



THIRD BIS CCA RESEARCH CONFERENCE

Financial Stability, Financial Regulation and Monetary Policy

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Discussion of

The Cyclical Behaviour of Bank Capital Buffers in an Emerging Economy: Size Does Matter

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The Cyclical Behaviour of Bank Capital Buffers in an Emerging Economy: Size Does Matter

The problem:

Cyclical downturn

- > more rating downgrades
- > higher capital requirements (as counterparty risk \uparrow)
- > \downarrow loans
- > amplification of economic cycle



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Questions:

- How serious is this problem?
- Does the response depend on the size of banks?



The Cyclical Behaviour of Bank Capital Buffers in an Emerging Economy: Size Does Matter

- Very well written introduction & presentation of theory
- Nice and clean dataset
 - (all inclusive unbalanced panel, quarterly & annual, 15 years)
 - you have it all (!): large and small, bust and boom
(complete cycle and “major banking crisis”, 1998-2000)



The Cyclical Behaviour of Bank Capital Buffers in an Emerging Economy: Size Does Matter

$$\Delta B_{i,t} = \lambda \left(B_{i,t}^* - B_{i,t-1} \right) + \varepsilon_{i,t}$$

$$B_{i,t} = \lambda B_{i,t}^* + (1 - \lambda) B_{i,t-1} + \varepsilon_{i,t}$$

where $B_{i,t}$ is capital in excess of the 9%.



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estimate

$$B_{i,t} = \alpha + \beta \cdot B_{i,t-1} + X'_{i,t} \cdot \theta + \varepsilon_{i,t}$$

$$X' = [\Delta gdp, roe, NPL / L, \Delta loans, loans / asset]$$



dynamic GMM estimator (Blundell and Bond (1998))



Dependent variable is capital buffers, 1996 - 2010

Variable	Coefficient	Standard Error
$BUF(t - 1)$	-0.0785***	0.0181
ROE	0.0657	0.0901
$RISK$	1.012	1.091
$DLOAN$	-0.012**	0.006
$LOANS$	-0.005**	0.003
GDP	-0.132***	0.030
$DUMMYSARC$	0.523	0.498
$DUMMYSIZE$	-1.051**	0.489
$INTERACT1$	1.121***	0.211
$INTERACT2$	0.035***	0.004
$INTERACT3$	0.029***	0.005
$CONSTANT$	0.854	0.795
$SARGANTEST$ ($p - value$)	0.79	
$m1$ ($p - value$)	0.00	
$m2$ ($p - value$)	0.86	

Dependent variable is capital buffers, 1996 - 2010

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Dependent variable is capital buffers

Variable	1996:3 - 2010:3		1993:3-2008:4	
	Coefficient	Standard Error	Coefficient	Standard Error
<i>BUF(t - 1)</i>	-0.0855***	0.0261	-0.0855***	0.0244
<i>ROE</i>	0.0799	0.0907	0.0740	0.0858
<i>RISK</i>	1.712	1.090	1.717*	0.676
<i>DLOAN</i>	-0.113**	0.049	-0.106**	0.045
<i>LOANS</i>	-1.640	1.402	-1.269	1.193
<i>GDP</i>	-1.210**	0.601	-1.231**	0.0601
<i>DUMMYSIZE</i>	-1.054**	0.495	-1.002	0.396
<i>INTERACT1</i>	1.151***	0.213	1.025	0.310
<i>INTERACT2</i>	0.047***	0.008	0.051	0.008
<i>INTERACT3</i>	0.051***	0.009	0.079	0.012
<i>CONSTANT</i>	0.964	0.886	0.682	0.756
<i>SARGANTEST</i> (<i>p - value</i>)	0.91		0.88	
<i>m1</i> (<i>p - value</i>)	0.00		0.00	
<i>m2</i> (<i>p - value</i>)	0.89		0.94	

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Finally,

when comparing the statistics of large and small banks over the years, you seem to have “natural selection” going on

- show size distribution;
- perhaps, compare subsample of those that were always large with those that were always small, as a robustness check.

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In summary:

A nice paper that uses a comprehensive dataset to address an important issue within the context of an emerging market

Smoothing the rough edges on the estimation could strengthen your case for cyclical capital buffers.

Cyclical Buffers

Questions:

should they be top-down (system wide) or bottom-up (bank-specific) ?

if they are system wide, should they vary as the bank size distribution varies ?

to which extent can cyclical reserve requirements in EMs do the job that cyclical capital buffers are expected to do ?