Discussion of Biljanovska, Gornicka and Vardoulakis

Optimal Macroprudential Policy and Asset Price Bubbles

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IMF ANNUAL MACROFINANCIAL RESEARCH CONFERENCE
September 15, 2020

This Paper: Macro-prudential policy design with asset price bubbles.

A persistent asset price bubble boosts collateral prices, reducing the need for corrective macro-prudential taxes (extensive margin)

A persistent bubble makes consumption declines larger when it deflates, thus increasing the need for corrective taxes (intensive margin)

This paper's prescriptions:

1. When debt is low, intervene less. For low debt, bubble is beneficial, and reduces probability of binding collateral constraint (extensive margin dominates)

2. When debt is high, intervene more. With large debt, macro-prudential policy should be more active (intensive margin dominates)

The Optimal Tax

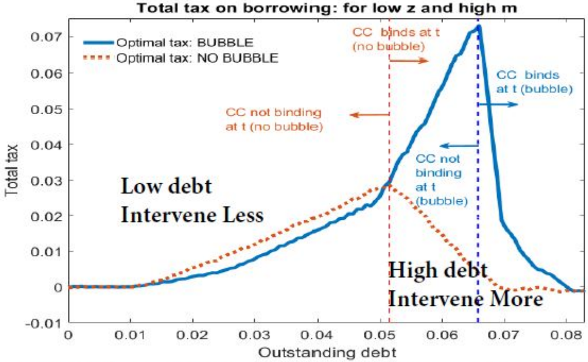


Figure (3) Optimal tax on borrowing in the presence of an asset price bubble.

Note: The figure plots the optimal tax in the absence (dotted red line) and in the presence (solid blue line) of a bubble, as a function of debt outstanding, L_t.

Some Suggestions for the Authors

Tighten the literature review. Only clarify relationship with key competitors. Avoid laundry list effect of citing fifty papers in the literature.

Other papers have made the claim that it may be desirable to respond to asset price bubbles.

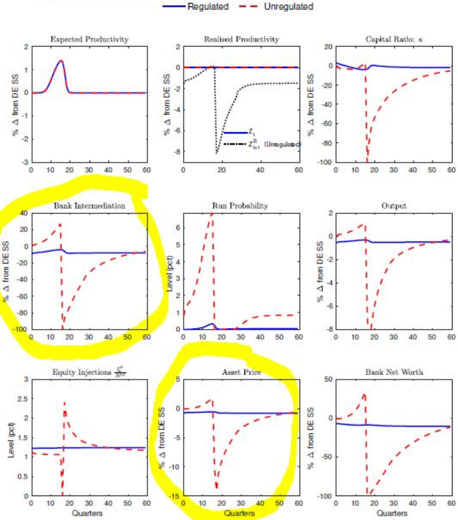
Gertler, Kiyotaki and Prestipino show it is optimal to respond to asset prices run-ups that increase the probability of bank runs.

Gali studies optimal response to asset price bubbles and also finds that the response to bubbles is non-monotonic.

Gertler, Kiyotaki and Prestipino, RED 2020

Figure 11: Avoiding runs with macroprudential regulation.

Macroprundential policy reduces boom-busts in asset prices that drive up the probability of a bank run



Galí, AER 2014

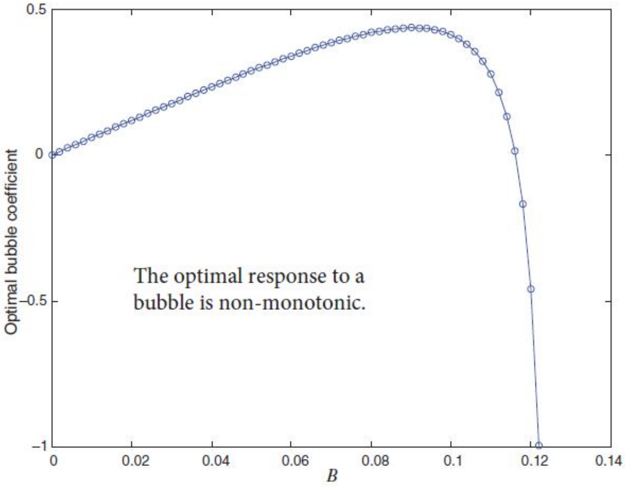


Figure 4. Optimal Bubble Coefficient

Should q and B be treated differently?

It would be important to explain what is conceptually different from the planner's standpoint between q_t and B_t.

B_t

$$
\begin{aligned}
U_{c,t} - \xi_t q_t U_{cc,t} - \psi_t E_t \left[\beta \frac{U_{c,t+1}}{U_{c,t}} (1 + m_{t+1}\mu_{t+1}) B_{t+1} \frac{U_{cc,t}}{U_{c,t}} \right] = \\
\beta R E_t \left\{ U_{c,t+1} - \xi_{t+1} q_{t+1} U_{cc,t+1} - E_{t+1}\psi_{t+1} \left[\beta \frac{U_{c,t+2}}{U_{c,t+1}} (1 + m_{t+2}\mu_{t+2}) B_{t+2} \frac{U_{cc,t+1}}{U_{c,t+1}} \right] \right\} \\
+ \beta R E_t \left[\xi_t \Omega_{t+1} + \psi_t \Delta_{t+1} \right] + \mu_t^p, \qquad (37)
\end{aligned}
$$

B_{t+1}

There is some kind of isomorphism between q and B. Not obvious why the planner would want to treat q and B differently.

Take two economies with same debt L and same asset prices $q + B$.

Would the optimal tax look any different depending on the bubble's share of the total price, $B/(B + q)$?

It looks like the different persistence of B relative to q may be driving the results. Is it true?

Quantitative Implications and Presentation

Flesh out better the quantitative implications of the optimal tax.

Most papers in this literature stop short of a full quantitative analysis, and are too stylized to be taken to the data.

Think of tax on debt as interest rate. What range of fluctuations in the cost of borrowing is required to stabilize/optimize asset prices and debt?

Charts of policy functions and butterfly charts useful to explain mechanism, but ill-suited to show quantitative features. Show time-series paths. Show actual vs counterfactuals with optimal policy.

Find a new angle to stand out. Think of giving policy advice.
1. Should the response be any different depending on whether there is a bubble or not?
2. How about mistakes? Is it worse to ignore the bubble when it is there, or to respond to a bubble that is not there?