Discussion of

The Demise of the Treaty of Detroit and (Dis)inflation Dynamics

by Cairó and Sim

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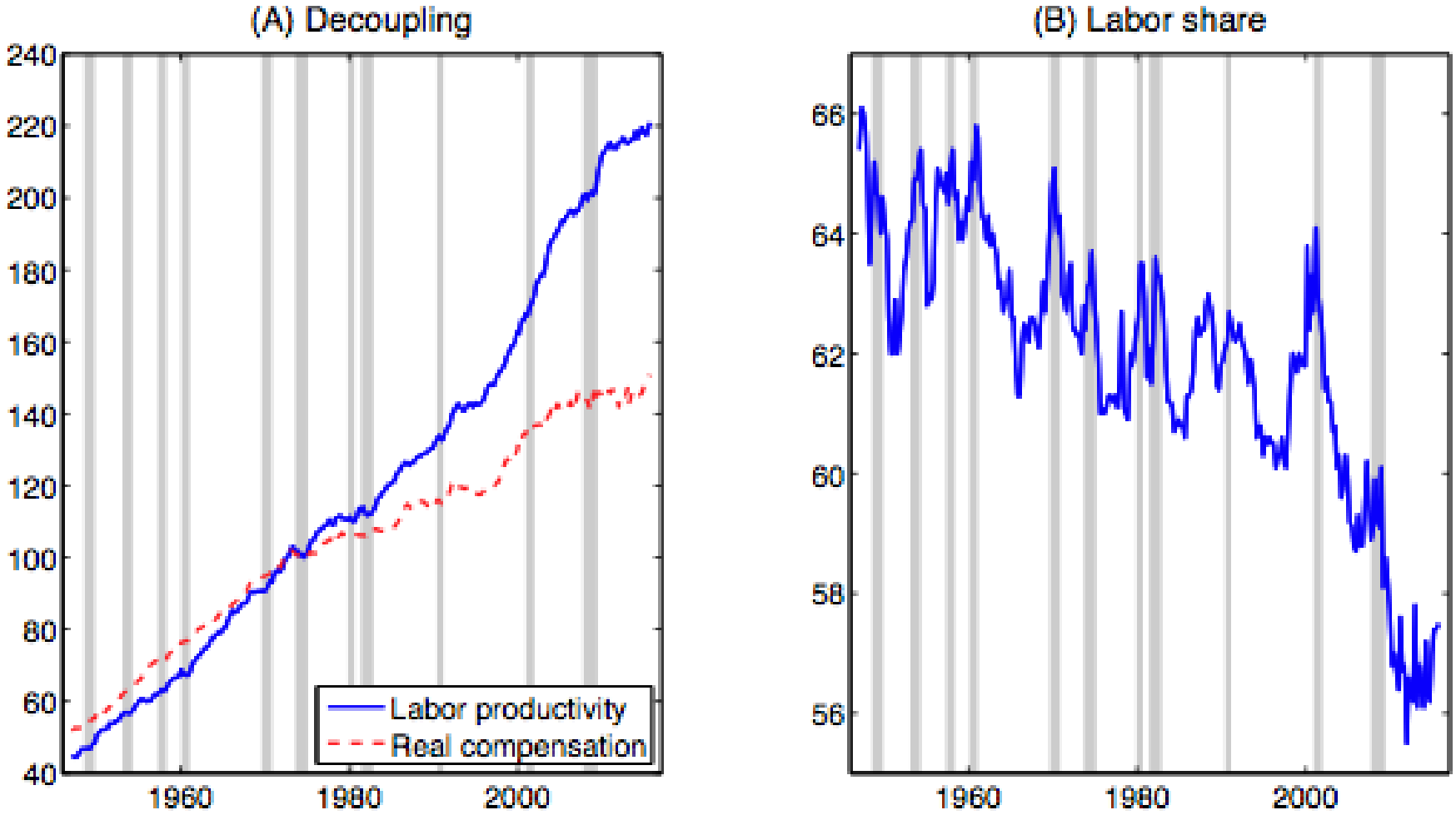
Figure 1: Productivity, Real Compensation and Labor Share



Note: Both panels plot quarterly data for the business sector from 1947:Q1 to 2015:Q3. In Panel A we plot indexes, with base year 2009. Shaded areas indicate NBER recessions.

motivation

$$\pi_t = \beta \mathbb{E}_t \pi_{t+1} + \kappa \mu_t$$

where $\mu_t = w_t - (y_t - n_t)$ is the marginal cost

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$$\pi_t = \kappa \sum_{j=0}^{\infty} \beta^j \mathbb{E}_t \mu_{t+j}$$

inflation is simply the discounted sum of future marginal costs

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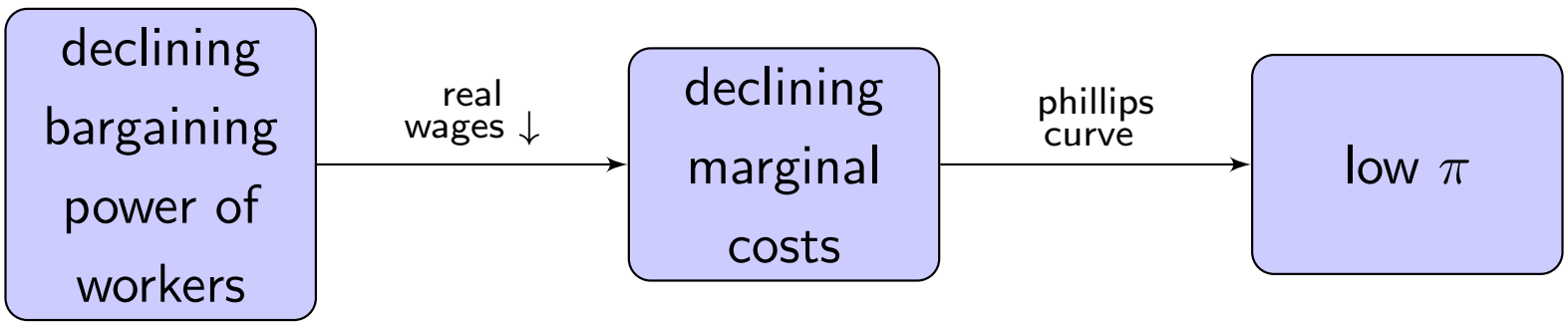
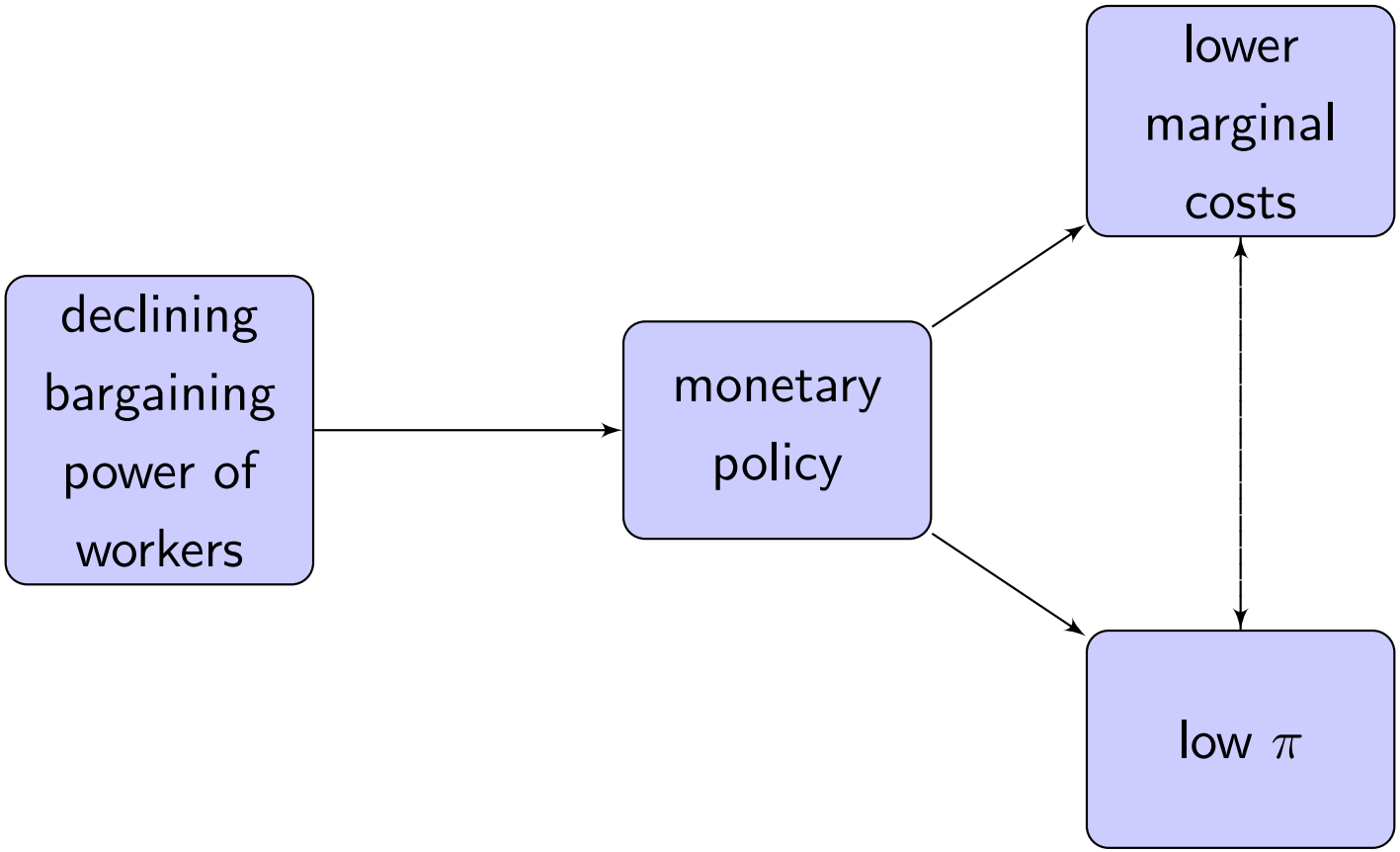

declining bargaining power of workers
real wages ↓
declining marginal costs
phillips curve
low π


declining bargaining power of workers
monetary policy
lower marginal costs
low π

model features

- dsge model with 2 types of agents
  - capitalists
  - workers
- labor search frictions
  - non-walrasian wage determination through nash bargaining
  - time varying bargaining power for workers (and firms)
- other bells and whistles ...

model features

- monetary policy
  - cb doesn't observes tfp and bargaining weights with noise
  - doesn't know actual NAIRU but cares about it
  - imputes NAIRU

- taylor rule

$$i_t = \rho_i i_t + (1-\rho_i)\left[i^Y + \pi_t^Y + \phi_\pi(\pi_t - \pi^*) - \phi_u(u_t - \mathbb{E}_t^{CB} u_t^n)\right]$$

- main exercise: response of economy to fall in temporary bargaining power of workers.
  - what happens following a fall in NAIRU when fed doesn't know that

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simple model

- Preferences:

$$U(C, N) = \ln C_t - \Phi N_t$$

- Production Function:

$$Y_t = A_t N_t$$

- sticky prices

simple 3-equation model

- IS equation:

$$y_t = \mathbb{E}_t y_{t+1} - (i_t - \mathbb{E}_t \pi_{t+1})$$

- phillips curve

$$\pi_t = \beta \mathbb{E}_t \pi_{t+1} + \kappa x_t$$

- labor share $S_t^L = \frac{w_t N_t}{Y_t}$

simple 3-equation model

- IS equation:

$$x_t = \mathbb{E}_t x_{t+1} - (i_t - \mathbb{E}_t \pi_{t+1})$$

  where $x_t = y_t - a_t$ is the output gap.

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$$\hat{s}_t^L = \omega_t + n_t - y_t$$

simple 3-equation model

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- labor share $S_t^L = \frac{w_t N_t}{Y_t}$

$$\hat{s}_t^L = x_t$$

simple exercise

- Change in potential output
  - $\forall t \in (-\infty, 0]$, $a_t = a_L$
  - At $t = 1$, unanticipated permanent shock $a_t = a_H > a_L$
- Monetary Policy

$$i_t = \phi_\pi \pi_t + \phi_y \left(y_t - \mathbb{E}_t^{CB} a_t \right)$$

- Information
  - At $t = 1$, household knows that potential output is higher forever at a_H
  - Suppose CB does not know in $t = 1$ but finds out in $t = 2$

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- Information
  - At $t = 1$, household knows that potential output is higher forever at a_H
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simple exercise

$$x_t = -\frac{\phi_y}{1+\phi_y+\phi_\pi\kappa}\left(a_H - \mathbb{E}^{CB} a_t\right)$$

$$\pi_t = -\frac{\kappa\phi_y}{1+\phi_y+\phi_\pi\kappa}\left(a_H - \mathbb{E}^{CB} a_t\right)$$

simple exercise

$$x_1 = -\frac{\phi_y}{1+\phi_y+\phi_\pi\kappa}\underbrace{(a_H - a_L)}_{+}$$

$$\pi_1 = -\frac{\kappa\phi_y}{1+\phi_y+\phi_\pi\kappa}\underbrace{(a_H - a_L)}_{+}$$

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In the short run, policy "mistake" causes:

- output below potential + lower labor share
- fall in inflation

simple model

suppose fed doesn't care about output gap: $\phi_y = 0$

$$x_1 = -\frac{\phi_y}{1 + \phi_y + \phi_\pi \kappa}(a_H - a_L) = 0$$

$$\pi_1 = -\frac{\kappa\phi_y}{1 + \phi_y + \phi_\pi \kappa}(a_H - a_L) = 0$$

simple model

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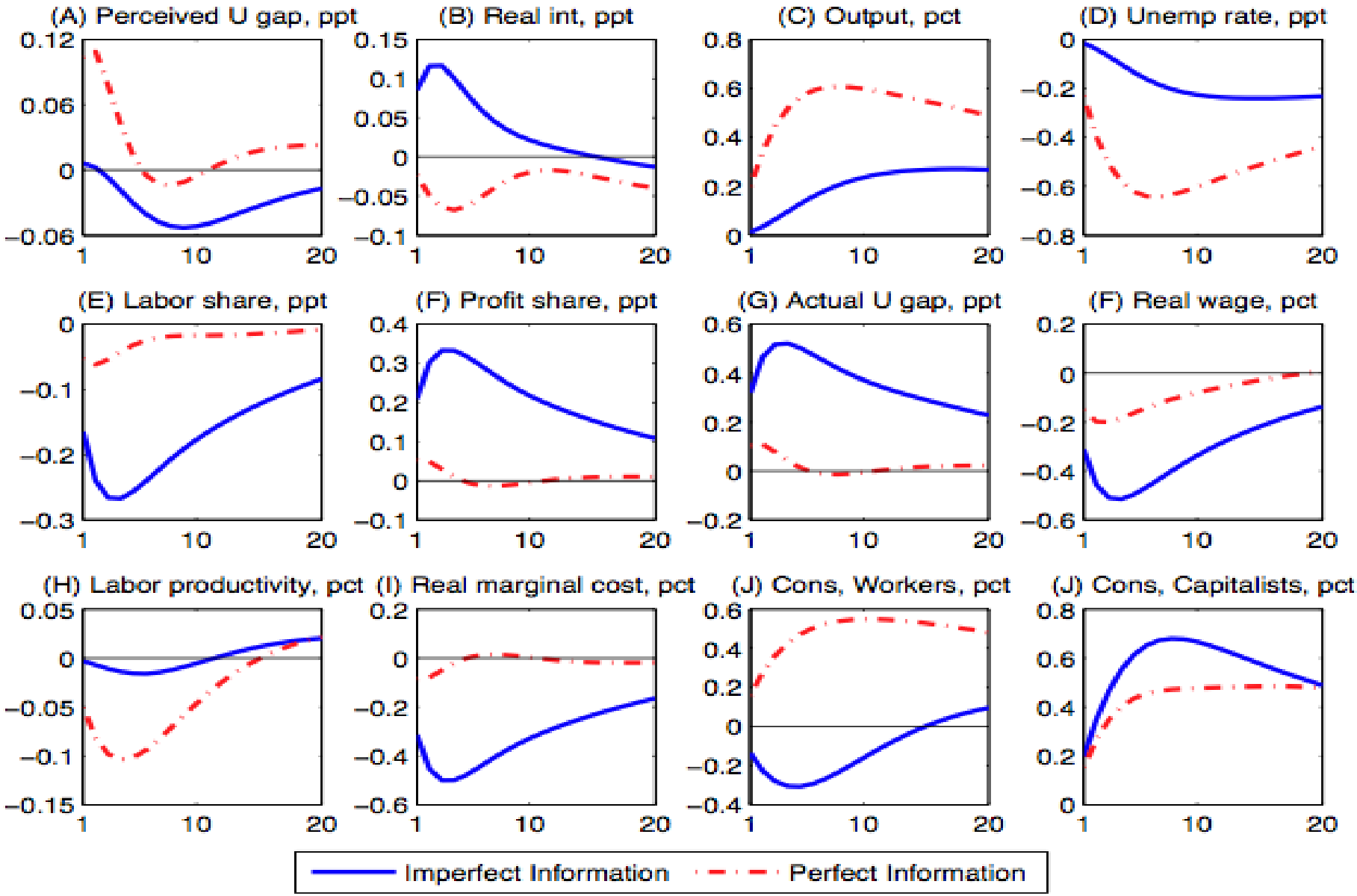
mis-measurement of output gap can't hurt if you don't care about it

Figure 5: Impact of Bargaining Power Shock: with and without Information Friction



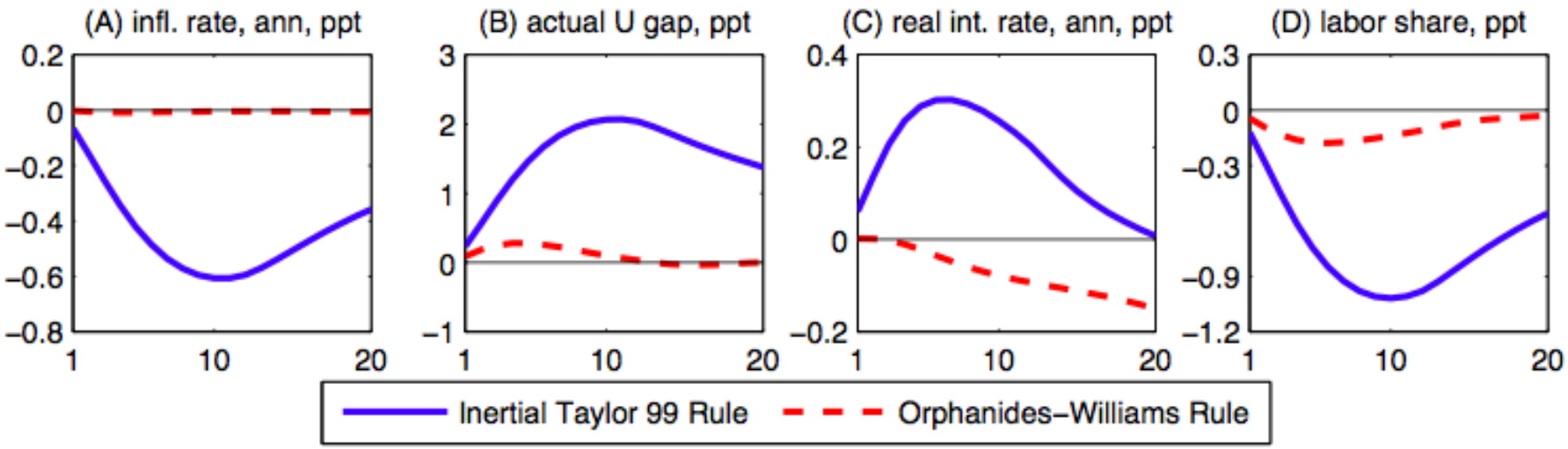
Notes: The IRFs assume one standard deviation shock to aggregate technology under the baseline monetary policy rule, with (blue solid) and without (red dash-dotted) information friction for the central

"robust policies"

Orphanides and Williams (2002):

$$\Delta i_t = \rho_\pi(\pi - \pi^*)$$

Figure 9: Robust Monetary Policy, Income Inequality and Disinflation: Bargaining Shock



model: transitory shocks to bargaining power

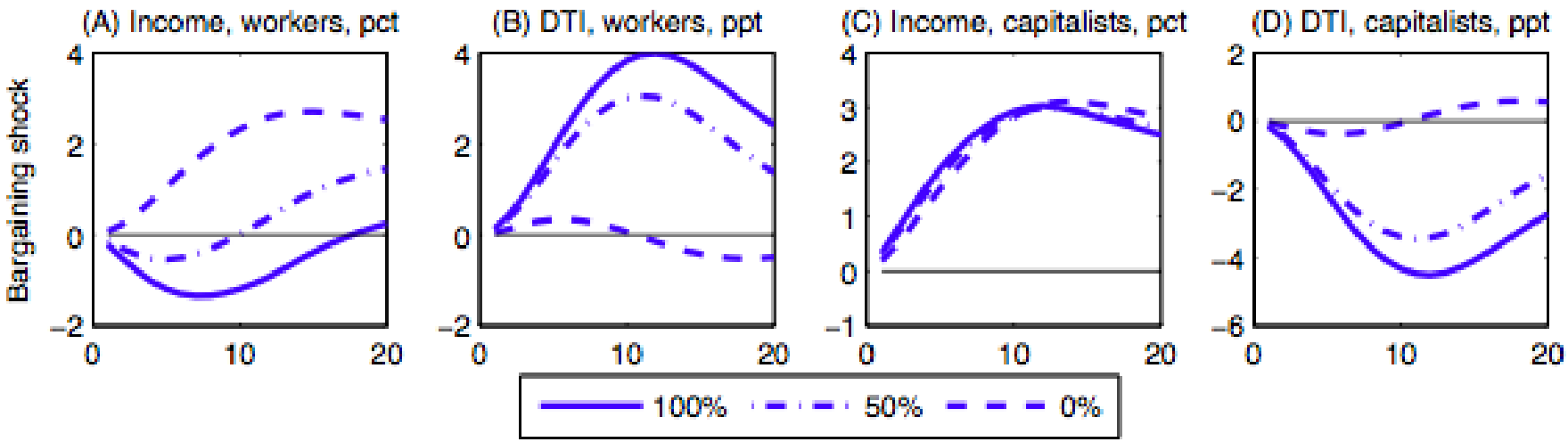
- not really consistent with the story about decline of unions.
- instead characterize transition from a high η economy to low η economy with the fed learning about correct level slowly.
- can use the model to build a narrative of the "new economy" in the Great Moderation period.
- story of Fed learning fits nicely with Faust and Leeper (2015): "Policymakers well aware that confounding dynamics underlie time series data to make interpretations difficult".

elasticity of substitution

- authors set elas. sub bet. L and $K = {}^{2}/_{3} < 1$
  - $\Rightarrow$ K and L are less substitutable than a Cobb-Douglas
- elas. of substitution is a very contentious parameter
  - Karabarbounis and Neiman (2014, QJE): cap. labor very substitutable (elas > 1)
  - Oberfield and Raval (2014) : elas < 1

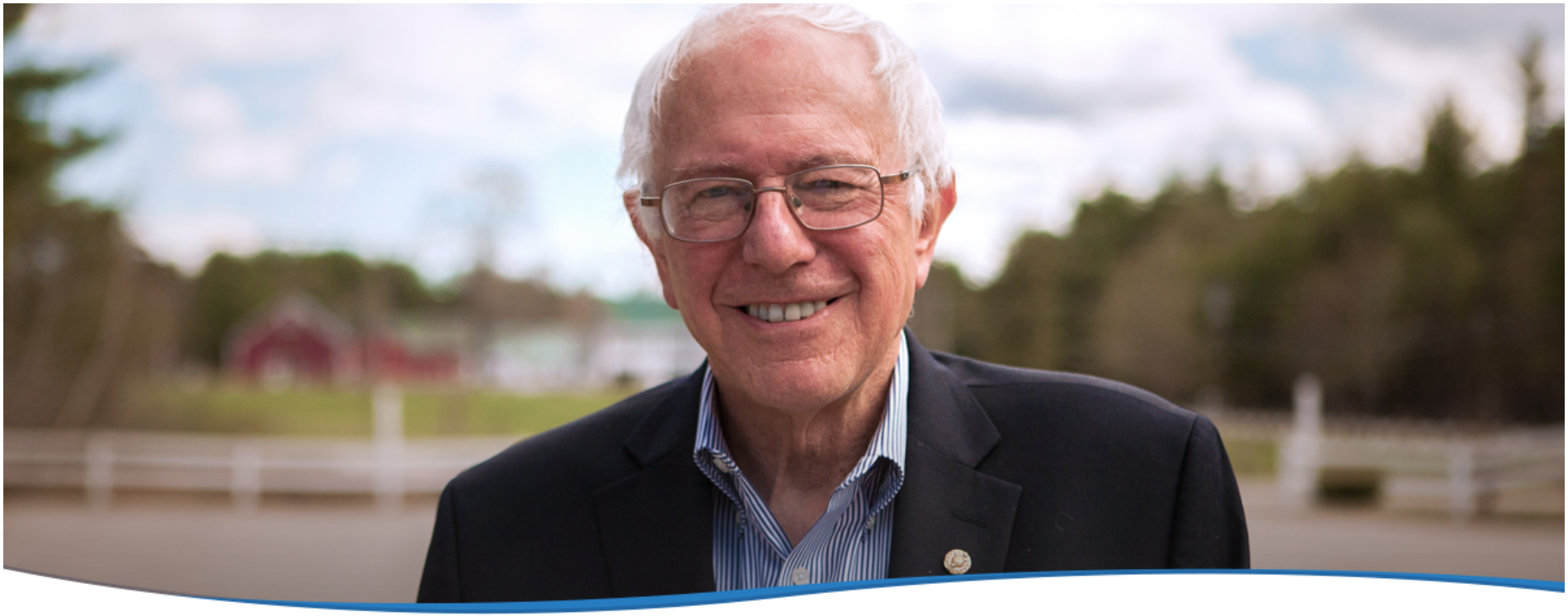
inequality

scenario: workers' labor share decline by 1 percentage point over a 3 year period



potential narrative of how inadvertent policy "errors" by the Fed may have redistributed rents away from the workers towards the capitalists.

great paper!



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