

# The new standardized measurement approach for operational risk

## Introduction

The Basel Committee on Banking Supervision (BCBS) has developed a Standardised Measurement Approach (SMA) which provides a single non-model-based method for the estimation of operational risk capital requirements. Reason for this is that banks now use an Advanced Measurement Approach (AMA), which gives banks a lot of freedom since it enables them to use internal models. The issue with AMA is that these internal models are complex and lack comparability. The SMA has two strong advantages. First it is built on the simplicity and comparability offered by a standardised approach. Second the SMA incorporates the risk sensitivity of an advanced approach by combining, in a standardised fashion, the use of a bank's financial statement information and its internal loss experience. The Committee tries to reach their goal to simplify the process and make it more comparable while not significantly increase capital requirements for operational risk, and is asking for feedback on this consultation paper. Capgemini Consulting appreciates the opportunity to comment on the consultative document on The Standardised Measurement approach for Operational Risk. We will therefore give some general comments and answer the three questions raised by BCBS.

## General comments

The Committee speaks about losses, however the consultation document doesn't provide a definition of loss. Today banks have their own definition of loss that needs to be updated to meet the upcoming changes. Some guidelines for defining a loss are given and additional ones will be added in the finalized version to ensure a consistent definition of operational loss. We encourage a consistent loss definition as without it, we will still get non-comparable capital charges.

The Standardised Measurement Approach is expected to be calibrated in such a way that the capital requirements are comparable with The Standardised Approach (TSA), which was 12%, 15% or 18% of the gross income of each business line, where the percentage depends on the riskiness of that business line. Banks have invested a large amount of money to create their own internal models. These models were developed to increase insights in risk. Due to the better insight, banks were able to steer on the risks and so reduce their losses with the effect of lower capital requirements.

AMA required very detailed information, both to use as input for various models and to explain to the supervisors that their models and regulatory capital was indeed correct. This gave banks insight into their losses and the possibility to reduce risky business. For the SMA this much detail in information is not required, so the SMA suffers from the same deficiencies as TSA as it uses consolidated numbers in a predetermined manner. This

results in less transparency for the bank, the supervisors and customers. Next to this, AMA gave the possibility to reduce risk and so capital requirements. As the SMA is calibrated on the TSA capital requirements it is not unlikely that the capital requirements will increase for banks currently using AMA.

Today data analysis and big data give much better insights into risk. We finally are able to make use of the amount of data that is at our disposal to better calculate operational risk and therefore capital requirements. BCBS decides to propose a method that uses less data and so throws away the benefit of data. This is also against the general trend. Should we really go this way?

The last suggestion we would like to make is to assess every file individually instead of just the total numbers. This would lead to more transparency, which is mostly lost due to the removal of AMA, because it gives much more information about where your losses and therefore risks are. We understand that it is impossible to implement this in the current proposal given the timeline, but it should be considered for future proposals.

## **What are respondents' views on the revised structure and definition of the BI?**

Compared to the method proposed in Basel II there is a change in indicators. Earlier the Gross Income (GI) was used as indicator for operational risk under TSA. The GI as an indicator had for example as a negative side effect that an operational loss led to an equal or lower total capital charge. In the new regulation the use of the Business Indicator (BI) is proposed. To calculate the BI only positive variables and absolute values are used. The overall SMA formula is constructed in such a way that an operational loss leads to a higher capital requirement. The BI uses absolute values of the differences between income and expenses. This means that a large bank without profit in each category has a lower BI add-on than a small bank with profits or losses. Because of the way the BI is constructed, the SMA looks at the differences between income and expenses. In most cases the size of the business of different categories is ignored. Ignoring the size of business implicitly states that operational risk exposure only depends on profits and losses. One can reason that higher profits (or losses) are attained by taking risk. There is, after all, no such thing as a free lunch. To express the risk taken, profit margin (or loss margin) would be a better indicator of risk than realized profit (or loss). Of course a 1% profit for a large institute will lead to a larger profit than the same margin for a small institute. So larger profit means a larger bank, but then size is only included implicitly. We doubt that size is incorporated strongly enough in the BI.

## **What are respondents' views on the inclusion of loss data into the SMA? Are there any modifications that the Committee should consider that would improve the methodology?**

The formula of SMA capital requirements is also an increasing function of the Loss Component, which uses loss data. The Loss Component is a function with hard cut-offs at losses of 10 million and 100 million. This means for example that ten losses of 10 million will lead to a lower capital charge than one loss of 100 million. We support the aim of BCBS to additionally penalize large losses occurred in the past. However, as the definition of loss is not predetermined we see opportunities to "optimize" the loss definition in such a way that occurred losses will be split into subsets smaller than the thresholds. Instead of taking a large loss as one loss it will be profitable to split the loss over more instances. This can trigger banks to be more actively concerned with their operational risk exposure to mitigate large one time exposures. However a small difference in definition can already be enough to dodge the threshold and eliminate the intended result.

The hard cut-offs of 10 and 100 million are fixed and arbitrary. This is also the case for the multipliers in the loss component. Why these numbers and why should they be fixed? Wouldn't a continuous function make more sense? This would eliminate the opportunity to significantly reduce capital requirements by splitting losses or tweaking loss definitions. Since we support the aim of BCBS to additionally penalize large losses, we suggest a progressively increasing continuous function. It could be with cut-offs, so similar to the BI Component buckets, but preferably just a smooth progressively increasing function.

A last suggestion about the losses themselves: Should an 8 year old loss count as heavy as a 4 year old loss? For example an organisation can or even will change in 8 years, so old losses might have less chance of occurring again. Also one can reason that older losses should have less influence. Would a weighted average annual loss

amount, where the weights decrease for older losses, not make more sense than just the average annual loss amount?

### **What are respondents' views on this example of an alternative method to enhance the stability of the SMA methodology? Are there other alternatives that the Committee should consider?**

The Loss Component is not capped, and also the Internal Loss Multiplier is not capped. This could potentially lead to immense capital requirements which might be unwanted. A cap on either the Loss Component or the Internal Loss Multiplier can prevent this. Therefore the suggested alternative Internal Loss Multiplier is a good fit, since it has a cap. It also has the required damping to make. Other alternatives might work too, but the cap and the damping should be two important characteristics of the function that should be dependent on BI Component and the Loss Component.

### **Conclusion**

The new Standardised Measurement Approach for operational risk removes to some extent the complexity and non-comparability of the internal models banks use while still incorporating a bank's risk sensitivity. Also by moving from GI to BI the main issue with TSA is conquered. So the SMA is a good attempt for a simple, comparable and reasonable method. The SMA has all the necessary characteristics except transparency, but will probably lead to higher capital requirements for banks using internal models, while the regulation was intended to not significantly increase capital requirements. Also the SMA requires less data, which is against the general trend, and could therefore lead to worse insights in operational risk.

The SMA is also better comparable than the internal models currently in use, but the comparability will improve with more guidelines for the definition of loss and by incorporating revenue size. A predetermined definition of loss (or guidelines) will also reduce the possibility to split a loss over more instances.