Comments on ”Expectation driven business cycles with limited enforcement” by Karl Walentin

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Expectation driven business cycle

Good news about future productivity

- encourages current investment <= higher returns to capital in the future
- higher stock prices
- higher consumption <= wealth effect
- higher output and employment

$\Rightarrow$ expectation driven boom

If optimism is unfounded => expectation driven bust

- $I\downarrow$, $P_k\downarrow$, $C\downarrow$, $Y\downarrow$, $N\downarrow$

Standard RBC model

- good news about future productivity => people go on vacation
- $N\downarrow$, $C\uparrow$, $I\downarrow$
- wealth effect
- investment postponed until technology has improved

Remedies

- Investment costs => I↑ today
- Habit persistence => C↑ today

However, there is still a problem:

- Good news => stock prices fall

Christiano, Motto and Rostagno (2006), CMR

- Nominal rigidities: sticky wages and prices
- Taylor rule in monetary policy

Beaudry and Portier (2004)

- three-sector model, complementaries between capital and intermediate goods

This paper

- investment costs, habit persistence (like CMR)
- no nominal rigidities
- instead: financial frictions

Limited enforcement

- Insiders can divert a part of the firm's assets
- Collateral constraint:
  - value of liabilities $\leq$ = value of "collateral" = θ * liquidation value
  - liquidation value = current revenues + resale value of capital
  - derived endogenously: long-term optimal contract with state contingent payments

Price of capital

- q^m resale price of capital
- q value of capital inside the firm (stock price)
- financial frictions => $q > q^m$

Good news about the future

- $q^m \downarrow$ <= investment costs (like in CMR)
  - high investment today lowers adjustment costs tomorrow
- $q \uparrow$ <= expected returns to capital inside the firm go up

Results

- A real model, capable of producing news-driven business cycles
- The size of the cycles?
  - Longer than in the real model of CMR, but still not very long
  - The response of stock prices relatively small, compared to
    - empirical estimates
    - CMR with nominal rigidities
- A spike in the real interest rate
  - similar problem in the real model of CMR

Questions (1)

- The theory of financial frictions especially relevant in the case of small and medium-sized firms
- Stock markets: large firms
- Is this a good model to explain stock price movements?

Questions (2)

- q ~ stock price ?
- q = the value of capital inside the firm for
  - insiders (entrepreneur) and
  - outsiders
- but are share-holders insiders?

- q=p/k; k capital in the firm
- p = W + b – d
  - p financial value of the firm
  - W = value to the insider
  - b = value to the outsiders
  - d = dividend (current period payment to outsiders)
- Is b a better measure for the value of stocks?

- Problem: good news => b ↓; stock prices fall
  - In equilibrium b = θ * liquidation value
    (<= state contingent payments)
  - Good news => q^m↓ => liquidation value ↓

Further comments

- The role of investment costs, habit persistence and financial frictions
  - Decomposing the mechanisms
  - Invest costs + habit persistence => C + I ?
  - Financial frictions => q (+I) ?
- CMR add financial frictions to the monetary model => the cycle is attenuated
- Lessons for monetary policy (credit channel)?