Discussion of "Battle of the Markups: Conflict Inflation and the Aspirational Channel of Monetary Policy Transmission"

Frederick van der Ploeg   Tim Willems

August 2024
Callum Jones
Federal Reserve Board

Motivation

- Inflation up over covid

- Profits up

- Real wages down

- Greed-flation?

Conflict Inflation: Basic Idea

- Workers want markup over the cost of consumption:

  $$W = \mu_w P$$

- Firms want markup over marginal cost (wage):

  $$P = \mu_p W$$

- Rearranging

  $$\frac{W}{P} = \mu_w \qquad and \qquad \frac{W}{P} = \frac{1}{\mu_p}$$

- May be inconsistent

- Assume some stickiness/staggered setting of prices/wages – inflation

- 'Battle of markups'

Cyclically Sensitive Markups

- Quantities can adjust to resolve the conflict

- Unemployment u affects wage markups:

$$\mu_w = \bar{\mu}_w - k_w u$$

  - $k_w > 0$: workers have less bargaining power in downturns

- Price markups are also sensitive to cycle:

$$\mu_p = \bar{\mu}_p - k_p u$$

  - $\mu_p > 0$: inventories build up during downturns

  - $\mu_p < 0$: market power arguments

- u resolves indeterminacy: set $\frac{W}{P} = \mu_w$ and $\frac{W}{P} = \frac{1}{\mu_p}$ and solve for u

- If u is fixed, we are back to conflict inflation

  - with price rigidities, get inflation that depends on u / relative prices

Role of Monetary Policy

- Central bank affects u so can influence markups

- Or, monetary policy affects u to address (short-run) conflict

- Christine Lagarde

  We need to ensure that firms absorb rising labour costs in margins ... The economy can achieve disinflation overall while real wages recover some of their losses. But this hinges on our policy dampening demand for some time so that firms cannot continue to display the pricing behaviour we have recently seen

- Is this about conflict inflation?

New Keynesian Model

- Standard features, except now

$$Y_t = \left[\int Y_{i,t}^{\frac{\varepsilon_p(y_t)-1}{\varepsilon_p(y_t)}} \, di \right]^{\frac{\varepsilon_p(y_t)}{\varepsilon_p(y_t)-1}}$$

- That is, the elasticity of substitution for goods depends on the output gap

- The desired frictionless markup is

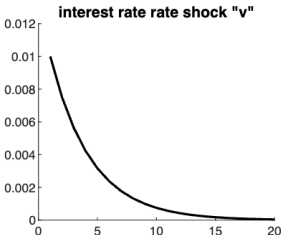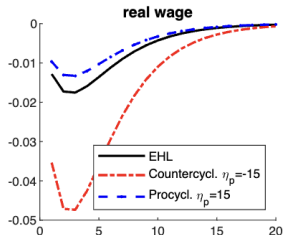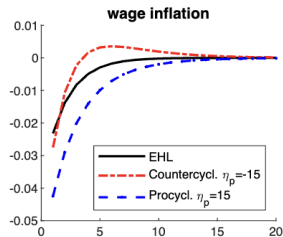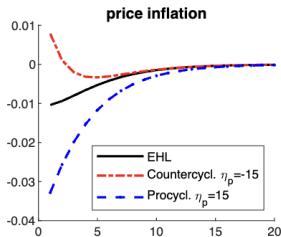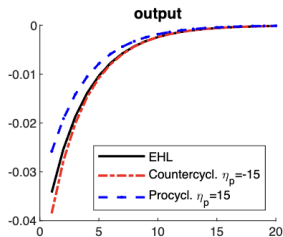$$\mu_{p,t}(y_t) = \frac{\varepsilon_p(y_t)}{\varepsilon_p(y_t) - 1}$$

  with the sign of the change in $\mu_{p,t}(y_t)$ wrt y_t depending on superelasticity

- In loglinear terms

$$\dot{\pi}_t = \rho \pi_t - \frac{\varepsilon(0) - 1}{\psi_p} \omega_t - \frac{\eta_p}{\psi_p} y_t$$

- Similar for wages

Implications - Transmission of Shocks

Like an additional markup shock?

7

Implications - Determinacy

- Phillips curve:

$$\dot{\pi}_t = \rho \pi_t - \frac{\varepsilon(0) - 1}{\psi_p} \omega_t - \frac{\eta_p}{\psi_p} y_t$$

- Suppose ψ_p is high (so $\frac{\varepsilon(0)-1}{\psi_p}$ near zero)

- If $\eta_p < 0$ (countercyclical price markups), a negative output gap pushes up inflation and raises firms' desired markups

- Central bank responds to inflation $\Rightarrow$ higher output gap, etc

Comments

Overall

- Enjoyed reading the paper

- Pushed me to want to learn / think more about the topic

- A lot of material

- Felt like I was seeing some older ideas

- Three related comments

1. The New Keynesian Model

- The key new assumption is that markups vary with y_t (in a reduced-form way)

- The standard NK model, with sticky prices, features a conflict transmission channel, to some extent

    - e.g. Smets and Wouters (2007) use a Kimball aggregator (elasticity of substitution varies with relative consumption) $\Rightarrow$ variable markups

    - Generates a real rigidity of the sort of interest here (Klenow and Willis, 2016)

    - Is this sufficient under estimated shocks to capture the aspirational channel?

    - Also Harding, Linde and Trabandt (2021), Gopinath and Itshoki (2011)

- Approach feels a bit disconnected from the core idea of conflict inflation

    - Is conflict inflation about persistent inflation?

- Aspirational channel more suited to low inflation environments?

2. Empirical Evidence

- Big range of estimates of price markup cyclicality. Why?

- As paper says, different shocks can move markups

- Can we understand this better?
  - Generate data from model for different shocks/variances?

- Connection between the model and empirical evidence

$$\dot{\pi}_t = \rho \pi_t - \frac{\varepsilon(0) - 1}{\psi_p} \omega_t - \frac{\eta_p}{\psi_p} y_t$$

- Interpretation of the local projections coefficients

Price Markup Cyclicality Estimates

Table 2: country-level estimates of cyclicality in price markups ($\hat{\eta}_p$ in equation (30))

Country	$\hat{\eta}_p$	Country	$\hat{\eta}_p$	Country	$\hat{\eta}_p$	Country	$\hat{\eta}_p$
Austria	0.648	Denmark	0.889	Israel	-0.203	Poland	-0.667
Belgium	1.893	Ecuador	-0.620	Italy	0.504	Portugal	0.031
Brazil	-0.228	Estonia	0.074	Japan	0.209	Romania	0.520
Bulgaria	3.274	Finland	0.005	Korea	0.249	Russia	0.233
Canada	-0.067	France	0.650	Latvia	0.275	Slovakia	0.751
Chile	-0.590	Germany	0.446	Lithuania	0.296	Slovenia	0.694
Colombia	-0.016	Greece	-0.334	Luxembourg	0.747	Spain	0.106
Costa Rica	-2.786	Hungary	-0.006	Malta	0.728	Sweden	0.161
Croatia	0.491	Iceland	1.007	Mexico	2.074	Türkiye	0.501
Cyprus	0.321	India	0.026	Netherlands	0.524	United Kingdom	0.652
Czech Rep.	-0.839	Ireland	-0.012	Norway	0.181	United States	1.532

3. What Shocks Drive Markups

- What was driving higher profits over covid?

- Excess demand in an environment of supply chain constraints (Comin, Johnson, Jones)

- Different view of Lagarde quote

  We need to ensure that firms absorb rising labour costs in margins ... The economy can achieve disinflation overall while real wages recover some of their losses. But this hinges on our policy dampening demand for some time so that firms cannot continue to display the pricing behaviour we have recently seen