Discussion of

Is the working-capital channel important?

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Paper Overview

Summary

► Quantifies the working-capital channel: firms need to borrow to finance variable inputs

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- Introduces working-capital heterogeneity (WCH) into a workhorse DSGE model

- Identification via heterogeneous pass-through of monetary policy shocks

- Detailed firm-level price data from Sweden covering 1997-2016

- Result: evidence for a strong, functional WorkCap channel, i.e. firms raise prices following interest rate spikes

Mechanism

- ▶ Ex-ante heterogenous MC curves

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- $\frac{\partial \pi_i}{\partial R} \propto \delta_i$ - price response to interest rate shocks is firm-specific
- Question: if firm i operates in j sectors, will there be δ_{ij}, i.e. market-specific WorkCap requirements?

Strong Empirical Evidence for WCH
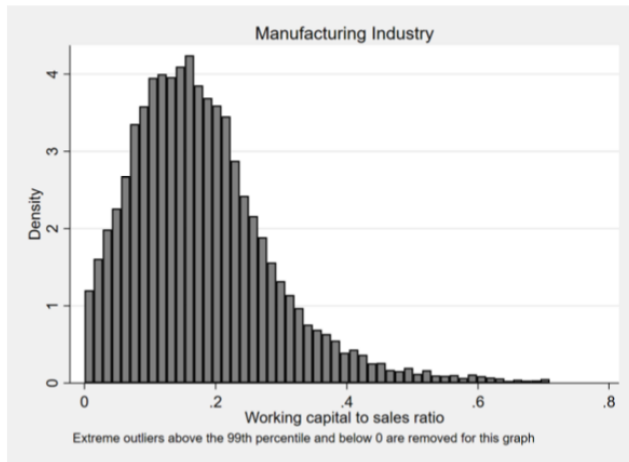
Working capital = receivables + inventories - (payables + pre-payments)

Comments

Overview

- Taylor principle
- Disinflationary booms
- Frequency of price adjustment
- Identification
- Other comments

Taylor Principle

Strong WorkCap immediately implies instability of the Taylor principle

$$\hat{\pi}_t = \kappa(\hat{c}_t + \alpha\hat{R}_t) + \beta\mathbb{E}_t\hat{\pi}_{t+1}$$

$$\hat{R}_t = \rho\hat{R}_{t-1} + (1-\rho)(\rho_\pi\hat{\pi}_{t+1} + \rho_c\hat{c}_t)$$

- ▶ Even if $\rho_\pi > 1$, if α sufficiently high monetary policy cannot stabilize inflation expectations

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- Even if $\rho_\pi > 1$, if α sufficiently high monetary policy cannot stabilize inflation expectations
- Is the effect weaker/stronger with heterogeneous δ_i?
  - Can compare plain vanilla NKDSGE+WC and NKDSGE+WCH
  - For WCH to work in the aggregate, probably need a bit of work

Disinflationary Booms

Many sticky price models imply booms that follow dis-inflations

$$\hat{\pi}_t = \kappa \hat{mc}_t + \beta \mathbb{E}_t \hat{\pi}_{t+1}$$

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- When $\alpha = 0$, fall in $\hat{\pi}_{t+1}$ implies higher marginal costs, i.e. output growth (assume $\kappa > 0$ and $\beta < 1$)
- With WorkCap - $\alpha > 0$ - dis-inflationary policies raise firms' variable input financing costs
  - Disinflation-output correlation breaks down
  - What is the Swedish experience? Riksbank announced inflation targeting swtich in 1993

Disinflationary Booms?
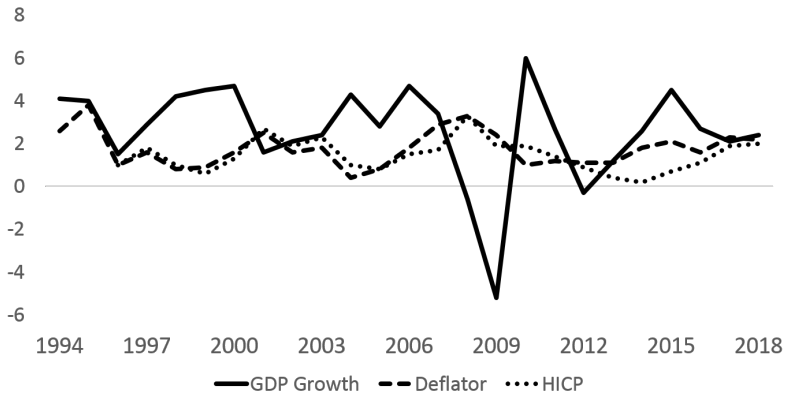
Eurostat; GDP, GDP deflator, HICP; all % change on previous period

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- Observationally equivalent mechanism

  - Aggregate sensitivity to demand shocks grows with the Calvo devil or with WorkCap needs

  - Simple exercise: sort firms by WorkCap and compute average frequency (and size of) price adjustment in each quantile

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- For example: firm leverage
  - Risky firms may respond less to the same MP shock
  - Are high WorkCap firms also less levered?
- Solution 1: controls
- Solution 2: could tie up WorkCap with product markets
  - Exploit cross-product variation of WorkCap within the same firm
  - Can use firm x time fixed effects

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- Why does WCH arise in the first place? Narrative

Conclusion

- Great data and paper
- Working capital heterogeneity is an interesting new channel
- Needs to decide what to focus on; lots of possible directions