

Discussion of “The Cost of Macroprudential Policy” by Bjorn Richter, Moritz Schularick, Ilhyock Shim

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The Contribution

- 1 Quantify the effects of changes in LTV caps on output and inflation for a panel of 56 countries over the 1990-2012 period
- 2 **Propose a narrative identification approach**
 - ▶ Focus on changes targeting the financial cycle without being driven by concerns about growth or inflation
- 3 Quantify intensity of LTV caps
 - ▶ Previous research:
 - ★ “Extensive” margin – “how many” tools have been used and in which direction
 - ★ Analyze the effectiveness of the macroprudential tool kit in terms of intermediate objectives of curbing credit and housing cycles
 - ▶ This paper: “Intensive margin” – “how much” LTV caps have been changed

Outline for Today

1 My Discussion

- Narrative Identification
- Monetary versus Macroprudential Policy
- Measurement of Intensive Margin of the Policy Actions
- Other Comments and Suggestions

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 - ▶ 53 LTV actions: 14 actions for AEs and 39 actions for EMEs

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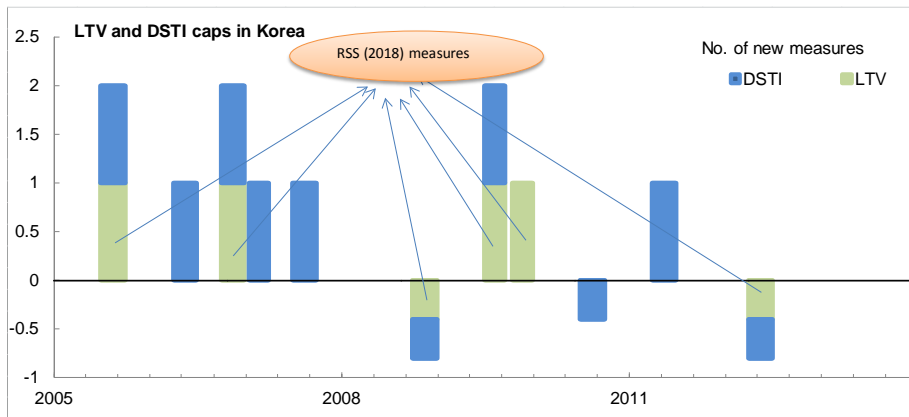
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- ③ LTV actions are **uncorrelated** with other (policy) shock
 - ▶ Control for *only* monetary policy shocks in all the specifications

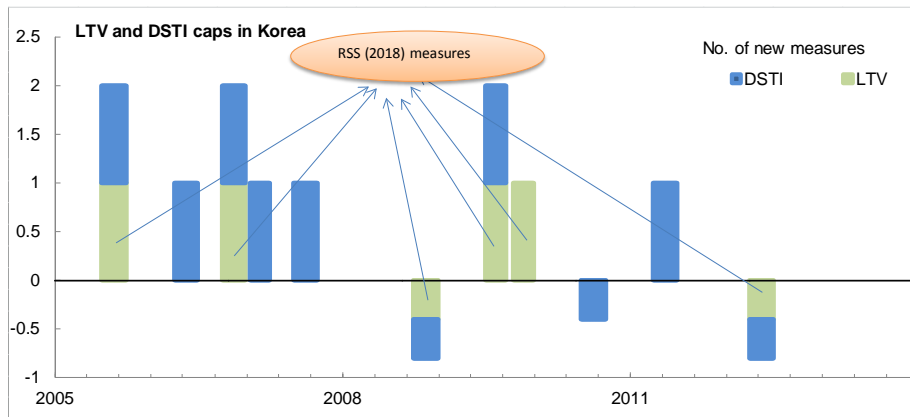
Comment # 1

- In the empirical analysis using local projection method the implicit assumption is that LTV actions are not correlated with policy shocks other than monetary policy
- **Observation 1:** Countries usually change housing related macroprudential measures, such as LTV and DSTI limits, in tandem to deal with fast growing mortgage loans and house price appreciation

LTVs correlated with other housing policies



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- Housing measures seem to be used in tandem in Korea!

Individual Macropru measures are correlated

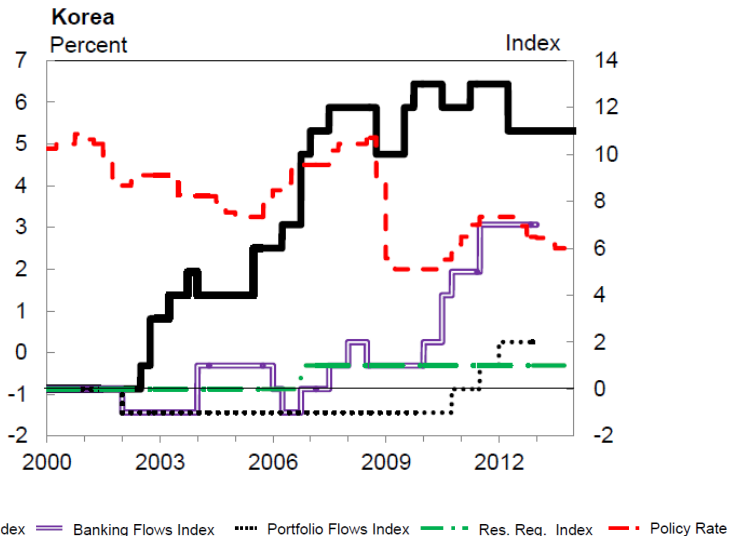
Table: Correlations Between Housing Related Measures
Evidence from 57 Countries

Variables	LTV	DSTI	Oth. Hous.
LTV	1.000		
DSTI	0.636*	1.000	
Oth. Hous.	0.443*	0.164*	1.000

Source: Akinci and Rumsey-Obstfeld (JFI, 2018)

Other tools for Financial Stability

- **Observation 2:** Capital flow management tools and changes in reserve requirements have also been used to deal with financial instability



Comment # 1 (Cont'd)

- Other policy measures, especially DSTI caps, should be used as controls in regressions that relate LTV caps to output and prices
- Evidence suggests that the caps on DSTI are the more effective macroprudential policy for limiting housing boom-bust cycles (Knutter and Shim (2016), Greenwald(2018))

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Comparing LTV changes with monetary policy

Table 6: Local projection: Responses of real GDP and the price level to a change in maximum loan-to-value ratios, quantified measure.

	$h = 1$	$h = 4$	$h = 8$	$h = 12$	$h = 16$
Dep. Var.: $100 \times \log$ real GDP					
LTV change	-0.05** (0.02)	-0.02 (0.03)	-0.05 (0.08)	-0.07 (0.11)	-0.11 (0.13)
Observations	3171	3171	3171	3171	3171

Table 9: Output effects of monetary policy.

Paper	2 year response	Peak response	Significance
Romer and Romer (2004)	-4.3%	-4.3% at 24months	Yes
Gertler and Karadi (2015)	-1.2%	-1.6% at 18 months	Yes (peak)
Jordà <i>et al.</i> (2017)	-1.9%	-2.9% at 4 years	Yes
Tenreiro and Thwaites (2016)	Expansion: -4.5%	Expansion: -7.5% at 36 months	Yes

- 10 ppt decrease in max. LTV ratio \equiv a 25 basis point increase in policy rate

Comment # 2: Spillovers from Macroprudential Policy

- LTVs and other housing measures are targeted instruments and work on credit demand of households with high indebtedness
- Evidence on spillovers from macroprudential measures:
 - ▶ Buch and Goldberg (2017): Banks affected by the regulation might change the composition of their credit supply by substituting away from mortgage lending at home toward lending into other sectors or internationally
 - ▶ Akinici and Olmstead-Rumsey (2018): macroprudential measures have no significant impact on total credit, but do have an important negative impact on banks' mortgage credit

Comment # 2 (Cont'd)

- The direct effect of LTV on output might be larger after taking into account potential spillovers from the use of these instruments
 - ▶ The adverse effects to output from the decline in mortgage credit demand can be partially offset by the increase in demand coming from the non-housing sector and internationally
 - ▶ Monetary policy, on the contrary, has a broader impact on all the sector

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 - ▶ The adverse effects to output from the decline in mortgage credit demand can be partially offset by the increase in demand coming from the non-housing sector and internationally
 - ▶ Monetary policy, on the contrary, has a broader impact on all the sector
- Consider using additional controls for cross border flows, total credit-to-GDP, household indebtedness-to-GDP ratio, or current account-to-GDP

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Intensity adjustment

- Important step towards quantification of these measures. Some countries change these measures by a small margin gradually over a long period of time, some others change rarely but at a much larger rate
- How do you get consistent and cross-country comparable quantity measures?
 - ▶ In countries like Korea and Hong Kong (constitute 23 out of 39 LTV actions in EMEs), different borrowers face different LTV caps based on where the property is located, whether it is the borrower's first or second home, and how expensive the home is. Discounting by an arbitrary number?
 - ▶ LTV caps might not binding immediately? Any discounting in this case?
 - ▶ There might be announcement and implementation lag. Canada is a prominent example. 3-6 months lag not unusual.
 - ▶ Although its a small percentage, some of these measures are issued as recommendation or guidance, not legally binding.

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Additional Comments/Suggestions

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 - ▶ Would be nice to further sub-group LTVs by the stated financial objective and recalculate the output cost

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- Mian, Sufhi and Verner (2015, QJE) → “A rise in the household debt to GDP ratio predicts lower output growth over the medium-run (from year 3 to year 6)”. Should we measure cost in terms of output or prices, or output per unit of household debt reduction?

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- Would be nice to see how DSTI and LTV limits affect composition of output:
 - ▶ Investment, especially in construction
 - ▶ Debt-financed consumption spending and external imbalances

Conclusion

- Excellent paper!
- Clear contribution to the literature
- Need some additional work and robustness in the identification of macroprudential policy shocks, and in their comparison with monetary policy shocks