

# Revisions to the simpler approaches to operational risk: the need for enhanced disclosures and risk sensitive measures

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 $6~{\rm January}~2015$ 

Online at https://mpra.ub.uni-muenchen.de/61329/MPRA Paper No. 61329, posted 16 Jan 2015 11:24 UTC

Revisions to the Simpler Approaches to Operational Risk: The Need for Enhanced Disclosures and Risk Sensitive Measures

**ABSTRACT** 

The Business Indicator approach has been identified by the Basel Committee as the most suitable replacement for the Gross Income approach, since it addresses most of the Gross Income's weaknesses, as well as possesses certain attributes which were highlighted to have been at the heart of

the recent Financial Crisis. It had been highlighted by the Committee that weaknesses of the simpler

approaches to operational risk, were attributed and generated principally from the use of Gross Income

(GI) as a proxy indicator for operational risk exposure.

This paper highlights rationales for revisions to the present framework of approaches to operational risk and why adjustments to the simpler approaches have become necessary. Further, as well as

accentuating on why issues relating to calibration and adequate focus on Pillar III of Basel II, namely,

market discipline, continue to dominate and feature as areas in need of greater attention, the paper also

seeks to demonstrate why Pillar III may be that area which requires greater focus - where matters

relating to goals of consistency, comparability and simplicity are involved.

As well as consolidating on why gaps still persist in relation to disclosure requirements relating to

operational risks, the paper will, more importantly, propose means of mitigating such gaps.

Key words: operational risk; standardised approaches; market discipline; calibration; off-balance sheet

exposures; comparability, consistency

JEL Classifications:

K2: Regulation and Business Law

L5: Regulation and Industrial Policy

M4: Accounting and Auditing

## Revisions to the Simpler Approaches to Operational Risk: The Need for Enhanced Disclosures and Risk Sensitive Measures

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#### A Introduction

According to the Basel Committee's Consultative Document,<sup>2</sup> weaknesses in current approaches to operational risk, which constitute part of the rationales for revisions to the present framework, are to be accomplished through:<sup>3</sup>

- refining the operational risk proxy indicator by replacing Gross Income (GI) with a superior indicator;
- and improving calibration of the regulatory coefficients based on the results of the quantitative analysis.

Other reasons which have been played a contributory role in the Committee's consideration to adopt a simple and comparable approach include results obtained from analyses whereby the following were highlighted:<sup>4</sup>

- the original Basel II business lines did not differ significantly in terms of their operational risk profiles;
- the size of a bank was a dominant factor in operational risk exposure;
- and refinements to the proxy indicator could enhance risk sensitivity.

The Need to Account Adequately for Off Balance Sheet Exposures

As is the case with the Standardised Approach to Counterparty Credit Risk (SA-CCR), one of the aims of introducing the revisions to the present framework on operational risk, includes namely, the need

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<sup>&</sup>lt;sup>2</sup> See Basel Committee on Banking Supervision, Consultative Document "Operational Risk: Revisions to the Simpler Approaches", October 2014 <a href="http://www.bis.org/publ/bcbs291.htm">http://www.bis.org/publ/bcbs291.htm</a> at page 2

<sup>&</sup>lt;sup>3</sup> ibid

<sup>&</sup>lt;sup>4</sup> "It was therefore considered appropriate to develop only one approach based on a single indicator of operational risk exposure with size-based coefficients. A single non-model-based approach also addresses the Committee's objectives of promoting simple and comparable approaches while still maintaining risk sensitivity." see ibid

to adequately account for exposures, and particularly, off- balance sheet exposures related to banking activities.

The Standardised Approach for Measuring Counterparty Credit Risk exposures (SA-CCR) replaced the Current Exposure Method and the Standardised Method as these were criticised for not adequately capturing "the level of volatilities as observed over recent stress periods." The conversion of off balance sheet items into credit exposure equivalents were facilitated by the Basel Committee's January 2014 revised leverage ratio standard.

It was also highlighted by the Committee that weaknesses of the simpler approaches were attributed and generated principally from the use of Gross Income (GI) as a proxy indicator for operational risk exposure - "based on the assumption that banks' operational risk exposure increases linearly in proportion to revenue."

Having introduced reasons for revisions to the present framework of approaches to operational risk and why adjustments to the simpler approaches have become necessary, section B of the paper will provide a review to the background revolving round the introduction of the three pillar framework of Basel II. Whilst the volume of work, documentation and efforts relating to the first two pillars have been considerable, and even though considerable efforts have recently been undertaken to improve work on Pillar III, this pillar (Pillar III), which is as equally important as the other two pillars, given its complementary role, continues to experience certain gaps to an extent<sup>7</sup> - particularly with respect to operational risks. Section B aims to highlight some gaps which exist within the present disclosure framework as well as illustrate how the Committee has attempted to address these. Subsequent sections are aimed highlighting the importance of addressing these gaps - as well as means of redress. In order to facilitate this goal, section C considers whether the goals of simplicity and comparability should constitute the focus in matters relating to measurements and standardised approaches. It also considers the feasibility of these goals with the goal of achieving enhanced risk-sensitivity. The importance of disclosures, as a facilitator of capital adequacy objectives will then be considered - as well as means of addressing other identified gaps relating to operational risk disclosures - by way of illustration to recent efforts which have been undertaken by the Basel Committee in respect of leverage ratios.

<sup>&</sup>lt;sup>5</sup> See Basel Committee on Banking Supervision, "The Standardised Approach for Measuring Counterparty Credit Risk Exposures (March 2014) at page 1 Available at http://www.bis.org/publ/bcbs279.htm

<sup>&</sup>lt;sup>6</sup> See Basel Committee on Banking Supervision, Consultative Document "Operational Risk: Revisions to the Simpler Approaches", October 2014 at page 1

<sup>&</sup>lt;sup>7</sup> "The Basel Committee (BIS 2003) accorded a lot of attention (132 pages) to the refinements of the risk weights as regards the first pillar, but was considered to be much less precise about the other pillars (16 pages on Pillar 2 and 15 pages on Pillar 3)." See JC Rochet, "Re balancing the Three Pillars of Basel II" http://www.ny.frb.org/research/epr/04v10n2/0409roch.pdf

## B Review and Background to Literature on Operational Risks

The first consultative paper on a new capital adequacy framework, which was issued by the Basel Committee on Banking Supervision, introduced the "three pillar" model which encompasses the minimum capital requirements, supervisory review and market discipline - "as a lever to strengthen disclosure and encourage safe and sound banking practices."

Basel II is premised on a three level approach which permits banks to select from three models, namely: the basic standardized model, the IRB foundation approach and the advanced ratings approach. In establishing an Internal Ratings Based approach, the Committee's intention was directed at "fine tuning capital requirements with a greater degree of accuracy to the level of a bank's exposure to credit risks."

Under Pillar One minimum capital requirements, operational risk is to be corroborated by capital. Measurement approaches for operational risk can be found in the Capital Requirements Directive (CRD) and there are three broad approaches to the capital assessment of operational risk which are as follows:

- Basic Indicator Approaches
- Standardized Approaches
- Internal Measurement Approach

Three approaches are stipulated by the Basel framework for the measurement of the capital charge for operational risk and these are as follows:<sup>10</sup>

- The Basic Indicator Approach (BIA) which is the simplest and whereby the capital charge is calculated as a percentage (alpha) of Gross Income (GI), a proxy for operational risk exposure. Being the most basic approach, its adoption does not require prior supervisory approval.

<sup>&</sup>lt;sup>8</sup> Basel Committee on Banking Supervision, 'Consultative Paper on a New Capital Adequacy Framework' 3rd June 1999 http://www.bis.org/press/p990603.htm>

<sup>&</sup>lt;sup>9</sup> Basel Committee on Banking Supervision, 'The Internal Ratings Based Approach' Supporting Document to the New Basel Capital Accord 2001 at pages 1 and 3 http://www.bis.org/publ/bcbsca05.pdf

<sup>&</sup>lt;sup>10</sup> Basel Committee on Banking Supervision, Consultative Document "Operational Risk: Revisions to the Simpler Approaches", October 2014 at page 5

- The advanced measurement approaches (AMA), the most advanced, which allows banks to use internal models to calculate their capital requirements. Adoption of the AMA requires prior supervisory approval and involves implementation of a rigorous risk management framework.
- The Standardised Approach (TSA), which is positioned as an intermediate approach between the BIA and the AMA, which requires banks to divide their total GI into eight business lines and to calculate capital requirements as a sum of the products of the GI attributed to each business line and the specific regulatory coefficients (betas) assigned to each line.

Unlike other classes of risks, which also incorporate quantitative disclosures requirements, qualitative disclosure requirements constitute the focus of attention in relation to operational risks. According to paragraph 824 of the revised Basel II framework<sup>11</sup> general qualitative disclosure requirements which should be observed are as follows:

- For each separate risk area (e.g. credit, market, operational, banking book interest rate risk, equity) banks must describe their risk management objectives and policies, including:
- strategies and processes;
- the structure and organisation of the relevant risk management function;
- the scope and nature of risk reporting and/or measurement systems;
- policies for hedging and/or mitigating risk and strategies and processes for monitoring the continuing effectiveness of hedges/mitigants.

The following important observations, based on results of studies and results of empirical investigations, were also made in relation to the adequacy, implementation of policies, and verification of risk disclosure practices:<sup>12</sup>

that regarding the adequacy of operational risk disclosures for stakeholders, most noted that
there is a dedicated section for operational risk in external reports, which are regularly updated.
However, since most banks don't disclose sensitive information relating to control gaps or
issues, these disclosures tend to be primarily high-level statements

<sup>&</sup>lt;sup>11</sup> See Basel Committee on Banking Supervision, "Basel II: International Convergence of Capital Measurement and Capital Standards: A Revised Framework - Comprehensive Version June 2006 at page 232 <a href="http://www.bis.org/publ/bcbs128c.pdf">http://www.bis.org/publ/bcbs128c.pdf</a>

<sup>&</sup>lt;sup>12</sup> See Basel Committee on Banking Supervision, Review of the Principles for the Sound Management of Operational Risk 6 October 2014 at page 33 http://www.bis.org/publ/bcbs292.pdf

- that in relation to the disclosure policies that address operational risk disclosures, most banks reported that these are not fully implemented and that the general inference was that most participating banks have in place, or will shortly have in place, a disclosure policy.
- In addition, some banks have yet to implement a process to review and verify operational risk disclosure practices

The penultimate section of this paper will seek to illustrate, as well as consolidate on why gaps still persist in relation to disclosure requirements relating to operational risks. More importantly, it will seek to address these by proposing means of mitigating such gaps.

## B II Replacing the the Gross Income Indicator with the Business Indicator

The Business Indicator (BI) was identified by the Basel Committee as the most suitable replacement for GI, since it addresses most of the GI's weaknesses, as well as possesses the following attributes which were also highlighted to have been at the heart of the recent Financial Crisis:<sup>13</sup>

- it includes items sensitive to operational risk that are omitted or netted from the GI definition;
- uses the absolute values of its components, thereby avoiding counterintuitive results based on negative contributions of components to capital charges from net losses under the existing framework;
- reduces the relative weight or contribution of components of the financial statement that are associated with activities traditionally less exposed to operational risk, and increases that of the components associated with activities more closely associated with operational risk

Furthermore, the BI's power, according to the Committee, as compared with GI and other potential indicators, lies in "its superior ability to capture a bank's exposure to the operational risk inherent in a bank's mix of business activities."

As is the case with the Standardised Approach to Counterparty Credit Risk, main issues revolve around the most efficient mode of capturing off balance sheet exposures, as well as the determination of the frequency of calculations - such that inaccurate measures or estimates or the inability to adequately account for such exposures, does not result in the severe under capitalisation of banks. Hence, the

<sup>&</sup>lt;sup>13</sup> Basel Committee on Banking Supervision, Consultative Document "Operational Risk: Revisions to the Simpler Approaches", October 2014 at page 1 "The BI comprises the three macro-components of a bank's income statement: the "interest component", the "services component", and the "financial component".

focus, it would seem, should concern accuracy of measures. Even though considerable efforts have been undertaken in the choice of determining the Business Indicator as replacement for the Gross Income, it appears that a lot of focus has also been given towards the goal of attaining simplicity, comparability and consistency. These could be particularly difficult given the institution specific attributes inherent in the nature of operational risks.

As indicated by the Committee, "in order for an indicator to be an effective proxy of operational risk for regulatory purposes, it is crucial that specific banking characteristics are captured by its components......"

## C Achieving Simplicity and Comparability of Outcomes Within the Framework

Principles taken into consideration in formulating the revised standardised approach, as stated by the Committee, are as follows:<sup>15</sup>

- There should be only one simple approach given the need to ensure simplicity and comparability of outcomes in the framework:
- The approach should address the known weaknesses of the existing simpler approaches while retaining the fundamental attributes of the current framework;
- It should be simple enough to understand, not unduly burdensome to implement, should not have too many parameters for calculation by banks and it should not rely on banks' internal models;
- It should exhibit enhanced risk sensitivity;
- It should be calibrated according to the operational risk profile of a large number of banks of different size and business models; and
- It should be suitable for implementation across a wide range of jurisdictions and banks.

Whilst the goals of simplicity and comparability resonate strongly from the first and third of the above-mentioned principles, the need for improved risk sensitivity and specificity, is also highlighted.

Improved risk sensitivity would appear to denote improved accuracy - provided such risk sensitivity is not unwarranted or excessive. Trade-offs will definitely be required since simplicity and comparability will also demand that less complex approaches (complex approaches which may enhance risk sensitivity and specificity) should be adopted.

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<sup>&</sup>lt;sup>14</sup> see ibid at page 30

<sup>&</sup>lt;sup>15</sup> see ibid at page 7

In addition, the growing importance of compliance with Basel rules and principles is also evident, not only as a result of recent surveys and findings thereof, <sup>16</sup> but also as evidenced by the Binding Technical Standards (BTS) which are being introduced and generated by the European Banking Authority, as its plays a crucial role in the implementation of Basel III.

According to the Basel Committee, the Basel framework recognises that capital is not a substitute for effective controls and risk management processes. "Rather, strong and effective risk management and internal control processes help reduce the capital that a bank needs to hold against its operational risks. An emphasis on sound management of operational risk to ensure financial soundness of banks is consistent with the uncertainties in the current capital measurement methodologies for operational risk, which are improved but still evolving toward maturation..."

As well as an effective compliance culture, an adequate and appropriate focus on the third pillar of Basel II is vital in ensuring that the objectives of other pillars are achieved. A lot of observations and comments have been made over the years in relation to the seemingly and relatively low attention accorded to the third pillar - in comparison to Pillars I and II.

Hence the Committee's observations in the Consultative Document that "banks should regularly report operational risk exposures, including material operational losses, to business unit management, senior management, and to the board of directors and that the reporting should be actionable and support decision making", should be very welcomed.<sup>18</sup>

#### D The Importance of Disclosures: Achieving Capital Adequacy Objectives

The complementary function of Pillar III (market discipline) to the other two pillars (minimum capital requirements and supervisory review) is highlighted in the Basel Committee's comprehensive version of the revised framework for Basel II.<sup>19</sup> Furthermore, its Review of the Principles for the Sound

http://www.bis.org/publ/bcbs292.pdf

See Basel Committee on Banking Supervision, "Basel II: International Convergence of Capital Measurement and Capital Standards: A Revised Framework - Comprehensive Version June 2006 at page 226 http://www.bis.org/publ/bcbs128c.pdf

<sup>&</sup>lt;sup>16</sup> Basel Committee on Banking Supervision, Review of the Principles for the Sound Management of Operational Risk 6 October 2014

 $<sup>^{17}</sup>$  See Basel Committee on Banking Supervision, Consultative Document "Operational Risk: Revisions to the Simpler Approaches", October 2014 at page 16

<sup>&</sup>lt;sup>18</sup> See ibid at page 46

<sup>&</sup>lt;sup>19</sup> "The Committee aims to encourage market discipline by developing a set of disclosure requirements which will allow market participants to assess key pieces of information on the scope of application, capital, risk exposures, risk assessment processes, and hence the capital adequacy of the institution."

Management of Operational Risk,<sup>20</sup> highlights the importance of the role of disclosure. Principle 11 "Role of Disclosure" states that a bank's public disclosures should allow stakeholders to assess its approach to operational risk management.

In its Consultative Document on the Review of the Pillar 3 Disclosure Requirements, it was observed that:<sup>21</sup>

there is no provision in the current Pillar 3 regime for periodic assessment of the relevance of existing disclosure requirements or for the introduction of new regulatory disclosure requirements to reflect emerging systemic risks. The Committee will periodically consider the validity of the disclosure requirements proposed in the new Pillar 3 regime and the need for additional disclosures to reflect changes to the regulatory framework or to meet emerging systemic risks that are identified to be of global significance.

Lack of consistency in the following areas, were also brought to light by the Review:<sup>22</sup>

- the interpretation of key terms through differing implementation of disclosure requirements by members' jurisdictions;
- the demarcation of information disclosed in each risk category (eg counterparty credit risk is often included in the credit risk disclosure but not always);
- and the basis of the information disclosed (eg financial information disclosed rather than regulatory risk exposures or internal value-at-risk (VaR) rather than regulatory VaR):
- Further, the Review noted that it is currently difficult for users to understand differences between line items in banks' financial statements and the regulatory exposure data in their Pillar 3 reports.

As well as the recognition of the need for a Pillar 3 disclosure framework which does not conflict with requirements under accounting standards, which are broader in scope, under given circumstances, banks are required to explain material differences between the accounting or other disclosure, as well as the supervisory basis of disclosure.<sup>23</sup>

http://www.bis.org/publ/bcbs292.pdf

http://www.bis.org/publ/bcbs286.pdf

<sup>23</sup> "Such explanation does not have to take the form of a line by line reconciliation."

<sup>&</sup>lt;sup>20</sup> See Basel Committee on Banking Supervision, Review of the Principles for the Sound Management of Operational Risk 6 October 2014

 $<sup>^{21}</sup>$  Basel Committee on Banking Supervision, Consultative Document "Review of the Pillar 3 Disclosure Requirements" at page  $5\,$ 

<sup>&</sup>lt;sup>22</sup> see ibid

In this respect, reference will be made to recent public disclosure requirements relating to Basel III leverage ratios.

The importance of attaining the goals of consistency and objectivity, as a means of facilitating enhanced disclosures is clearly indicated in paragraph 42 of the Basel Committee's January 2014 publication on disclosure requirements.<sup>24</sup>

The public disclosure requirements include:<sup>25</sup>

- a summary comparison table that provides a comparison of banks' total accounting assets amounts and leverage ratio exposures;
- a common disclosure template, which as previously discussed, provides a breakdown of the main leverage ratio regulatory elements;
- a reconciliation requirement that details the source(s) of material differences between banks' total balance sheet assets in their financial statements and on- balance sheet exposures in the common disclosure template;
- and other disclosures.

Such disclosure requirements as those reflected above whose purposes clearly serve to facilitate consistency and comparability through the incorporation of a common template, comparison table and reconciliation requirements should also serve to promote such goals in cases applicable to operational risks - particularly the gaps highlighted under section B - relating to lack of implementation of disclosure policies and operational risk disclosure practices.

Disclosure requirements' role and aim in facilitating comparability across jurisdictions, has become even more important as a result of the consequential developments following the introduction of the Basel leverage ratio, namely the introduction of supplementary leverage ratios in different jurisdictions and concerns relating to the way in which accounting policies within these jurisdictions will impact their implementation. The introduction of supplementary leverage ratios in certain jurisdictions such as the UK and the U.S, is attributed not only to concerns which have been expressed in relation to the Basel leverage ratio not being as well calibrated to accommodate such buffers as those which exist within the risk based capital adequacy framework, but also to the appropriateness of measures such as the Standardised Approach to Counterparty Credit Risk (SA-CCR) in adequately accounting for

See Basel Committee on Banking Supervision, "Basel II: International Convergence of Capital Measurement and Capital Standards: A Revised Framework - Comprehensive Version June 2006 at page 227

<sup>&</sup>lt;sup>24</sup> See Basel Committee on Banking Supervision, "Basel III Leverage Framework and Disclosure Requirements", January 2014, page 9 Bank for International Settlements Publications http://www.bis.org/publ/bcbs270.pdf

<sup>&</sup>lt;sup>25</sup> ibid

off-balance sheet exposures through the use of credit conversion factors. For these, as well as other reasons related to the need to avoid undercapitalisation in banks, and potential systemic consequences to the financial system, accuracy and risk sensitivity in implementing standardised approaches and measures appears to be a more profound need than the goals of simplicity where such measures and approaches are concerned.

#### **E** Conclusion

From the three pillars, the third pillar, is perhaps that area which requires the greatest level of simplicity and comparability in terms of the need to facilitate comparisons of disclosures across jurisdictions. Not only because of the level of expertise (particularly low level of expertise of users of financial statements) or role of those involved, but also the need to ensure that potential for abuse of such information, as well as information asymmetries are mitigated - and that right signals are conveyed to the market. Information which may or may not have huge systemic consequences. The degree to which such information is accurate would definitely depend on Pillars I and II. It could be argued that each pillar should be accorded the same degree of accuracy or simplicity. However, it would also appear that those processes involving measurements require greater degree of accuracy.

From this perspective, the summary comparison table, common disclosure template, and reconciliation requirement for public disclosures (Basel III leverage ratios) and the considerable efforts which have been dedicated towards facilitating meaningful comparisons across jurisdictions with different accounting frameworks, represent a huge step towards achieving the goals of disclosure, namely: assisting market participants to "assess key pieces of information on the scope of application, capital, risk exposures, risk assessment processes, and hence the capital adequacy of the institution."

Where all efforts have been undertaken to facilitate accuracy, then some stages and processes are better left to address the need for consistency and comparability - particularly in unavoidable circumstances which are attributed to different and inflexible accounting policies and frameworks. Another lesson derived from the implementation of the Basel III leverage ratio is that the goal of simplicity and consistency, associated with the aims and objectives of the leverage ratio has not really been realised and that its implementation has only prompted more complex scenarios and applications in the form of the introduction of jurisdictional supplementary leverage ratios - as well as enhanced supplementary leverage ratios. Such developments whilst being attributed to calibration issues between the capital adequacy and leverage ratio frameworks, have also taken place owing to fears of inaccurate measures - particularly the use of credit conversion factors within the Standardised Approach (SA-CCR) framework to account for off balance sheet exposures, and the need to avoid undercapitalisation with particularly, globally systemically important banking institutions.

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