



# Basel 4

**A brief overview**

November 2018

[kpmg.com/Basel4](https://kpmg.com/Basel4)



# Introduction

Basel 4 was (almost completely) finalised by the Basel Committee in December 2017, and is due to be implemented from January 2022.

The December 2017 agreement included substantial amendments to the capital treatment of credit risk, operational risk and the credit valuation adjustment, the imposition of an output floor, revisions to the definition of the leverage ratio and the application of the leverage ratio to global systemically important banks. A revised market risk framework had already been largely finalised in January 2016.

In the EU the full implementation of Basel 4 will require not only finalisation of the CRR2/CRD5 package (covering mostly the revised market risk framework) but also the introduction of a CRR3/CRD6 package for the other elements of Basel 4.

The EU has already implemented Basel 3 through the Capital Requirements Regulation (CRR) and the revised Capital Requirements Directive (CRD4). These covered the quantity and quality of capital that banks should hold, the introduction of a minimum leverage ratio, two new minimum liquidity ratios (the LCR and the NSFR), a tougher capital treatment of securitisations, and the use of the counter cyclical capital buffer as a macro-prudential tool.

We present here a primer for Basel 4, highlighting its main components, their potential impact on major EU banks and the actions that banks should be taking to implement these changes and to mitigate (where possible) their impact.



## Credit risk

### Key elements of new standards:

- Standardised approach more granular and risk sensitive
- Removing the option to use advanced IRB for institutions and large corporates, and any IRB approach for equity
- Restrictions on model parameters (input floors)

**Implementation date<sup>1</sup>:** 1/1/2022

### Impact on capital requirements:

Higher capital requirements - in particular on higher risk exposures, income producing real estate, and where IRB no longer available

### CET1 capital ratio impact<sup>2</sup>:

4.5 percent reduction (4.7 percent for EU G-SIBs)

### Other impacts:

- Pricing of long term credit exposures
- Systems and data
- Read-across to counterparty credit risk

### Potential mitigating actions:

- Asset allocation
- Use of remaining modelling opportunities

### More to come?

- CRR3
- Use of national discretions
- Impact of TRIM
- Sovereign exposures

### KPMG Basel 4 series papers:

[\*Credit Risk - the Standardised approach, April 2018\*](#)

[\*Credit Risk - IRB approach, April 2018\*](#)



## Market risk

### Key elements of new standards:

- Stricter border between Trading and Banking books
- More risk-sensitive Standardised Approach (SA)
- Revised Internal/Advanced Model Approach (IMA)
- Replacement in IMA of VaR measure by the expected shortfall measure

**Implementation date<sup>1</sup>:** 1/1/2022

### Impact on capital requirements:

Higher capital requirements, most pronounced under the revised standardised approach

### CET1 capital ratio impact<sup>2</sup>:

2.3 percent reduction (3.4 percent for EU G-SIBs)

### Other impacts:

Systems and data

### Potential mitigating actions:

- Data cleansing and alignment
- Enhance model governance and understand modelling differences
- Assess regulatory and other programme overlaps for efficiencies
- Develop roadmaps for implementation and operating model
- Standardise modelling capabilities
- Build out secondary considerations and effects, such as capital allocation

### More to come?

- Finalisation of BCBS market risk standards
- Finalisation of CRR2
- Impact of TRIM

### KPMG Basel 4 series papers:

[\*Market Risk, March 2018\*](#)



## Credit valuation adjustment

### Key elements of new standards:

- New basic approach (BA-CVA) and new standardised approach (SA-CVA) for CVA risks in derivatives and securities financing transactions
- Enhance risk sensitivity, improve robustness and greater consistency with market risk framework

**Implementation date<sup>1</sup>:** 1/1/2022

### Impact on capital requirements:

Higher capital requirements, mostly from removal of more advanced modelling approaches

### CET1 capital ratio impact<sup>2</sup>:

3.8 percent reduction (5.4 percent for EU G-SIBs)

### Other impacts:

Systems and data

### Potential mitigating actions:

- Choice of counterparty
- Business model and product mix
- Meet requirements to use the SA-CVA approach

### More to come?

CRR 3

### KPMG Basel 4 series papers:

[\*CVA Risk, March 2018\*](#)



## Operational risk

### Key elements of new standards:

- Withdrawing the use of internal model-based approaches
- Single Standardised Measurement Approach (SMA)
- Business indicators, increasing marginal coefficients, internal loss multiplier

### Implementation date<sup>1</sup>: 1/1/2022

### Impact on capital requirements:

Higher capital requirements – in particular for larger banks, banks with high historic operating losses, and banks moving from the AMA

### CET1 capital ratio impact<sup>2</sup>:

6.4 percent reduction (7.5 percent for EU G-SIBs)

### Other impacts:

- Systems and data – in particular to meet the ten year loss data capture requirement.
- Reduced risk sensitivity and quality of risk management, compared with current more advanced approaches

### Potential mitigating actions:

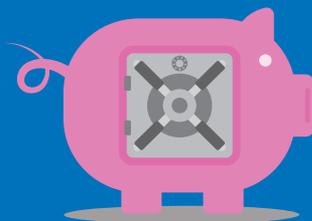
- Greater focus on reducing operational losses
- Change balance across business lines
- Reduce overall size of bank

### More to come?

- CRR3
- Use of national discretions

### KPMG Basel 4 series papers:

[Operational Risk, February 2018](#)



## Output floor

### Key elements of new standards:

- Floor to constrain the extent to which banks can use internal models to drive down their capital requirements for credit and market risk
- Calibrated to 72.5% of RWAs under Standardised approaches

### Implementation date<sup>1</sup>:

Phased in from 1/1/2022 to 1/1/2027

### Impact on capital requirements:

Higher capital requirements, with most pronounced impact from 2025 onwards

### CET1 capital ratio impact<sup>2</sup>:

6.5 percent reduction (5.4 percent for EU G-SIBs)

### Other impacts:

Systems and data - ability to calculate floor using Standardised approaches

### More to come?

- CRR3

### KPMG Basel 4 series papers:

[Piecing the jigsaw together, May 2018](#)



## Leverage ratio

### Key elements of new standards:

- Revised exposure definition (derivatives, some off-balance sheet items and holdings of reserves at central banks)
- G-SIB leverage ratio buffer (set at half of a G-SIB's capital ratio buffer)

### Implementation date<sup>1</sup>:

- Current definition from 1/1/18
- Revised definition and G-SIB buffer 1/1/2022

### Impact on capital requirements:

Lower capital requirements – definition changes generally increase measured leverage ratios, and more than offset the impact of the G-SIB buffer

### Leverage ratio impact:

1.0 percent increase (4.3 percent for EU G-SIBs)

### Other impacts:

Leverage ratio becomes binding constraint for fewer banks

### Potential mitigating actions:

Reduce balance sheet size

### Notes:

1. Implementation date is in Basel standards; EU implementation may be later.
2. EBA estimate of average percentage impact on the CET1 capital ratios of large internationally active EU banks



## Overall impact

### Impact on capital requirements:

Higher capital requirements

### CET1 capital ratio impact<sup>2</sup>:

18.7 percent reduction (25.4 percent for EU G-SIBs)

### Other impacts:

- Business model
- Systems and data
- Risk management
- Impact analysis
- Implementation projects

### Potential mitigating actions:

- Adjust product mix
- Reduce risk weighted exposures
- Issue or retain CET1 capital

### Pillar 2 offset:

Possible reductions in Pillar 2 capital add-ons to reflect improved and less model-based Pillar 1 requirements?

### Other impacts:

- Higher RWAs drive higher Pillar 2 and TLAC/MREL requirements (where these are specified as a percentage of total RWAs)
- Impact on profitability

### More to come?

- CRR3
- BRRD2
- Setting of bank-specific MREL requirements

### KPMG Basel 4 series papers:

[\*Piecing the jigsaw together, May 2018\*](#)

[\*Impact of Basel 4 on EU banks, October 2018\*](#)

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### Additional thought leadership collateral:



Operational risk



Market risk



CVA risk



Credit risk



Credit risk - IRB  
approach



Piecing the  
jigsaw together

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