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Revised Operational Risk Capital Framework

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Introduction

The Basel Committee on Banking Supervision (BCBS) are proposing to scrap internal modelling of operational risk capital in an attempt to introduce simplicity and comparability across banks. Banks will welcome this clarity in an area that has been under review for many years but concerns will remain around increased capital costs, additional data and disclosure burdens, good risk management incentivisation, national application and global consistency.

Summary

The proposed SMA combines a revised version of the BI approach (which the BCBS first consulted on in 2014) with some recognition of bank-specific loss data. The BCBS sees this as a way of introducing a degree of risk-sensitivity, which provides some incentive for banks to improve their operational risk management, while simplifying the approach. Banks with low operational risk losses will benefit from a lower operational risk regulatory capital charge – although this will not apply to small banks.

The removal of the internal modelling approach for operational risk regulatory capital reflects the view of the BCBS that the inherent complexity of the AMA and the lack of comparability arising from a wide range of internal modelling practices has exacerbated the variability in risk-weighted asset calculations across banks using the AMA and eroded confidence in risk-weighted capital ratios.

The BCBS states that the objective of these proposals is not to increase significantly overall capital requirements. However, this is not a 'one size fits all' proposal, and the impact will vary from bank to bank and will lead to an increase in minimum capital requirements for some institutions.

The BCBS has published a further consultation on operational risk capital measurement. This confirms the withdrawal of the internal modelling-based Advanced Measurement Approach (AMA), and proposes to replace all of the Basel II approaches to operational risk with a single revised Business Indicator (BI) approach – the Standardised Measurement Approach (SMA). Responses should be submitted by 3 June 2016.

The BCBS has also published a consultation paper on revised Pillar 3 disclosure requirements, including amendments relating to operational risk. These include revising disclosures to meet the newly proposed SMA, additional disclosures of internal losses, and more detailed information relating to a bank's operational risk management framework. Responses should be submitted by 10 June 2016.

These are both part of a wider picture covering all the components of the denominator of the capital ratio – the BCBS has already published its revised market risk framework, while revisions to the capital treatment of credit risk and the introduction of a capital floor are both due to be finalised by the end of 2016. It is clear that apparently technical papers will continue to shape business model and strategy.

Impact on firms

Banks will welcome greater certainty in an area that has been under review for many years, notably the revisions to the BI approach in response to comments on the 2014 proposals, and the recognition of bank-specific loss data. However, some concerns are likely to remain:

Capital

Analysis of the 2014 proposals showed that some global banks could face increases of up to 70 percent of their Pillar 1 operational risk capital charges. The latest proposals should have a smaller impact, but this could still be significant for some banks. The overall impact will also depend on how the proposed new Pillar 1 approach interfaces with Pillar 2 capital requirements – banks that can demonstrate good internal modelling and strong operational risk systems and controls could potentially gain a partial offset to higher Pillar 1 requirements.

Data and systems

The data requirements for calculating internal loss experience and the proposed disclosure requirements will impose an additional burden on some banks. Banks not currently using the AMA will have to put the necessary systems and processes in place to collect, analyse, and report the required data; while even banks currently adopting AMA may have to revise their systems and processes to deliver the required calculations and disclosures.

Incentives for good operational risk management

The introduction of an internal loss component will provide some regulatory incentive for firms to reduce their operational risk losses. However, this element of risk-sensitivity is limited to past losses, and does not include the three other key elements of the AMA, namely external data, forward-looking scenario analysis information, and the business environment and internal control factors (BEICF) data (even if these elements were difficult to apply consistently across banks under the AMA). The Pillar 2 capital framework is used as a tool by some regulators to encourage enhanced risk management across banks. As an example in the UK, the PRA has issued standard methodologies for assessing Pillar 2 operational risk capital, taking into account internal data, forecast losses and scenario analysis. However, it remains to be seen how this will be applied by supervisors and how consistently this will be used globally.

Disclosure

The enhanced Pillar 3 disclosure requirements will require banks to detail how they manage their operational risks as well as their loss history.

In the detail

Operational risk management and measurement has been a key regulatory focus given the number of significant loss incidents across banking in recent years, which banks have failed to prevent or hold sufficient capital against. For example, the PRA has recently published new standards for Pillar 2 operational risk measurement in the UK, while the EBA has included operational risk in its 2016 EU-wide stress test exercise.

The BCBS consultation proposes a new Standardised Measurement Approach (SMA) that revises the Business Indicator (BI) approach (proposed in 2014) and combines it with some recognition of a bank's internal loss data (for medium and large sized banks), thereby introducing a degree of risk-sensitivity and providing some incentive for banks to improve their operational risk management. Banks with more effective risk management and lower operational risk losses will be required to hold a comparatively lower operational risk regulatory capital charge. Banks that do not meet the minimum data quality standards will be penalised with a higher capital charge.

The revised BI approach also addresses some of the comments received on the earlier proposal by reducing differences in the treatment of the "distribute only" and the "originate to distribute" business models, under which banks that originate products would have faced a lower operational risk charge; reducing the inconsistent treatment of dividend income across jurisdictions; reducing the impact of high net interest margins and high fee revenues and expenses in inflating the operational risk charge; and taking a more consistent approach to the treatment of leasing compared with credit. In addition, the BI operational risk charge has been made more linear in the way it applies to banks of different sizes.

The concerns previously highlighted in relation to the BI components introduced in the previous 2014 proposal are summarised in **Table 1** below, along with the corresponding changes proposed in the new consultation. A comparison of the calculations of each of the BI components across the different rules or proposals (i.e. Gross Income (Basel II), 2014 BI proposal, and latest BI proposal) follows in **Table 2**.

Table 1: Concerns highlighted in relation to the BI components introduced in the 2014 proposal and corresponding proposed changes in the new consultation

BI Component Impacted	Concern of previous proposal	Description of concern raised in previous proposal	Proposed changes in the new consultation
Interest component	Inconsistency in the treatment of dividend income	The treatment of dividend income in financial statements varies significantly across jurisdictions leading to inconsistencies in the BI across banks, e.g. some banks include dividend income within the interest component.	Dividend income has been included in the interest component of the BI.
Interest component	Overcapitalisation of banks with a high net interest margin (NIM)	Banks with high NIM (Net Interest Income/ Interest-earning Assets) have high BI values leading to over-conservative regulatory capital.	A linear normalisation ratio for high-margin banks (larger than 3.5%) is adopted. The Interest component is adjusted by the ratio of the NIM cap, set to 3.5%, to the actual NIM.
Interest component	Inconsistent treatment of leasing compared with credit	Business models based on credit finance, financial leasing or operating leasing face similar operational risks, therefore the contributions of income and expenses from financial and operating lease to the BI should be consistent with the contribution of credit finance, irrespective of accounting treatment.	To ensure consistency across banks and jurisdictions, all financial and operating lease income and expenses are netted and then included in absolute value into the interest component (i.e. the absolute value of average lease income over the three years less average lease expense over the three years).
Services component	Asymmetric impact on the 'distribute only' and the 'originate to distribute' business models	The former definition of the services component meant that banks distributing products bought from third parties would include both the fee income and fee expense, thereby leading to higher capital than banks producing the products themselves who would include only fee income, even though both banks face similar operational risks.	The services component is changed from the sum of fee income, fee expense, other operating income and other operating expenses, to the maximum of fee income and fee expense, plus the maximum of other operating income and other operating expense.
Services component	Overcapitalisation of banks with high fee revenues and expenses	Banks with a high fee component produces very high BI values, resulting in over-conservative regulatory capital.	The BI for high fee banks (i.e. share of fees greater than 50% of unadjusted BI) is modified by accounting for only 10% of fees in excess of 50% of the unadjusted BI (with absolute value of net fee income as a floor to avoid unintended capital reductions).

Source: KPMG International, March 2016

Table 2: Comparison of calculations for BI components under each proposal

BI Component Impacted	Gross Income (Basel II)	Business Indicator (2014 Consultation)	Business Indicator (2016 Consultation)
Interest Component (ILDC)	Interest Income – Interest Expense	Abs (Interest Income – Interest Expense)	Min [Abs (Interest Income – Interest Expense); 0.035 x Interest Earning Assets] + Abs (Lease Interest – Lease Expense) + Dividend Income
Services Component (SC)	Fee Income – Fee Expense + Other Operating Income	Fee Income + Fee Expense + Other Operating Income + Other Operating Expense	Max (Other Operating Income; Other Operating Expense) + Max{ Abs(Fee Income – Fee Expense); Min [Max (Fee Income; Fee Expense); 0.5 * uBI + 0.1 * Max (Fee Income – Fee Expense) – 0.5 * uBI]} Where uBI = Interest Component + Max (Other Operating Income; Other Operating Expense) + Max (Fee Income; Fee Expense) + Financial Component
Financial Component (FC)	Net P&L on Trading Book	Abs (Net P&L on Trading Book) + Abs (Net P&L on Banking Book)	Abs (Net P&L on Trading Book) + Abs (Net P&L on Banking Book)
Other	Dividend Income	Not included	Dividend income included in interest component

Source: KPMG International, March 2016

Under the new approach, banks are divided into five 'buckets' based on the value of the BI, as defined in **Table 3** below. For banks that fall within the first bucket, with BI of less than €1 billion, the operational risk capital charge would be an increasing linear function of the BI and would not take into account internal losses. For banks in buckets 2 through 5, the capital is calculated in two steps:

1. A baseline level of capital is calculated using the BI component.
2. A portion of the BI component above €1 billion is multiplied by an 'internal loss multiplier' which is based on an internal loss component to take into account the different risk profiles of banks, thereby introducing risk sensitivity in the approach. The consultation paper proposes one way of introducing risk sensitivity, while seeking views on alternative approaches.

Table 3: BI component in the 2016 consultation

	BI Range	BI Component
1.	€0 to €1bn	0.11*BI
2.	€1bn to €3bn	€110m + 0.15(BI – €1bn)
3.	€3bn to €10bn	€410m + 0.19(BI – €3bn)
4.	€10bn to €30bn	€1.74bn + 0.23(BI – €10bn)
5.	€30bn and above	€6.34bn + 0.29(BI – €30bn)

Source: BCBS Consultative Document: Standardised Measurement Approach for operational risk, March 2016

Table 4: Proposed coefficients per bucket under the 2014 proposal

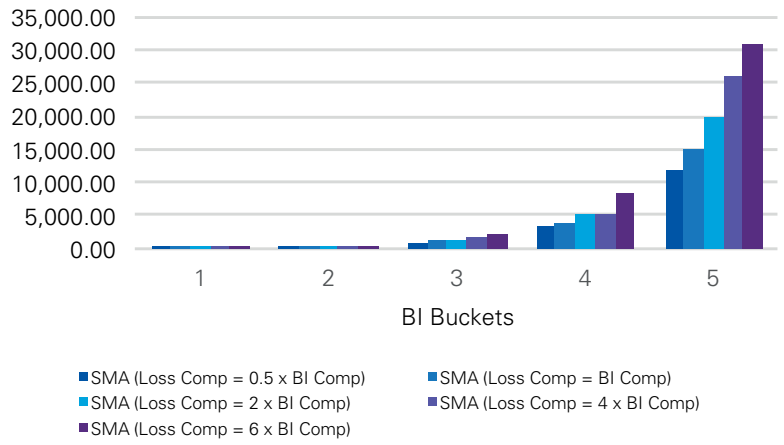
	BI (€ Millions)	Coefficient
1.	0–100	[10%]
2.	>100–1,000	[13%]
3.	>1,000–3,000	[17%]
4.	>3000–30,000	[22%]
5.	>30,000	[30%]

Source: BCBS Consultative Document: Standardised Measurement Approach for operational risk, March 2016

The 2014 proposal introduced a set of escalating coefficients based on the size of the bank as reflected in the BI, assuming that the relationship between operational risk exposure and size increases in a non-linear fashion. To keep the framework simple, a discrete structure for the coefficients was proposed, as per **Table 4**. Under the new proposals, the BI component increases linearly within buckets, however the marginal effect of the BI on the BI component increases progressively the higher the bucket. Specifically, the unit increase in the BI relates to a marginal increase of 0.11, 0.15, 0.19, 0.23 and 0.29 under buckets 1, 2, 3, 4 and 5 respectively.

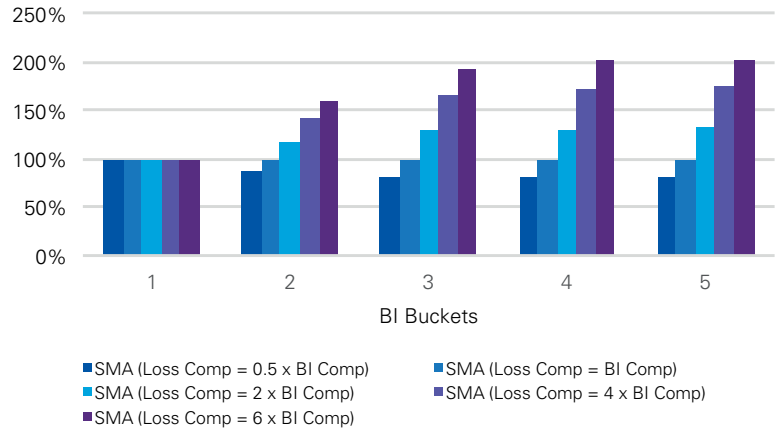
Figure 1 illustrates the resulting regulatory capital under each of the buckets, taking the BI for each bucket as the average between the lower and upper bound for that bucket and assuming a loss multiplier equal to one (i.e. assuming a loss component equal to the BI component which indicates an operational risk exposure in line with industry average). In addition, the impact of the internal loss data on the capital charge is illustrated per bucket by assuming the loss component is half, equal, two times greater, four times greater and six times greater than the BI component. The corresponding percentage of these changes are further reflected in **Figure 2**. As internal loss data is not taken into account for banks in the first bucket the capital remains unchanged, while for those in buckets 2-5 the capital increases proportionately.

Figure 1: £'m change in capital (under SMA) per bucket, with a proportionate change in the data loss component.



Source: KPMG International, March 2016

Figure 2: The percentage change in capital (under SMA) per bucket, with a proportionate change in the data loss component.



Source: KPMG International, March 2016

The internal loss component reflects the operational loss exposure of a bank that can be inferred from its internal loss experience. The loss component distinguishes between loss events above €10 million, above €100 million, and smaller loss events, to differentiate between banks with different loss distribution tails but similar average loss totals. Banks would be required to use 10 years of good-quality loss data to calculate the averages used in the loss component. In the transition period, banks that do not have 10 years of good quality loss data may use a minimum of 5 years of data to calculate the loss component.

Minimum data standards would therefore include:

- A minimum of 5-10 years of internal loss data (ILD).
- Documented procedures and processes for the identification, collection and treatment of ILD.
- Mapping of ILD to relevant Basel categories and criteria for allocating losses.
- A minimum threshold of €10,000 for capturing ILD.
- Specific loss data information such as gross loss, recoveries, reference dates (date of occurrence, discovery and accounting), drivers and causes.
- Specific criteria for assigning loss data arising from an event in a centralised function.
- The treatment of boundary events.
- Policies and procedures for including ILD in the calculation dataset.

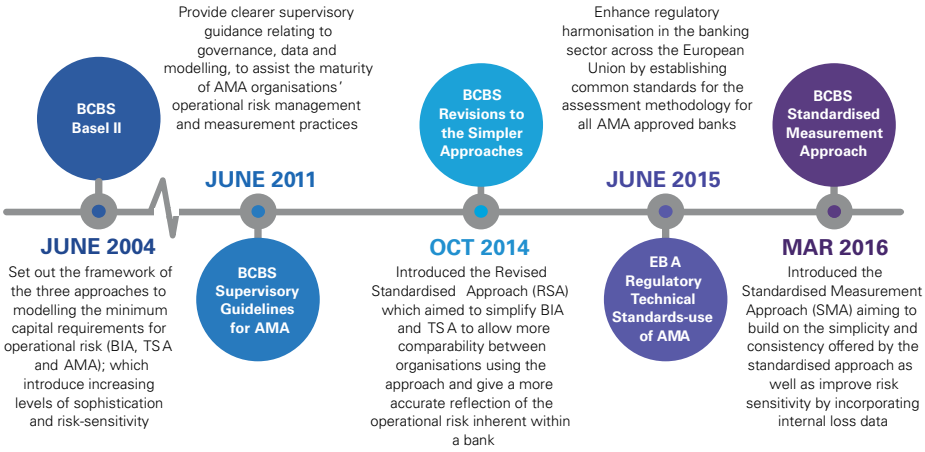
In addition to the minimum data standards, the proposed Pillar 3 disclosure requirements would mean banks also need to capture and report:

- The value of the business indicator/ subcomponent drivers of the SMA calculation for the last 3 years (i.e. interest, services, financial).
- Their internal losses for the last 3 years (including the number of losses over €1m, the total amount of losses over €1m, and the total of the 5 largest losses).
- The historical losses used for SMA calculation split out over the last ten years (total amount and total amount over €1m), for banks in buckets 2-5 using internal losses.

There is an inherent possibility of an extreme event occurring that would not be commercially viable to hold capital against. Arguably, the best approach to managing risks of this nature is to ensure that robust processes are in place around scenario analysis and horizon scanning, and that effective but realistic contingency plans are in place as required – something which should be part of good risk management within the business.

The management and measurement of operational risk has been a key regulatory focus for a number of years given the number of significant loss incidents across the banking sector, which banks have failed to prevent or hold sufficient capital against. **Figure 3** shows a timeline overview of regulatory activity for operational risk.

Table 3: Significant policy changes or consultations regarding operational risk modelling



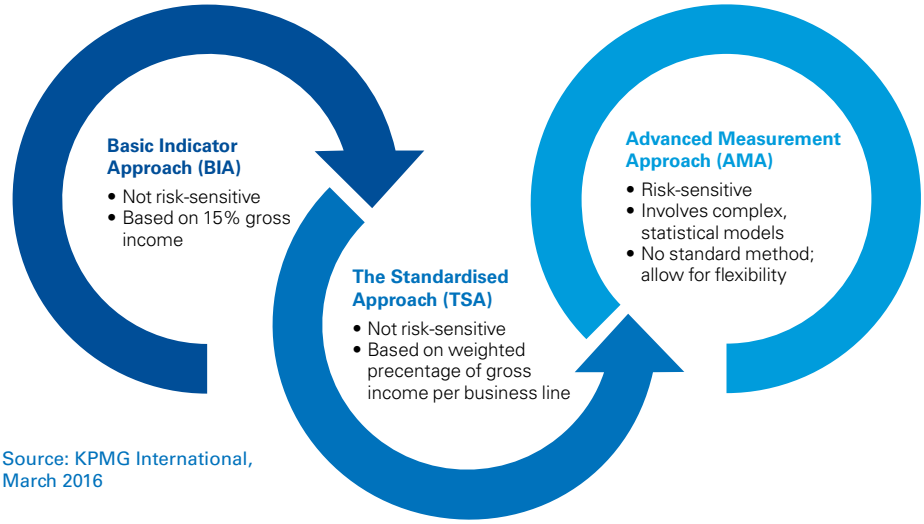
Source: KPMG International, March 2016

Basel II current approaches for calculating operational risk capital

The three existing approaches – BIA, TSA and AMA – have features which introduce increasing levels of sophistication and risk-sensitivity. Internationally active banks and banks with significant operational risk exposures were expected to use an approach that is more sophisticated and that is appropriate for the risk profile of the institution. Banks were encouraged to move along the spectrum of available approaches as they developed more sophisticated operational risk measurement and management systems and practices.

The three existing approaches to calculation operational risk capital are summarised in **Figure 4**.

Figure 4: Basel II approaches to calculating operational risk capital



Source: KPMG International, March 2016

The Basic Indicator Approach (BIA)

Under the BIA, banks are required to hold capital for operational risk equal to the average over the previous three years of a fixed percentage (15%) of positive annual gross income (GI).

The Standardised Approach (TSA)

TSA is simply an extension to the BIA that allows banks to divide their activities into eight business lines and apply a weight to each of these business lines. The capital charge for each business line is calculated by multiplying gross income by a factor assigned to that business line. The factor (known as the beta-factor) ranges from 12% to 18% depending on the business line. A negative GI for a business line may be included, but a total GI for any given year that is negative must be set to zero.

For both the BIA and TSA, gross income is used as a broad indicator that serves as a proxy for the scale of business operations as it is assumed that a bank's exposure to operational risk is linearly related to the size of the bank's revenue. These approaches do not take into account the management of operational risk within the business and therefore are not considered to be risk-sensitive.

The Advanced Measurement Approach (AMA)

The three existing approaches – BIA, TSA The AMA allows banks to calculate the regulatory capital requirement equal to the risk measure generated by the bank's internal operational risk measurement system using quantitative and qualitative criteria. This approach takes into account the bank's historical operational risk loss data, external operational risk loss data (from sources such as ORX), forward-looking operational risk scenarios, as well as the bank's Business Environment and Internal Control Factors. While this approach is risk-sensitive, incorporating the operational risk environment of the bank, it has obtained a reputation for being both too complex and too reliant on statistical models. In order to become AMA approved, banks must be able to demonstrate that they have in place a robust risk management framework.

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