

Workshop On Macroprudential Policy and the CCyB

Comments on “How Usable are Capital Buffers?”
by G. Leitner

Outline



Capital requirements and buffer usability



Main Results



Implications for Chile



Discussion

What limits buffer usability?

Risk Metric	Components	Requirement	% of Exposure	Eligible Capital	Restrictions
Risk Weighted Capital Requirement (RWC)	Total Risk Weighted Exposure Amount: CR, MR and OR (TREA)	Minimum requirement	4,5%	CET1	
			6%	TIER 1	AT1<25% T1
			8% +Pilar 2	K=T1+T2	T2<25% K
		Buffer requirement CBR	CCoB CCyB SyRB SII	CET1	
Leverage Ratio (LR)	Total Exposure: On and off balance (LREM)	Minimum requirement	3% + Pilar2	TIER 1	No restriction on T1
		Buffer requirement	G-SII	TIER 1	

- Reducing CET1 to use the buffer violates the minimum LR TIER requirement
- This happens when CET1 used to meet min RWC is below CET1 used for min LR

$$\mathbf{CET1_{RW} < CET1_{LR}}$$

What limits usability?

		Impact	Effect on usability
Regulatory Requirements	Pillar 2 requirements on RWC	Increases CET1_RW	Higher
Capital Composition	Higher AT1 (above RW max)	Lowers CET1_LR	Higher
	Higher T2	Lowers CET1_RW	Lower
Risk Weights	Lower risk weights due to IRB	Lowers CET1_RW	Lower
Asset composition	Higher share of low risk assets	Lowers RWD (TREAL/LREM)	Lower

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Main results

- Explores buffer “usability” for a large sample of European banks over the 2016 to 2022 period and carries out several simulations based on changes to the Basel framework.
- Main results:
 - A significant share of capital held in buffers cannot be used=> macro financial implications.
 - The main driver of differences in usability is the “risk weight density” (RWD), followed by use of T2 capital.
 - There are important differences across countries regarding RWD (with countries less affected by the GFD having lower requirements) and between systemic and non-systemic banks (G-SIIs have lower RWD).
- Counterfactual exercises changing bank regulation, find that the following raise usability:
 - Extending buffers to leverage requirements
 - Non-neutral CCyB
 - BIII output floor

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European vs Chilean Banking Legislation

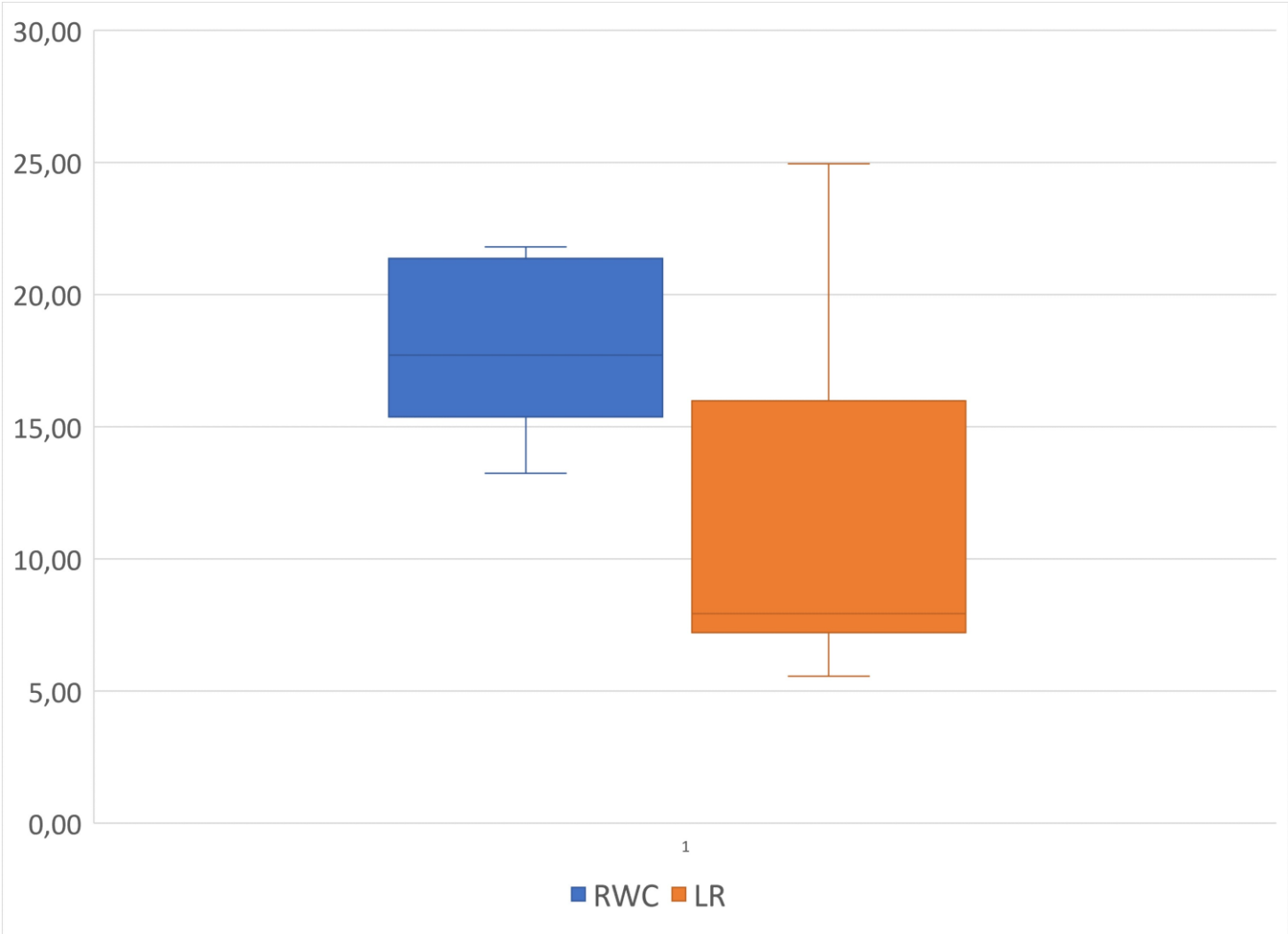
- Both Chile and EU have implemented BCBS standards---overall very similar.
- What are the differences:
 - In Chile systemic banks have additional RWC minimum requirements (not a buffer)
 - Pillar 2 requirements can only be set for RWC minimum requirement
 - Leverage requirement in Chile must be met with CET1
 - IRBs are being gradually phased in: currently foundation model available for credit risk
- Implications for “usability” vis a vis Europe?

		EUROPE			CHILE			Effect on Usability
Risk Metric	Requirement	% of Exposure	Eligible Capital	Restriction on Capital	% of Exposure	Eligible Capital	Restriction on Capital	
RWC	Minimum requirement	4,5%	CET1		4,5%	CET1		
		6%	TIER 1	AT1<25% T1	6%	TIER 1	AT1<33% CET1	
		8% +Pilar 2	K=T1+T2	T2<25% K	8% +Pilar 2+SII	K=T1+T2	T2<50% CET1	Higher due to SII
	Buffer requirement	CCoB CCyB SyRB SII	CET1		CCoB CCyB	CET1		
LR	Minimum requirement	3% + Pilar2	TIER 1	No restriction on T1	3% + SII	CET1		Lower
	Buffer requirement	G-SII	TIER 1		--	CET1		Lower

Limited IRB use: only permitted for credit risk, foundation approach, full rollout of output floor=> **higher usability in Chile due to higher risk density.**

A quick look at RWC and LR in Chile

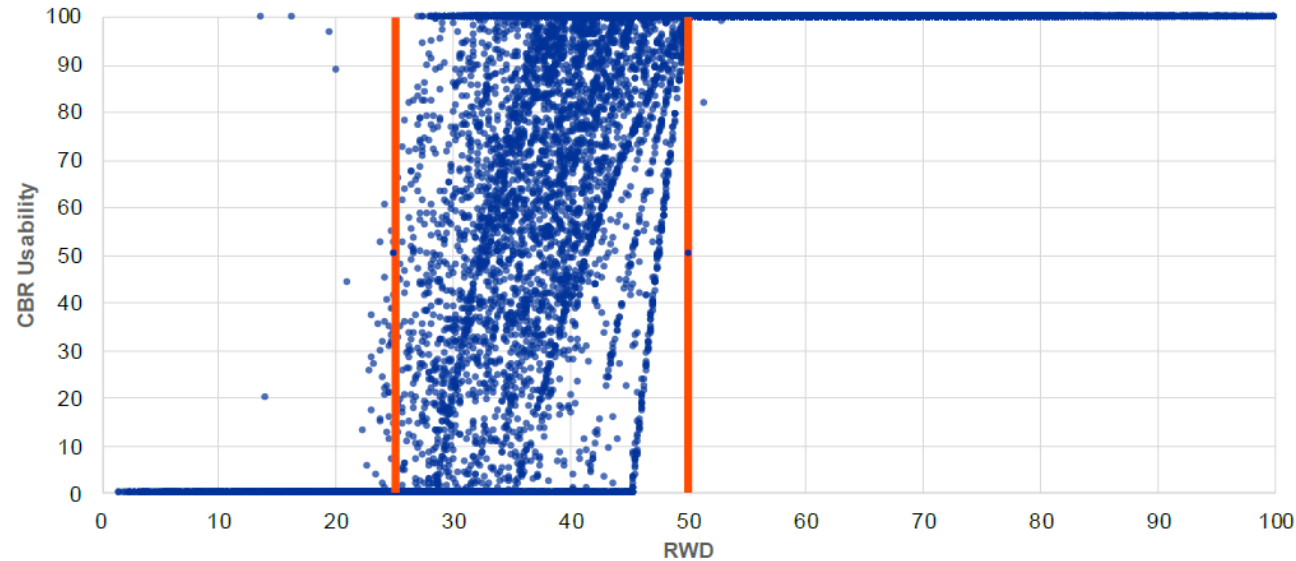
Key Capital Ratios Chilean Banks (Sep 2023)



Source: CMF

Authors show full usability at RWD above 50

RWD as a crucial determinant of CBR usability



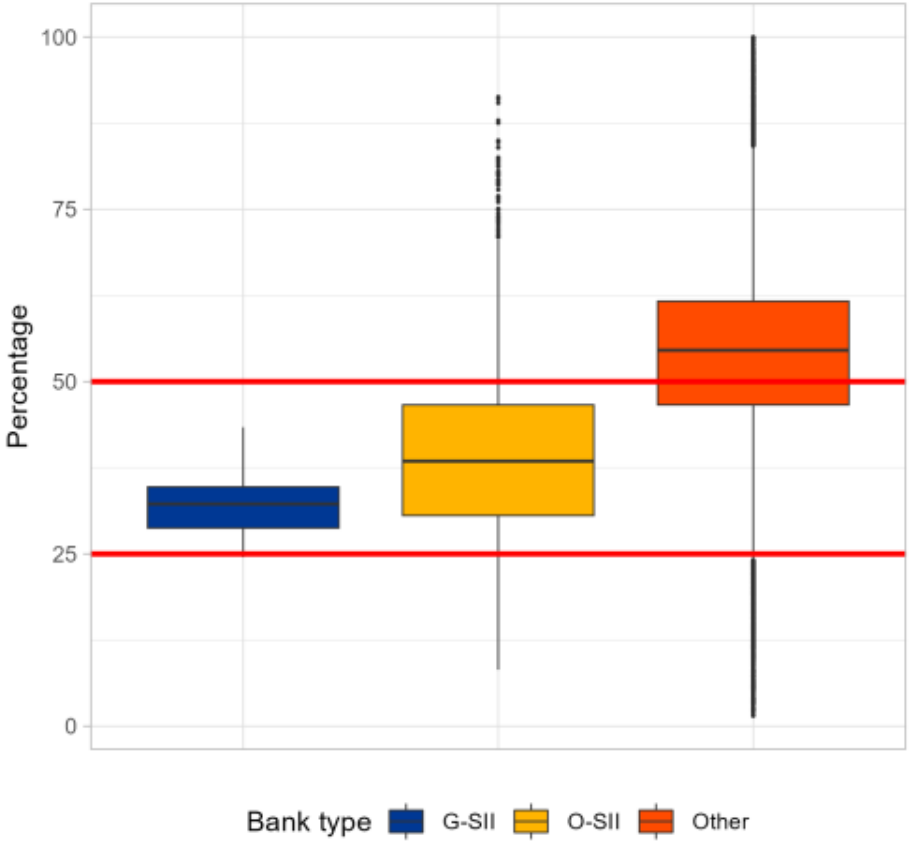
Sources: Supervisory data and USIT.

Notes: Each dot in this chart represents one bank at a given time observation. The figure shows all banks over all periods of the balanced sample, therefore multiple dots correspond to the same bank.

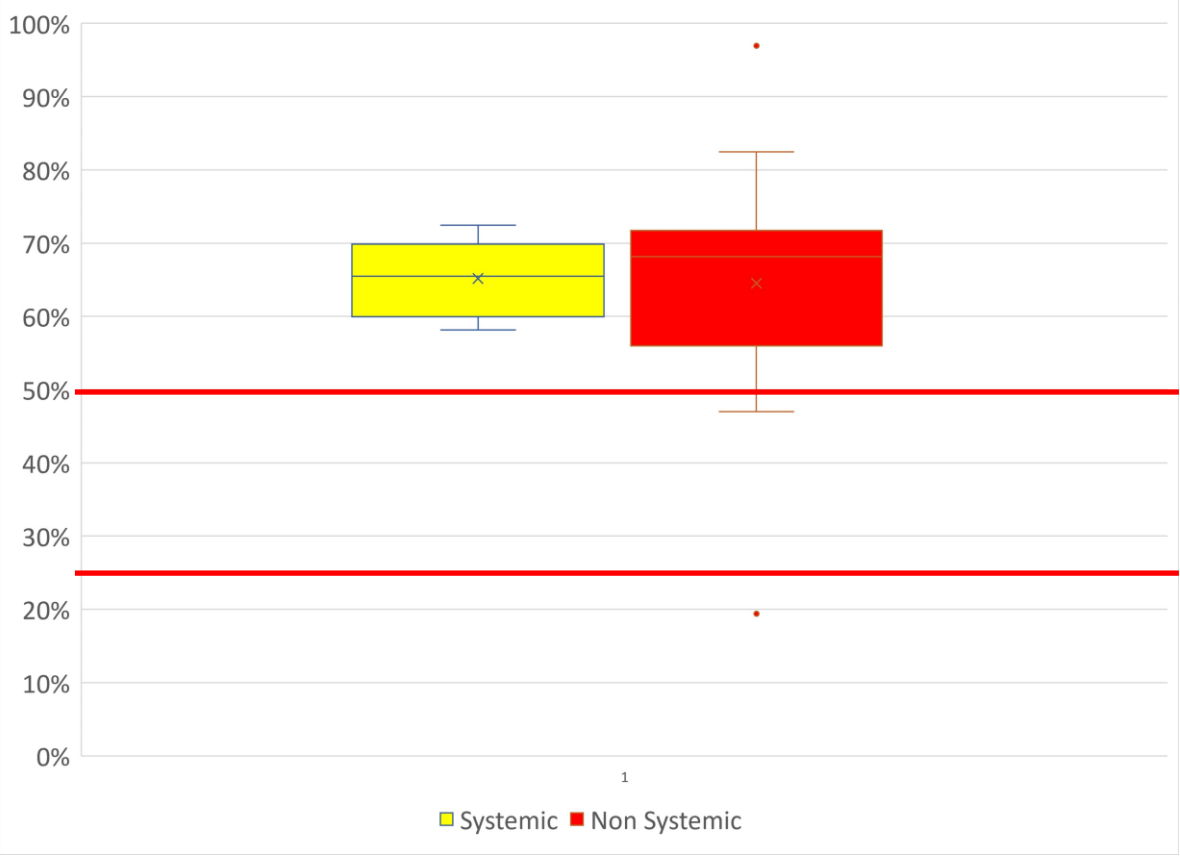
Numerical exercises: critical RWD lies between 27% and 44% for most Banks (assumption of $P2R=0$ is valid for Chile)

RWD in Chilean Banks vs Paper Sample

RWD Europe Sample



RWD Chile



Source: Leitner et al 2023, CMF

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- A timely and useful exercise.
- Relevant for the broader discussion on capital buffer usability:
 - Willingness to use buffers: signal/stigma, restrictions on dividends and remunerations.
 - Capacity to use buffers: using the buffer will trigger a violation of the leverage requirement.
- The paper highlights an additional consequence of the heterogeneity that still exists across jurisdictions and institutions on RWD: validates the output floor.
- Key variable to incorporate in empirical analysis...
- A preliminary look at Chilean data suggests usability is not currently a binding constraint, in part due to the gradual rollout of IRB.
- Nonetheless the papers results suggest that this is an issue that requires monitoring: changes in RWD due to asset composition (public sector assets, use of guarantees) and changes in T2 use.
- Usability is one more component to be considered in the determination of an optimal neutral CCyB requirement.
- Complexity in current BCBS framework...



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