Discussion of : Monetary and Macroprudential Policy with Multi-Period Loans

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Brief Summary

- Since the financial crisis, there is a renewal of DSGE models with banking and financial frictions meant for the analysis of macroprudential policy.
- Current DSGE models with banking rely on unrealistic hyposethesis :
  - the loans maturity is one quarter ;
  - credit rates are flexible/renegociated each quarter ;
  - the system response to shocks is perfectly symmetric/linear.

Brief Summary

- macro models are unable to catch the high autorcorrelation observed in the supply of credit ;
- the model-generated credit rate has a too big variance compared to its observed counterpart.
- in case of very important shocks during financial crisis episodes, DSGE models explain the series using unrealistic system responses (negative nominal rates, negative credit supply, etc).

Brief Summary

- All these issues could make DSGE models irrelevant for the analysis of macroprudential policy :
    - DSGE models with one-quarter loans probably over-estimate the effect of macroprudential policy as this policy has no effect on previously contracted loans but strongly affect newly contracted loans.
- The paper of Marcin (and al) tackles these very important issues for DSGE models with banking.

Brief Summary

- First, the authors develop a standard New Keynesian model with an housing market à la Iacoviello.
- Using this model, they investigate how multiperiod loans affect both macroprudential and monetary policies.
- They explore non linearities issues by using different constraints in their set-up (non negativity constraint on newly granted loans, or collateral constraint loosening).

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Brief Summary

The authors find that :

- monetary policy is less effective with fixed than variable loans rates.
- the transmission of monetary policy weakens in the maturity of the loans.
- concerning macroprudential policy, there is not much difference between variable and fixed-rate contracts.
- while they find significant asymmetry in its transmission.

Comments/Suggestions : the policy analysis 1/3

- Macroprudential/monetary policy is examined in the paper as something destabilizing for the economy (an exogeneous shock process).
- The analysis could be extended in a more traditional way :

1. quantifying the welfare gains from implementing a LTV ratio rule as in Angelini et al. (2011) and see if the results are sensitive to the choice of the loan maturity ;

Comments/Suggestions : the policy analysis 1/3

2. the introduction of a macroprudential instrument that affects the credit rate as in Quint and Rabanal (2011) could also be very interesting to study (its effects could be strongly weakened by fixed rates and the maturity of loans) ;
3. Turning to monetary policy : according to the authors calculations, under a non negativity constraint on new loans, the effects of monetary policy tightening become weaker. It'd be interesting to study how the introduction of multiperiod loans could affect the tradeoff between output and inflation variability by plotting the taylor frontier.

Comments/Suggestions : data matching 1/2

- The model could include more shocks, the calibration could replicate business cycles statistics of the US economy.
- So that the incoporation of multiperiod loans could help in catching the high autocorrelation in the supply of loans of banks compared to the benchmark situation.

Comments/Suggestions : data matching 2/2

- In the same vein, incorporating fixed credit rate could also help in replicating the data (the mecanism developped by the authors is better than the ad hoc Phillips curve for credit and deposit rates of Gerali, Neri et al (2011)).
- Rather than calibration, the model could also be estimated as in Guerrieri and Iacoviello (2014), they estimate a non linear DSGE model with an occasionnally binding collateral constraint on housing wealth that drive an asymmetry in the link between housing price and economic activity.

Comments/Suggestions : capital requirements 1/2

- The authors considers only a borrower-oriented macroprudential tool. The analysis could be supplemented with capital requirements, the authors could extend the banking system to account for a bank capital constraint as in Gerali, Neri et al (2011).
- Thus the authors could examine a bank capital regulation shock.

Comments/Suggestions : capital requirements 2/2

- The diffusion/effectiveness of the capital requirement regulation could also be affected by the maturity of loans.
- The authors could also explore the non-linearities for banks : this bank capital constraint could also be occasionnally binding when the bank capital is below the target fixed by the authorities.