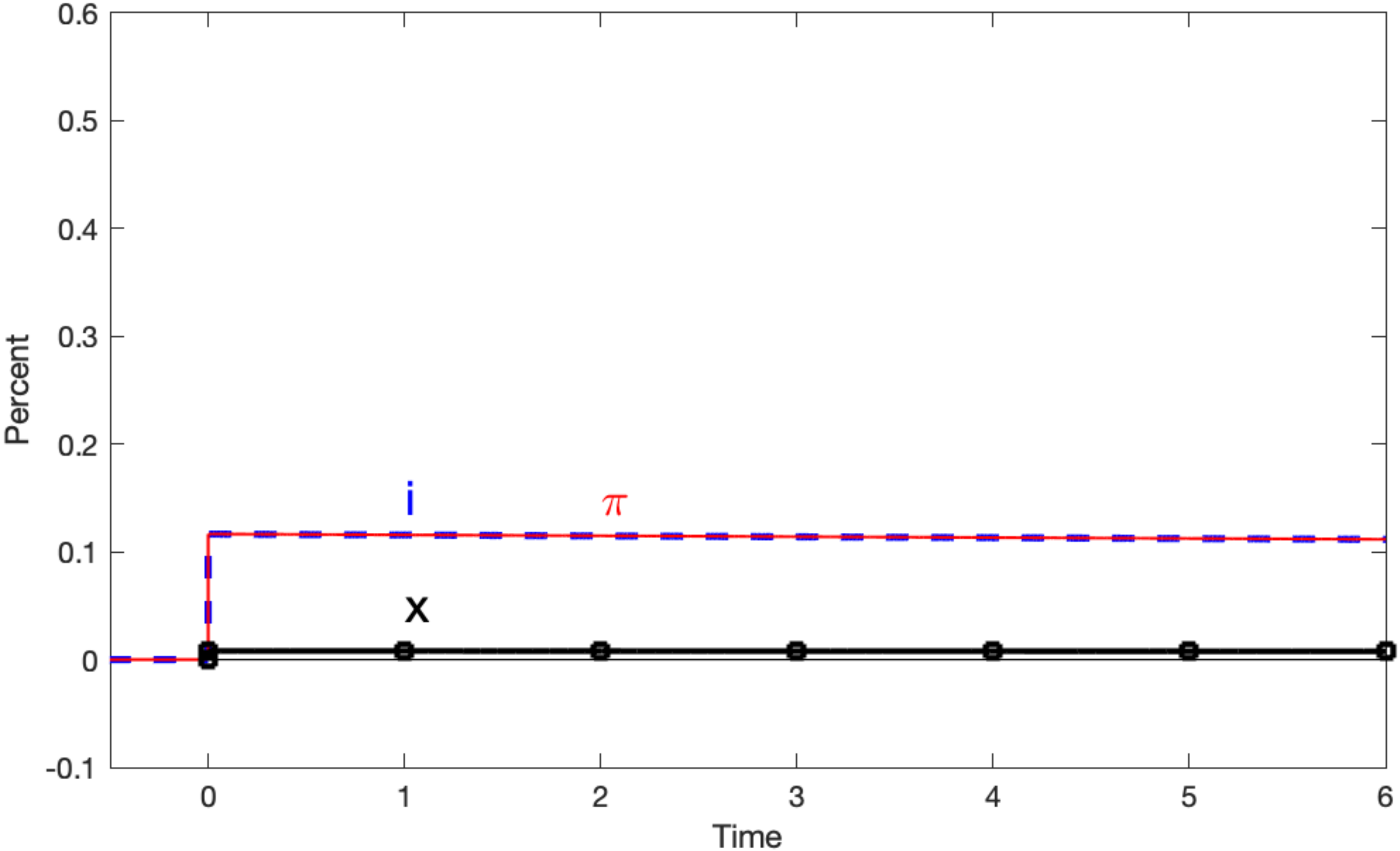
$$E_t d\pi_t = (\rho\pi_t - \kappa x_t)dt$$

Model: $$dv_t = (rv_t + i_t - \pi_t - \tilde{s}_t)dt + (dq_t - E_t dq_t)$$ Shock to $i_t$ with no change in $\tilde{s}_t$

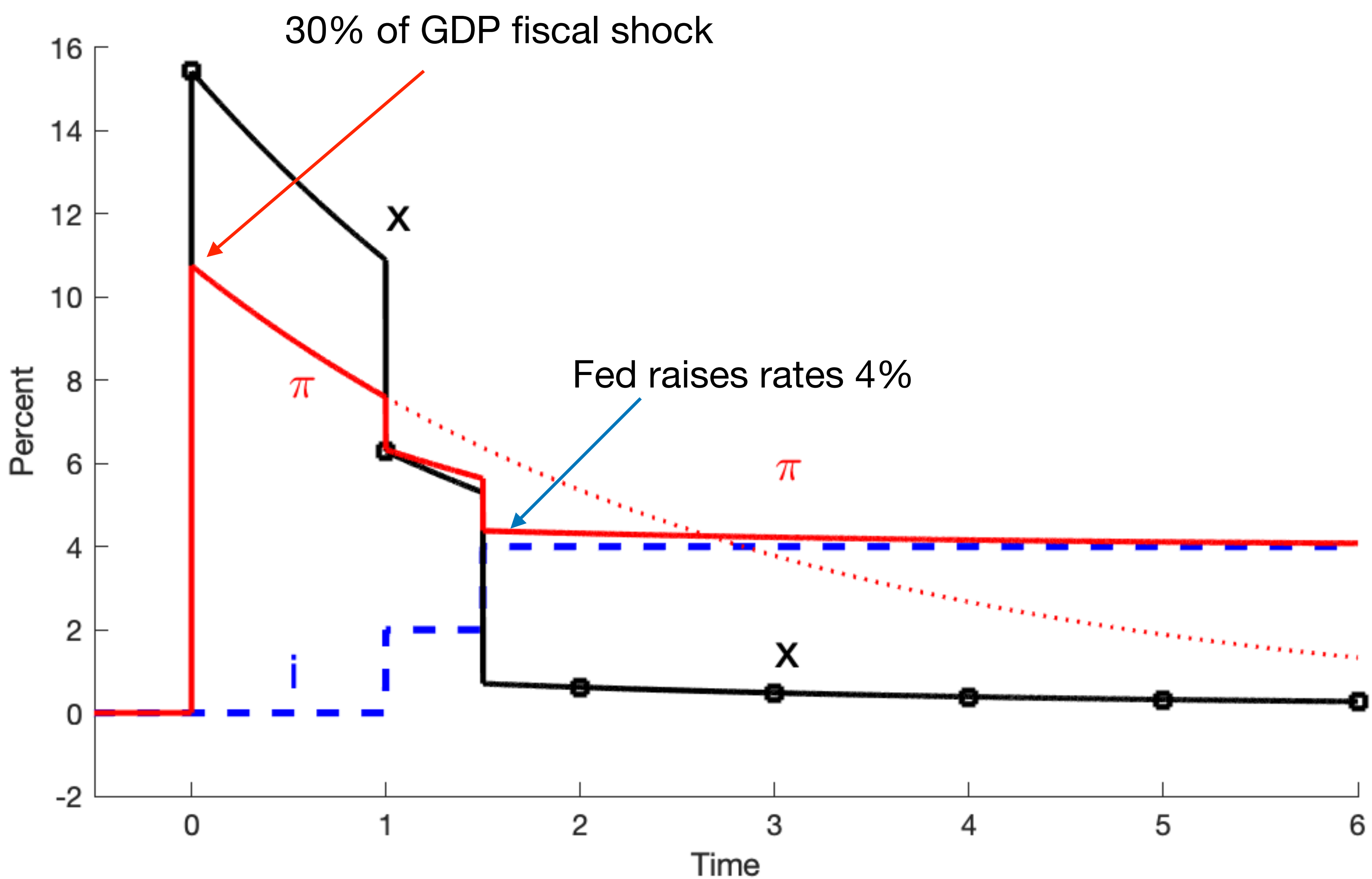
$$E_t dq_t = [(r+\omega)q_t + i_t]dt$$

# 1% Fiscal Shock + Taylor Rule Fed Response

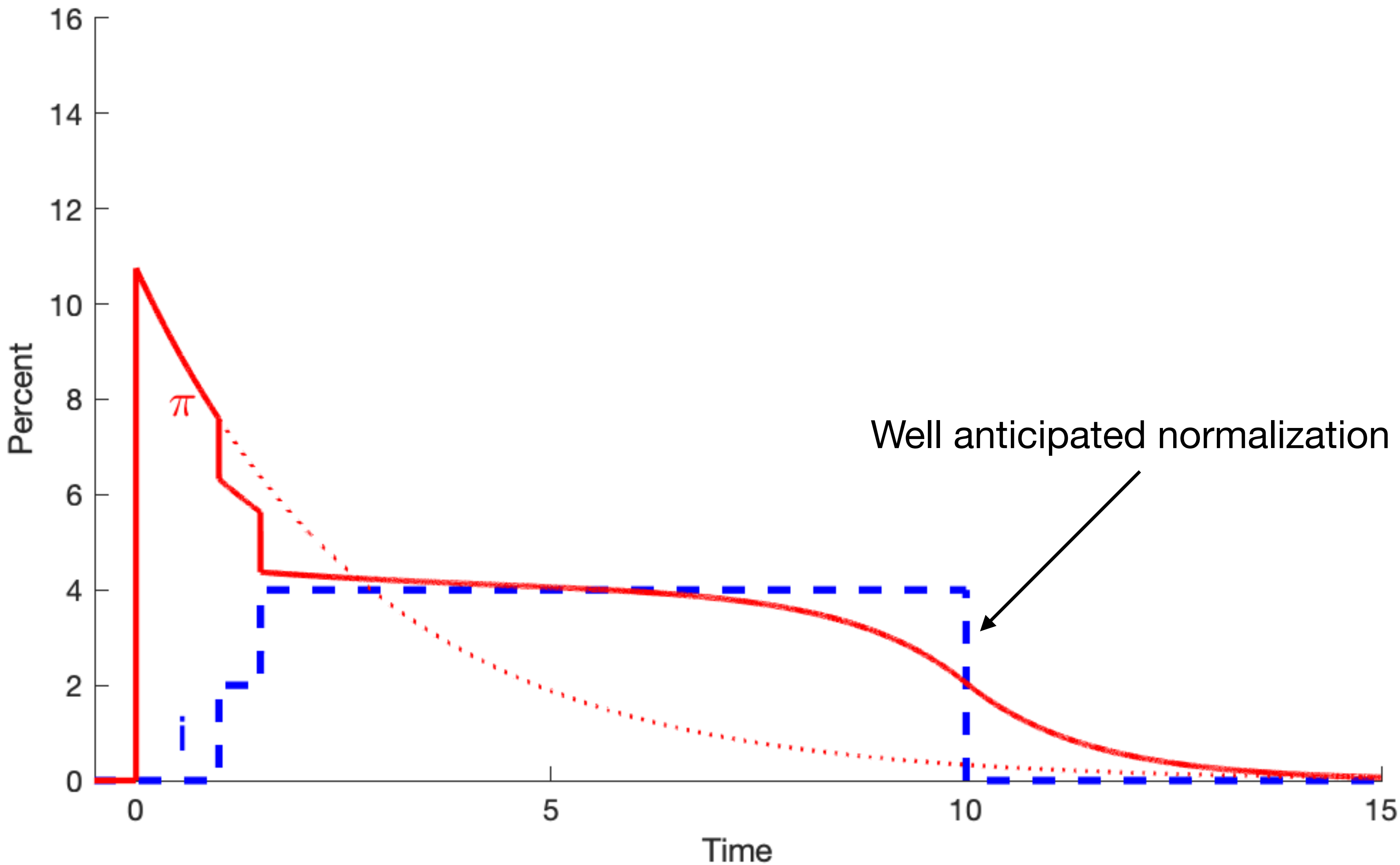
$$i_t = \theta\pi_t;\ \theta = 1$$



# Fed responds late to a fiscal shock



# We need not have inflation forever



# Worries

- *Can* the Fed (alone) raise rates, lower inflation?
  1. The *point* is to cause a bit of recession.

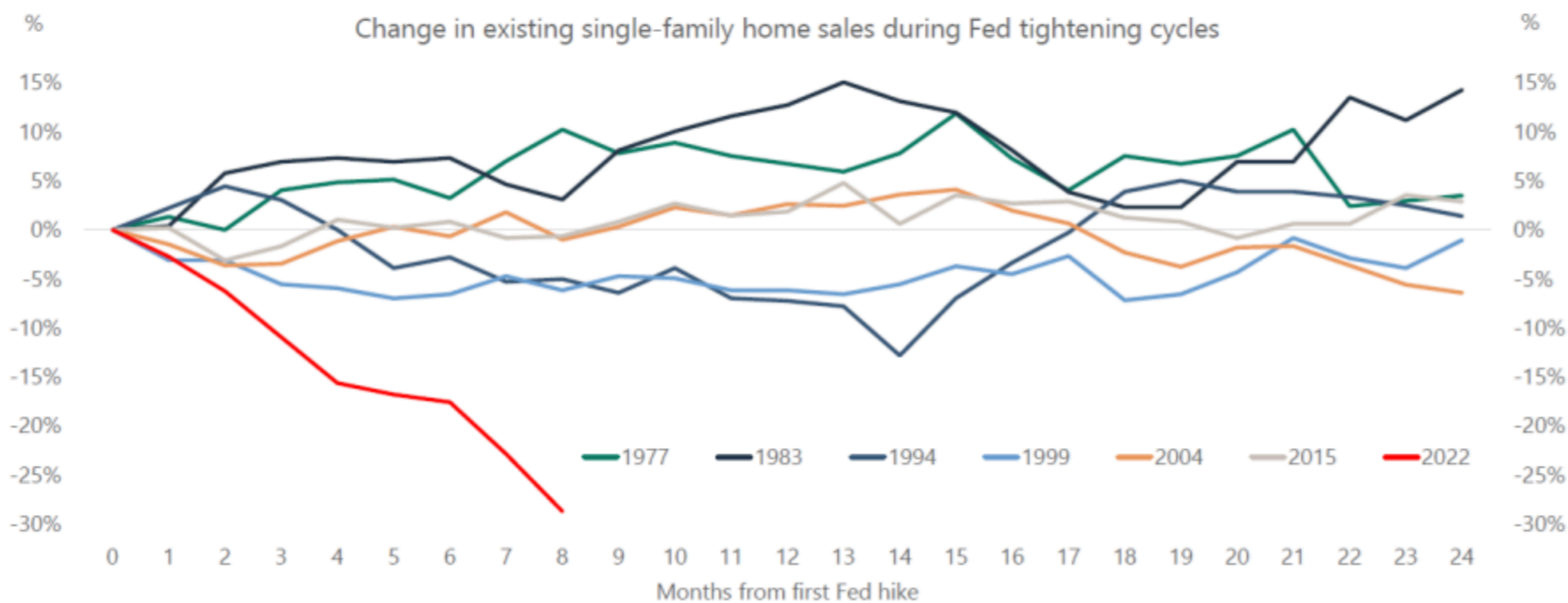
     $$x_t = E_t x_{t+1} - \sigma(i_t - E_t \pi_{t+1})$$

     $$\pi_t = \beta E_t \pi_{t+1} + \kappa x_t$$

     Raise $i$, lower $x$, lower $\pi$.
  2. Recession politics?
  3. All AD is not the same — interest-sensitive hit more.
  4. Fiscal interactions:
     A. Higher interest costs. $25T x 1% = $250b
     B. Fed balance sheet losses. $9T!
     C. Recession stimulus and bailout. Another 30% GDP?
     D. Unreformed current and long-term deficits.
- The next shock?

## All AD is not the same: shift away from interest-sensitive components

Fastest Housing Slowdown on Record




Source: NAR, Haver Analytics, Apollo Chief Economist