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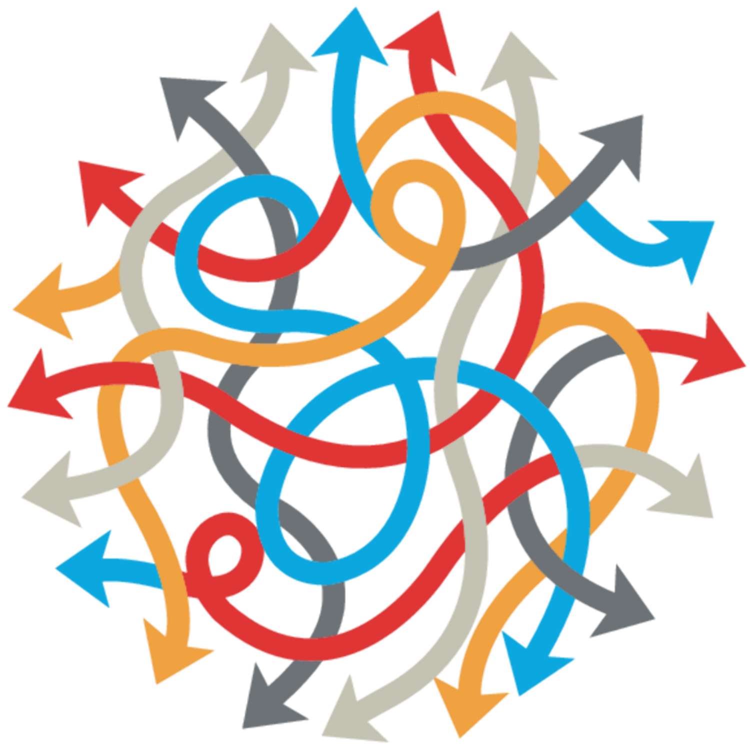


The regulatory change transmission mechanism and Basel 3

A practitioner perspective

Conference on Macroprudential policy, bank regulation and financial stability, Brunel University London

Simon Brennan | 28 June 2019

Implementation of Basel 3 in the EU

Adoption split across recently-finalised and yet-to-be-written legislation

Basel December 2017 revisions		CRR2	CRR3
Credit Risk	• Standardised Approach for Credit Risk. • Internal Ratings-Based Approach for Credit Risk.		To be adopted
Fundamental Review of the Trading* Book (FRTB)	• Delayed application of framework to January 2022. • BCBS published its final rules for FRTB in January 2019*.	Introduced as a reporting requirement	To be adopted as a binding requirement
CVA, Operational Risk, Output Floor	• Minimum capital requirements for Credit Valuation Risk (CVA) risk. • Minimum capital requirements for Operational Risk. • Standardised output floor.		To be adopted
Leverage Ratio	• Revised exposure definition. • G-SIB buffer.	Leverage ratio G-SIB buffer introduced	Revised Exposure definition likely to be introduced

*****These rules will be reflected by the European Commission by way of a Delegated Act under CRD5/CRR2.

Implementation of Basel 3 in the EU

Expected timeline

27.06.19
Entry into force.

18 months after entry into force
CRD5/BRRD2 Member State adoption and publication, and application deadline.

2 years after entry into force
CRR2 general application date.

Including NSFR, SA-CCR, leverage ratio

2019

CRR2:
- Scope, Supervisory powers.
- TLAC requirements
- Own funds requirements for CCP exposures.

2020

31.12.19
CRR2
- Commission to adopt **Delegated Act modifying FRTB framework.**

Q2 2020
CRD6/CRR3
Expected European Commission Proposal.

2021

One year after adoption of FRTB Delegated Act, 31.12.20
CRR2
- Application of FRTB reporting requirements based on Standardised Approach.

CRD5
- Provisions on interest rate risk arising from non-trading book activities.

2022

CRR2
- G-SIB leverage ratio requirement.

01.01.22
CRD5
- Restrictions and required actions in event of failure to meet capital/leverage ratio buffer requirements.

Q2 2022
CRD6/CRR3
Predicted adoption of legislative package.

2023

Three years after adoption of Delegated Act on FRTB
CRR2
- Application of FRTB reporting requirements based on Internal Model Approach.

2024

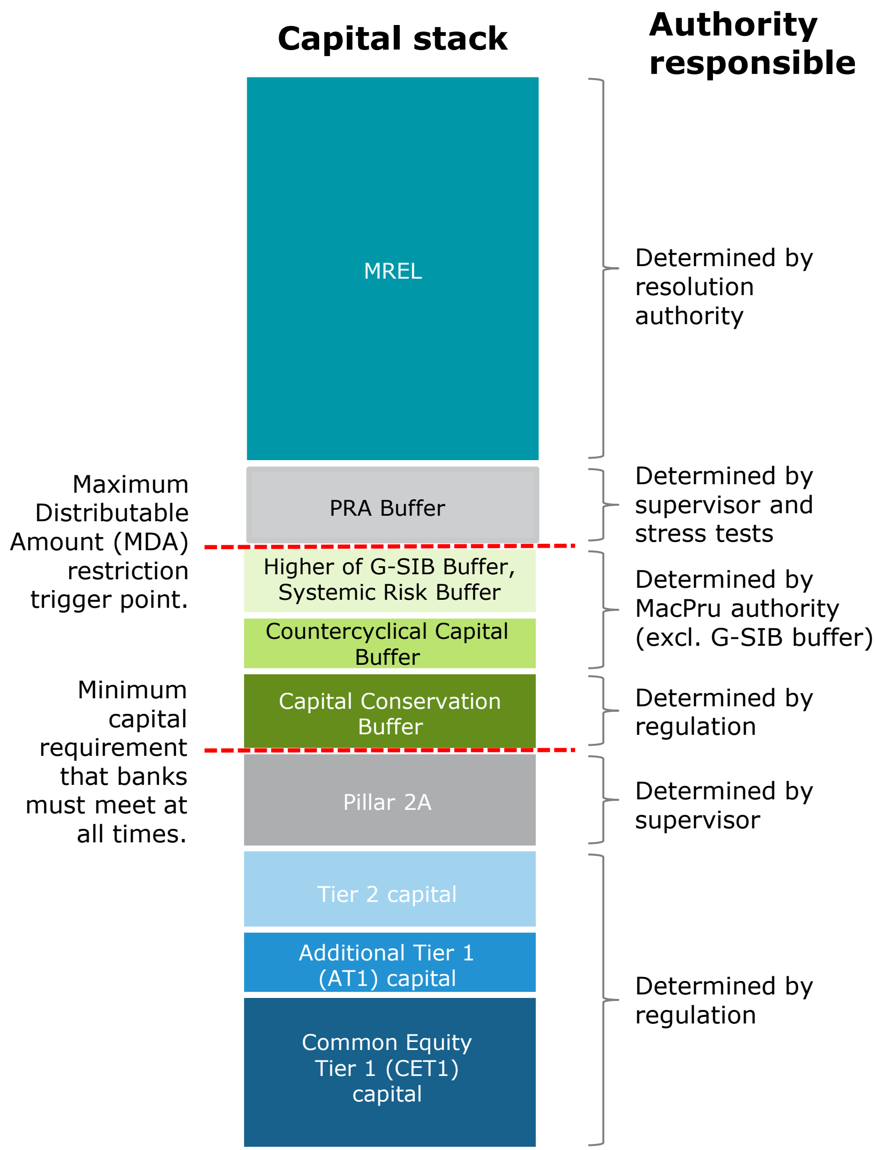
30.12.23
CRD5
- Intermediate Parent Undertaking (IPU) requirements.

01.01.24
BRRD2
- MREL application date for resolution and non-resolution entities.

2024
CRD6/CRR3
Predicted implementation of legislative package.

Prudential framework at a glance

Complex and multivariate, and with many stakeholders

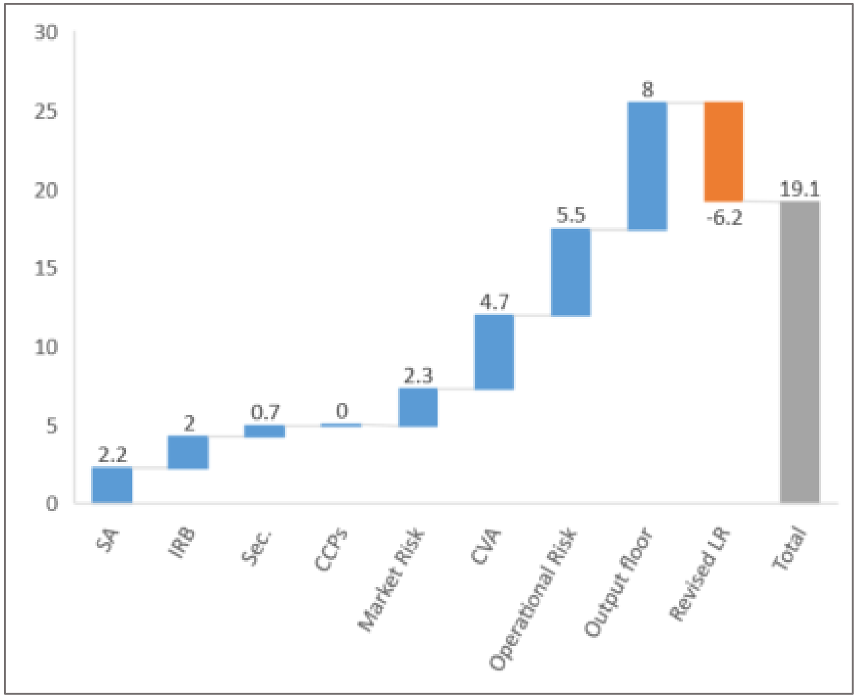


	Component	Status
Calculating Pillar 1 capital requirements	Credit risk	• Major revisions to IRB and SA, plus output floors.
	Market risk	• FRTB implementation split over CRR2 and CRR3.
	Operational risk	• Fundamental revision via removal of AMA.
	Leverage ratio	• Implementation via CRD5/CRR2.
	Sovereign risk	• Progress on new rules paused
Pillar 2	IRRBB	• Revised EBA guidelines to apply from 30 June 2019.
	Stress testing	• Continuously evolving framework/expectations.
Liquidity and funding	LCR	• Stable [but perhaps needs to be revised].
	NSFR	• Implementation via CRD5/CRR2 forthcoming.
Gone-concern	MREL/TLAC	• Implementation ongoing.
Quasi-external factors	IFRS9	• Recently applicable, stable.
	TRIM	• Ongoing, likely to lead to revisions to IRB.
	Model risk management	• Area of ongoing supervisory focus.

Impact of Basel 3

2017 revisions increase capital requirements and alter balance between components of the framework

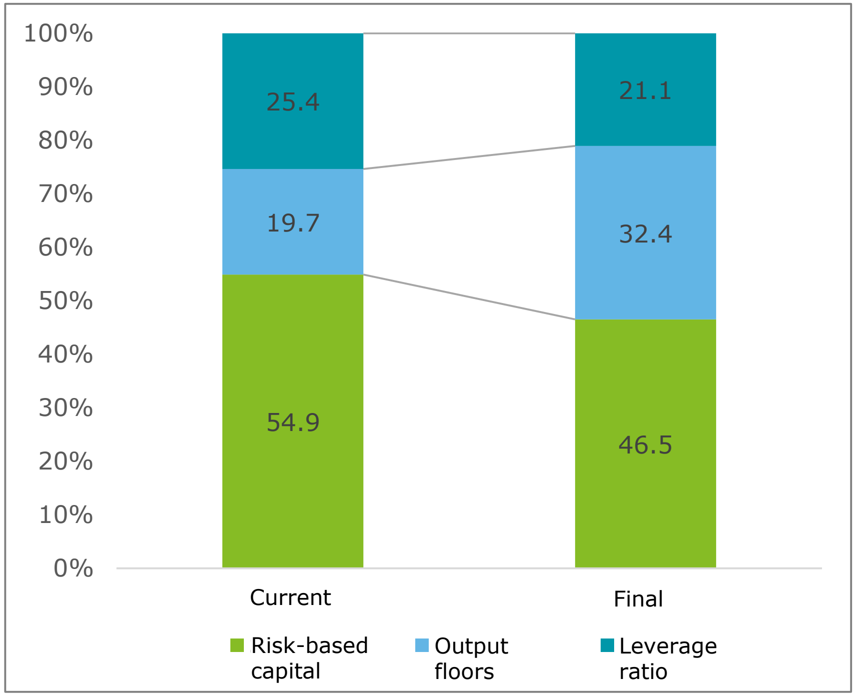
Change in total T1 minimum capital requirements due to the full implementation of Basel 3 – as a percentage of the overall current requirements, EU banks peer group



Source: 'Basel 3 monitoring exercise', EBA, March 2019.

Notes: Table 1. Weighted-average impact across all banks. Based on June 2018 EBA Quantitative Impact Study data.

Impact of 2017 Basel revisions on constraining factor on banks' capital positions – per cent of banks, Global banks peer group



Source: 'Basel 3 monitoring report', BCBS, December 2017.

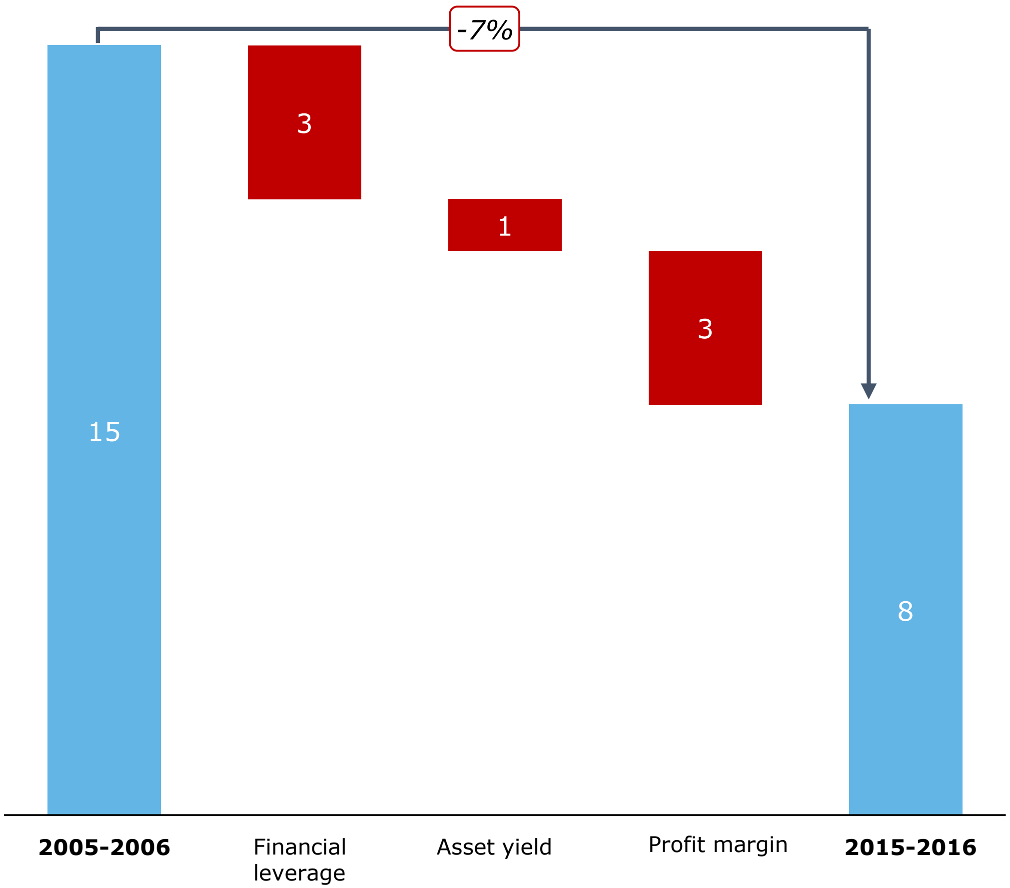
Notes: Table B6. Proportion of Group 1 banks (internationally active banks with >€3bn T1 capital) constrained by different elements of capital regime under current framework vs. 2017 revised package.

Impact of Basel 3

Return on Equity (RoE) is below pre-crisis levels, primarily due to lower financial leverage and profit margins

DuPont analysis of bank profitability

Simple average, per cent



Of which, changes by business model

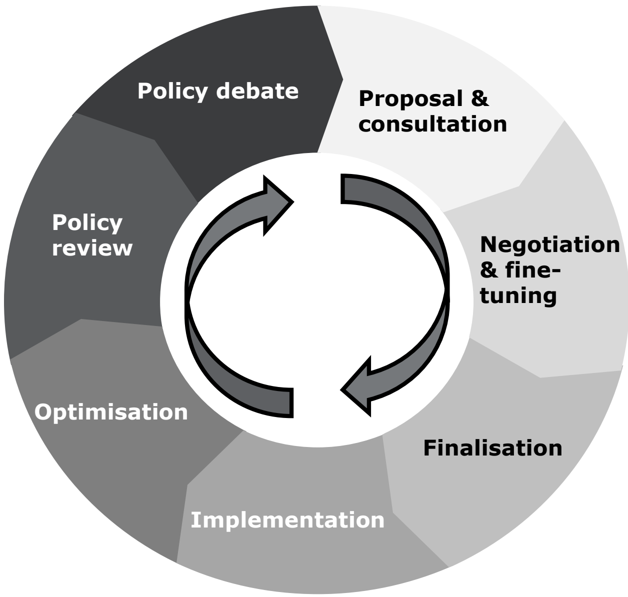
	ROE, 2005-06	Change: Financial leverage	Change: Asset yield	Change: Profit margin	ROE, 2015-16
Retail-funded	**15**	-2	-2	-6	**6**
Wholesale-funded	**14**	-2	-2	-2	**8**
Universal	**15**	-4	0	-2	**9**
Trading	**14**	-5	1	-1	**9**

Source: 'Structural changes in banking after the crisis', Committee on the Global Financial System, January 2018.

Notes: Table 3. Financial leverage = assets / equity, asset yield = revenue / assets and profit margin = net profit/revenue.

Regulatory change transmission mechanism

An ongoing process, rather than a point-in-time ‘event’

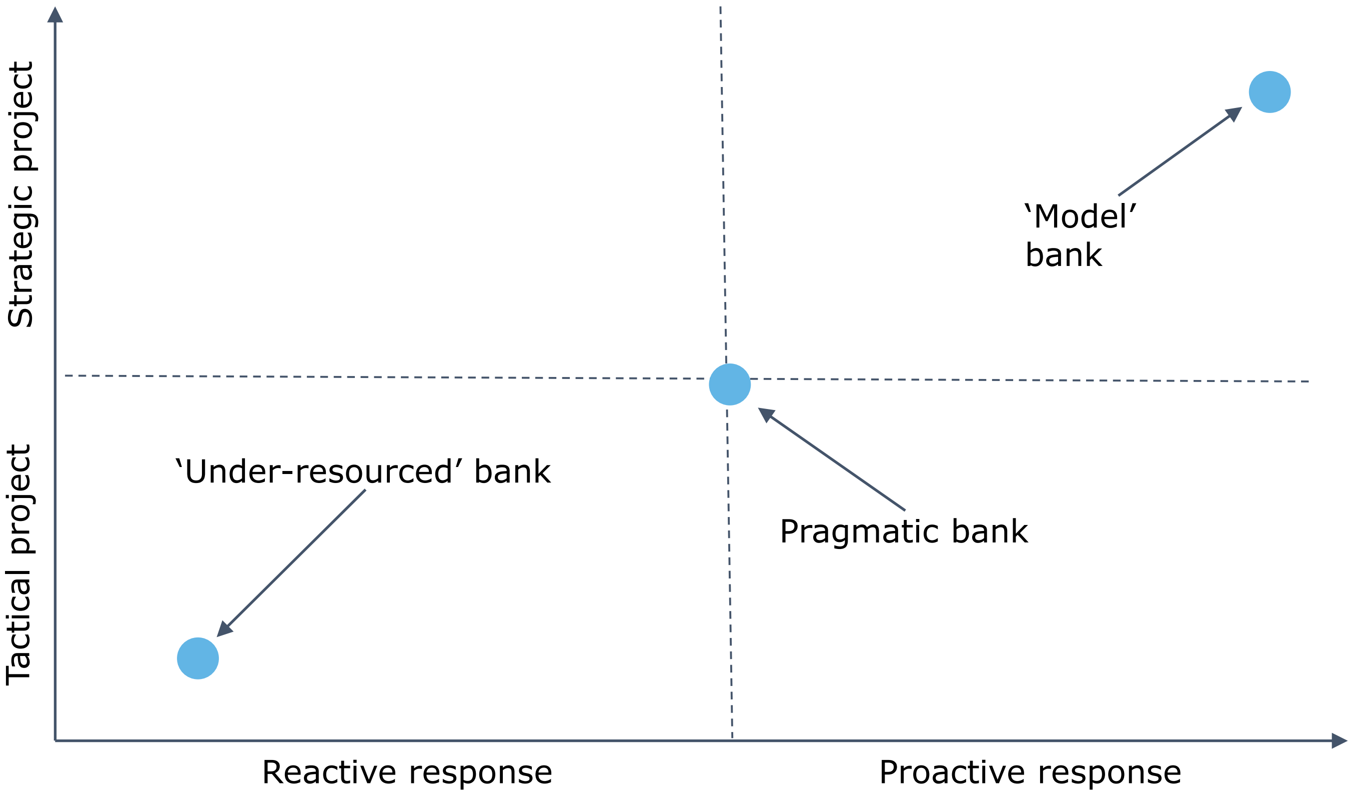


1 Bank receives final regulation	• Likely to have tracked regulation from inception, and carried out preliminary analysis.
2 Analysis of impact on business – products, services/ ops/ tech, profitability, capital, etc.	• May build on previous ‘sketch’ impact analyses. Likely to require input from across the business (front/ middle/ back office, + ops/ tech, strategy department).
3 Go to ExCo for senior buy-in, sponsor, funding	• ‘Regulatory mandatory’ projects will receive funding – but how much? How ambitious will project/ implementation be? What are the competing priorities for funding?
4 Initiate and execute implementation project	• Depending on project, can last from 2-24 months, or even longer. • Ongoing adjustments may be necessary to accommodate secondary rule-making.
5 Review implementation as needed	• Lessons learned may lead to revisions.

Regulatory change transmission mechanism

Banks vary in terms of how they respond to regulatory change

- A response in top right-hand quadrant requires most resources, in terms of planning, implementation, management attention, etc.
- Centre reflects a balance between regulatory change and competing priorities.
- Bottom left quadrant represents overburdened, under-resourced banks.



Regulatory change transmission mechanism

How much do we really know?

- Little work has been done to examine the *practical complexities* of the new regulatory framework.
- Variety of methodological issues limit the real-world insights available from existing attempts at modelling of impacts.

"In many cases, research connects regulatory changes (e.g. higher capital ratios) to relevant indicators capturing resilience and terms of financing (e.g. changes in risk indicators, spreads, or cost of lending) **rather than broader G20 objectives as such** (e.g. increased financial stability and sustainable economic growth). […] The higher capital and liquidity requirements under Basel III intend to "improve the banking sector's ability to absorb shocks arising from financial and economic stress, whatever the source". **Evaluations [of Basel III] have focused mainly on the effects of changes in capital requirements, and lesser on liquidity regulation as well as on analysis of combined effects of reforms…**"

FSB, 2017

"…how banks take, measure and control risks tends to be much harder to observe than some other aspects of banking.

[…] banks appear to have improved their risk governance and risk management practices since the crisis, although further progress is often needed to meet supervisory expectations. **It can be difficult to disentangle the drivers of improvements: while many reflect regulatory and supervisory changes, banks have also been adjusting as a result of their crisis experience and market pressure**."

CGFS, 2018

"…banks **may not respond to regulatory requirements in the manner assumed in many models** and […] we should be cautious about any conclusions drawn from models that ignore these issues."

BCBS, 2016

Questions
Food for thought

Optimisation

- Do we understand what 'optimisation' means in the context of an increasingly complex and ever-changing regulatory environment?

Practicalities

- Does the reality of how implementation occurs in practice affect our assumptions about what the 'optimal' regulatory framework looks like?

Incentives

- Do we sufficiently understand the business model and business strategy incentives created by the current regulatory regime?