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Revisions to the Standardised Approach for Bank Credit Risk Measurement

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Banking supervision; Credit risk; EU law

Abstract

The Basel III capital accord of 2010 is subject to further evaluation and revisions. The industry refers to these changes as "Basel IV" in view of the expected significant impact that the further proposals of the Basel Committee may have. The Committee itself considers the various proposals as necessary calibration of the existing framework, in order to deal with some of the flaws, but rejects the view that the changes will result in a complete overhaul. In this article one of the current proposals, the revisions to the standardised approach for bank credit risk measurement, is discussed from a European perspective. It is concluded that some parts of the Basel Committee proposals are already comprised in the currently applicable Capital Requirements Regulation provisions. Other parts of the proposals, particularly those concerning the risk weighting of residential property loans and commercial real estate, will bring important changes to the existing CRR rules, provided that these changes are consistent with developments in parallel with European policies.

Introduction

After the adoption in 2010 of the Basel III accord for capital and liquidity,[1] the Basel Committee on Banking Supervision (BCBS or Basel Committee) has been active in developing new standards to address a wide range of topics not addressed in Basel III. Some of the work in respect of new standards was already scheduled before the financial crisis of 2007 spun off. This is particularly the case for work on market risk framework.[2] Other proposals typically intend to address certain constraints and issues discovered during the financial crisis.

The Basel Committee's recent proposal on revision of the standards for the methods to assess operational risk[3] is one example. The work on revisions to the securitisation framework[4] is another example of a development where standards included in the Basel II framework of 2004[5] have been challenged when they were applied in practice under the severe stressed circumstances of the financial crisis. The December 2014 proposals on the introduction of a capital floor for banks applying the internal ratings based (IRB) approach for credit risk[6] (Capital Floor) are the clearest example of proposals of the Basel Committee that aim to address the weaknesses of the original Basel II framework.

The Capital Floor proposals aim at managing the underestimation of risks by the application of own modelled internal ratings based systems in relation to credit risk. Based on empirical studies it appeared that own individual models tended to result in very significantly deviating outcomes when quantifying comparable risks by different banks. The work on Capital Floors follows the overall evaluation of the use of internal models by the Basel Committee and concerns all risk types, not only credit risk.[7]

The revisions to the standardised approach (SA) for credit risk,[8] which we will discuss in this article, addresses the lack of risk sensitiveness of the old standards for the SA for credit risk. For exposures on banks and corporates, the Basel Committee finds that banks are leaning too mechanistically on external credit assessments (ECAs). For other exposure types the standards are revised to improve risk sensitiveness of the framework.

Many consider these proposals as a premature overhaul of the Basel III capital accord. From the responses to the consultative document on revisions to the standardised approach published by the Basel Committee in December 2014, it can be observed that the industry and consultancies consider the new proposals for revision of the capital standards too disruptive to the implementation

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[1] Basel Committee on Banking Supervision, "Basel III: A global regulatory framework for more resilient banks and banking systems" December 2010 (revised June 2011) and "Basel III: International framework for liquidity risk measurement, standards and monitoring".

[2] The BCBS Consultative document "Proposed revisions to the Basel II market risk framework" dates from July 2008 and hardly comments on the constraints identified during the financial crisis in respect of the market risk measurement. The revisions to the Basel II market risk standards as proposed in 2008 have been completely amended in the "Fundamental review of the trading book" document first published in May 2012 and since then has been revised a number of times. On 10 January 2016, the Group of Central Bank Governors and Heads of Supervision (GHOS), endorsed the new market risk framework that will take effect from 2019.

[3] BCBS, "Operational risk—Revisions to the simpler approaches" October 2014.

[4] BCBS, "Revisions to the securitisation framework" Consultative Document, December 2013 and "Basel III Document. Revisions to the securitisation framework" 11 December 2014.

[5] BCBS, "International Convergence of Capital Measurement and Capital Standards. A Revised Framework Comprehensive Version" June 2006.

[6] BCBS, "Capital Floors: the design of a framework based on standardised approaches" Consultative Document, December 2014.

[7] See the recent comments of the Basel Committee in its report to the G-20 on the progress made in November 2015: "In principle, internal models allow for more accurate risk measurement. But if they are used to set minimum capital requirements, banks have unintended incentives to underestimate risk. Furthermore, some asset classes are inherently difficult to model. This undermines the assumption underlying the current architecture that internal models are always more accurate. A number of empirical studies have suggested that simpler metrics are at times more robust than complex ones. This suggests that the blanket use of internally modelled approaches may not always measure and differentiate risk accurately and appropriately for all portfolios and risk types." Basel Committee, "Finalising post-crisis reforms: an update" November 2015.

[8] BCBS, "Standards. Revisions to the Standardised Approach for credit risk" Consultative Document, December 2014.

process of Basel III. Criticisms by industry participants and consultancies on the initial proposals have been processed by the Basel Committee in a new consultative document for the revisions to the standardised approach published in December 2015.[9]

In this article, the revisions to the SA for credit risk measurement framework of the Basel capital accord are the subject of discussion from a European law perspective. Therefore, references to laws and regulations adopting the Basel Committee standards will be discussed by reference to European regulations and directives only. The proposals for Capital Floors will not be discussed in this contribution, although we are aware that many of the critics are concerned with the combination of application of revised rules for the SA and Capital Floors. This combined application is particularly relevant for the larger IRB banks, where the majority of smaller and medium-sized banks in Europe do not apply IRB models in practice.

Background of the existing framework for measurement of credit risk

Two methodologies: standardised approach or IRB approach

Under the Basel II standards, banks have a choice between two broad methodologies for calculating their capital requirements for credit risk. One alternative, the SA, measures credit risk in a standardised manner, supported by external credit assessments. The other alternative, the IRB approach, which is subject to the explicit approval of the bank's supervisor, allows banks to use their internal rating systems for credit risk.[10]

Basel III did not alter this approach fundamentally. In fact, Basel III focused almost exclusively on the introduction of new rules for qualitative and quantitative capital requirements addressing the liabilities' side of the bank balance sheet. With the exception of new rules for the risk weighting of credit valuation adjustment risk for over-the-counter derivatives and a few minor other corrections, hardly any of the original Basel II rules addressing credit risk, market risk and operational risk as being the main risk categories changed as a result of Basel III.

In respect of the SA for measurement of credit risk, very significant parts of the existing Basel II standards stem from the first Basel Committee capital accord of 1988. This is particularly true for the classification of the different counterparties against which the bank holds credit risk exposures. These counterparties are grouped in (roughly speaking) six main categories being:

- sovereign exposures;
- exposures to sub-sovereign risks, such as exposures to regional governments;
- exposures on multilateral development banks;
- exposures to banks;
- exposures to corporate clients; and
- other exposures.

Since 1988 very few changes occurred regarding the scale of risk weight percentages attached to exposures, where a 0% risk weight expresses that the bank is not (expected to be) running credit risk and the 100% risk weight expresses the maximum exposure of a bank. Between 0% and 100% there were in the Basel I standards three additional percentages, being 20%, 35% and 50%, expressing lower or higher risk weights of the bank in respect of the relevant exposures.

In the application of the SA for measurement of credit risk, clients of a bank are grouped in the main categories (which are in their turn divided into sub-categories) to which the different risk weights are attached. For certain exposures the grouping is made in respect of the risk mitigating collateral granted to the bank, notwithstanding the nature or type of counterparty. This was, for instance, the case for (residential) mortgage loans that had been from the outset classified within the 50% risk weight bucket. In later versions of the Basel Committee standards, the risk weights for certain qualifying residential mortgage loans was lowered to 35%, whereas the percentage of risk weights for commercial real estate backed by mortgages is in principle 50%.

Once the categorisation is made, the total risk weighted exposure can be calculated by multiplying the outstanding exposure amount (whether this is an on-balance or an off-balance exposure) with the risk weight percentage. The outcome of this calculation is the risk weighted exposure against which 8% capital must be held. A bank that would only finance central governments or central banks in one of the "Zone A" countries[11] would, in theory, have a zero risk weighted exposure. A bank only having unsecured exposures on corporate clients would be required to fully take into account the outstanding exposure and hold 8% capital against that 100% risk weighted exposure.

Introduction of reference to credit ratings in Basel II

One of the changes to the Basel I accord of 1988 as introduced in Basel II concerned the categorisation of exposures located in Zone A or Zone B countries. This system was replaced with a categorisation in accordance with the ECA attached to sovereign debt issued by countries, which resulted in a new scale being introduced in 2004. This scale provided for the risk weights in the following table.

[9] BCBS, "Standards. Revisions to the Standardised Approach for credit risk" Second Consultative Document, December 2015.

[10] This paraphrases the original text of Basel II ss.50 and 51, p.19.

[11] In the original Basel I accord there has been a grouping of exposures located in so-called Zone A; countries being the group of jurisdictions that fell in the original G-10 country grouping. Zone B jurisdictions were all other countries not falling in the G-10 group.

Table 1: Risk weights of sovereign debt in accordance with external ratings

Credit assessment	*AAA to AA-*	*A+ to A-*	*BBB+ to BBB-*	*BB+ to B-*	*Below B-*	*Unrated*
Risk Weight	0%	20%	50%	100%	150%	100%

Basel II also introduced a risk weighting percentage "off the scale" that varied in the original Basel I accord between 0% and 100%. As appears from the above table, there is a risk weight of 150% attached to the exposure in respect of sovereign debt where the country issuing such debt has been given an ECA of below B-. Such a rating is rarely given and only to jurisdictions which face severe economic downturn or other problematic economic circumstances.[12] Banks holding an exposure in respect of sovereign debt issued by a (below) B- rated jurisdiction, shall be required to include one-and-a-half of the actual value of the exposure in the aggregate of risk weighted exposures and hold, consequently, factor 1.5 regulatory capital in respect of that exposure.

This system of requiring "above maximum" capital to be held for risks in extraordinary problematic categories is used throughout the Basel II accord not only for sovereign exposures on countries with a B- rating but also for other exposures where the estimated risks are considered to be very high. For instance, certain securitisation exposures must be weighed against a percentage of 350% if the securitisation position is given a long-term ECA rating of BB+ to BB-. Positions with a long term ECA weighting below the above referred category must be deducted from capital, which is the ultimate "stick behind the door" for problematically performing exposures on debtors. Such high risk weights or requirements to deduct from regulatory capital are attached to exposures to discourage banks from holding these exposures for a longer term.

One of the other changes of Basel II concerned the categorisation of the exposure groups, introducing more sophistication as regards the various groups constituting risk categories. The Basel II categorises credit risk exposures[13] in the following 13 groups.

Table 2: Risk categories of the Basel II standards for credit risk

1	Claims on sovereigns
2	Claims on non-central government public sector entities
3	Claims on multilateral development banks
4	Claims on banks
5	Claims on securities firms
6	Claims on corporates
7	Claims included in the regulatory retail portfolios
8	Claims secured by residential property
9	Claims secured by commercial real estate
10	Past due loans
11	Higher-risk categories
12	Other assets
13	Off-balance sheet items

The exposures listed in (5), (7), (9), (10) and (11) are newly introduced and were not dealt with (in an elaborate way) in the Basel I accord of 1988. The item referred to in (2) concerns a further evolved category that was already contained in the Basel I accord albeit in a different way.

Introduction of IRB approach for weighting credit risk exposures

Under the IRB approach banks apply own models as regards the quantification of credit risk in the banking book. The IRB approach permits banks to develop per individual client or per individual client group own internal estimates of risk components based on the past behaviour of the client as regards performance of its (contractual) obligations.

Such internal estimates cover the:

- probability of default (PD);
- loss given default (LGD);
- the exposure at default (EaD); and
- effective maturity (M).

They must be applied for the following categories:

(a) corporates;
(b) sovereign;
(c) banks;
(d) retail; and
(e) equity.[14]

Within the corporate category five sub-categories have been defined relating to specialised lending. Within the retail category three sub-classes are identified.[15]

Based on discretion of supervisory authorities, banks may be required to replace own internal estimates for one or more of the risk elements with values developed by the authorities. Banks may also apply for a partial IRB approach, for instance if, for one or more of the credit exposure categories, the bank wishes to follow the SA rather than its own internal estimates.

[12] As of 14 December, 2015 Standard & Poor's issued a B- or lower credit rating concerning exposures to some 15 jurisdictions out of a group of 130. It must be noted that the BCBS utilises only one letter coding of different ECAI's for sovereign exposures, being the letter coding developed by Standard & Poor's. See Basel II p.19 fn.14. In the EU, the relevant rules and regulations are based on systems of a significant number of ECAI's, all as listed in Annex III, Mapping tables for the purposes of art.16 to the draft Implementing Technical Standard on the mapping of ECAIs' credit assessment under Regulation 575/2013 on prudential requirements for credit institutions and investment firms and amending Regulation 648/201 [2013] OJ L176/1 (Capital Requirements Regulation—CRR) art.136(1) and (3), Joint Committee of EBA, EIOPA and ESMA JC 2015/067 of 11 November 2015.

[13] These categories exclude securitisation exposures of banks (in whichever role), for which a bespoke chapter in Basel II has been developed.

[14] Also for banks applying the IRB approach a bespoke regime is established to address securitisation exposures.

[15] Basel II p.52 para.214.

For most of the categories listed under (a) up to and including (e), Basel II has provided for a foundation-IRB method and an advanced-IRB method. The former permits banks to use own estimates for PD whereas the other risk factors (LGD, EaD and M) are supervisory estimates. The advanced-IRB approach allows banks to use own estimates for one or more of the other risk factors as well as an own calculation of M, in addition to the own estimates of PD. Both the foundation-IRB and the advanced-IRB method banks must apply the risk weight functions as provided for in the Basel II framework. In other words, the calculation formulae developed for each of the risk categories must be applied for deriving capital requirements. For retail exposures there is no distinction between foundation-IRB approach and advanced-IRB approach.

Revision to the standardised approach for measuring credit risk

Background of the proposals

The Basel Committee comments that the proposals for the Revision of the Standardised Approach for measuring credit risk must be placed in the context of the recommendations made to the G-20 political leaders in the Basel Committee's report, "Reducing excessive variability in banks' regulatory capital ratios" of November 2014.[16] The Basel Committee conducted the Regulatory Consistency Assessment Programme (RCAP), assessing the manner of implementation of the Basel capital accord across the various jurisdictions and by the different regulators. The RCAP confirmed that:

> "There are material variances in banks' regulatory capital ratios that arise from factors other than differences in the riskiness of bank's portfolios. These variances undermine confidence in capital ratios."[17]

Improvements to the "standardised non-modelled approaches for calculating regulatory capital" intend to form the basis for the use of capital floors and benchmarks. Improved standardised approaches also continue to serve as a fall-back option in the event banks do not or no longer meet the requirements to apply own models for credit risk measurement.[18] The November 2014 report to the G20 political leaders did not contain too much detail as to the background of the revisions that the Basel Committee contemplates for the standardised approach for credit risk measurement. These details are provided in the comprehensive December 2014 Consultative Document.

First, the Basel Committee aims to reduce (automatic) reliance on ECA's and, consequently, increase the risk sensitivity of the measurement of credit risk. Secondly, national discretions must be removed as much as possible. The Basel Committee therefore wishes to improve the consistent and harmonised application of the credit risk-capital adequacy framework throughout all jurisdictions where the capital accord is applied. Thirdly, the link between the SA and IRB approach must be strengthened. Finally, the comparability of capital ratios across all jurisdictions must be improved.

The SA credit risk for sovereigns, central banks and public sector entities are not within scope of the proposals to revise the SA credit risk measurement framework. A separate review and proposal will be organised by the Basel Committee.

Substituting references to ECA with new risk drivers

In the first consultative document of December 2014, the Basel Committee proposed to introduce a new methodology to calculate risk weights throughout (almost) all the risk categories, except for exposures on sovereigns which are not covered in the proposals. Instead of assessing risk weights on the basis of (published) ECA's issued by one or more credit rating agencies (ECAIs), a new system introducing alternative risk drivers is proposed:

> "These alternative risk drivers have been selected on the basis that they should be simple, intuitive, readily available and capable of explaining risk consistently across jurisdictions."[19]

The original new system of risk drivers of 2014 proposed different approaches for the following risk categories:

- bank exposures;
- corporate exposures;
- retail exposures;
- exposures secured by residential real estate; and
- exposures secured by commercial real estate.

For each of these categories a bespoke approach was suggested, defining risk drivers specifically relevant for each category. The most far-reaching proposal of the

[16] Available at: *http://www.bis.org/bcbs/publ/d298.pdf* [Accessed 19 January 2016].
[17] BCBS, "Reducing excessive variability in bank's regulatory capital ratios" November 2014, p.1.
[18] It must be noted that the revisions to the standardised approach for measurement of credit risk constitutes an important chapter of other and comparable work that the Basel Committee undertook proposing improvements to the standardised approach for measurement of operational risk (October 2014, available at: *http://www.bis.org/publ/bcbs291.htm* [Accessed 19 January 2016]), market risk (May 2012 and October 2013, the latter available at: *http://www.bis.org/publ/bcbs265.htm* [Accessed 19 January 2016]) and counterparty risk (in respect of OTC-derivatives) stemming from March 2014 (available at: *http://www.bis.org/publ/bcbs279.htm* [Accessed 19 January 2016]). The Basel Committee plans to "review and consider the overall calibration resulting from the combined revisions to the standardised approaches prior to finalizing these proposals in order to ensure that capital requirements reflect the inherent riskiness of exposures and that the standardised approaches constitute a suitable alternative and complement to internal models." See BCBS, "Revisions to the Standardised Approach for credit risk" December 2015, p.1.
[19] BCBS, "Revisions to the Standardised Approach for credit risk" December 2015, p.2.

December 2014 framework related to the complete removal of the references to ECA's in the bank and corporate exposure classes for the quantification of risk. However, in the second consultative document of December 2015, the assigned risk weights based on alternative risk drivers have been changed to a regime where reliance on ECA's is permitted for exposures to banks and corporates together with the application of the new and alternative risk drivers. The latter alternative is proposed in order to enable the risk weighting of exposures in jurisdictions where, for regulatory purposes, ECA's may (no longer) be relied on and furthermore serves as the framework for unrated exposures.

As comparability of the outcome of credit risk weighting throughout all jurisdictions is a key element of the proposals, the Basel Committee also asks in the second consultative document of December 2015, whether or not the differences in the two methodologies will result in a lack of comparability. The Basel Committee expects that based on the contributions in the second consultation, this point will be further evaluated.

On balance, changes in the SA framework will therefore occur for all categories, albeit for banks and corporates ECAs may still be applied to assess risk weights. Other proposals contained in the December 2014 document relate to the revisions to the credit risk mitigation framework. These proposals have been upheld as well in the most recent publication of the Basel Committee. We will discuss the chapters of the Basel Committee proposals on the above-listed exposures in more detail in the following paragraphs. We refrain from commenting on the proposals for specialised lending in the chapter on corporate exposures. We also refrain from commenting on the regime of add-on risk weights to certain exposures with currency mismatch, off-balance sheet items, defaulted exposures and other assets. Finally we do not comment on the credit risk mitigation technique framework which deserves its own separate assessment.

Bank exposures

The current Basel standards regarding risk weights for exposures of banks on other banks borrowing from banks refer to ECAs to determine the risk weight. For unrated exposures a flat rate is applied—customarily this flat rate is 20% of the nominal exposure if the central government of the jurisdiction in which the bank is incorporated has a favourable highest (triple-A) rating.[20] The current Basel standards for SA calculations of credit risk also contain an option to calculate risk weights by deducting the risk profile of a bank, referring to the ECA of the sovereign in which jurisdiction the bank is incorporated.

Because in the recent frameworks of prudential supervision of banks, breaking or mitigating the link between banks and their sovereigns is an important feature of regulation, this option of the current standards will be removed. The Basel Committee also recommends that ECAIs develop methodologies where the sovereign ECA does not form part of the rating scores of other debtors'/issuers' debt, including banks established in the relevant jurisdiction.[21] The Basel Committee acknowledges that currently there may be no ECAs available for banks which exclude scoring as regards the ECA issued for their sovereign. In such standalone ratings for banks, the sovereign rating serves as a floor. In the second consultative document of December 2015, the Basel Committee invites market participants to present solutions for the possible constraints that may arise in practice in view of the unavailability of ECAs of banks or bank issued debt without these including a scoring of the rating of the sovereign.

In order to avoid that banks mechanistically rely on the ECA of individual banks or bank issued debt when assessing credit risk, a new due diligence requirement will be imposed in addition to the assessment of credit risk based on ECA. This additional due diligence requirement also imposes obligations on banks to address potentially discovered higher risk than would appear from the ECA. In such cases, the higher risk must be accounted for by increasing the risk weight of that particular exposure on a bank or bank issued debt at least one bucket higher than the "base risk weight". Risk weights may, however, never be lower than stemming from the look-up table established to attach risk weights to exposures on banks or bank issued debt in respect of which an ECAI has issued a credit rating.

The Basel Committee prescribes a hierarchy of approaches, the External Credit Risk Assessment Approach (ECRA) and the Standardised Credit Risk Assessment Approach (SCRA). Banks are required to make firm choices between one of the two approaches in order to avoid arbitrage.

In the ECRA, rated exposures of banks form part of the assessment methodology. A "base risk weight" is determined on the ECA of the bank or bank issued debt concerned. This rating serves to determine the risk weight as set forth in a look-up table. The following risk weights are set opposite the various levels of rating, making a distinction between ordinary term exposures and short term exposures[22] and comparing the current risk weights of Basel II with the risk weights proposed in the second consultative document of December 2015.[23]

Table 3: Risk weights of bank exposures in ECRA

External rating of counterparty	*AAA to AA-*	*A+ to A-*	*BBB+ to BBB-*	*BB+ to B-*	*Below B-*
Current Basel II risk weights	20%	50%	50%	100%	150%

[20] See CRR art.121 for the entire look-up table and the scale of risk weights from 20% for triple-A rated sovereigns to 150% for sovereigns raking in the least credit quality Step 6. For unrated exposures on banks incorporated in a jurisdiction with no rating, the risk weight is 100%.
[21] BCBS, "Revisions to the Standardised Approach for credit risk" December 2015, p.4.
[22] Exposures with an original maturity of three months or less.
[23] Basel II p.22 paras 63 and 64 and BCBS, "Revisions to the Standardised Approach for credit risk" December 2015, p.28.

"Base risk weight" in December 2015 proposal	20%	50%	50%	100%	150%
Risk weight for short term exposures in Basel II	20%	20%	20%	50%	150%
Risk weight for short term exposures in December 2015 proposal	20%	20%	20%	50%	150%

The revisions in the second consultative document of December 2015 change the terminology but do not fundamentally change the risk weights attached to exposures on banks with different credit ratings. The most fundamental change concerns the risk weighting of unrated exposures. For these exposures another methodology is developed which forms part of the SCRA. The SCRA is intended as the risk weighting framework for banks that are, in accordance with the laws that apply to them, not permitted to use ECAs. The SCRA method is also to be used for unrated exposures by any bank that applies the ECRA. The SCRA addresses unrated exposures in a system defining three risk buckets, where the three buckets express the different risk profiles of the banks or bank issued debt. A "Grade A" exposure represents the lowest risk, a "Grade B" the medium risk and a "Grade C" exposure the highest risk. For each of the three categories, the Basel Committee has developed a norm that enables it to classify the exposures in one of the three buckets. In the table below, the new SCRA methodology is explained in more detail. The table provides for the system of classification in three risk categories, the risk weights attached to those categories and a summary of the criteria developed by the Basel Committee based on which the classification must be made.[24]

Table 4: SCRA methodology for unrated bank exposures or for banks that are not permitted to use ECA's

	"Base risk weights" for ordinary terms	**Risk weights for short term exposures**	**Criteria for classification**
Grade A	50%	20%	A bank that has adequate capacity to meet its financial commitments in a timely manner for the projected life of the assets or exposures and irrespective of economic cycles and business conditions. Such a bank must exceed the published minimum regulatory requirements and buffers of the competent authority where the borrowing bank is established.
Grade B	100%	50%	A bank that is subject to substantial credit risk and where the performance of its obligations depends on stable or favourable economic or business conditions. Such a bank must meet the published minimum regulatory requirements and buffers.
Grade C	150%	150%	Represents a higher credit risk exposure on banks that have a material default risks and limited margins of safety. Adverse business, financial or economic conditions are very likely to lead, or have led, to an inability to meet financial commitments. A bank breaching any of the following triggers must be categorised as Grade C bank: • Non-compliance with regulatory requirements and buffers; • The issue of an adverse opinion by the external auditor on financial statements or otherwise an expression of substantial doubt as to the ability to continue as going concern within the previous 12 months.

Some of the classifications of Grade C banks seem to be unrealistic, i.e. before a bank's external auditor issues adverse opinions on a bank, early intervention by the supervisory authorities has probably already occurred. Such banks would, in all likelihood, already be subject to recovery or resolution mechanisms and they are not likely to be able to raise ordinary financing from other banks.

Should the criteria for Grade C banks perhaps better refer to the more sophisticated rules concerning qualitative criteria for regulatory capital? One could imagine that a bank that surpasses the regulatory capital buffer threshold as defined in the system of Additional Tier 1 capital instruments (for European banks this concerns the threshold of 5.125% of Common Equity Tier 1 (CET1) as set forth in CRR art.54(1) point (a) limb (i)) should logically be considered to be a Grade C bank. Such a bank is not beyond abilities to raise financing in the commercial markets, but will be doing so in the context of necessary recapitalisation operations as a result of the occurrence of the trigger event. The adverse circumstances arising in the context of such a refinancing operation, justify in our view the classification of such a bank as a Grade C bank.

In the December 2015 proposal on revisions of the SA, the Basel Committee also considered introducing a risk weight floor for bank exposures related to the risk weighting of the sovereign in which jurisdiction the bank borrower is established. Such "sovereign-floor" should confirm the principle that a risk weighting of the bank exposure calculated on the basis of the SCRA shall never be lower than the risk weighting of its sovereign. The

[24] See, for the full text of the Basel Committee proposal: BCBS, "Revisions to the Standardised Approach for credit risk" December 2015, p.29.

relevant paragraphs are square bracketed in the December 2015 consultative document and are subject to further review by the Basel Committee.[25]

It should be noted that, provided the relevant firms are subject to prudential standards and a level of supervision equivalent to those applicable for banks (which must include capital and liquidity requirements), the risk weighting for securities firms (in European terminology this would be an "investment firm") or other financial institutions[26] is equal as the weighting for exposures on banks.[27]

Corporate exposures

The removal of references to ECAs, as was contemplated in the first consultative document of December 2014, has been cancelled by the Basel Committee and the original concepts of the Basel II accord of 2004 have been reinstated without too many changes. One of the new changes concerns the requirement that banks will need to perform due diligence on the corporate counterparty in order to assess whether the ECA corresponds with own findings as a result of the due diligence. By imposing this due diligence requirement the Basel Committee aims, as has been discussed in more detail here above, to change the practice of mechanistic reliance on ECAs when attaching risk weights to exposures of the bank. Similarly, as is the case for the new standards for exposures on banks, any negative outcome of the due diligence results in the application of a higher risk weight.

The new standards for exposures on corporates do not materially change the concepts as developed in the Basel II accord. If there is an ECA available, risk weights may be attributed to the exposure depending on the ECA. There is a look-up table for the attribution of risk weights depending on the level of the ECA. If there is no ECA available, then the exposure must be given a risk weight of 100%, except for exposures on small and medium-sized entities (SMEs). For exposures on corporate SMEs[28] the risk weight is lower, depending on certain conditions. Unrated exposures on corporate SMEs may be attributed a risk weight of 85%. These exposures concern exposures on corporates whose reported (consolidated) revenues (BCBS uses the expression "sales") do not exceed €50 million. Exposures on SMEs qualifying pursuant to the retail exposure criteria are treated differently, as we will discuss in the following paragraph.

As regards the look-up table as proposed in the second consultative document, minor differences may be noted as compared to the look-up table developed in Basel II. The below table displays the differences.

Table 5: Risk weights of corporate exposures

External rating of counterparty	*AAA to AA-*	*A+ to A-*	*BBB+ to BB-*	*BBB+ to BBB-*	*BB+ to BB-*	*Below BB-*
Current Basel II risk weights	20%	50%	100%			150%
Risk weights in December 2015 proposal	20%	50%		100%	100%	150%

The only noteworthy difference is the change in the "investment grade" category, where the revisions proposed by the Basel Committee in the second consultative document of December 2015 are slightly more conservative than is the case in the Basel II accord. This category is proposed to be narrowed down to BBB+ to BBB- instead of BBB+ to BB-. The December 2015 consultation also introduces a new category BB+ to BB- to cover for the gap. The risk weights for corporates with below investment grade ECAs are, however, not different at this stage, but may possibly be increased in the future. We have interpreted this change (for which little further explanation can be found) as to create a convenient infrastructure for future changes in the risk weighting system, for instance by attaching a higher risk weight to the BB+ to BB- risk weighting bracket. The Basel Committee only proposes to define the various categories in a more refined fashion at this stage.

It must be noted that the current European rules already apply less conservative weighting as compared to Basel II and as compared to the recent Basel Committee proposals. CRR art.122(1), addressing the risk weights, distinguishes six credit quality steps and for credit quality Steps 5 and 6, risk weights apply of 150%. However, credit quality Steps 5 and 6 are equal to Standard & Poor's B and CCC, CC, R, SD/D.[29] The Basel Committee 150% risk weight already applies for below BB- ratings which is in the European system next to credit quality Step 4 with a risk weight of 100%.

On balance, the second consultative document of December 2015 more or less restates the legacy system of Basel II of 2004, albeit there are some comments on the need to perform own due diligence on the relevant exposure preventing mechanistic reliance on credit

[25] BCBS, "Revisions to the Standardised Approach for credit risk" December 2015, p.30.
[26] This expression used in the consultative document of the Basel Committee does not refer to the expression "financial institution" within the meaning of CRR art.4(1) Point 26. Rather the concept as it is used in the documentation of the Basel Committee is to be interpreted in the broadest sense possible, also including clearing institutions (if not regulated as a bank), insurance companies, pension schemes and similar businesses, provided the institution concerned is subject to prudential supervision standards similar as those applicable to banks. If they do not meet the prudential supervision standards, the exposures will be treated as if it are exposures on corporates. See "Revisions to the Standardised Approach for credit risk" December 2015, p.30 para.6.
[27] BCBS, "Revisions to the Standardised Approach for credit risk" December 2015, p.30.
[28] A corporate-SME is the expression used to include in the bucket for corporate exposures SME's that do not qualify for the risk weighting regime for retail exposures.
[29] See Annex III, Mapping tables for the purposes of art.16 to the draft Implementing Technical Standard on the mapping of ECAIs' credit assessment under of Regulation 575/2013 on prudential requirements for credit institutions and investment firms and amending Regulation 648/201 [2013] OJ L176/1 (Capital Requirements Regulation—CRR) art.136(1) and (3), Joint Committee of EBA, EIOPA and ESMA JC 2015 067 of 11 November 2015.

ratings. In our view, European banks subject to the requirements of the recent framework of CRD IV[30] art.79 are already required to make these independent credit risk assessments and reliance on ECAs is already contained in these rules of 2013. See CRD IV Recital (72):

> "Overreliance on external credit ratings should be reduced and the automatic effects deriving from them should be gradually eliminated. Institutions should therefore be required to put in place sound credit-granting criteria and credit decision-making processes. Institutions should be able to use external credit ratings as one of several factors in that process but they should not rely solely or mechanistically on them."

For European banks, the proposed revisions to the credit risk assessment framework will therefore not bring significant changes as regards the organisation of the credit granting process. Through the applicability of the provisions of CRD IV art.79, they are already stimulated not to rely mechanistically on a rating of an ECAI or on the fact that the exposure is unrated. The only change that may arise once the Basel Committee proposals for revisions of the SA are adopted concerns the introduction of better risk sensitive weights for exposures of corporates in the lowest credit quality steps, as currently regulated in the provision of CRR art.122.

Retail exposures

In order to improve the risk sensitivity of the retail exposure category further refinements are introduced. The retail category will distinguish between the "regulatory retail" exposures and the other retail exposures. The latter will be risk weighted in the SA at 100% and have effectively the same risk weight as corporate exposures in the medium risk weighted buckets. For the former, the flat risk weight shall be 75% and will be based on the qualification of the exposure in accordance with four criteria:

- orientation of the exposure;
- product features;
- portfolio granularity; and
- low value of the individual exposure.

The proposed changes to the SA as introduced by the Basel Committee in the documents of 2014 and 2015, only effect the "orientation" criterion to be slightly modified.

The Basel Committee proposes to refer in the orientation criterion to SMEs instead of to the current reference of "small business" as contained in para.70 of the Basel II text. There is a further reference to the definition of SME as "corporate exposure where the reported sales for the consolidated group of which firm is a part is less than EUR 50 million".

In the current provision of CRR art.123, the European framework already refers to SMEs. There is a preferential treatment for exposures to SMEs regulated in CRR art.501 effectively reducing the capital requirements by multiplying the exposure value with a mitigating factor. This preferential treatment is available subject to certain conditions. More importantly, for companies that qualify as an SME, the provision of CRR art.501 refers to a definition of Commission Recommendation 2003/361 of 6 May 2003.[31] In the EU, detailed criteria apply to define what constitutes the "micro, small and medium sized businesses" by measuring staff headcount, annual turnover and annual balance sheet.

Typically, annual turnover figures for the largest category of the medium-sized businesses are consistent with the Basel Committee criteria of sales not exceeding the €50 million threshold. But in order to qualify as a SME within the meaning of the CRR rules other qualifications must be met too, for instance headcount of the personnel of the business may not exceed 250 individuals and balance sheet total may not exceed €43 million.

In conclusion: the recent Basel Committee proposals as regards retail exposures will be rather unimportant for the European rules and regulations on the SA for credit risk for retail exposures.

Exposures secured by residential real estate

In the initial December 2014 proposals of the Basel Committee, two risk drivers were proposed to address the preferential risk weighting of 35% on exposures secured by residential real estate. The current Basel II text hardly provides for detailed description of the applicable risk drivers in order to qualify for this preferential treatment. The first risk driver as proposed by the Basel Committee in December 2014 concerns the loan-to-value ratio (LTV) being applied as indication of the safety of the exposure, in view of the coverage of the loan with the residential real property as collateral. The LTV is calculated as the amount of the loan divided by the value of the property. The other risk driver as proposed by the Basel Committee in December 2014 concerned the debt-service-coverage ratio (DSC). DSC would be an indicative criterion on the ability of the borrower to meet the payment obligations under the residential mortgage loan.[32]

Although the Basel Committee sees the DSC as a useful criterion to be applied at the outset of the underwriting process of the residential mortgage loan, it will no longer be proposed as the mandatory risk driver that must be

[30] Directive 2013/36 on access to the activity of credit institutions and the prudential supervision of credit institutions and investment firms, amending Directive 2002/87 and repealing Directives 2006/48 and 2006/49 [2013] OJ L176/338.
[31] Recommendation 2003/361 concerning the definition of micro, small and medium sized enterprises [2003] OJ L124/36.
[32] BCBS, "Revisions to the Standardised Approach for credit risk" December 2015, p.13.

met in order to qualify for the preferential treatment for exposures on residential real estate. The LTV is to be maintained in the revisions to the SA framework as now being proposed by the Basel Committee.

The Basel Committee introduces in the proposals for revision of the SA for credit risk a detailed framework for the treatment of the exposures secured by residential real estate based on the LTV. These proposals require first, that the bank satisfies certain qualitative criteria as regards the underwriting of the residential mortgage loans and secondly, they provide for a scale of varying risk weights set forth in a look-up table depending on the LTV of the real property concerned.

As regards the qualitative criteria, the bank granting the loans shall be required to validate that the loan meets a number of qualitative criteria:

- the *property must be finished* (therefore the occupation of the property for residential use is likely. For one–four family residential property units (not being apartments within a larger construction project) being under construction, national authorities may apply exceptions to the rule that the property must be finished;
- the loan and collateral granted to the bank must be *legally enforceable*. The legal process towards foreclosure of the property must enable the bank to realise the value of the property within a reasonable time frame;
- the bank must hold a *first lien of the property* unless in the jurisdiction concerned junior liens are recognised as proper risk mitigating factors;
- the borrower must have the *ability to repay* the mortgage loan. The Basel Committee proposes that national authorities impose on the banks the requirement to use underwriting policies referring to the debt service coverage and other relevant levels to conduct an assessment;
- the value of the property must be prudently valued by independent appraisers using prudently conservative valuation criteria. For instance, valuations based on expected price increases must be excluded from the valuation metrics; and
- proper documentation of the loan and all the processes applied during the underwriting process is seen by the Basel Committee as a key qualitative factor for the qualification of loans under preferential treatment for residential real estate exposures.

The value measured at origination of the loan will be applied throughout the life cycle of the loan to calculate the LTV ratio. The LTV ratio will, however, be adjusted to incorporate the repayments being made on the loan. LTV variations to address a general real property market turmoil are not included in the proposals of the Basel Committee. However, downwards LTV adjustments to address extraordinary idiosyncratic events in respect of an individual property should be permissible.

The scale of ordinary LTV risk weights attached to the residential mortgage loan is as set forth in the following table.

Table 6: Risk weights of residential real estate exposures set opposite the LTV

	LTV ≤ 40%	**40%< LTV ≤ 60%**	**60%< LTV ≤ 80%**	**80%< LTV ≤ 90%**	**90%< LTV ≤ 100%**	**LTV > 100%**
Risk weight	25%	30%	35%	45%	55%	$RW_{counter\text{-}party}$

The risk weight for real estate loans with an LTV exceeding 100% is set at the ordinary risk weight of the counterparty. For a loan to private individuals this results in a risk weight of 75%. For other (corporate) exposures the risk weight is 100%.

All these calculations assume that the

> "prospects for repayment and recovery of the exposure are not materially dependent on the cash flows generated by the property securing the loan rather than on the underlying capacity of the borrower to repay the debt from other sources".[33]

If a loan repayment does depend on such cash flows generated by the property—for instance rent or lease income or other sources stemming from the (third party) use of the residential property—the following risk weights apply.

Table 7: Risk weights of residential real estate exposures materially dependent on cash flows generated by the property

	LTV ≤ 60%	**60%< LTV ≤ 80%**	**LTV > 80%**
Risk weight	70%	90%	120%

In which manner will these proposals of the Basel Committee affect the currently applicable rules for European banks pursuant to the CRR provisions? On balance, the current European rules set forth in CRR arts 124 and 135 are stricter than the standards now proposed by the Basel Committee for a number of reasons.

First, the European rules provide for a mechanism where the preferential treatment of exposures in residential real estate loan portfolios of banks may be limited and stricter risk weights up to 150% may be

[33] BCBS, "Revisions to the Standardised Approach for credit risk" December 2015, p.36 para.56.

applied, if loss experience of exposures and developments in the residential property markets in a particular jurisdiction require the adjustment.

Secondly, the current European rules do not provide for a mechanism where the preferential treatment of real estate exposures with low LTVs may be decreased below the 35% floor as currently applies. Therefore on balance, the new risk weights of 20% and 30% for exposures in the first two buckets of the scale for ordinary exposures (see Table 6) would materially mitigate the current rules in the European Union.

Thirdly, the current European rules have introduced additional eligibility criteria for residential real estate exposures to qualify for the preferential treatment. These additional eligibility criteria are contained in CRR art.125(2) Points (a) and (b). These criteria have indeed introduced in Europe the DSC as a criterion, albeit that it will depend on the applicable regulations in the individual Member States how this criterion is applied. Therefore, the underlying capacity of the borrower to repay the debt from other sources than the income generated through the renting of leasing of the real property already plays a fundamental role in Europe for the qualification of loans for the preferential treatment. Particular attention should be given to the derogation of the requirements as set forth in CRR art.125 para.3. In this provision, derogation is regulated based on the system of gathering historical loss rates in the residential mortgage market within the jurisdiction concerned. In the event such loss rates are evidenced to stay below certain limits, the requirements to assess the individual debt service of a particular retail client may be waived.

Exposures secured by commercial real estate

Probably based on the bad reputation that has been built up concerning commercial real estate financing during the financial crisis, the Basel Committee proposes in the recent December 2015 document to increase of the risk weight when applying the preferential treatment. This risk weight is increased from 50 to 60% and may only be applied if certain very conservative requirements are met.

First, the real property loan must meet all the requirements as set forth above for residential property loans. A bank will not have too many problems meeting the qualitative requirements for residential mortgage loans in view of the mass scale and large number of loans originated. Therefore, the amount of standardisation and common (market) practice makes it easier to comply with these criteria. For commercial real estate this may be less true in view of the bespoke features of most of the loans originated in this market. Therefore, the requirements of para.50 of the Basel Committee proposal[34] will result in a significantly higher compliance burden for banks than was the case under the old Basel II standards.

Furthermore, the Basel Committee proposal also introduces a floor in respect of the risk weight applicable, where the exposure must be either weighted at 60%, provided the requirements for such preferential treatment are met, or the risk weight attached to the (corporate) counterparty. Assuming that the counterparty does not qualify as an SME and would consequently fall within the regulatory retail category, this means that for unrated corporates seeking to borrow from a bank to finance commercial real estate, the risk weighting is essentially doubled to 100% rather than the 50% weighting of Basel II.

For ordinary exposures of commercial real estate lending, the following simple look-up table applies.

Table 8: Risk weights of commercial real estate exposures

	LTV ≤ 60%	LTV >60%
Risk weight	Min (60%, RW of Counterparty)	RW of Counterparty

For commercial real estate exposures where the repayment of the loan is materially dependent on the cash flows generated by the property securing the loan (which is often the case in this market), another manner of calculating risk weights must be applied. These risk weights are as follows.

Table 9: Risk weights of commercial real estate exposures materially dependent on cash flows generated by the property

	LTV ≤ 60%	60%< LTV ≤ 80%	LTV > 80%
Risk weight	80%	100%	130%

It is evident that particularly the introduction of a risk weight of 60% instead of the 50% risk weight introduced in 2004 upon the adoption of Basel II materially affects the current rules in Europe as set forth in CRR art.126. The same conclusion may be drawn as regards the proposals for the introduction of a floor related to the risk weighting of the counterparty. Unless this counterparty is a rated corporate having a favourable credit rating in one of the credit quality Steps 1 or 2 or unless the corporate qualifies for treatment in the regulatory retail bucket of 35%, the impact for the risk weighting of this segment of the real property market will be quite considerable.

Conclusion

Industry participants tend to consider the current work of the Basel Committee changing many parts of Basel III as a threat to the running implementation processes conducted to implement the original 2010 Basel III text. The sum of all the Basel Committee proposals is referred to by the industry as "Basel IV" as a metaphor for the

[34] See BCBS, "Revisions to the Standardised Approach for credit risk" December 2015, Ch.9 p.34.

significant impact the proposed changes will bring. Mark Carney, the Chairman of the Basel Committee has, however, rejected the negative connotation that is embedded in the expression "Basel IV".[35] Concerning the Basel Committee, the changes proposed in the various areas are a necessary correction to the existing Basel III framework without affecting an overhaul of the core policies contained in Basel III.

When one looks (in isolation) at the proposals for the revision of the standardised approach for measuring credit risk as they are currently published, one could indeed draw the conclusion that these proposals do not significantly change the currently applicable rules. The rather moderate impact these proposals may have for current practices and policies may be explained against the background of significant pressure exercised by the industry in respect of the first consultative document on this topic as it was published by the Basel Committee in December 2014. The aim of the Basel Committee to replace the risk weighting methodology for exposures on banks and on corporates that is primarily based on external credit ratings by completely newly developed risk drivers has been replaced in the second consultative document of December 2015 by a rather moderate system of calculation of risk weights based on external credit ratings, and an obligation to conduct proper due diligence on the relevant exposure.

For European banks, the combination of calculating risks weights based on external credit ratings and the obligation to perform own due diligence is already contained in the current rules of CRR arts 121 and 122 and CRD IV art.79. The latter provision has been introduced in Europe to address the risk of overreliance on external credit ratings and has been forming part of the European legislation since 2013. In many jurisdictions in Europe this particular provision of CRD IV has resulted in considerable efforts of the individual institutions to adapt underwriting processes to the new requirements, also reconsidering and reassessing the existing loan portfolios. For this part of the Basel Committee proposals, one could say that for European banks it concerns "old wine in a new bottle".

However, some of the proposals of the Basel Committee concerning the standardised approach for measuring credit risk will indeed bring new rules, also for European banks. This concerns, first, the methodology developed for the credit risk weighting of banks that do not have an external rating ("unrated exposures"). This methodology must be applied by all banks that use the standardised approach, whether they are permitted to rely on external credit ratings or when they are not permitted, based on the laws applicable to them, to rely at all on external ratings for the calculation of credit risk. For the latter group of banks, the proposals to risk weight unrated exposures will be the comprehensive methodology for assessing credit risk for all exposures on banks.

The proposals of the Basel Committee to address unrated exposures concern the categorisation of banks in three grades. The system classifies banks in three categories based on certain measurable criteria, particularly the level of compliance (by the bank whose credit risk exposure is to be assessed) with regulatory capital requirements. We have suggested in this contribution an alternative for the criteria for the lowest quality level Grade C banks, as we consider the current text of the Basel Committee proposals rather ineffective and lacking a logical foundation.

The most significant changes concerning the revision of the standardised approach for measuring credit risk are about exposures concerning loans financing the acquisition of residential real estate and commercial real estate. The LTV mechanism proposed by the Basel Committee brings much more sophistication to the methodology in comparison to the current standards that stem from the Basel II accord of 2004. For European banks the LTV methodology will not bring too many movements in the outcome of risk weights for the residential mortgage loan segment, albeit the European CRR rules address this exposure risk with a completely different methodology. For commercial mortgage loans, the risk weights will be stricter and more risk sensitive than currently is the case pursuant to CRR art.126.

[35] Mark Carney said in an interview with *Bloomberg*: "There is no Basel IV. I'll say it again; I'd like you to print it. There is no big wave of additional capital. There are things that need to be done in order to clean up the system." *Bloomberg*, 1 December 2015 available at: *http://www.bloomberg.com/news/articles/* [Accessed 19 January 2016].