The world awaits: Basel 4 nears completion

December 2016

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Executive Summary

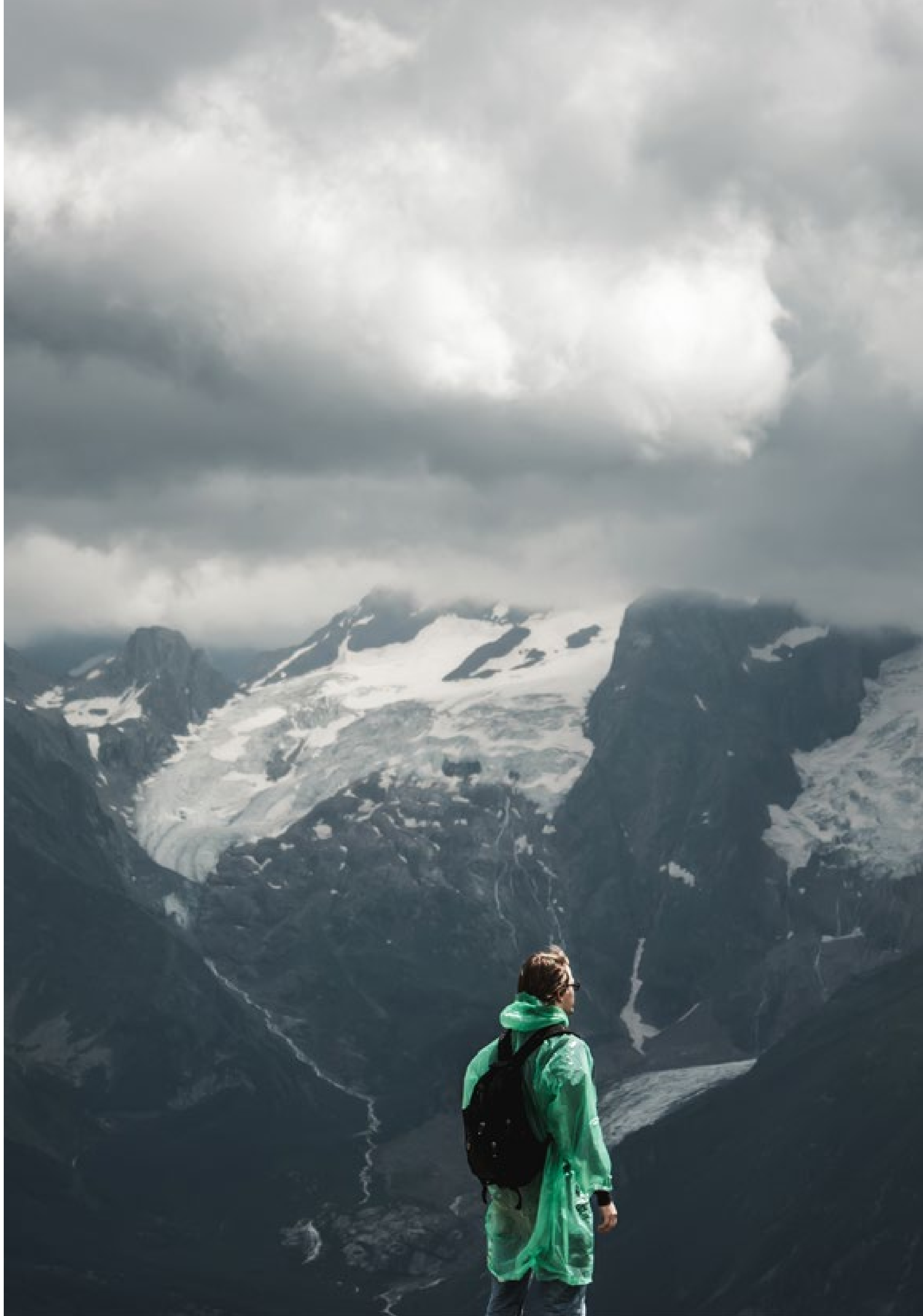
The Basel Committee is expected to finalise early next year its revisions to the standardised and internal ratings based approaches to the calculation of risk weighted assets for credit risk; a shift to a single standardised approach to operational risk; and the application of a capital floor to limit the extent to which regulatory capital requirements calculated using internal model approaches to credit and market risk can diverge from calculations using standardised approaches.

It remains to be seen how far the Basel Committee will amend its earlier consultation proposals to achieve its stated objective that these revised standards should not increase overall capital requirements significantly. Some banks will certainly be subject to a further increase in their regulatory capital requirements.

These revised standards will follow the finalisation of the Basel Committee's revised frameworks for the standardised approach to counterparty credit risk (March 2014), market risk (January 2016), and interest rate risk in the banking book (April 2016); and they will largely complete what KPMG has been calling 'Basel 4'.

In addition to higher regulatory capital requirements, many banks will face significant operational costs in implementing the revised standards, and will need to align their responses to the plethora of other regulatory reforms and commercial pressures they face.

The revised standards from the Basel Committee will put further downward pressure on banks' profitability and will reinforce the need for some banks to change their strategies and business models in an attempt to secure a viable and sustainable future.



Basel 4

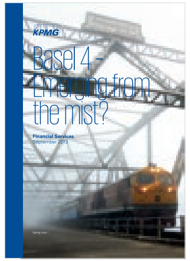
Ever since 2013 KPMG has been using the 'Basel 4' label to describe the Basel Committee's work to develop new standards on risk weighted assets.

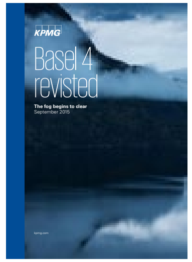
Basel 3 (originally published at the end of 2010) focused primarily on the numerator of the minimum required regulatory capital ratio. It covered both the quality and quantity of banks' capital, including an increased emphasis on CET1 and overall Tier 1 capital, and higher capital requirements resulting from both the minimum requirements and a series of additional capital buffers – the conservation buffer, the counter-cyclical buffer, and a buffer on systemically important banks. The introduction of a leverage ratio and two new liquidity ratios (the LCR and the NSFR) were also key components of Basel 3.

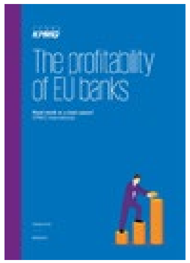
Basel 4 focuses primarily on the denominator of the capital ratio – the calculation of the credit, market and operational risk exposures of a bank, using either standardised or internal model based approaches. Here, the Basel Committee has already finalised revised frameworks for counterparty credit risk, market risk and interest rate risk in the banking book. The next step will be the finalisation of the long-awaited standards for credit and operational risk, and for the capital ('output') floor.

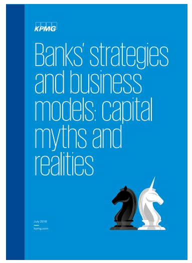
The Basel Committee may also announce the outcome of its deliberations on imposing a higher minimum leverage ratio on global systemically important banks. Further ahead we expect the finalisation of the capital treatment of simple, high quality securitisations, and there remains the longer term prospect of revisions to the capital treatment of sovereign exposures.

Basel 4 also includes some other capital-related regulatory initiatives that were not part of the Basel 3 package – the evolution of stress-testing and the development of a growing array of macro-prudential tools, many of which work through higher capital requirements or higher risk weightings.









Find these reports at www.kpmg.com/Basel4

Next steps

The Basel Committee is close to finalising its standards for the calculation of capital requirements for credit risk (under both the standardised approach and the internal ratings-based approach) and operational risk; and for the setting of a capital floor to constrain the extent to which banks can use internal models to drive their capital requirements for credit and market risk below the requirements set by the standardised approaches for these types of risk.

These standards are expected to be agreed by the Group of Governors and Heads of Supervision (GHoS – the oversight body of the Basel Committee) on 8 January 2017. The GHoS typically makes only a high level announcement of its decisions, and the timing of the publication of the final standards by the Basel Committee will depend on the extent to which fine-tuning or further work is required following the GHoS meeting.

The need for revised standards is not in doubt. The standardised approaches to credit and operational risk have become outdated. There is general agreement that the variations across banks in risk exposure weightings derived from their internal models do not always seem to reflect differences in the underlying risks. Model-based approaches have limited applicability to low default exposures.

The Basel Committee's revised framework for market risk (January 2016) included both a revised standardised approach and constraints on the use of internal models to calculate regulatory capital requirements. Its consultative proposals on credit and operational risk followed a similar path, and indeed proposed that internal models should no longer be used to calculate regulatory capital requirements for operational risk and for some types of credit exposures. Furthermore, a capital floor was proposed. (See box on the next page).

Basel Committee consultation proposals on credit risk, operational risk and the capital floor

Previous consultation papers issued by the Basel Committee proposed:

Credit risk

Making the standardised approach more risk sensitive (December 2015). The consultation proposals would increase the risk weights on some types of lending, including real estate exposures with high loan-to-value ratios or where repayment is materially dependent on the cash flows generated by the property securing the exposure; higher risk corporate exposures; and some types of specialised lending.

Removing the option for banks to use internal model approaches to calculate risk weighted assets (RWAs) for some types of exposure (March 2016). This would include exposures to banks and other financial institutions, large corporates, equities and specialised lending. These would become subject to the standardised approach to credit risk.

Constraining the internal models that could still be used (March 2016). The proposals would remove the option to use the Advanced IRB approach for exposures to medium-sized corporates; set model-parameter (‘input’) floors to ensure a minimum level of conservatism (including a 10 percent loss given default floor for residential mortgage exposures); and limit the ways in which banks can estimate probability of default, loss given default, exposure at default, maturity and credit risk mitigation parameters.

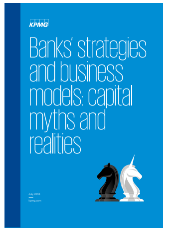
Operational risk

Withdrawing the use of internal models for calculating regulatory capital requirements for operational risk and introducing a single Standardised Measurement Approach (March 2016). For larger banks, the requirements would be based on a set of business indicators and bank-specific loss data, but they would not be able to base their calculations on external data, forward-looking scenario analysis information, or data on business environment and internal control factors. Banks that have been subject to large conduct fines in recent years would be subject to higher operational risk capital requirements for the next ten years.

Capital floor

Setting a capital floor to limit the extent to which the use of internal models for credit and market risk could reduce regulatory capital requirements below the capital required under the standardised approaches (December 2014).

These proposals have already proved controversial. Many banks have expressed concern that the higher capital requirements (‘risk weighted asset inflation’) implied by the consultative versions of these standards would increase their costs of funding, reduce their return on equity and constrain their ability to lend; and that the overall regulatory push-back against the use of internal models is discouraging them from taking a risk-sensitive approach to the management of their exposures to credit, market and operational risks.



Our KPMG International publication on Capital Myths and Realities (July 2016) estimated that the combined impact of the final Basel Committee framework for market risk and its proposals for credit risk, operational risk and the capital floor could be to increase the capital requirements of major international banks by €350 billion.

"In countries where bank lending and profitability has remained weak since the financial crisis, especially in Europe, this has also led some politicians and policy-makers to question whether it is appropriate to impose ever-higher capital requirements on banks."

In countries where bank lending and profitability has remained weak since the financial crisis, especially in Europe, this has also led some politicians and policy-makers to question whether it is appropriate to impose ever-higher capital requirements on banks and to suggest that the detail and timing of the implementation of the final standards should be adapted to reflect local circumstances. Meanwhile, political developments in the United Sates could have an impact on Basel Committee discussions, where until now the US regulators are reported to have taken a tougher approach than their European counterparts, as well as on how the final standards are implemented in the United States.

The Basel Committee has stated that in revising the standardised and internal model-based approaches to risk exposure weightings it will focus on "not significantly increasing overall capital requirements". However, it remains to be seen how this objective can be achieved alongside other policy objectives, including a greater degree of consistency in how banks use internal models, and less variability across banks as a result of their use of internal models.

Meeting these multiple objectives is also likely to generate some regional differences. European banks may be heavily represented in the 'outlier' banks for whom the revised Basel Committee standards are likely to result in a significant increase in capital requirements, because European banks generally have lower risk weights on their exposures than do banks elsewhere in the world. This is in part because European banks have made more substantial use of internal models to calculate their risk weights, but also because the exposures of European banks tend to be more heavily concentrated in lower risk weighted areas such as residential mortgage lending and (for some large European banks) market risk trading positions.

KPMG does not expect any change from the consultation proposal that all banks should move to a single standardised approach for operational risk. But KPMG does expect that the final standards will rein back some of the other consultation proposals, softening the calibration to reduce the impact on overall capital requirements and reducing the number of 'outliers' for whom the final standard will still lead to higher capital requirements:

- applying lower risk weights than under the consultation proposals to some asset classes within the standardised approach to credit risk
- withdrawing the use of internal models from fewer types of credit risk exposure, and allowing the use of at least the Foundation IRB approach – or a constrained Advanced IRB approach – for some low default portfolios such as specialised lending
- imposing less severe constraints and less stringent input floors on the use of internal models, with the possibility of allowing some local supervisory discretion
- applying a capital floor in the lower half of the proposed 60 – 90 percent range, thereby allowing the capital requirements of banks using internal models to diverge further from the standardised approach, and
- providing for long implementation and phasing-in (for example for the capital floor) periods, to ease the costs of adjustment – just as the European Commission has recently proposed for the implementation of the market risk framework in the European Union, with implementation delayed until at least 2020 and then imposing only 65 percent of the revised market risk capital charge on banks for three years after implementation.

Remarks by Stefan Ingves, the Chair of the Basel Committee, in a speech given at the end of November were consistent with all of these anticipated amendments to the consultation proposals, and seemed to confirm the move to a single standardised approach for operational risk. More generally, however, some of the remarks could be interpreted as the Basel Committee focusing more on avoiding significant shortfalls of banks' capital as a result of increases in minimum capital requirements than on avoiding an increase in the minimum capital requirements themselves (this would also be consistent with extended implementation and phasing-in periods to give banks an opportunity to build up their capital).

Challenges for banks

Whatever the precise details of the revised Basel Committee standards for credit risk, operational risk and the capital floor, banks face a number of challenges.

Higher capital requirements

Overall (including the already finalised revised market risk framework), the Basel Committee's revised standards will increase significantly the risk weighted assets of many banks. KPMG International has estimated that this could reduce the CET1 capital ratios of banks that have made substantial use of internal models to calculate regulatory capital requirements by around 2 percentage points *(Capital Myths and Realities, July 2016)*. The largest impacts are likely to be on:

- Banks currently using advanced internal ratings-based (IRB) models to calculate credit risk weights on exposures where this option is removed, restricted to the Foundation IRB approach, or constrained through parameter restrictions and input floors.
- Banks with relatively large trading books. The Basel Committee estimated that the revised framework will increase market risk capital requirements by 40 percent on a weighted average basis. For most banks this will have a limited impact, since market risk typically accounts for less than 10 percent of total RWAs. However, the revisions will have a material impact on banks whose market risk accounts for a larger proportion of RWAs. Moreover, a KPMG in the UK survey of 12 global systemically important banks undertaken in February 2016 found that nearly half (five) of them expected market risk capital requirements to increase by 50-75 percent, and two expected an increase of more than 100 percent.
- Banks currently benefitting from the use of the Advanced Measurement Approach for operational risk, and banks with high costs of retail and wholesale market misconduct in recent years.

The CET1 capital and the RWAs of the 100 major international banks in the Basel Committee's Basel 3 monitoring exercise sample totalled around €3.5 trillion and €30 trillion respectively at end-December 2015. If the revised Basel Committee standards generated a 10 percent increase in RWAs then these banks would have to increase their CET1 capital by €350 billion to maintain their capital ratios; or alternatively reduce their RWAs by €3 trillion (equivalent to a reduction of around €7 trillion of balance sheet assets assuming an average risk weight of 40 percent).

Implementation costs

In addition to the impact on capital requirements, banks will face a range of costs in implementing the new standards. These include:

- Developing new internal models to meet the new standards, in particular where the required model specifications have changed significantly, as in the revised market risk framework.
- Reconciling competing models for economic capital management and for calculating regulatory capital requirements. It is becoming increasingly difficult for banks to use the same (or at least similar) internal models for both of these purposes, which in turn complicates capital allocation and product pricing decisions.
- Ensuring that timely and accurate data are available to enable banks to undertake the necessary calculations under the new standards. As already seen with the revised market risk framework, there can be significant changes to the data sets required to calculate both standardised and internal model based approaches; to the data required to underpin the use of an internal model and to undertake back-testing; and to the data necessary for banks using an internal models approach to calculate what their capital requirements would be under a standardised approach.
- Establishing internal management information and external reporting of capital requirements, including to meet the (not yet completely finalised) revisions to 'Pillar 3' disclosure requirements.
- Meeting assurance requirements, whether imposed internally or externally, on regulatory reporting and on public disclosures in financial statements and Pillar 3 disclosure statements. For example, in the UK the ICAEW has recently issued an exposure draft on assurance with respect to banks' regulatory ratios, including capital, leverage and liquidity ratios.
- Developing new or revised systems and processes to undertake the required calculations – including, for banks using an internal models approach, to also calculate what their capital requirements would be under a standardised approach.

In addressing these implementation challenges banks will also need to take account of wider, but related, projects such as banks' responses to the Basel Committee Principles on Risk Data Aggregation and Reporting, and other bank initiatives on data and technology.

Banks will need to consider the resources required to meet all these implementation challenges, and the timetable for doing so.

Business models

Significant shifts in some banks' business models are already under way, in response to three main types of pressure – macro-economic, commercial and regulatory. These shifts are unevenly distributed across regions and in some cases within countries. Some banks – most particularly in Europe – have withdrawn from, or scaled back their activity in, some lending and trading markets and some geographic regions. Elsewhere, many banks have continued to expand, but more selectively in terms of their focus on key activities.

Macro-economic pressures

The main macro-economic pressures on banks are low interest rates and slow economic growth, while geopolitical uncertainties bring the risk of sharp movements in exchange rates, asset prices, commodity prices and capital flows. Although investment banks may benefit from greater price volatility, banks with more traditional retail and corporate businesses have found themselves squeezed by a sustained period of low interest rates, a flat yield curve and (in weaker economies) high levels of non-performing loans.

Commercial pressures

The main commercial pressure facing many banks is the strength of competition, not only from existing banks but from new entrant banks and from non-banks that are exploiting technological innovations to challenge banks in areas such as lending and payment systems. At the same time, technological innovation provides an opportunity for existing banks to enhance the effectiveness and efficiency of their processes, to address their legacy IT systems, and to tackle the many data issues that they face.

Regulatory pressures

Banks also need to take into account the broader context of regulatory change. The bulk of the regulatory reform agenda is now known, even if some uncertainties remain around the details in some areas. But even if banks should now be able to plan against a backdrop of greater regulatory certainty, the multitude of parallel tracks imposes considerable cost and complexity.

First, a host of international standards on capital and liquidity are moving towards national implementation, including the revised market risk framework, loss absorbing capacity and recovery and resolution planning more generally, interest rate risk in the banking book, IFRS 9 and the regulatory treatment of banks' expected credit losses, the net stable funding ratio and revised Pillar 3 disclosures.

In Europe, for example, the European Commission has recently put forward a major package of revisions to the Capital Requirements Regulation and the Capital Requirements Directive to implement these standards, mostly from 2020. Meanwhile, banks face ever-shifting quantitative and qualitative stress test requirements, an ever-widening range of actual and potential macro-prudential measures, and the continued development of Pillar 2 capital and liquidity requirements.

Second, conduct requirements and other requirements to manage non-financial risks towards customers and counterparties are being tightened in both retail and wholesale markets. This includes in many countries tighter rules on anti-money laundering and countering terrorist financing; codes of conduct for benchmark-setting, foreign exchange trading and other wholesale markets; tougher standards on market abuse; and new requirements on disclosure and selling practices in retail markets.

Third, much greater emphasis is being placed by both regulators and supervisors on corporate governance, risk governance and the culture of banks.

Fourth, there is a greater supervisory focus on the viability and sustainability of banks' business models, particularly in Europe. It is not clear what this might eventually lead to in terms of supervisory actions, but certainly there is growing pressure from supervisors (and indeed from shareholders and market analysts) on banks to think hard about their own futures. Some of this supervisory pressure coincides with banks' own efforts to improve their profitability, governance, culture and risk management, and it may accelerate some much-needed strategic changes.

Impact of Basel 4

Basel 4 reinforces many of these pressures, not least because of its impact on banks' capital, funding and implementation costs and risk sensitivity. Higher capital requirements and implementation costs will put further downward pressure on banks' profitability and thereby accentuate any questions about the viability and sustainability of their business models. Meanwhile, less risk-sensitive regulation generates an incentive for banks to adjust their business activities and risk management.

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Regulation: The road to implementation

The volume of unfinished business is diminishing as more regulations are moving through the design and calibration stages to implementation, and fewer regulatory reform initiatives remain at an earlier development stage.

1. Unknowns
- New macro-prudential tools (e.g. credit controls)

2. Under development
- Revised credit and operational risk weightings
- Capital floor
- Risk weightings for sovereign exposures
- Capital requirements for simple securitisations
- Pillar 3 disclosure (phase 2)

3. Designed
- D-SIB designation and capital surcharges (some countries)
- Macro-prudential tools (some countries)

4. Calibrated (implementation date as recommended in international standards)
- Standardized approach counterparty credit risk weights (2017)
- CCP exposure risk weights (2017)
- Capital treatment of securitizations (2018)
- Leverage ratio (2018)
- NSFR (2018)
- IFRS 9/ECL accounting (2018)
- Haircuts on non-centrally cleared securities financing transactions (2018)
- Revised IRRBB standards (2018)
- Revised market risk framework (2019)
- Large exposures (2019)
- TLAC for G-SIBS (2019-2022)

5. Implemented (usually on phased-in basis)
- Basel 3
- G-SIB designation and surcharges
- D-SIB designation and surcharges (most countries)
- Stress testing
- BCBS risk data aggregation and reporting principles for G-SIBs
- Macro-prudential tools (some countries)
- LCR
- Pillar 3 disclosure (phase 1)
- National structural separation legislation
- Resolution and bail-in powers (some countries)
- BCBS corporate governance principles
- FSB risk governance and risk governance principles
- FSB guidance to supervisors on assessing risk culture
- Remuneration
- FSB and IOSCO principles for interest rate and FX benchmarks
- Central clearing of OTC derivatives

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