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RESPONSE TO THE CONSULTATIVE DOCUMENT ISSUED ON MARCH 4, 2016 ON THE STANDARDISED MEASUREMENT APPROACH (SMA) FOR OPERATIONAL RISK

We write in response to the consultative document issued by the Basel Committee on Banking Supervision (“the Committee”) in March 2016. The Committee is proposing to withdraw internal modelling for the calculation of operational risk capital charge, and its replacement by a Standardised Measurement Approach (SMA).

The Committee seeks an optimum balance between reducing complexity in the capital calculation and yet still accurately portraying the operational risk faced by financial institutions. In attempting to achieve this objective, we believe the pendulum has swung too far toward simplification. The calculation takes no consideration of risk mitigation and may therefore overstate the operational risk faced by each individual financial institution.

Executive Summary

- Until now, the connection between the sound management of operational risk and the Pillar I capital charge (as modelled) has incentivised banks to invest substantially in improving their risk management. The clear alignment between Pillar I capital and operational risk management as the corporate second line of defence has enabled operational risk managers to drive significant behavioural change. If the ability to influence capital levels is withdrawn, the second line of defence loses its leverage over the first line of defence – and thus also loses its credibility. Since the Committee does not appear minded to mandate compulsory risk management practices, it would seem important to maintain a connection between risk management and the capital charge. We set out below some proposals which meet the Committee’s goal of standardisation while also encouraging and rewarding sound practice.
- The requirement to track operational loss experience, which then flows into the capital calculation via the multiplication factor, may create a perverse incentive to re-classify marginal

loss events as credit or market losses rather than as operational losses which might negatively impact the capital charge. Where third party recoveries (for example insurance) are considered within the loss record, this will serve as recognition for banks which make appropriate “ex ante” risk provision. We set out below some proposals as to how insurance recoveries may be considered within the loss event tracking.

- To date, banks have derived a forward-looking measure of their operational risk from the modelling of scenarios. Regular revision of loss scenarios has enabled banks to prepare for events that might arise simply as a result of the changing external risk landscape. Scenario modelling is conspicuously absent from this latest set of proposals, meaning that any assessment of emerging risks would be absent from the capital calculation and thus potentially creating a situation where banks were adequately capitalised for historic losses but not for future losses.
- The Committee seeks proposals on how extreme events might be incorporated. The proposals below are intended to address this area simultaneously.

Withdrawal of internal modelling for operational risk regulatory capital

The Committee notes that they anticipated that operational risk modelling would coalesce around a reduced number of modelling practices. While this expectation has failed to materialise, banks still need to anticipate (and make provision for) changes in their risk landscape resulting simply from the swift evolution in their market place and business practices.

In a rapidly changing industry against an unstable macro-economic environment, the Committee proposes the complete withdrawal of internal modelling for operational risk capital, and its replacement by a standardised charge driven by balance sheet metrics and a loss component composed exclusively of each individual bank’s own internal loss experience (as recorded over the previous 10 years). We question the viability of this approach because:

- While the Business indicator (BI) component uses a regression based upon a broad sample of banks (and thereby indirectly reflects industry experience), it cannot compensate for the absence of external loss data from individual bank capital calculations: simply because a certain type of loss has not happened to a specific bank in the past does not indicate that it may not happen in the future. At the very least therefore, external losses (for example, from shared databases or other external sources) should be incorporated into the calculation.

- As an industry, banking is changing rapidly. Losses which happened 10 years ago may no longer be relevant to the bank of today – hence the requirement to track losses over 10 years may be excessive.
- The only way banks have so far considered extreme events (> EUR 100 million), or incorporated emerging risks in their capital calculation, has been by means of scenario modelling: past losses cannot by definition be reflective of emerging risks.
- A bank may exit a line of business because it is either not lucrative enough or it is too loss-prone: nevertheless loss events from that line of business would seemingly still flow into the loss component going forward. The capital charge therefore would not be reflective of the bank's forward looking risk profile.

The Business Indicator (BI) Component

As presented in Paragraphs 15-24 and Annex one, the constituents of the BI component would appear to target a stable basis for the capital calculation. A major concern is that these definitions are not necessarily congruent with accounting definitions in various non-US countries. Countries which use **International Financial Reporting Standards** (IFRS) or a local version of Generally Accepted Accounting Principles (GAAP) will include or exclude different elements – notwithstanding the prescriptive definitions in the consultative document. As such, the calculation of the BI component will vary from country to country, or it may be a separate computation, not verified by a bank's auditors. Either way, it seems likely that the stated goal of comparability will not be achieved.

Treatment of revenues or expenses relating to extraordinary items

In recent years, many mergers or demergers between banks have been sponsored or required by national or EU regulators. As currently presented, the BI would not reflect the resultant corporate changes.

BI for a Banking Group

The calculation of the SMA within a banking group appears to be inconsistent. Paragraph four, for example, states that "the proposed SMA framework would be applied to internationally active banks on a consolidated basis", yet paragraphs 37-39 make reference to calculations both at a consolidated and at a sub-consolidated level. Bearing in mind the potential distortion caused by the applicable coefficients, please could the Committee provide guidance as to which should apply?

The Internal Loss Multiplier, the Loss Component, and the Incorporation of Insurance

In earlier papers – most notably “*Recognising the risk-mitigating impact of insurance in operational risk modelling*” (BCBS, October 2010) – the Committee has clearly acknowledged the efficacy of insurance in mitigating operational risk losses. Clear guidance was provided as to the criteria to be fulfilled by an insurance policy for it to be admissible as part of the capital structure which might be set against the operational risk capital requirement.

Over more than a decade of usage, insurance has demonstrated repeatedly that it is an effective, long-term mitigant for operational risk. Indeed the Committee’s 2008 Loss Data Collection exercise reported that “*the median recovery rate is 75% for all losses with insurance recoveries*”. Thanks to the Committee’s guidance on the sound management of operational risk (*Principles for the sound management of operational risk* – BCBS June 2011), banks provide greater visibility of their risks, their controls, and their governance. This transparency has enabled insurers to extend coverage in greater amounts, for longer periods.

Insurance is therefore a source of stability in the banking prudential equation:

- Insurance is a non-correlated source of long-term capital which has proven itself stable over several cycles.
- In difficult times insurance taps into capital which is not exposed to maturity transformation, and thus adds stability to bank funding.
- The process of insurance underwriting is a review of the bank’s people, processes, systems, and governance. As such, it serves as a support and validation of supervisory review.
- The pricing and availability of insurance is driven by the quality of the bank’s risk management. As such, insurance serves to mark the cost of operational risk to market.

To now leave insurance mitigation out of the Pillar I capital calculation would seemingly run contrary to the Committee’s goal of creating greater stability, and would also create arbitrage opportunities between various parts of the regulatory capital calculation:

- In paragraph 43, bullet seven, the Committee states that “operational risk losses that have historically been included in banks’ credit risk databases will continue to be treated as credit risk”. Thus a bank which has purchased insurance may claim a capital reduction even where no payout has been sought (for example where a bank has lent against the security of a building which is destroyed by fire).
- Also within credit risk, a bank which has purchased qualifying credit risk insurance – either by way of a credit guarantee or by way of a credit default swap – may deduct the value of that

insurance (subject to haircuts) within its credit risk capital calculation irrespective of whether it has pursued collection or not.

- Within operational risk by contrast paragraph 43, bullet 12 specifically states that “banks must not use losses net of insurance recoveries as an input for the SMA loss data set.” This contradicts existing practice in the calculation of the [credit risk] capital charge.
- As it stands, there is no reward for accurate data-tracking, and there are clear opportunities to arbitrage the capital charge simply by re-assigning loss events to the more advantageous definition.

The inconsistency in the treatment of insurance within credit risk and within operational risk will likely create opportunities to “game” the capital charge in one area or the other.

In considering operational risk losses, the Committee has specified that banks must develop a “proper SMA loss data set”, where “gross loss is a loss before recoveries of any type” (bullet 11). Bullet 12 (b) and (c) note that a loss includes directly linked external expenses as well as provisions or [legal] reserves accounted for in the P&L.

In effect, the Committee seems to acknowledge that many operational risk losses are related to the bank incurring a legal (not contractual) liability to a third party. Such legal liability often takes a long time to be crystallised and cannot be effectively recorded in the P&L until a final (court) judgment is reached. By the same token, where insurance has been purchased which would provide indemnity for such losses, that insurance cannot pay out until the final legal position has been determined. Similarly, operational risk losses relating to internal fraud or unauthorised trading may take several months to be quantified (there have been several examples of unauthorised trading where the unauthorised positions took several months to identify and unwind): until quantification has taken place, no recovery from third parties (including insurance) is possible.

The Committee has conducted considerable research into the use of insurance and its efficacy in mitigating operational risk. Building upon that previous work (*Recognising the risk-mitigating impact of insurance in operational risk modelling* (BCBS, October 2010), we submit that the discussion of insurance, reinsurance, and recoveries could be greatly simplified without any loss of transparency. **We would propose that the SMA loss data set should deal with insurance (and other recoveries) as follows:**

Reference date

- The bank may use the date of discovery or the date of accounting for building the SMA loss data set.

- For losses relating to legal events, the applicable date will be the date of accounting when a legal reserve is first established for P&L purposes.

Grouped losses

Losses should be grouped together and assigned to the earliest applicable date if:

- Multiple losses were caused by a single event – for example, property damage at multiple locations caused by a windstorm.
- Multiple losses were caused by the same person or group of persons – for example, a dishonest employee making unauthorised transfers from multiple client accounts.
- Multiple losses arose from the same *modus operandi* – for example, computer hackers stealing multiple credit card details.

Recoveries

There are two ways recoveries – especially insurance recoveries – could be factored in to the SMA loss data set:

Method 1: **Treat the recovery as a “Negative Loss Event”**, separate in time from the actual operational risk loss. This approach best recognises the historic facts – both of the loss and of any recovery.

Since we are concentrating here on historic data, we need only take **facts** into account and can ignore any discussion of potential recoveries or attempts (if any) by insurers to challenge a claim. In this respect, we would refer to the Committee’s “2008 Loss Data Collection Exercise”, which concluded that the median recovery rate for losses with insurance was 75%.

Hence the loss itself could be valued as it entered the bank’s books, as could the insurance payout. Thus the *facts* would show up as a Loss Event and a Negative Loss Event (where insurance paid out at a later date). The recovery would then be subject to the same multiplication factor that the Committee sets out in its formula for calculating the loss component. If the insurance recovery was considerably later than the loss itself (for example, two to three years after the loss had entered the books), clearly the Loss Event would be retired from the calculation of the loss component some time before Negative Loss Event would be retired. Nevertheless, this approach is absolutely clear and fact-based and would fulfil the Committee’s rule that loss and recovery (or mitigation) should not be conflated.

As a very simplified example of how this might work, we list below three examples of possible losses and recoveries:

- *Event one:*
Day 1: Trading error – “fat-finger error” – resultant loss EUR300 million.
Day 10: Trade reversed at then prevailing market rates – recovery EUR250 million.
- *Event two:*
Day 20: Discovery of employee dishonesty – estimated loss EUR150 million.
Day 320: The bank’s crime bond insurance pays EUR80 million.
- *Event three:*
Day 25: Clients accuse the bank of negligence in investing their funds with Madoff: initial quantum EUR150 million plus EUR5 million defence costs.
Day 30: The bank’s professional indemnity insurer pays defence costs on behalf of the bank – EUR5 million.
Day 350: The courts find the bank guilty of negligence and order the bank to make victims whole – indemnity value EUR145 million – which is paid by the professional indemnity insurer.

In summary we can describe the above losses and negative loss events as:

EVENT	LOSS EVENT (EURO MILLION)	NEGATIVE LOSS EVENT (EURO MILLION)
Event one	300	250
Event two	150	80
Event three	150	145
	5	5

$$\text{Loss Component} = 7 \times (\text{ATAL}^1) + 7 \times (\text{ATAL}^2) + 5 \times (\text{ATAL}^3)$$

Where:

- ATAL^1 = Average Total Annual Loss.
- ATAL^2 = Average Total Annual Loss only including loss events above EUR10 million.

ATAL^3 = Average Total Annual Loss only including loss events above EUR100 million.

Example one:

In order to keep the example simple, let us assume that the same three events happen in each year of the [proposed] 10 year loss cycle. The Loss Component calculation might then look as follows:

EVENT	LOSS EVENT (EURO MILLION)	LOSS EVENT COMPONENT (EURO MILLION)	NEGATIVE LOSS EVENT (EURO MILLION)	NEGATIVE LOSS EVENT COMPONENT (EURO MILLION)
Event one	300	5700	250	4750
Event two	150	2850	80	1120
Event three	150	2850	145	2755
	5	35	5	35

Within Example one we have utilised the loss component equation and applied it to the loss event and the negative loss event amounts for each of the events described above. For example, for Event one we have:

$$\text{Loss Component} = 7 \times (300m) + 7 \times (300m) + 5 \times (300m) = 5700m$$

The Total Loss Component is achieved by the sum of all the “Loss Event” components less the sum of all the “Negative Loss Event” components.

Thus,

$$\text{Total Loss Component} = 11435m - 8660m = 2775 \text{ million.}$$

Method two: **Deduct the recovery from the original loss quantum.** Since the original loss quantum is itself an estimate, and any recovery will perforce be an estimate until it is actually received, this will result in a greater fluidity in the calculation of the loss component. If we work through our example given above, the calculation of the loss component might look as follows.

Example two:

As per example one, we will assume that the same three events happen in each year of the [proposed] 10 year loss cycle. The loss component calculation might then look as follows:

EVENT	GROSS LOSS (EURO MILLION)	RECOVERY (EURO MILLION)	NET (EURO MILLION)	LOSS COMPONENT (EURO MILLION)
Event one	300	250	50	700
Event two	150	80	70	980
Event three	150	145	5	35
	5	5	0	0

The methodology behind example two involves computing a net amount between the “Gross Loss” and the “Recovery” amount. Once we have obtained the net amount we then calculate the loss component of event. The total loss component for this example is arrived at by the sum of all the “loss components”.

For example, under this method, the loss component for Event 1 is calculated as:

$$Net = 300m - 250m = 50 \text{ million}$$

$$Loss \text{ Component} = 7 \times (50 \text{ million}) + 7 \times (50 \text{ million}) + 5 \times (0 \text{ million}) = 700 \text{ million}$$

Thus, combining all the events, as defined above, we get:

$$Total \text{ Loss Component} = 700 \text{ million} + 980 \text{ million} + 35 \text{ million} + 0 \text{ million} = 1715 \text{ million}$$

Extreme Events and Scenario Modelling

The Committee has stated that it is open to considering alternative adjustments to the methodology that appropriately incorporate the impact of extreme loss events.

By definition, very few banks will have suffered an extreme operational risk loss event. For those that have, the SMA capital charge will leap upward – just at a time when the organisation is under distress and may struggle to fund the resultant increased capital charge.

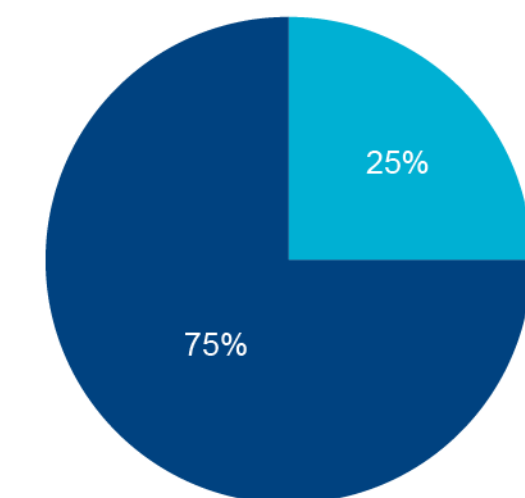
In order to prevent such [distressed] volatility and at the same time encourage banks to develop a forward-looking view of their operational risk which will also reward sound risk management and good ex-ante risk provisioning, we propose a modification of the SMA calculation:

- Step one: calculate the total SMA using the standard formula set out by the Committee – including insurance recoveries (using either method outlined above).
- Step two: Multiply the resultant number by 75%. This will be the “hard-wired” operational risk capital charge.
- Step three: The remaining 25% should be a forward-looking capital charge calculated using scenarios. The scenarios should be specifically targeted at “extreme” loss events – for example > EUR100 million, and should, where appropriate, utilise external loss data. Banks may integrate anticipated insurance recoveries into their modelling, provided the insurance in question fulfils the criteria set out in the 2010 paper “*Recognising the risk-mitigating impact of insurance in operational risk modelling*” (BCBS, October 2010).

With regard to this “**Scenario Capital**”, the committee may wish to provide guidance on a minimum or maximum number of scenarios a bank could be required to model. Alternatively, the Committee might provide a series of standardised scenarios (similar to the approach taken by the US Federal Reserve in its CCAR process): banks could select say 20-25 scenarios appropriate to their business mix, and add a further 5-10 scenarios of their own creation. The menu of standard scenarios could be periodically updated as the banking landscape evolves or as new information needs to be integrated. Projected insurance recoveries (or other third party recoveries) could be included in the outputs from these scenarios, provided that insurance meets the standard defined in the 2010 paper (*Recognising the risk-mitigating impact of insurance in operational risk modelling* -BCBS, October 2010).

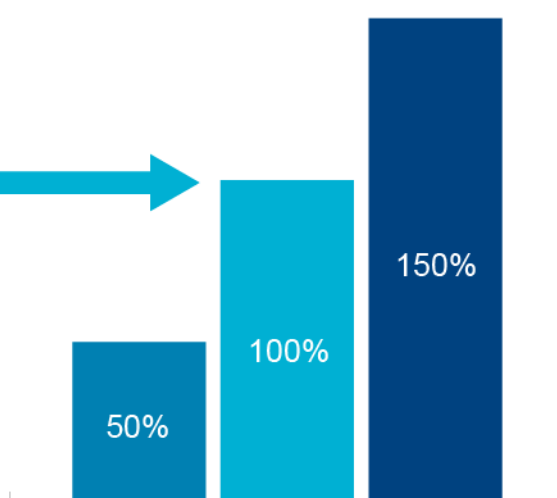
The Committee might also wish to insert a floor and/or a ceiling in the Scenario Capital model – by stating, for example, that the capital calculated using scenarios and allowing for insurance mitigation may not be less than 50% or more than 150% of the Scenario Capital. Our proposed methodology can be summarised in the two figures below

Figure 1: Total operational risk capital charge.



Key:
 = "forward-looking" capital charge (FLCC).
 = "hard-wired" capital charge.

Figure 2: Alternative "forward-looking" capital charge.



Key:
 = Ceiling capital charge (150% of FLCC).
 = Standard capital charge (100% of FLCC).
 = Floor capital charge (50% of FLCC).

Where a bank integrates insurance in its scenarios as a means of reducing the projected loss from a scenario, that calculation needs to include a number of additional considerations – for example, by means of applying haircuts to the projected recovery:

- Counterparty credit risk: Most insurers maintain a credit rating of A or A+, equivalent to a 1% possibility of default over a one year time horizon. The committee may wish to consider what counterparty credit weighting should apply.
- Delay in payout: Often there is a period of 6-12 months after a loss event when a bank knows it has suffered a loss but has not yet quantified or proven the loss (or the loss is a legal liability loss, which may take several months or years to move through the court system to final adjudication). Until the quantum of the loss is fixed or proven, insurance cannot pay out. Nevertheless, it makes sense to apply a time-based haircut to the anticipated recovery, so that it represents an anticipated net present value of anticipated cash flows.
- External verification of the mitigation claimed: Where an external reviewer finds that insurance is less than 50% likely to pay out for the relevant scenario, the bank may not claim mitigation but must model the scenario gross of any (hoped for) recoveries.

Tying Scenarios back to real losses

A situation may occur where a bank has modelled a loss scenario (for example, a computer hack which causes a system outage), only to find that it has actually suffered exactly such a loss. Thus it would have capital set aside for the scenario under its Scenario Capital, but would theoretically take another hit by integrating the real loss in its SMA loss data set.

While such a situation would serve as an excellent back-testing of the validity of the scenario modelling, it would mean the bank suffered a double capital hit. Since that would be contrary to the intention of fostering sound and forward-looking risk management and risk provision, we would propose that once the scenario has actually occurred, the relevant scenario should fall out of the Scenario capital modelling for that bank and instead form part of its SMA loss data set.

Conclusion

We believe that the incorporation of insurance within the Pillar I operational risk framework should be robustly and consistently addressed. Banks should be further encouraged to integrate their capital calculation, risk management, and insurance functions. Well-managed insurance can significantly reduce the level of uncertainty within a bank. This process is supported by the application of analytical and modelling skills developed by the insurance industry. If insurance is indeed withdrawn from the Pillar I framework, the synergy between the two industries could soon be lost.

Thank you for your consideration.

Yours sincerely,



Mark Weil, CEO, Marsh UK and Ireland