# Consequences of Loan-to-Value Ratio Policies for Business and Credit Cycles

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# Focus of the paper:

- Very important current hot issue: LTV ratio and Macroprudential policy.
- Compare the consequences of permanent versus activist (temporary/countercyclical) LTV ratio policy for the business and credit cycles.
- Distinguish between expansion and contraction phases of the cycle.

## Main Findings on Permanent reduction in the LTV:

- Reduces the average amplitude of recessions, and, in particular, the frequency with which they occur.
- Reduces the amplification of demand shocks arising from the credit constraint and the volatility of output growth.

• Reduce household indebtedness in the long-run.

# Main Findings on Countercyclical LTV ratio rules:

- Can also improve the characteristics of the business and financial cycles, but great care needs to be taken in their implementation.
- Rules based on house prices deliver better cyclical outcomes than those based on the credit-to-GDP ratio.
- It is complicated to analyse because the strength of the impact on the business and credit cycles depends on the mix of shocks hitting the economy.

## Main Findings of the paper:

• Permanent better than temporarily reduction of LTV.

• Good result comparing to some international evidence:

 $\Rightarrow$  For instance, the role of household indebtedness in Swedish monetary policy has recently received much attention.

 $\Rightarrow$  Financial Times, October 29, 2014: "Tactic of lean against the wind' has failed in Sweden".

## How do they get those results:

- Dynamic stochastic general equilibrium (DSGE) model à la lacoviello (2005) and Kiyotaki and Moore (1997)
- This class of models specifies for housing market and mortgage market, with a collateral constraints attached to the value of the house.
- Therefore, this class of models includes heterogeneous agents: Lenders versus Borrowers.

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• Contribution key in term of model: long-term debt.

#### Comment 1:

 Brzoza-Brzezinay, Gelain and Kolasa (2014) specify for a different multi-period contracts:

Your equation (2) would be:

$$\dots \frac{1}{m} \sum_{j=1}^{m} L_{t-j} + (R_{L,t-1} - 1) \sum_{j=1}^{m} \frac{m-j+1}{m} L_{t-j} = \dots L_{t}$$

where m is the period mortgage loans.

• Similar multi-period loans can be found in Jacob and Munro (2016).

- How your setup is different from those?
- Add these references.

#### **Comment 2:**

- The authors consider the the impact on duration and amplitude of recessions and expansions.
- They find that a permanent lower LTV ratio leads to small reduction in duration but sizeable reduction of the average amplitude of recessions.
- Should we care about recessions or expansions? Recessions follow expansions, maybe better to focus on be caution on expansion, on the spirit to avoid bubbles? Indeed, Table 4 shows an increase in both duration and amplitude during expansion for lower LTV ratios.

## Comment 3:

- Guerrieri and lacoviello (2016) show that housing prices matter more during severe recessions than during booms through their effects on collateral constraints.
- They have a different approach: asymmetric shocks.
- What I understand is that authors instead use symmetric shocks.

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Add these references.

#### **Comment 4:**

- Should we consider only negative house price shocks during recession?
- Indeed, deleveraging shocks are much important in dragging down the economy
- See Forlati and Lambertini (2011), Quint and Rabanal (2014) and Punzi and Rabitsch (2016)

## **Comment 4: Deleverage Shocks**



#### **Comment 5:**

- Should we lower the LTV over all Borrowers?
- Based on US Data, the last recession lead to a lower LTV overall, but a deeper decrease has been experiences only by high leveraged borrowers, i.e.  $LTV \ge 80$

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• Should we take into consideration this in engineering macroprudential policy?

## **Comment 5: US LTV Distribution**



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### Conclusions

- This paper contributes on the ongoing debate on how effective are macroprudential policies.
- The paper also contributes on establishing a better design of macroprudential policy.
- Understanding the different impact during recession and expansion is very useful for policy makers.

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• Very nice paper!!!