

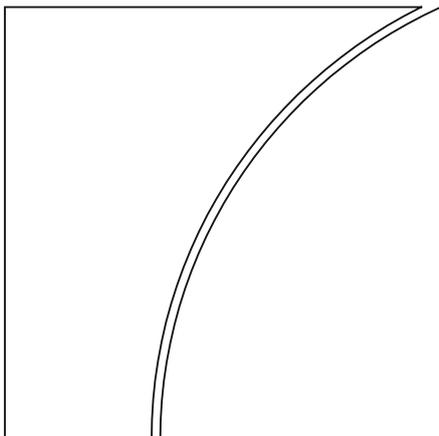
Basel Committee on Banking Supervision

Basel III Document

Revisions to the securitisation framework

*Amended to include the alternative capital treatment for
"simple, transparent and comparable" securitisations*

11 December 2014 (rev. July 2016)



BANK FOR INTERNATIONAL SETTLEMENTS

This publication is available on the BIS website (www.bis.org).

© *Bank for International Settlements 2016. All rights reserved. Brief excerpts may be reproduced or translated provided the source is stated.*

ISBN 978-92-9197-016-2 (print)

ISBN 978-92-9197-015-5 (online)

Contents

| | |
|---|----|
| Introduction..... | 1 |
| Background on the STC criteria..... | 5 |
| Rationale for introducing STC criteria into the capital framework..... | 6 |
| Definition of STC securitisation for regulatory capital purposes | 6 |
| Determination of STC compliance and role of supervisors..... | 7 |
| Standards text..... | 8 |
| I. Credit risk — securitisation framework | 8 |
| A. Scope and definitions of transactions covered under the securitisation framework | 8 |
| B. Definitions and general terminology | 9 |
| C. Operational requirements for the recognition of risk transference..... | 13 |
| 1. Operational requirements for traditional securitisations..... | 13 |
| 2. Operational requirements for synthetic securitisations | 13 |
| 3. Operational requirements for securitisations containing early amortisation provisions..... | 14 |
| 4. Operational requirements and treatment of clean-up calls | 15 |
| D. Due diligence requirements | 15 |
| E. Treatment of securitisation exposures | 16 |
| 1. Calculation of capital requirements and risk-weighted assets..... | 16 |
| 2. Hierarchy of approaches..... | 17 |
| (i) Securitisation exposures of IRB pools | 17 |
| (ii) Securitisation exposures of SA pools | 17 |
| (iii) Securitisation exposures of mixed pools | 17 |
| 3. Approaches | 18 |
| (i) Internal Ratings-Based Approach (SEC-IRBA)..... | 18 |
| (ii) External Ratings-Based Approach (SEC-ERBA) | 22 |
| (iii) Internal Assessment Approach (IAA)..... | 25 |
| (iv) Standardised Approach (SEC-SA) | 28 |
| 4. Caps for securitisation exposures..... | 29 |
| F. Treatment of resecuritisation exposures | 31 |
| G. Implicit support | 31 |
| H. Treatment of credit risk mitigation for securitisation exposures..... | 31 |
| I. Capital treatment for ‘simple, transparent and comparable’ (STC) securitisations .. | 33 |
| 1. Scope and identification of STC securitisations for the purposes of alternative capital treatment..... | 33 |

| | | |
|-----|---|----|
| 2. | Compliance with the STC criteria and the additional criteria for capital purpose and oversight..... | 34 |
| 3. | Alternative capital treatment for STC securitisations meeting the additional criteria for capital purposes..... | 34 |
| | (i) Internal Ratings-Based Approach (SEC-IRBA) | 34 |
| | (ii) External Ratings-Based Approach (SEC-ERBA)..... | 35 |
| | (iii) Standardised Approach (SEC-SA)..... | 36 |
| II. | Other non-securitisation sections..... | 37 |
| | (A) Components of capital (as revised by Basel III) | 37 |
| | (B) Credit risk – the Standardised Approach..... | 37 |
| | (C) Credit risk – the Internal Ratings-Based approach | 38 |
| | (D) The second pillar – supervisory review process for securitisation..... | 39 |
| | Annex 1: Illustrative examples for recognition of dilution risk when applying the SEC-IRBA to securitisation exposures..... | 41 |
| | Annex 2: Expanded set of STC criteria for regulatory capital purposes..... | 46 |

Introduction

This securitisation framework, which will come into effect in January 2018, forms part of the Committee's broader Basel III agenda to reform regulatory standards for banks in response to the global financial crisis and thus contributes to a more resilient banking sector. This framework includes the revised securitisation framework published in December 2014 along with the alternative capital treatment for "simple, transparent and comparable" (STC) securitisations.

The revised securitisation framework published in December 2014¹ aimed to address a number of shortcomings in the Basel II securitisation framework and to strengthen the capital standards for securitisation exposures held in the banking book.²

Furthermore, the Basel Committee and the International Organization of Securities Commissions (IOSCO) jointly conducted work to review securitisation markets and to identify factors that may be hindering the development of sustainable securitisation markets. The Committee and IOSCO issued in July 2015 criteria that could help – and to assist the financial industry's development of – simple, transparent and comparable securitisation.³ Thereafter, the Committee considered how to incorporate such criteria into the securitisation capital framework.

In developing the final standards for capitalising securitisation exposures (including those considered as STC-compliant), the Committee has carefully taken into account the comments received on the three consultative documents,⁴ as well as the results of the quantitative impact studies (QIS) undertaken during the consultations. Furthermore, revisions have also been guided by the Committee's determination to strike an appropriate balance between risk sensitivity, simplicity and comparability.

The STC criteria developed by the Committee and IOSCO in July 2015 STC explicitly excluded short-term securitisations (and more specifically, ABCP conduits / programmes) from the scope of the criteria.⁵ The Committee and IOSCO are currently considering whether, and how, STC criteria for this type of schemes should also be developed. If the Committee and IOSCO finally publish STC criteria for ABCP conduits / programmes, the Committee will in turn determine how to incorporate them in the revised securitisation framework, and how the various types of exposures to these schemes will be treated.

Shortcomings in the Basel II securitisation framework

The crisis highlighted several weaknesses in the Basel II securitisation framework, including concerns that it could generate insufficient capital for certain exposures. This led the Committee to decide that the securitisation framework needed to be reviewed. The Committee identified a number of shortcomings relating to the calibration of risk weights and a lack of incentives for good risk management, namely:

¹ Available at www.bis.org/bcbs/publ/d303.pdf.

² Securitisation exposures held in the trading book will be subject to the revised framework for the trading book, available at www.bis.org/bcbs/publ/d352.pdf.

³ Available at www.bis.org/bcbs/publ/d332.pdf.

⁴ Available at www.bis.org/publ/bcbs236.htm (first consultation on revisions to the securitisation framework); www.bis.org/publ/bcbs269.htm (second consultation); and www.bis.org/bcbs/publ/d343.pdf (consultation on capital treatment for STC securitisations).

⁵ While the July 2015 STC criteria excluded "short-term securitisations instruments" from the scope of the STC criteria, the Committee understands that this exemption was primarily aimed at ABCP. Short-term securitisation instruments other than ABCP should not be prevented from qualifying for STC status simply because their maturity is shorter than one year, provided that they qualify under the existing STC criteria. By contrast, the Committee acknowledges that, due to their specific structure, ABCP programmes would not meet all STC criteria. Consequently, the Committee proposes to keep short-term securitisation instruments other than ABCP within the scope of the STC framework.

- (i) Mechanistic reliance on external ratings;
- (ii) Excessively low risk weights for highly-rated securitisation exposures;
- (iii) Excessively high risk weights for low-rated senior securitisation exposures;
- (iv) Cliff effects; and
- (v) Insufficient risk sensitivity of the framework.

The above shortcomings translate into specific objectives that the revisions to the framework seek to achieve: reduce mechanistic reliance on external ratings; increase risk weights for highly-rated securitisation exposures; reduce risk weights for low-rated senior securitisation exposures; reduce cliff effects; and enhance the risk sensitivity of the framework.

The objectives and principles that have guided the Committee are that: the revised securitisation framework should be more risk sensitive; more prudent in terms of its calibration, broadly consistent with the underlying framework for credit risk, and be as simple as possible. In addition, it should give incentives to improve risk management by assigning capital charges using the best and most diverse information available to banks. Finally, it should be transparent and enable comparability across banks and jurisdictions. This framework aims to achieve the right balance between these objectives.

Major elements of the revised securitisation framework

The major changes in this document relative to the Basel II securitisation framework are described below.

(1) Hierarchy

Basel II securitisation framework

The Basel II framework consists of two hierarchies, depending on the approach to credit risk used for the type of underlying exposures securitised: one for the Standardised Approach (SA), used by banks that apply the SA credit risk framework for the asset class which comprises the underlying pool of securitised exposures; and one for the Internal Ratings-Based (IRB) approach, used by banks that apply an IRB approach to credit risk for the asset class which comprises the underlying pool of securitised exposures.

The SA securitisation framework is aimed at less sophisticated banks. The treatment of the exposure depends upon whether the bank is acting as investor, originator or providing a third party facility (eg a liquidity facility to guarantee timely payments of principal and interest to investors where there might be timing differences in the receipt of principal and interest amounts from the pool of assets that was securitised).

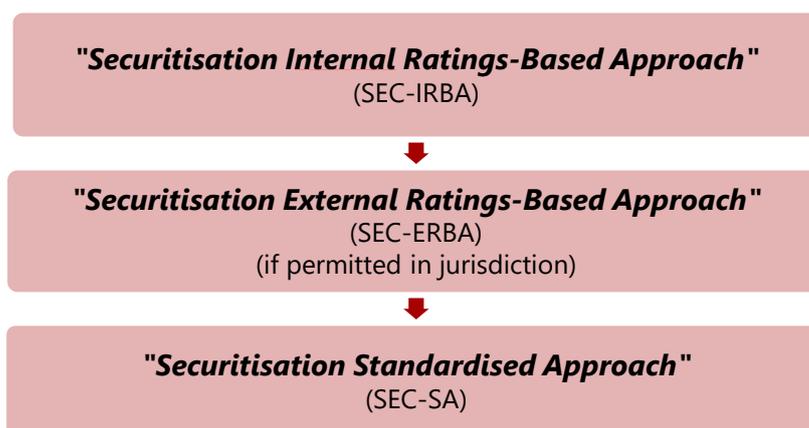
The IRB approach is aimed at more sophisticated banks and allows for a more granular assessment of the relevant risks associated with the securitisation exposures concerned.

Overall, the Basel II framework includes four Ratings-Based Approach (RBA) look-up tables (two under the IRB securitisation framework and two others under the SA securitisation framework), two internal approaches for non-rated exposures (Supervisory Formula Approach (SFA) and Internal Assessment Approach (IAA)), and several exceptional treatments.

Basel III securitisation framework

The Committee has revised the hierarchy to reduce the reliance on external ratings as well as to simplify it and limit the number of approaches.

The revised hierarchy of approaches in the revised framework for securitisation exposures is:



NB1: For resecuritisation exposures: only SEC-SA, with adjustments.

NB2: Subject to certain limitations, banks located in jurisdictions that permit use of the SEC-ERBA may use an internal assessment approach (IAA) to calculate capital requirements in respect of unrated exposures to ABCP programmes.

The SEC-IRBA is at the top of the revised hierarchy. The underlying model is the Simplified Supervisory Formula Approach (SSFA) and it uses K_{IRB} information as a key input. K_{IRB} is the capital charge for the underlying exposures using the IRB framework (either the advanced or foundation approaches).⁶ In order to use the SEC-IRBA, the bank should have the same information as under the Basel II SFA: (i) a supervisory-approved IRB model for the type of underlying exposures in the securitisation pool; and (ii) sufficient information to estimate K_{IRB} .^{7 8}

A bank that cannot calculate K_{IRB} for a given securitisation exposure would have to use the SEC-ERBA, provided that this method is implemented by the national regulator. A bank that cannot use the SEC-IRBA or the SEC-ERBA (either because the tranche is unrated or because its jurisdiction does not permit the use of ratings for regulatory purposes) would use the SEC-SA, with a generally more conservative calibration and using K_{SA} as input.⁹ K_{SA} is the capital charge for the underlying exposures using the Standardised Approach for credit risk. A slightly modified (and more conservative) version of the SEC-SA would be the only approach available for resecuritisation exposures. In general, a bank that cannot use SEC-IRBA, SEC-ERBA, or SEC-SA for a given securitisation exposure would assign the exposure a risk weight of 1,250%.

(2) Approaches

The Basel II securitisation framework does not include an explicit maturity adjustment in either the SFA or the RBA. The Committee has identified this as a flaw of the Basel II approaches. In terms of risk drivers used, the SEC-IRBA and SEC-ERBA can be compared, respectively, to the Basel II SFA and RBA as follows.

⁶ Including the expected loss (EL) charge not counted through risk-weighted assets but potentially through adjustments to regulatory capital.

⁷ There is, however, a change with respect to the application of IRB methods to reduce arbitrage opportunities. Under the Basel II securitisation framework, if the bank is using the IRB approach for some exposures and the SA for other exposures in the underlying pool, it should generally use the approach corresponding to the predominant share of exposures within the pool. The Basel II framework provides no guidance about determining predominance for so-called "mixed pools." In the revised framework, if the bank can calculate K_{IRB} for at least 95% but less than 100% of the underlying exposure amounts of a securitisation, it must use a pro rata approach, applying SA risk weights for exposures for which it cannot calculate K_{IRB} and IRB risk weights for exposures for which it can calculate K_{IRB} .

⁸ To increase the applicability of SEC-IRBA, the Committee has clarified that the IRB top-down approach can be used.

⁹ To limit the number of options available to banks, if a bank did not apply SEC-IRBA or SEC-ERBA, it would have to apply the SEC-SA with K_{SA} input for *all* the underlying exposures (even for those for which the bank could calculate K_{IRB}).

SEC-IRBA

One of the major shortcomings of the SFA identified by the Committee is the sharp cliff effects in marginal capital charges. This is driven in part due to the lack of an adequate incorporation of maturity. Under the SFA, the maturity of assets in the underlying pool is only partially considered –through K_{IRB} – when calculating capital requirements.

The Basel II SFA is based on a 1-year default mode model, and therefore does not (in contrast to the wholesale IRB framework¹⁰) fully reflect the possibility of losses to tranche exposures resulting from potential future credit deterioration in the underlying pool. The SFA looks only at the risk of default over a 1-year horizon, ignoring the risk of a potential deterioration afterwards; it implicitly assumes that a given tranche will not incur any market value loss until the values for all more-junior tranches have been reduced to zero. Reasonable economic risk models would be unlikely to make this assumption when tranche maturity is greater than 1 year.

As the relevant effects of maturity are, however, not fully captured through K_{IRB} alone, the SEC-IRBA incorporates tranche maturity as an additional risk driver. All other inputs (ie K_{IRB} , attachment and detachment points, number of exposures in the pool and the pool loss-given default) are used under the SFA.

Notwithstanding, to address concerns raised by commenters to the second consultative document that the use of legal maturity is overly conservative and does not reflect the real maturity of the tranche, the Committee has agreed to apply a haircut in order to smooth the impact of maturity on capital charges when legal maturity is used.

SEC-ERBA

The Basel II RBA assigns risk weights according to the external rating of the exposure, the seniority and the granularity of the underlying pool.

The Committee has revised the extent to which external ratings reflect some other relevant risk characteristics and has determined that it is necessary to consider additional risk drivers relative to the Basel II RBA, namely:

- Tranche thickness of non-senior tranches (ie the size of the tranche relative to the entire securitisation transaction). Under the Basel II RBA, tranche thickness is not fully taken into account. While credit rating agencies consider tranche thickness, analysis performed by the Committee suggests that capital requirements for a given rating of a mezzanine tranche should differ significantly based on tranche thickness.
- Tranche maturity: A rating agency typically targets a given level of expected loss per rating, while the capital charge reflects its expected loss rate conditional on the assumed stress event occurring (unexpected loss). As such, a tranche's unstressed expected loss rate (as reflected in the credit rating) is not a sufficient statistic for determining its stressed expected loss rate (ie its unexpected loss rate). The mapping between expected and unexpected loss rates depends in part on tranche maturity.

¹⁰ The IRB approach for wholesale exposures includes an explicit maturity adjustment such that capital requirements for loans with longer maturities, other things equal, will be higher than for loans with shorter maturities. From a modelling perspective, the IRB maturity adjustment incorporates into capital requirements the potential for downward migrations/changes in credit quality short of default. In general, given two exposures to a particular obligor, one with a maturity of 1 year and the other with a maturity of five years, we would expect that the 5-year maturity exposure would be more likely to be downgraded or to default before its maturity than the 1-year maturity exposure, as there is more time for negative events to occur before the 5-year exposure fully pays back.

Notwithstanding, to address concerns about potentially overstating maturity effects, the Committee has reduced the risk weights for longer-maturity tranches assigned under the SEC-ERBA relative to those proposed in the second consultative document.

Finally, the Committee has found that credit rating agencies already take granularity into account when assigning a rating to a tranche. In particular, in order to achieve a certain rating, credit rating agencies require different levels of credit enhancement depending on the pool's granularity (the less granular is the pool, the more credit enhancement is required). Consequently, the Committee has decided not to include a granularity adjustment when ratings are used.

Improvements in the securitisation framework

The revised Basel III securitisation framework represents a significant improvement to the Basel II framework in terms of reducing complexity of the hierarchy and the number of approaches. Under the revisions there would be only three primary approaches, as opposed to the multiple approaches and exceptional treatments allowed in the Basel II framework.

Further, the application of the hierarchy no longer depends on the role that the bank plays in the securitisation – investor or originator; or on the credit risk approach that the bank applies to the type of underlying exposures. Rather, the revised hierarchy of approaches relies on the information that is available to the bank and on the type of analysis and estimations that it can perform on a specific transaction.

The mechanistic reliance on external ratings has been reduced; not only because the RBA is no longer at the top of the hierarchy, but also because other relevant risk drivers have been incorporated into the SEC-ERBA (ie maturity and tranche thickness for non-senior exposures).

In terms of risk sensitivity and prudence, the revised framework also represents a step forward relative to the Basel II framework. The capital requirements have been significantly increased, commensurate with the risk of securitisation exposures. Still, capital requirements of senior securitisation exposures backed by good quality pools will be subject to risk weights as low as 15%. Moreover, the presence of caps to risk weights of senior tranches and limitations on maximum capital requirements aim to promote consistency with the underlying IRB framework and not to disincentivise securitisations of low credit risk exposures.

Incorporating the STC criteria into the capital framework

Background on the STC criteria

The STC criteria are intended to help transaction parties – including originators, investors and other parties with a fiduciary responsibility – evaluate more thoroughly the risks and returns of a particular securitisation, and to enable more straightforward comparison across securitisation products within an asset class. These criteria should assist investors in undertaking their due diligence on securitisations, but in no case would these criteria serve as a substitute for such due diligence.

The STC criteria may help both investors and supervisors assess the risk of securitisation exposures by fostering simplicity in the underlying assets and the structures of securitisations meeting such criteria. By improving transparency, the STC criteria may help provide investors throughout the life of the transaction with greater access to comprehensive and reliable information about the securitisation structure and their underlying assets' characteristics and performance. By incentivising a greater comparability for certain elements of securitisation transactions, the STC criteria could lower investors' hurdle for assessing securitisation risks.

What does STC mean?

| | |
|----------------------|--|
| Simplicity | Simplicity refers to the homogeneity of underlying assets with simple characteristics, and a transaction structure that is not overly complex. |
| Transparency | Criteria for transparency provide investors with sufficient information on the underlying assets, the structure of the transaction and the parties involved in the transaction, thereby promoting a more comprehensive and thorough understanding of the risks involved. The manner in which the information is available should not hinder transparency, but instead support investors in their assessment. |
| Comparability | Criteria promoting comparability could assist investors in their understanding of such investments and enable more straightforward comparison across securitisation products within an asset class. Importantly, they should appropriately take into account differences across jurisdictions. |

Rationale for introducing STC criteria into the capital framework

The December 2014 framework takes into account some important factors, including pool credit quality and attachment and detachment points of tranches. However, the December 2014 framework does not capture certain features (especially qualitative ones) of securitisation structures found in the marketplace. Arguably, STC criteria are better able to capture the nuances and qualitative elements of structures, thus increasing confidence as to how these transactions will perform. The criteria help mitigate uncertainty related to asset risk, structural risk, governance, and operational risk.

Additional confidence in the performance of STC transactions may justify a reduction in the conservatism built into the capital framework through its non-neutrality. The non-neutrality of the framework refers to the fact that the total capital required for a securitisation (ie the sum of the capital required for all securitisation tranches) is greater than the amount of capital required for the underlying assets.¹¹ All other things being equal, a securitisation with lower structural risk needs a lower capital surcharge than a securitisation with higher structural risk; and a securitisation with less risky underlying assets requires a lower capital surcharge than a securitisation with riskier underlying assets.

Notably, while incorporating the STC criteria into the capital framework could increase its risk sensitivity, it might also introduce significant operational burdens. In view of this trade-off, jurisdictions that consider that implementation costs exceed potential benefits retain the option not to implement the STC framework.

Definition of STC securitisation for regulatory capital purposes

When publishing the July 2015 STC criteria, the Committee and IOSCO noted that additional and/or more detailed criteria may be necessary with respect to setting regulatory capital requirements, especially for the credit risk of underlying assets. While the criteria developed by the Committee and IOSCO are detailed enough to serve as guideposts for good practice, the use of the criteria for the setting of preferential regulatory capital requirements requires greater prescriptiveness. The Committee has therefore decided

¹¹ In the formula-based approaches, positions detaching below K_{RB}/K_{SA} receive a 1250% risk weight. Capital non-neutrality arises from the capital charges on tranches detaching above K_{RB}/K_{SA} , which receive risk weights that are lower than 1250%. In the formula-based approaches, non-neutrality is controlled directly, through a direct input parameter (p), which is a measure of the capital surcharge on the tranches relative to underlying pool capital (ie a “ p ” equal to 1 means a capital surcharge of 100% over the capital requirements for the underlying assets). Furthermore, further contributors to the non-neutrality are the floor risk weight (of 15% in the December 2014 framework) and, in the case of the Securitisation Standardised Approach the delinquency parameter w that adjusts the underlying K_{SA} capital feeding into the formula.

to enhance or supplement the July 2015 STC criteria with additional guidance and criteria for the specific purpose of differentiating the capital treatment between STC and other securitisation transactions.

The most material enhancements to the criteria are as follows:

- **More explicit requirements for minimum performance history** (added to the base criterion A2), incorporating language used within the Basel IRB framework.
- **The exclusion of transactions if standardised risk weights for the underlying exposures exceed certain levels** (new criterion D15). This criterion aims to help ensure that higher-risk underlying exposures would not be able to qualify for alternative treatment as STC-compliant transactions.
- **A more explicit definition of granularity** (new criterion D16). With this, the Committee intends to provide clarity as to how granular a pool must be. No single exposure should comprise more than 1% of the underlying pool.

STC securitisations qualifying for differentiated regulatory capital treatment are securitisations (as defined under the Basel 2014 framework) meeting both the BCBS-IOSCO July 2015 STC criteria (as interpreted for their application to the regulatory capital framework – see Annex 2, criteria A1 to C14), as well as the additional criteria for capital purposes (see Annex 2, criteria D15 and D16). The expanded set of criteria is referred to as STC criteria for regulatory capital purposes.

Determination of STC compliance and role of supervisors

The consultative document proposed that originators would need to attest to a securitisation's compliance with the STC criteria for regulatory capital purposes, and that investors would additionally need to make their own assessment. In view of commenters' concerns with what seemed like a dual certification process, the final rule requires that only the investor assesses compliance with the STC criteria for the purpose of determining the regulatory capital treatment that should apply to their holding. Originators should nevertheless disclose sufficient information to investors to allow them to perform the STC assessment, and would be liable in case of misrepresentations or inaccurate information.

Supervisors would review the preferential regulatory capital treatment assignments made by the banks that they supervise (ie the investors in the securitisation transactions and originators retaining some exposures in their securitisations). This review would be part of the normal supervisory process of each jurisdiction that incorporates the qualifying STC securitisation criteria into its securitisation framework. Should a supervisor not be satisfied with a bank's determination that a given transaction satisfies the STC criteria for regulatory capital purposes, it should take remedial action (for instance, under the Pillar 2 framework, or by denying preferential regulatory capital treatment for that specific transaction and potentially others as well).

Standards text

I. Credit risk — securitisation framework¹²

NB: These paragraphs replace the Basel II securitisation framework, namely paragraphs [538 to 643 and Annex 7] of Basel II;¹³ as well as revisions related to securitisation included in Basel 2.5.¹⁴

References to paragraphs in the revised securitisation framework contained in this document are shown [in brackets]. References to other parts of the Basel framework are shown without brackets.

A. Scope and definitions of transactions covered under the securitisation framework

1. Banks must apply the securitisation framework for determining regulatory capital requirements on exposures arising from traditional and synthetic securitisations or similar structures that contain features common to both. Since securitisations may be structured in many different ways, the capital treatment of a securitisation exposure must be determined on the basis of its economic substance rather than its legal form. Similarly, supervisors will look to the economic substance of a transaction to determine whether it should be subject to the securitisation framework for purposes of determining regulatory capital. Banks are encouraged to consult with their national supervisors when there is uncertainty about whether a given transaction should be considered a securitisation. For example, transactions involving cash flows from real estate (eg rents) may be considered specialised lending exposures, if warranted.

2. A *traditional securitisation* is a structure where the cash flow from an underlying pool of exposures is used to service at least two different stratified risk positions or tranches reflecting different degrees of credit risk. Payments to the investors depend upon the performance of the specified underlying exposures, as opposed to being derived from an obligation of the entity originating those exposures. The stratified/tranched structures that characterise securitisations differ from ordinary senior/subordinated debt instruments in that junior securitisation tranches can absorb losses without interrupting contractual payments to more senior tranches, whereas subordination in a senior/subordinated debt structure is a matter of priority of rights to the proceeds of liquidation.

3. A *synthetic securitisation* is a structure with at least two different stratified risk positions or tranches that reflect different degrees of credit risk where credit risk of an underlying pool of exposures is transferred, in whole or in part, through the use of funded (eg credit-linked notes) or unfunded (eg credit default swaps) credit derivatives or guarantees that serve to hedge the credit risk of the portfolio. Accordingly, the investors' potential risk is dependent upon the performance of the underlying pool.

4. Banks' exposures to a securitisation are hereafter referred to as "securitisation exposures". Securitisation exposures can include but are not restricted to the following: asset-backed securities, mortgage-backed securities, credit enhancements, liquidity facilities, interest rate or currency swaps, credit derivatives and tranched cover as described in paragraph 199 of the Basel II framework. Reserve accounts, such as cash collateral accounts, recorded as an asset by the originating bank must also be treated as securitisation exposures.

¹² Given the amount of changes, no tracked changes are shown in this section relative to the previous framework.

¹³ Basel II – *International Convergence of Capital Measurement and Capital Standards: A Revised Framework – Comprehensive Version*, available at www.bis.org/publ/bcbs128.htm.

¹⁴ Basel 2.5 – *Enhancements to the Basel II framework, July 2009*, available at www.bis.org/publ/bcbs157.pdf.

5. A resecuritisation exposure is a securitisation exposure in which the risk associated with an underlying pool of exposures is tranching and at least one of the underlying exposures is a securitisation exposure. In addition, an exposure to one or more resecuritisation exposures is a resecuritisation exposure. An exposure resulting from retransching of a securitisation exposure is not a resecuritisation exposure if the bank is able to demonstrate that the cash flows to and from the bank could be replicated in all circumstances and conditions by an exposure to the securitisation of a pool of assets that contains no securitisation exposures.

6. Underlying instruments in the pool being securitised may include but are not restricted to the following: loans, commitments, asset-backed and mortgage-backed securities, corporate bonds, equity securities, and private equity investments. The underlying pool may include one or more exposures.

B. Definitions and general terminology

Originating bank

7. For risk-based capital purposes, a bank is considered to be an originator with regard to a certain securitisation if it meets either of the following conditions:

- (a) the bank originates directly or indirectly underlying exposures included in the securitisation; or
- (b) the bank serves as a sponsor of an asset-backed commercial paper conduit or similar programme that acquires exposures from third-party entities. In the context of such programmes, a bank would generally be considered a sponsor and, in turn, an originator if it, in fact or in substance, manages or advises the programme, places securities into the market, or provides liquidity and/or credit enhancements.

Asset-backed commercial paper (ABCP) programme

8. An ABCP programme predominantly issues commercial paper to third-party investors with an original maturity of one year or less and is backed by assets or other exposures held in a bankruptcy-remote, special purpose entity.

Clean-up call

9. A clean-up call is an option that permits the securitisation exposures (eg asset-backed securities) to be called before all of the underlying exposures or securitisation exposures have been repaid. In the case of traditional securitisations, this is generally accomplished by repurchasing the remaining securitisation exposures once the pool balance or outstanding securities have fallen below some specified level. In the case of a synthetic transaction, the clean-up call may take the form of a clause that extinguishes the credit protection.

Credit enhancement

10. A credit enhancement is a contractual arrangement in which the bank or other entity retains or assumes a securitisation exposure and, in substance, provides some degree of added protection to other parties to the transaction.

Credit-enhancing interest-only strip

11. A credit-enhancing interest-only strip (I/O) is an on-balance sheet asset that (i) represents a valuation of cash flows related to future margin income, and (ii) is subordinated.

Early amortisation

12. An early amortisation provision is a mechanism that, once triggered, accelerates the reduction of the investor's interest in underlying exposures of a securitisation of revolving credit facilities and allows

investors to be paid out prior to the originally stated maturity of the securities issued. A securitisation of revolving credit facilities is a securitisation in which one or more underlying exposures represent, directly or indirectly, current or future draws on a revolving credit facility. Examples of revolving credit facilities include but are not limited to credit card exposures, home equity lines of credit, commercial lines of credit, and other lines of credit.

Excess spread

13. Excess spread (or future margin income) is defined as gross finance charge collections and other income received by the trust or special purpose entity (SPE, as defined below) minus certificate interest, servicing fees, charge-offs, and other senior trust or SPE expenses.

Implicit support

14. Implicit support arises when a bank provides support to a securitisation in excess of its predetermined contractual obligation.

Internal Ratings-Based (IRB) pool

15. For risk-based capital purposes, an IRB pool means a securitisation pool for which a bank is able to use an IRB approach to calculate capital requirements for all underlying exposures given that it has approval to apply IRB for the type of underlying exposures and it has sufficient information to calculate IRB capital requirements for these exposures. Supervisors should expect that a bank with supervisory approval to calculate capital requirements for the underlying pool of exposures be able to obtain sufficient information to estimate capital requirements for the underlying pool of exposures using an IRB approach. A bank that cannot estimate capital requirements for all underlying exposures using an IRB approach for a given securitisation exposure for which it has a supervisory-approved IRB approach would be expected to demonstrate to its supervisor why it cannot calculate capital requirements for the entire underlying pool of exposures using an IRB approach. However, a supervisor may prohibit a bank from treating an IRB pool as such in the case of particular structures or transactions, including transactions with highly complex loss allocations, tranches whose credit enhancement could be eroded for reasons other than portfolio losses, and tranches of portfolios with high internal correlations (such as portfolios with high exposure to single sectors or with high geographical concentration).

Mixed pool

16. For risk-based capital purposes, a mixed pool means a securitisation pool for which a bank is able to calculate IRB parameters for some, but not all, underlying exposures in a securitisation.

Standardised Approach (SA) pool

17. For risk-based capital purposes, an SA pool means a securitisation pool for which a bank does not have approval to calculate IRB parameters for any underlying exposures; or for which, while the bank has approval to calculate IRB parameters for some or all of the types of underlying exposures, it is unable to calculate IRB parameters for any underlying exposures because of lack of relevant data, or is prohibited by its supervisor from treating the pool as an IRB pool pursuant to paragraph [15].

Senior securitisation exposure (tranche)

18. A securitisation exposure (tranche) is considered to be a senior exposure (tranche) if it is effectively backed or secured by a first claim on the entire amount of the assets in the underlying

securitised pool.¹⁵ While this generally includes only the most senior position within a securitisation transaction, in some instances there may be other claims that, in a technical sense, may be more senior in the waterfall (eg a swap claim) but may be disregarded for the purpose of determining which positions are treated as senior. Different maturities of several senior tranches that share pro rata loss allocation shall have no effect on the seniority of these tranches, since they benefit from the same level of credit enhancement. The material effects of differing tranche maturities are captured by maturity adjustments on the risk weights to be assigned to the securitisation exposures.

Examples:

- (a) In a typical synthetic securitisation, an unrated tranche would be treated as a senior tranche, provided that all of the conditions for inferring a rating from a lower tranche that meets the definition of a senior tranche are fulfilled.
- (b) In a traditional securitisation where all tranches above the first-loss piece are rated, the most highly rated position would be treated as a senior tranche. When there are several tranches that share the same rating, only the most senior tranche in the cash flow waterfall would be treated as senior (unless the only difference among them is the effective maturity). Also, when the different ratings of several senior tranches only result from a difference in maturity, all of these tranches should be treated as a senior tranche.
- (c) Usually, a liquidity facility supporting an ABCP programme would not be the most senior position within the programme; the commercial paper, which benefits from the liquidity support, typically would be the most senior position. However, a liquidity facility may be viewed as covering all losses on the underlying receivables pool that exceed the amount of overcollateralisation/reserves provided by the seller and as being most senior if it is sized to cover all of the outstanding commercial paper and other senior debt supported by the pool, so that no cash flows from the underlying pool could be transferred to the other creditors until any liquidity draws were repaid in full. In such a case, the liquidity facility can be treated as a senior exposure. Otherwise, if these conditions are not satisfied, or if for other reasons the liquidity facility constitutes a mezzanine position in economic substance rather than a senior position in the underlying pool, the liquidity facility should be treated as a non-senior exposure.

Securitisation exposure amount

19. For risk-based capital purposes, the exposure amount of a securitisation exposure is the sum of the on-balance sheet amount of the exposure, or carrying value – which takes into account purchase discounts and writedowns/specific provisions the bank took on this securitisation exposure – and the off-balance sheet exposure amount, where applicable.

20. A bank must measure the exposure amount of its off-balance sheet securitisation exposures as follows:

- for credit risk mitigants sold or purchased by the bank, use the treatment set out in paragraphs [99 to 105];
- for facilities that are not credit risk mitigants, use a credit conversion factor (CCF) of 100%. If contractually provided for, servicers may advance cash to ensure an uninterrupted flow of payments to investors so long as the servicer is entitled to full reimbursement and this right is senior to other claims on cash flows from the underlying pool of exposures. At national discretion, the undrawn portion of servicer cash advances or facilities that are unconditionally cancellable without prior notice may receive the CCF for unconditionally cancellable commitments under the standardised approach for credit risk. For this purpose, a national supervisor that uses this

¹⁵ If a senior tranche is retranching or partially hedged (ie not on a pro rata basis), only the new senior part would be treated as senior for capital purposes.

discretion must develop an appropriately conservative method for measuring the amount of the undrawn portion; and

- for derivatives contracts other than credit risk derivatives contracts, such as interest rate or currency swaps sold or purchased by the bank, use the measurement approach that the bank would use under the counterparty credit risk framework.

Special purpose entity (SPE)

21. An SPE is a corporation, trust or other entity organised for a specific purpose, the activities of which are limited to those appropriate to accomplish the purpose of the SPE, and the structure of which is intended to isolate the SPE from the credit risk of an originator or seller of exposures. SPEs, normally a trust or similar entity, are commonly used as financing vehicles in which exposures are sold to the SPE in exchange for cash or other assets funded by debt issued by the trust.

Tranche maturity

22. For risk-based capital purposes, tranche maturity (M_T) is the tranche's remaining effective maturity in years and can be measured at the bank's discretion in either of the following manners:

- (a) As the euro¹⁶ weighted-average maturity of the contractual cash flows of the tranche:

$$M_T = \frac{\sum_t t \cdot CF_t}{\sum_t CF_t},$$

where CF_t denotes the cash flows (principal, interest payments and fees) contractually payable by the borrower in period t .

The contractual payments must be unconditional and must not be dependent on the actual performance of the securitised assets. If such unconditional contractual payment dates are not available, the final legal maturity shall be used.

- (b) On the basis of final legal maturity of the tranche, as:

$$M_T = 1 + (M_L - 1) * 80\%,$$

where M_L is the final legal maturity of the tranche.

In all cases, M_T will have a floor of one year and a cap of five years.

23. When determining the maturity of a securitisation exposure, banks should take into account the maximum period of time they are exposed to potential losses from the securitised assets. In cases where a bank provides a commitment, the bank should calculate the maturity of the securitisation exposure resulting from this commitment as the sum of the contractual maturity of the commitment and the longest maturity of the asset(s) to which the bank would be exposed after a draw has occurred. If those assets are revolving, the longest contractually possible remaining maturity of the asset that might be added during the revolving period would apply, rather than the (longest) maturity of the assets currently in the pool.

The same treatment applies to all other instruments where the risk of the commitment/protection provider is not limited to losses realised until the maturity of that instrument (eg total return swaps).

For credit protection instruments that are only exposed to losses that occur up to the maturity of that instrument, a bank would be allowed to apply the contractual maturity of the instrument and would not have to look through to the protected position.

¹⁶ The euro designation is used for illustrative purposes only.

C. Operational requirements for the recognition of risk transference

1. Operational requirements for traditional securitisations

24. An originating bank may exclude underlying exposures from the calculation of risk-weighted assets only if all of the following conditions have been met. Banks meeting these conditions must still hold regulatory capital against any securitisation exposures they retain.

- (a) Significant credit risk associated with the underlying exposures has been transferred to third parties.
- (b) The transferor does not maintain effective or indirect control over the transferred exposures. The exposures are legally isolated from the transferor in such a way (eg through the sale of assets or through subparticipation) that the exposures are put beyond the reach of the transferor and its creditors, even in bankruptcy or receivership. Banks should obtain legal opinion¹⁷ that confirms true sale.

The transferor is deemed to have maintained effective control over the transferred credit risk exposures if it: (i) is able to repurchase from the transferee the previously transferred exposures in order to realise their benefits; or (ii) is obligated to retain the risk of the transferred exposures. The transferor's retention of servicing rights to the exposures will not necessarily constitute indirect control of the exposures.

- (c) The securities issued are not obligations of the transferor. Thus, investors who purchase the securities only have claim to the underlying exposures.
- (d) The transferee is an SPE and the holders of the beneficial interests in that entity have the right to pledge or exchange them without restriction.
- (e) Clean-up calls must satisfy the conditions set out in paragraph [28].
- (f) The securitisation does not contain clauses that (i) require the originating bank to alter the underlying exposures such that the pool's credit quality is improved unless this is achieved by selling exposures to independent and unaffiliated third parties at market prices; (ii) allow for increases in a retained first-loss position or credit enhancement provided by the originating bank after the transaction's inception; or (iii) increase the yield payable to parties other than the originating bank, such as investors and third-party providers of credit enhancements, in response to a deterioration in the credit quality of the underlying pool.
- (g) There must be no termination options/triggers except eligible clean-up calls, termination for specific changes in tax and regulation or early amortisation provisions which according to paragraph [26] result in the securitisation transaction failing the operational requirements set out in paragraph [24 or 25].

2. Operational requirements for synthetic securitisations

25. For synthetic securitisations, the use of credit risk mitigation (CRM) techniques (ie collateral, guarantees and credit derivatives) for hedging the underlying exposure may be recognised for risk-based capital purposes only if the conditions outlined below are satisfied:

- (a) Credit risk mitigants must comply with the requirements set out in Section II.D of the Basel II framework.
- (b) Eligible collateral is limited to that specified in paragraphs 145 and 146 of the Basel II framework. Eligible collateral pledged by SPEs may be recognised.

¹⁷ Legal opinion is not limited to legal advice from qualified legal counsel, but allows written advice from in-house lawyers.

- (c) Eligible guarantors are defined in paragraph 195 of the Basel II framework. Banks may not recognise SPEs as eligible guarantors in the securitisation framework.
- (d) Banks must transfer significant credit risk associated with the underlying exposures to third parties.
- (e) The instruments used to transfer credit risk may not contain terms or conditions that limit the amount of credit risk transferred, such as those provided below:
 - clauses that materially limit the credit protection or credit risk transference (eg an early amortisation provision in a securitisation of revolving credit facilities that effectively subordinates the bank's interest; significant materiality thresholds below which credit protection is deemed not to be triggered even if a credit event occurs; or clauses that allow for the termination of the protection due to deterioration in the credit quality of the underlying exposures);
 - clauses that require the originating bank to alter the underlying exposures to improve the pool's average credit quality;
 - clauses that increase the banks' cost of credit protection in response to deterioration in the pool's quality;
 - clauses that increase the yield payable to parties other than the originating bank, such as investors and third-party providers of credit enhancements, in response to a deterioration in the credit quality of the reference pool; and
 - clauses that provide for increases in a retained first-loss position or credit enhancement provided by the originating bank after the transaction's inception.
- (f) A bank should obtain legal opinion that confirms the enforceability of the contract.
- (g) Clean-up calls must satisfy the conditions set out in paragraph [28].

3. Operational requirements for securitisations containing early amortisation provisions

26. A securitisation transaction is deemed to fail the operational requirements set out in paragraphs [24 or 25] if the bank (i) originates/sponsors a securitisation transaction that includes one or more revolving credit facilities, and (ii) the securitisation transaction incorporates an early amortisation or similar provision that, if triggered, would (a) subordinate the bank's senior or pari passu interest in the underlying revolving credit facilities to the interest of other investors; (b) subordinate the bank's subordinated interest to an even greater degree relative to the interests of other parties; or (c) in other ways increases the bank's exposure to losses associated with the underlying revolving credit facilities.

27. If a securitisation transaction contains one of the following examples of an early amortisation provision and meets the operational requirements set forth in paragraphs [24 and 25], an originating bank may exclude the underlying exposures associated with such a transaction from the calculation of risk-weighted assets, but must still hold regulatory capital against any securitisation exposures they retain in connection with the transaction:

- (a) replenishment structures where the underlying exposures do not revolve and the early amortisation ends the ability of the bank to add new exposures;
- (b) transactions of revolving credit facilities containing early amortisation features that mimic term structures (ie where the risk on the underlying revolving credit facilities does not return to the originating bank) and where the early amortisation provision in a securitisation of revolving credit facilities does not effectively result in subordination of the originator's interest;

- (c) structures where a bank securitises one or more revolving credit facilities and where investors remain fully exposed to future drawdowns by borrowers even after an early amortisation event has occurred; or
- (d) the early amortisation provision is solely triggered by events not related to the performance of the underlying assets or the selling bank, such as material changes in tax laws or regulations.

4. Operational requirements and treatment of clean-up calls

28. For securitisation transactions that include a clean-up call, no capital will be required due to the presence of a clean-up call if the following conditions are met: (i) the exercise of the clean-up call must not be mandatory, in form or in substance, but rather must be at the discretion of the originating bank; (ii) the clean-up call must not be structured to avoid allocating losses to credit enhancements or positions held by investors or otherwise structured to provide credit enhancement; and (iii) the clean-up call must only be exercisable when 10% or less of the original underlying portfolio or securities issued remains, or, for synthetic securitisations, when 10% or less of the original reference portfolio value remains.

29. Securitisation transactions that include a clean-up call that does not meet all of the criteria stated in paragraph [28] result in a capital requirement for the originating bank. For a traditional securitisation, the underlying exposures must be treated as if they were not securitised. Additionally, banks must not recognise in regulatory capital any gain on sale, in accordance with paragraph [36]. For synthetic securitisations, the bank purchasing protection must hold capital against the entire amount of the securitised exposures as if they did not benefit from any credit protection. If a synthetic securitisation incorporates a call (other than a clean-up call) that effectively terminates the transaction and the purchased credit protection on a specific date, the bank must treat the transaction in accordance with paragraph [108].

30. If a clean-up call, when exercised, is found to serve as a credit enhancement, the exercise of the clean-up call must be considered a form of implicit support provided by the bank and must be treated in accordance with the supervisory guidance pertaining to securitisation transactions.

D. Due diligence requirements

31. For a bank to use the risk weight approaches of the securitisation framework, it must have the information specified in paragraphs [32 to 34]. Otherwise, the bank must assign a 1,250% risk weight to any securitisation exposure for which it cannot perform the required level of due diligence.

32. As a general rule, a bank must, on an ongoing basis, have a comprehensive understanding of the risk characteristics of its individual securitisation exposures, whether on- or off-balance sheet, as well as the risk characteristics of the pools underlying its securitisation exposures.

33. Banks must be able to access performance information on the underlying pools on an ongoing basis in a timely manner. Such information may include, as appropriate: exposure type; percentage of loans 30, 60 and 90 days past due; default rates; prepayment rates; loans in foreclosure; property type; occupancy; average credit score or other measures of creditworthiness; average loan-to-value ratio; and industry and geographical diversification. For resecuritisations, banks should have information not only on the underlying securitisation tranches, such as the issuer name and credit quality, but also on the characteristics and performance of the pools underlying the securitisation tranches.

34. A bank must have a thorough understanding of all structural features of a securitisation transaction that would materially impact the performance of the bank's exposures to the transaction, such as the contractual waterfall and waterfall-related triggers, credit enhancements, liquidity enhancements, market value triggers, and deal-specific definitions of default.

E. Treatment of securitisation exposures

1. Calculation of capital requirements and risk-weighted assets

35. Regulatory capital is required for banks' securitisation exposures, including those arising from the provision of credit risk mitigants to a securitisation transaction, investments in asset-backed securities, retention of a subordinated tranche, and extension of a liquidity facility or credit enhancement, as set forth in the following sections. Repurchased securitisation exposures must be treated as retained securitisation exposures.

36. Banks must deduct from Common Equity Tier 1 any increase in equity capital resulting from a securitisation transaction, such as that associated with expected future margin income resulting in a gain on sale that is recognised in regulatory capital.¹⁸

37. For the purposes of the expected loss (EL) provision calculation set out in Section III.G of the Basel framework, securitisation exposures do not contribute to the EL amount. Similarly, neither general nor specific provisions against securitisation exposures or underlying assets still held on the balance sheet of the originator are to be included in the measurement of eligible provisions. However, originator banks can offset 1,250% risk-weighted securitisation exposures by reducing the securitisation exposure amount by the amount of their specific provisions on underlying assets of that transaction and non-refundable purchase price discounts on such underlying assets. Specific provisions on securitisation exposures will be taken into account in the calculation of the exposure amount, as defined in paragraphs [19 and 20]. General provisions on underlying securitised exposures are not to be taken into account in any calculation.

38. The risk-weighted asset amount of a securitisation exposure is computed by multiplying the exposure amount, as defined in paragraphs [19 and 20], by the appropriate risk weight determined in accordance with the hierarchy of approaches in paragraphs [42 to 47]. Risk weight caps for senior exposures in accordance with paragraphs [88 and 89] or overall caps in accordance with paragraphs [90 to 93] may apply. Overlapping exposures will be risk-weighted as defined in paragraphs [39 and 41].

Treatment of overlapping exposures

39. For the purposes of calculating capital requirements, a bank's exposure A overlaps another exposure B if in all circumstances the bank will preclude any loss for the bank on exposure B by fulfilling its obligations with respect to exposure A. For example, if a bank provides full credit support to some notes and holds a portion of these notes, its full credit support obligation precludes any loss from its exposure to the notes. If a bank can verify that fulfilling its obligations with respect to exposure A will preclude a loss from its exposure to B under any circumstance, the bank does not need to calculate risk-weighted assets for its exposure B.

40. To arrive at an overlap, a bank may, for the purposes of calculating capital requirements, split or expand¹⁹ its exposures. For example, a liquidity facility may not be contractually required to cover defaulted assets or may not fund an ABCP programme in certain circumstances. For capital purposes, such a situation would not be regarded as an overlap to the notes issued by that ABCP conduit. However, the bank may calculate risk-weighted assets for the liquidity facility as if it were expanded (either in order to cover defaulted assets or in terms of trigger events) to preclude all losses on the notes. In such a case, the bank would only need to calculate capital requirements on the liquidity facility.

¹⁸ As discussed in paragraph 74 of *Basel III: A global regulatory framework for more resilient banks and banking systems*.

¹⁹ That is, *splitting* exposures into portions that overlap with another exposure held by the bank and other portions that do not overlap; and *expanding* exposures by assuming for capital purposes that obligations with respect to one of the overlapping exposures are larger than those established contractually. The latter could be done, for instance, by expanding either the trigger events to exercise the facility and/or the extent of the obligation.

41. Overlap could also be recognised between relevant capital charges for exposures in the trading book and capital charges for exposures in the banking book, provided that the bank is able to calculate and compare the capital charges for the relevant exposures.

2. Hierarchy of approaches

42. Securitisation exposures will be treated differently depending on the type of underlying exposures and/or on the type of information available to the bank, as described below. Securitisation exposures to which none of the approaches laid out in paragraphs [43 to 47] can be applied must be assigned a 1,250% risk weight.

(i) Securitisation exposures of IRB pools

43. A bank must use the Securitisation Internal Ratings-Based Approach (SEC-IRBA) as described in paragraphs [48 to 64] for a securitisation exposure of an IRB pool as defined in paragraph [15], unless otherwise determined by the supervisor.

(ii) Securitisation exposures of SA pools

44. If a bank cannot use the SEC-IRBA, it must use the Securitisation External Ratings-Based Approach (SEC-ERBA) as described in paragraphs [65 to 70] for a securitisation exposure to an SA pool as defined in paragraph [17] provided that (i) the bank is located in a jurisdiction that permits use of the SEC-ERBA and (ii) the exposure has an external credit assessment that meets the operational requirements for an external credit assessment in paragraph [71], or there is an inferred rating that meets the operational requirements for inferred ratings in paragraphs [72 and 73].

45. A bank that is located in a jurisdiction that permits use of the SEC-ERBA may use an Internal Assessment Approach (IAA) as described in paragraphs [74 to 77] for an unrated securitisation exposure (eg liquidity facilities and credit enhancements) to an SA pool within an ABCP programme. In order to use an IAA, a bank must have supervisory approval to use the IRB approach. A bank should consult with its national supervisor on whether and when it can apply the IAA to its securitisation exposures, especially where the bank can apply the IRB for some, but not all, underlying exposures. To ensure appropriate capital levels, there may be instances where the supervisor requires a treatment other than this general rule.

46. A bank that cannot use the SEC-ERBA or an IAA for its exposure to an SA pool may use the Standardised Approach (SEC-SA) as described in paragraphs [78 to 87].

(iii) Securitisation exposures of mixed pools

47. Where a bank can calculate K_{IRB} on at least 95% of the underlying exposure amounts of a securitisation, the bank must apply the SEC-IRBA calculating the capital charge for the underlying pool as:

$$d*K_{IRB} + (1-d)*K_{SA},$$

where

- d is the percentage of the exposure amount of underlying exposures for which the bank can calculate K_{IRB} over the exposure amount of all underlying exposures; and
- K_{IRB} and K_{SA} are as defined in paragraphs [49] and [79], respectively.

Where the bank cannot calculate K_{IRB} on at least 95% of the underlying exposures, the bank must use the hierarchy for securitisation exposures of SA pools as set out in paragraphs [44 to 46].

3. Approaches

(i) *Internal Ratings-Based Approach (SEC-IRBA)*

48. To calculate capital requirements for a securitisation exposure to an IRB pool, a bank must use the SEC-IRBA and the following bank-supplied inputs: the IRB capital charge had the underlying exposures not been securitised (K_{IRB}), the tranche attachment point (A), the tranche detachment point (D) and the supervisory parameter p , as defined below. Where the only difference between exposures to a transaction is related to maturity, A and D will be the same.

Definition of K_{IRB}

49. K_{IRB} is the ratio of (a) the IRB capital requirement (including the expected loss portion and, where applicable, dilution risk as discussed in paragraph [52]) for the underlying exposures in the pool to (b) the exposure amount of the pool (eg the sum of drawn amounts related to securitised exposures plus the exposure-at-default associated with undrawn commitments related to securitised exposures).^{20,21} K_{IRB} is expressed in decimal form (eg a capital charge equal to 15% of the pool would be expressed as 0.15).

Notwithstanding the clarification in paragraph [47] for mixed pools, quantity (a) above must be calculated in accordance with applicable minimum IRB standards as set forth in Section III of the Basel framework as if the exposures in the pool were held directly by the bank. This calculation should reflect the effects of any credit risk mitigant that is applied on the underlying exposures (either individually or to the entire pool), and hence benefits all of the securitisation exposures.

For structures involving an SPE, all of the SPE's exposures related to the securitisation are to be treated as exposures in the pool. Exposures related to the securitisation that should be treated as exposures in the pool could include assets in which the SPE may have invested a reserve account, such as a cash collateral account or claims against counterparties resulting from interest swaps or currency swaps.²² Notwithstanding, the bank can exclude the SPE's exposures from the pool for capital calculation purposes if the bank can demonstrate to its national supervisor that the risk of the SPE's exposures is immaterial (for example, because it has been mitigated²³) or that it does not affect the bank's securitisation exposure.

In the case of funded synthetic securitisations, any proceeds of the issuances of credit-linked notes or other funded obligations of the SPE that serve as collateral for the repayment of the securitisation

²⁰ K_{IRB} must also include the unexpected loss and the expected loss associated with defaulted exposures in the underlying pool.

²¹ The scaling factor of 1.06 referenced in paragraph 44 of the Basel II framework is applied to the unexpected loss portion of the calculation of K_{IRB} . The calculation of K_{IRB} as described in this paragraph and the calculation of caps as determined in paragraphs [78 to 82 of this document] are the only occurrence of use of the scaling factor in the securitisation framework, ie the risk-weighted assets resulting from the different approaches (Internal Ratings-Based Approach, External Ratings-Based Approach or Standardised Approach) are not subject to the scaling factor.

²² In particular, in the case of swaps other than credit derivatives, the numerator of K_{IRB} must include the positive current market value times the risk weight of the swap provider times 8%. In contrast, the denominator should not take into account such a swap, as such a swap would not provide a credit enhancement to any tranche.

²³ Certain best market practices can eliminate or at least significantly reduce the potential risk from a default of a swap provider. Examples of such features could be:

- cash collateralisation of the market value in combination with an agreement of prompt additional payments in case of an increase of the market value of the swap; and
- minimum credit quality of the swap provider with the obligation to post collateral or present an alternative swap provider without any costs for the SPE in the event of a credit deterioration on the part of the original swap provider.

If national supervisors are satisfied with these risk mitigants and accept that the contribution of these exposures to the risk of the holder of a securitisation exposure is insignificant, supervisors may allow the bank to exclude these exposures from the K_{IRB} calculation.

exposure in question and for which the bank cannot demonstrate to its national supervisor that it is immaterial must be included in the calculation of K_{IRB} if the default risk of the collateral is subject to the tranching loss allocation.²⁴

50. To calculate K_{IRB} , the treatment for eligible purchased receivables described in paragraphs 239–243, 363–368, 485, 487 and 491–499 may be used -with the particularities specified in paragraphs [50(a)-50(c)] below- if, according to IRB minimum requirements:

- (i) for non-retail assets, it would be an undue burden on a bank to assess the default risk of individual obligors; and
- (ii) for retail assets, a bank is unable to primarily rely on internal data.

All other IRB minimum requirements must be met by the bank.

50(a) Paragraph [50] applies to any securitised exposure, not just purchased receivables. For this purpose, “eligible purchased receivables” should be understood as referring to any securitised exposure for which the conditions of paragraph [50] are met, and “eligible purchased corporate receivables” should be understood as referring to any securitised non-retail exposure.

50(b) Supervisors may deny the use of a top-down approach for eligible purchased receivables for securitised exposures depending on the bank’s compliance with minimum requirements.

50(c) The requirements to use a top-down approach for the eligible purchased receivables are generally unchanged when applied to securitisations except in the following cases:

- (i) the requirement in paragraph 242 for the bank to have a claim on all proceeds from the pool of receivables or a pro-rata interest in the proceeds does not apply. Instead, the bank must have a claim on all proceeds from the pool of securitised exposures that have been allocated to the bank’s exposure in the securitisation in accordance with the terms of the related securitisation documentation;
- (ii) in paragraph 492, the purchasing bank should be interpreted as the bank calculating K_{IRB} ;
- (iii) in paragraphs 494–499 “a bank” should be read as “the bank estimating PD, LGD or EL for the securitised exposures”; and
- (iv) if the bank calculating K_{IRB} cannot itself meet the requirements in paragraphs 494–498, it must instead ensure that it meets these requirements through a party to the securitisation acting for and in the interest of the investors in the securitisation, in accordance with the terms of the related securitisation documents. Specifically, requirements for effective control and ownership must be met for all proceeds from the pool of securitised exposures that have been allocated to the bank’s exposure to the securitisation. Further, in the first bullet point of paragraph 496, the relevant eligibility criteria and advancing policies are those of the securitisation, not those of the bank calculating K_{IRB} .

51. In cases where a bank has set aside a specific provision or has a non-refundable purchase price discount on an exposure in the pool, both quantity (a) and quantity (b) as defined in paragraph [49] must be calculated using the gross amount of the exposure without the specific provision and/or non-refundable purchase price discount.

52. Dilution risk in a securitisation must be recognised if it is not immaterial, as demonstrated by the bank to its national supervisor (see paragraph 369), whereby the provisions of paragraph [49] and all its subparts shall apply.

²⁴ As in the case of swaps other than credit derivatives, the numerator of K_{IRB} (ie quantity (a)) must include the exposure amount of the collateral times its risk weight times 8%, but the denominator should be calculated without recognition of the collateral.

52(a) Where default and dilution risk are treated in an aggregate manner (eg an identical reserve or overcollateralisation is available to cover losses for both risks), in order to calculate capital requirements for the securitisation exposure, a bank must determine K_{IRB} for dilution risk and default risk, respectively, and combine them into a single K_{IRB} prior to applying the SEC-IRBA. Annex [1] provides an illustration of such a calculation.

52(b) In certain circumstances, pool level credit enhancement will not be available to cover losses from either credit risk or dilution risk. In the case of separate waterfalls for credit risk and dilution risk, a bank should consult with its national supervisor as to how the capital calculation should be performed. To guide banks and supervisors, Annex [1] includes an example of how such calculations could be made in a prudent manner.

Definition of attachment point (A) and detachment point (D)

53. The input A represents the threshold at which losses within the underlying pool would first be allocated to the securitisation exposure. This input, which is a decimal value between zero and one, equals the greater of (a) zero and (b) the ratio of (i) the outstanding balance of all underlying assets in the securitisation minus the outstanding balance of all tranches that rank senior or pari passu to the tranche that contains the securitisation exposure of the bank (including the exposure itself) to (ii) the outstanding balance of all underlying assets in the securitisation.

54. The input D represents the threshold at which losses within the underlying pool result in a total loss of principal for the tranche in which a securitisation exposure resides. This input, which is a decimal value between zero and one, equals the greater of (a) zero and (b) the ratio of (i) the outstanding balance of all underlying assets in the securitisation minus the outstanding balance of all tranches that rank senior to the tranche that contains the securitisation exposure of the bank to (ii) the outstanding balance of all underlying assets in the securitisation.

55. For the calculation of A and D: (i) overcollateralisation and funded reserve accounts must be recognised as tranches; and (ii) the assets forming these reserve accounts must be recognised as underlying assets. Only the loss-absorbing part of the funded reserve accounts that provide credit enhancement can be recognised as tranches and underlying assets. Unfunded reserve accounts, such as those to be funded from future receipts from the underlying exposures (eg unrealised excess spread) and assets that do not provide credit enhancement like pure liquidity support, currency or interest-rate swaps, or cash collateral accounts related to these instruments must not be included in the above calculation of A and D. Banks should take into consideration the economic substance of the transaction and apply these definitions conservatively in the light of the structure.

Formulation of supervisory parameter (p)

56. The supervisory parameter p in the context of the SEC-IRBA is as follows:

$$p = \max [0.3; (A + B*(1/N) + C*K_{IRB} + D*LGD + E*M_T)],$$

where:

- 0.3 denotes the p-parameter floor;
- N is the effective number of loans in the underlying pool, calculated as described in paragraph [59];
- K_{IRB} is the capital charge of the underlying pool (as defined in paragraph [49]);
- LGD is the exposure-weighted average loss-given-default of the underlying pool, calculated as described in paragraph [60];
- M_T is the maturity of the tranche calculated according to paragraphs [22 and 23]; and

- the parameters *A*, *B*, *C*, *D*, and *E* are determined according to the following look-up table:

| | | A | B | C | D | E |
|------------------|---|----------|----------|----------|----------|----------|
| Wholesale | Senior , granular ($N \geq 25$) | 0 | 3.56 | -1.85 | 0.55 | 0.07 |
| | Senior , non-granular ($N < 25$) | 0.11 | 2.61 | -2.91 | 0.68 | 0.07 |
| | Non-senior , granular ($N \geq 25$) | 0.16 | 2.87 | -1.03 | 0.21 | 0.07 |
| | Non-senior , non-granular ($N < 25$) | 0.22 | 2.35 | -2.46 | 0.48 | 0.07 |
| Retail | Senior | 0 | 0 | -7.48 | 0.71 | 0.24 |
| | Non-senior | 0 | 0 | -5.78 | 0.55 | 0.27 |

57. If the underlying IRB pool consists of both retail and wholesale exposures, the pool should be divided into one retail and one wholesale subpool and, for each subpool, a separate *p*-parameter (and the corresponding input parameters *N*, K_{IRB} and LGD) should be estimated. Subsequently, a weighted average *p*-parameter for the transaction should be calculated on the basis of the *p*-parameters of each subpool and the nominal size of the exposures in each subpool.

58. If a bank applies the SEC-IRBA to a mixed pool as described in paragraph [47], the calculation of the *p*-parameter should be based on the IRB underlying assets only. The SA underlying assets should not be considered for this purpose.

Calculation of effective number of exposures (N)

59. The effective number of exposures is calculated as:

$$N = \frac{(\sum_i EAD_i)^2}{\sum_i EAD_i^2},$$

where EAD_i represents the exposure-at-default associated with the i^{th} instrument in the pool.

Multiple exposures to the same obligor must be consolidated (ie treated as a single instrument).

Calculation of exposure-weighted average LGD

60. The exposure-weighted average LGD is calculated as follows:

$$LGD = \frac{\sum_i LGD_i \cdot EAD_i}{\sum_i EAD_i},$$

where LGD_i represents the average LGD associated with all exposures to the i^{th} obligor. When default and dilution risks for purchased receivables are treated in an aggregate manner (eg a single reserve or overcollateralisation is available to cover losses from either source) within a securitisation, the LGD input must be constructed as a weighted average of the LGD for default risk and the 100% LGD for dilution risk. The weights are the stand-alone IRB capital charges for default risk and dilution risk, respectively.

Simplified method for computing N and LGD

61. Under the conditions outlined below, banks may employ a simplified method for calculating the effective number of exposures and the exposure-weighted average LGD. Let C_m in the simplified calculation denote the share of the pool corresponding to the sum of the largest *m* exposures (eg a 15% share corresponds to a value of 0.15). The level of *m* is set by each bank.

- If the portfolio share associated with the largest exposure, C_1 , is no more than 0.03 (or 3% of the underlying pool), then for purposes of the SEC-IRBA the bank may set LGD as 0.50 and *N* equal to the following amount:

$$N = \left(C_1 \cdot C_m + \left(\frac{C_m - C_1}{m - 1} \right) \cdot \max\{1 - m \cdot C_1, 0\} \right)^{-1}$$

- Alternatively, if only C_1 is available and this amount is no more than 0.03, then the bank may set LGD as 0.50 and N as $1/C_1$.

Calculation of risk weight

62. The formulation of the SEC-IRBA is as follows:

$$K_{SSFA(K_{IRB})} = \frac{e^{a \cdot u} - e^{a \cdot l}}{a(u - l)}$$

where $K_{SSFA(K_{IRB})}$ is the capital requirement per unit of securitisation exposure under the SEC-IRBA which is a function of three variables, labelled a , u and l . The constant e is the base of the natural logarithms (which equals 2.71828). The variables a , u and l are defined as follows:

$$a = -(1 / (p * K_{IRB}))$$

$$u = D - K_{IRB}$$

$$l = \max(A - K_{IRB}; 0)$$

63. The risk weight assigned to a securitisation exposure when applying the SEC-IRBA is calculated as follows:

- When D for a securitisation exposure is less than or equal to K_{IRB} , the exposure must be assigned a risk weight of 1,250%.
- When A for a securitisation exposure is greater than or equal to K_{IRB} , the risk weight of the exposure, expressed as a percentage, would equal $K_{SSFA(K_{IRB})}$ times 12.5.
- When A is less than K_{IRB} and D is greater than K_{IRB} , the applicable risk weight is a weighted average of 1,250% and 12.5 times $K_{SSFA(K_{IRB})}$ according to the following formula:

$$RW = \left[\left(\frac{K_{IRB} - A}{D - A} \right) \cdot 12.5 \right] + \left[\left(\frac{D - K_{IRB}}{D - A} \right) \cdot 12.5 \cdot K_{SSFA(K_{IRB})} \right]$$

The risk weight for market risk hedges such as currency or interest rate swaps will be inferred from a securitisation exposure that is *pari passu* to the swaps or, if such an exposure does not exist, from the next subordinated tranche.

64. The resulting risk weight is subject to a floor risk weight of 15%.

(ii) *External Ratings-Based Approach (SEC-ERBA)*

65. For securitisation exposures that are externally rated, or for which an inferred rating is available, risk-weighted assets under the SEC-ERBA will be determined by multiplying securitisation exposure amounts (as defined in paragraph [19]) by the appropriate risk weights as determined by paragraphs [66 to 70], provided that the operational criteria in paragraphs [71 to 73] are met.²⁵

Short-term ratings

66. For exposures with short-term ratings, or when an inferred rating based on a short-term rating is available, the following risk weights will apply:

²⁵ The rating designations used in Tables 1 and 2 are for illustrative purposes only and do not indicate any preference for, or endorsement of, any particular external assessment system.

Table 1: ERBA risk weights for short-term ratings

| | | | | |
|----------------------------|---------|---------|---------|-------------------|
| External credit assessment | A-1/P-1 | A-2/P-2 | A-3/P-3 | All other ratings |
| Risk weight | 15% | 50% | 100% | 1,250% |

Long-term ratings

67. For exposures with long-term ratings, or when an inferred rating based on a long-term rating is available, the risk weights depend on (i) the external rating grade or an available inferred rating; (ii) the seniority of the position; (iii) the tranche maturity; and (iv) in the case of non-senior tranches, the tranche thickness.

68. Specifically, for exposures with long-term ratings, risk weights will be determined according to Table 2 and will be adjusted for tranche maturity (calculated according to paragraphs [22 and 23]), and tranche thickness for non-senior tranches according to paragraph [69].

Table 2: ERBA risk weights for long-term ratings

| Rating | Senior tranche | | Non-senior (thin) tranche | |
|---------------|----------------------------|---------|----------------------------|---------|
| | Tranche maturity (M_T) | | Tranche maturity (M_T) | |
| | 1 year | 5 years | 1 year | 5 years |
| AAA | 15% | 20% | 15% | 70% |
| AA+ | 15% | 30% | 15% | 90% |
| AA | 25% | 40% | 30% | 120% |
| AA- | 30% | 45% | 40% | 140% |
| A+ | 40% | 50% | 60% | 160% |
| A | 50% | 65% | 80% | 180% |
| A- | 60% | 70% | 120% | 210% |
| BBB+ | 75% | 90% | 170% | 260% |
| BBB | 90% | 105% | 220% | 310% |
| BBB- | 120% | 140% | 330% | 420% |
| BB+ | 140% | 160% | 470% | 580% |
| BB | 160% | 180% | 620% | 760% |
| BB- | 200% | 225% | 750% | 860% |
| B+ | 250% | 280% | 900% | 950% |
| B | 310% | 340% | 1050% | 1050% |
| B- | 380% | 420% | 1130% | 1130% |
| CCC+/CCC/CCC- | 460% | 505% | 1,250% | 1,250% |
| Below CCC- | 1,250% | 1,250% | 1,250% | 1,250% |

69. The risk weight assigned to a securitisation exposure when applying the SEC-ERBA is calculated as follows:

- To account for tranche maturity, banks shall use linear interpolation between the risk weights for one and five years.
- To account for tranche thickness, banks shall calculate the risk weight for non-senior tranches as follows:

$$\text{Risk weight} = [\text{risk weight from table after adjusting for maturity}] * [1 - \min(T; 50\%)],$$

where T equals tranche thickness, and is measured as D minus A, as defined, respectively, in paragraphs [54 and 53].

In the case of market risk hedges such as currency or interest rate swaps, the risk weight will be inferred from a securitisation exposure that is pari passu to the swaps or, if such an exposure does not exist, from the next subordinated tranche.

70. The resulting risk weight is subject to a floor risk weight of 15%. In addition, the resulting risk weight should never be lower than the risk weight corresponding to a senior tranche of the same securitisation with the same rating and maturity.

Operational requirements for use of external credit assessments

71. The following operational criteria concerning the use of external credit assessments apply in the securitisation framework:

- (a) To be eligible for risk-weighting purposes, the external credit assessment must take into account and reflect the entire amount of credit risk exposure the bank has with regard to all payments owed to it. For example, if a bank is owed both principal and interest, the assessment must fully take into account and reflect the credit risk associated with timely repayment of both principal and interest.
- (b) The external credit assessments must be from an eligible external credit assessment institution (ECAI) as recognised by the bank's national supervisor in accordance with paragraphs 90 to 108 of the Basel II framework with the following exception. In contrast with the third bullet point of paragraph 91 of the Basel II framework, an eligible credit assessment, procedures, methodologies, assumptions and the key elements underlying the assessments must be publicly available, on a non-selective basis and free of charge.²⁶ In other words, a rating must be published in an accessible form and included in the ECAI's transition matrix. Also, loss and cash flow analysis as well as sensitivity of ratings to changes in the underlying rating assumptions should be publicly available. Consequently, ratings that are made available only to the parties to a transaction do not satisfy this requirement.
- (c) Eligible ECAIs must have a demonstrated expertise in assessing securitisations, which may be evidenced by strong market acceptance.
- (d) Where two or more eligible ECAIs can be used and these assess the credit risk of the same securitisation exposure differently, paragraphs 96 to 98 of the Basel II framework will apply.
- (e) Where CRM is provided to specific underlying exposures or the entire pool by an eligible guarantor as defined in paragraph 195 of the Basel II framework and is reflected in the external credit assessment assigned to a securitisation exposure(s), the risk weight associated with that external credit assessment should be used. In order to avoid any double-counting, no additional capital recognition is permitted. If the CRM provider is not recognised as an eligible guarantor under paragraph 195 of the Basel II framework, the covered securitisation exposures should be treated as unrated.
- (f) In the situation where a credit risk mitigant solely protects a specific securitisation exposure within a given structure (eg asset-backed security tranche) and this protection is reflected in the external credit assessment, the bank must treat the exposure as if it is unrated and then apply the CRM treatment outlined in Section II.D of the Basel II framework or in the foundation IRB approach of Section III of the Basel II framework, to recognise the hedge.
- (g) A bank is not permitted to use any external credit assessment for risk-weighting purposes where the assessment is at least partly based on unfunded support provided by the bank. For example,

²⁶ Where the eligible credit assessment is not publicly available free of charge, the ECAI should provide an adequate justification, within its own publicly available code of conduct, in accordance with the "comply or explain" nature of the International Organization of Securities Commissions' Code of Conduct Fundamentals for Credit Rating Agencies.

if a bank buys ABCP where it provides an unfunded securitisation exposure extended to the ABCP programme (eg liquidity facility or credit enhancement), and that exposure plays a role in determining the credit assessment on the ABCP, the bank must treat the ABCP as if it were not rated. The bank must continue to hold capital against the other securitisation exposures it provides (eg against the liquidity facility and/or credit enhancement).

Operational requirements for inferred ratings

72. In accordance with the hierarchy of approaches determined in paragraphs [42 to 47], a bank must infer a rating for an unrated position and use the SEC-ERBA provided that the requirements set out in paragraph [73] are met. These requirements are intended to ensure that the unrated position is pari passu or senior in all respects to an externally-rated securitisation exposure termed the "reference securitisation exposure".

73. The following operational requirements must be satisfied to recognise inferred ratings:

- (a) The reference securitisation exposure (eg asset-backed security) must rank pari passu or be subordinate in all respects to the unrated securitisation exposure. Credit enhancements, if any, must be taken into account when assessing the relative subordination of the unrated exposure and the reference securitisation exposure. For example, if the reference securitisation exposure benefits from any third-party guarantees or other credit enhancements that are not available to the unrated exposure, then the latter may not be assigned an inferred rating based on the reference securitisation exposure.
- (b) The maturity of the reference securitisation exposure must be equal to or longer than that of the unrated exposure.
- (c) On an ongoing basis, any inferred rating must be updated continuously to reflect any subordination of the unrated position or changes in the external rating of the reference securitisation exposure.
- (d) The external rating of the reference securitisation exposure must satisfy the general requirements for recognition of external ratings as delineated in paragraph [71].

(iii) *Internal Assessment Approach (IAA)*

74. Subject to supervisory approval, a bank may use its internal assessments of the credit quality of its securitisation exposures extended to ABCP programmes (eg liquidity facilities and credit enhancements) provided that the bank has at least one approved IRB model (which does not need to be applicable to the securitised exposures) and if the bank's internal assessment process meets the operational requirements set out below. Internal assessments of exposures provided to ABCP programmes must be mapped to equivalent external ratings of an ECAI. Those rating equivalents are used to determine the appropriate risk weights under the SEC-ERBA for the exposures.

75. A bank's internal assessment process must meet the following operational requirements in order to use internal assessments in determining the IRB capital requirement arising from liquidity facilities, credit enhancements, or other exposures extended to an ABCP programme:

- (a) For the unrated exposure to qualify for the IAA, the ABCP must be externally rated. The ABCP itself is subject to the SEC-ERBA.
- (b) The internal assessment of the credit quality of a securitisation exposure to the ABCP programme must be based on ECAI criteria for the asset type purchased, and must be the equivalent of at least investment grade when initially assigned to an exposure. In addition, the internal assessment must be used in the bank's internal risk management processes, including management information and economic capital systems, and generally must meet all the relevant requirements of the IRB framework.

- (c) In order for banks to use the IAA, their supervisors must be satisfied (i) that the ECAI meets the ECAI eligibility criteria outlined in paragraphs 90 to 108 and (ii) with the ECAI rating methodologies used in the process. In addition, banks have the responsibility to demonstrate to the satisfaction of their supervisors how these internal assessments correspond to the relevant ECAI's standards.

For instance, when calculating the credit enhancement level in the context of the IAA, supervisors may, if warranted, disallow on a full or partial basis any seller-provided recourse guarantees or excess spread, or any other first-loss credit enhancements that provide limited protection to the bank.

- (d) The bank's internal assessment process must identify gradations of risk. Internal assessments must correspond to the external ratings of ECAs so that supervisors can determine which internal assessment corresponds to each external rating category of the ECAs.

- (e) The bank's internal assessment process, particularly the stress factors for determining credit enhancement requirements, must be at least as conservative as the publicly available rating criteria of the major ECAs that are externally rating the ABCP programme's commercial paper for the asset type being purchased by the programme. However, banks should consider, to some extent, all publicly available ECAI rating methodologies in developing their internal assessments.

- In the case where (i) the commercial paper issued by an ABCP programme is externally rated by two or more ECAs and (ii) the different ECAs' benchmark stress factors require different levels of credit enhancement to achieve the same external rating equivalent, the bank must apply the ECAI stress factor that requires the most conservative or highest level of credit protection. For example, if one ECAI required enhancement of 2.5 to 3.5 times historical losses for an asset type to obtain a single A rating equivalent and another required two to three times historical losses, the bank must use the higher range of stress factors in determining the appropriate level of seller-provided credit enhancement.
- When selecting ECAs to externally rate an ABCP, a bank must not choose only those ECAs that generally have relatively less restrictive rating methodologies. In addition, if there are changes in the methodology of one of the selected ECAs, including the stress factors, that adversely affect the external rating of the programme's commercial paper, then the revised rating methodology must be considered in evaluating whether the internal assessments assigned to ABCP programme exposures are in need of revision.
- A bank cannot utilise an ECAI's rating methodology to derive an internal assessment if the ECAI's process or rating criteria are not publicly available. However, banks should consider the non-publicly available methodology – to the extent that they have access to such information – in developing their internal assessments, particularly if it is more conservative than the publicly available criteria.
- In general, if the ECAI rating methodologies for an asset or exposure are not publicly available, then the IAA may not be used. However, in certain instances – for example, for new or uniquely structured transactions, which are not currently addressed by the rating criteria of an ECAI rating the programme's commercial paper – a bank may discuss the specific transaction with its supervisor to determine whether the IAA may be applied to the related exposures.

- (f) Internal or external auditors, an ECAI, or the bank's internal credit review or risk management function must perform regular reviews of the internal assessment process and assess the validity of those internal assessments. If the bank's internal audit, credit review or risk management functions perform the reviews of the internal assessment process, then these functions must be independent of the ABCP programme business line, as well as the underlying customer relationships.

- (g) The bank must track the performance of its internal assessments over time to evaluate the performance of the assigned internal assessments and make adjustments, as necessary, to its assessment process when the performance of the exposures routinely diverges from the assigned internal assessments on those exposures.
- (h) The ABCP programme must have credit and investment guidelines, ie underwriting standards, for the ABCP programme. In the consideration of an asset purchase, the ABCP programme (ie the programme administrator) should develop an outline of the structure of the purchase transaction. Factors that should be discussed include the type of asset being purchased; type and monetary value of the exposures arising from the provision of liquidity facilities and credit enhancements; loss waterfall; and legal and economic isolation of the transferred assets from the entity selling the assets.
- (i) A credit analysis of the asset seller's risk profile must be performed and should consider, for example, past and expected future financial performance; current market position; expected future competitiveness; leverage, cash flow and interest coverage; and debt rating. In addition, a review of the seller's underwriting standards, servicing capabilities and collection processes should be performed.
- (j) The ABCP programme's underwriting policy must establish minimum asset eligibility criteria that, among other things:
- exclude the purchase of assets that are significantly past due or defaulted;
 - limit excess concentration to individual obligor or geographical area; and
 - limit the tenor of the assets to be purchased.
- (k) The ABCP programme should have collection processes established that consider the operational capability and credit quality of the servicer. The programme should mitigate to the extent possible seller/servicer risk through various methods, such as triggers based on current credit quality that would preclude co-mingling of funds and impose lockbox arrangements that would help ensure the continuity of payments to the ABCP programme.
- (l) The aggregate estimate of loss on an asset pool that the ABCP programme is considering purchasing must consider all sources of potential risk, such as credit and dilution risk. If the seller-provided credit enhancement is sized based on only credit-related losses, then a separate reserve should be established for dilution risk, if dilution risk is material for the particular exposure pool. In addition, in sizing the required enhancement level, the bank should review several years of historical information, including losses, delinquencies, dilutions and the turnover rate of the receivables. Furthermore, the bank should evaluate the characteristics of the underlying asset pool (eg weighted-average credit score) and should identify any concentrations to an individual obligor or geographical region and the granularity of the asset pool.
- (m) The ABCP programme must incorporate structural features into the purchase of assets in order to mitigate potential credit deterioration of the underlying portfolio. Such features may include wind-down triggers specific to a pool of exposures.

76. The exposure amount of the securitisation exposure to the ABCP programme must be assigned to the risk weight in the SEC-ERBA appropriate to the credit rating equivalent assigned to the bank's exposure.

77. If a bank's internal assessment process is no longer considered adequate, the bank's supervisor may preclude the bank from applying the IAA to its ABCP exposures, both existing and newly originated, for determining the appropriate capital treatment until the bank has remedied the deficiencies. In this instance, the bank must revert to the SEC-SA described in paragraphs [78 to 87].

(iv) *Standardised Approach (SEC-SA)*

78. To calculate capital requirements for a securitisation exposure to an SA pool using the SEC-SA, a bank would use a supervisory formula and the following bank-supplied inputs: the SA capital charge had the underlying exposures not been securitised (K_{SA}); the ratio of delinquent underlying exposures to total underlying exposures in the securitisation pool (W); the tranche attachment point (A); and the tranche detachment point (D). The inputs A and D are defined above in paragraphs [53 and 54], respectively. Where the only difference between exposures to a transaction is related to maturity, A and D will be the same. K_{SA} and W are defined below in paragraphs [79 and 81].

79. K_{SA} is defined as the weighted-average capital charge of the entire portfolio of underlying exposures, calculated using the risk-weighted asset amounts in the SA in Section II of the Basel framework in relation to the sum of the exposure amounts of underlying exposures, multiplied by 8%. This calculation should reflect the effects of any credit risk mitigant that is applied to the underlying exposures (either individually or to the entire pool), and hence benefits all of the securitisation exposures. K_{SA} is expressed as a decimal between zero and one (that is, a weighted-average risk weight of 100% means that K_{SA} would equal 0.08).

For structures involving an SPE, all of the SPE's exposures related to the securitisation are to be treated as exposures in the pool. Exposures related to the securitisation that should be treated as exposures in the pool include assets in which the SPE may have invested, comprising reserve accounts, cash collateral accounts and claims against counterparties resulting from interest swaps or currency swaps.²⁷ Notwithstanding, the bank can exclude the SPE's exposures from the pool for capital calculation purposes if the bank can demonstrate to its national supervisor that the risk does not affect its particular securitisation exposure or that the risk is immaterial – for example, because it has been mitigated.²⁸

In the case of funded synthetic securitisations, any proceeds of the issuances of credit-linked notes or other funded obligations of the SPE that serve as collateral for the repayment of the securitisation exposure in question, and for which the bank cannot demonstrate to its national supervisor that they are immaterial, have to be included in the calculation of K_{SA} if the default risk of the collateral is subject to the tranching loss allocation.²⁹

80. In cases where a bank has set aside a specific provision or has a non-refundable purchase price discount on an exposure in the pool, K_{SA} must be calculated using the gross amount of the exposure without the specific provision and/or non-refundable purchase price discount.

81. The variable W equals the ratio of the sum of the nominal amount of delinquent underlying exposures (as defined in paragraph [82]) to the nominal amount of underlying exposures.

82. Delinquent underlying exposures are underlying exposures that are 90 days or more past due, subject to bankruptcy or insolvency proceedings, in the process of foreclosure, held as real estate owned, or in default, where default is defined within the securitisation deal documents.

83. The inputs K_{SA} and W are used as inputs to calculate K_A , as follows:

$$K_A = (1 - W) \cdot K_{SA} + W \cdot 0.5$$

In case a bank does not know the delinquency status, as defined above, for no more than 5% of underlying exposures in the pool, the bank may still use the SEC-SA by adjusting its calculation of K_A as follows:

²⁷ See footnote 19.

²⁸ See footnote 20.

²⁹ See footnote 21.

$$K_A = \left(\frac{EAD_{\text{Subpool 1 where W known}}}{EAD_{\text{Total}}} \times K_A^{\text{Subpool 1 where w known}} \right) + \frac{EAD_{\text{Subpool 2 where W unknown}}}{EAD_{\text{Total}}}$$

If the bank does not know the delinquency status for more than 5%, the securitisation exposure must be risk weighted at 1,250%.

84. Capital requirements are calculated under the SEC-SA as follows:

$$K_{SSFA(K_A)} = \frac{e^{a \cdot u} - e^{a \cdot l}}{a(u - l)}$$

where $K_{SSFA(K_A)}$ is the capital requirement per unit of the securitisation exposure and the variables a , u , and l are defined as follows:

$$a = -(1 / (p * K_A))$$

$$u = D - K_A$$

$$l = \max(A - K_A; 0)$$

85. The supervisory parameter p in the context of the SEC-SA is set equal to 1 for a securitisation exposure that is not a resecuritisation exposure.

86. The risk weight assigned to a securitisation exposure when applying the SEC-SA would be calculated as follows:

- When D for a securitisation exposure is less than or equal to K_A , the exposure must be assigned a risk weight of 1,250%.
- When A for a securitisation exposure is greater than or equal to K_A , the risk weight of the exposure, expressed as a percentage, would equal $K_{SSFA(K_A)}$ times 12.5.
- When A is less than K_A and D is greater than K_A , the applicable risk weight is a weighted average of 1,250% and 12.5 times $K_{SSFA(K_A)}$ according to the following formula:

$$RW = \left[\left(\frac{K_A - A}{D - A} \right) \cdot 12.5 \right] + \left[\left(\frac{D - K_A}{D - A} \right) \cdot 12.5 \cdot K_{SSFA(K_A)} \right]$$

The risk weight for market risk hedges such as currency or interest rate swaps will be inferred from a securitisation exposure that is *pari passu* to the swaps or, if such an exposure does not exist, from the next subordinated tranche.

87. The resulting risk weight is subject to a floor risk weight of 15%. Moreover, when a bank applies the SEC-SA to an unrated junior exposure in a transaction where the more senior tranches (exposures) are rated and therefore no rating can be inferred for the junior exposure, the resulting risk weight under SEC-SA for the junior unrated exposure shall not be lower than the risk weight for the next more senior rated exposure.

4. Caps for securitisation exposures

(i) *Maximum risk weight for senior exposures*

88. Banks may apply a "look-through" approach to senior securitisation exposures, whereby the senior securitisation exposure could receive a maximum risk weight equal to the exposure weighted-average risk weight applicable to the underlying exposures, provided that the bank has knowledge of the composition of the underlying exposures at all times. The applicable risk weight under the IRB framework would be calculated taking into account the application of the 1.06 scaling factor pursuant to paragraph 44 of the IRB credit risk framework, and would also be inclusive of the expected loss portion multiplied by 12.5. In particular:

- In the case of pools where the bank uses exclusively the SA or the IRB approach, the risk weight cap for senior exposures would equal the exposure weighted-average risk weight that would apply to the underlying exposures under the SA or IRB framework, respectively.
- In the case of mixed pools, when applying the SEC-IRBA, the SA part of the underlying pool would receive the corresponding SA risk weight, while the IRB portion would receive IRB risk weights. When applying the SEC-SA or the SEC-ERBA, the risk weight cap for senior exposures would be based on the SA exposure weighted-average risk weight of the underlying assets, whether or not they are originally IRB.

89. Where the risk weight cap results in a lower risk weight than the floor risk weight of 15%, the risk weight resulting from the cap should be used.

(ii) *Maximum capital requirements*

90. A bank (originator, sponsor or investors) using the SEC-IRBA for a securitisation exposure may apply a maximum capital requirement for the securitisation exposures it holds equal to the IRB capital requirement (including the expected loss portion and the scaling factor of 1.06 for the unexpected loss portion) that would have been assessed against the underlying exposures had they not been securitised and treated under the appropriate sections of the IRB framework including Section III.G of the Basel II framework.

In the case of mixed pools, the overall cap should be calculated by adding up the capital before securitisation; that is, by adding up the capital required under the general credit risk framework for the IRB and for the SA part of the underlying pool.

91. An originating or sponsor bank using the SEC-ERBA or SEC-SA for a securitisation exposure may apply a maximum capital requirement for the securitisation exposures it holds equal to the capital requirement that would have been assessed against the underlying exposures had they not been securitised.

In the case of mixed pools, the overall cap should also be calculated by adding up the capital before securitisation; that is, by adding up the capital required under the general credit risk framework for the IRB and the SA part of the underlying pool, respectively. The IRB part of the capital requirement includes the expected loss portion and the scaling factor of 1.06 for the unexpected loss portion.

92. In order to apply a maximum capital charge to a bank's securitisation exposure, a bank will need the following inputs:

- The largest proportion of interest that the bank holds for each tranche of a given pool (P). In particular:
 - For a bank that has one or more securitisation exposure(s) that reside in a single tranche of a given pool, P equals the proportion (expressed as a percentage) of securitisation exposure(s) that the bank holds in that given tranche (calculated as the total nominal amount of the bank's securitisation exposure(s) in the tranche) divided by the nominal amount of the tranche.
 - For a bank that has securitisation exposures that reside in different tranches of a given securitisation, P equals the maximum proportion of interest across tranches, where the proportion of interest for each of the different tranches should be calculated as described above.
- Capital charge for underlying pool (K_P):
 - For an IRB pool, K_P equals K_{IRB} as defined in paragraphs [49 to 52].
 - For an SA pool, K_P equals K_{SA} as defined in paragraph [79 and 80].

- For a mixed pool, K_P equals the exposure-weighted average capital charge of the underlying pool using K_{SA} for the proportion of the underlying pool for which the bank cannot calculate K_{IRB} , and K_{IRB} for the proportion of the underlying pool for which a bank can calculate K_{IRB} .

The maximum aggregated capital requirement for a bank's securitisation exposures in the same transaction will be equal to $K_P * P$.

93. In applying the capital charge cap, the entire amount of any gain on sale and credit-enhancing interest-only strips arising from the securitisation transaction must be deducted in accordance with paragraph [36].

F. Treatment of resecuritisation exposures

94. For resecuritisation exposures, banks must apply the SEC-SA specified in paragraphs [78 to 87], with the following adjustments:

- the capital requirement of the underlying securitisation exposures is calculated using the securitisation framework;
- delinquencies (W) are set to zero for any exposure to a securitisation tranche in the underlying pool; and
- the supervisory parameter p is set equal to 1.5, rather than 1 as for securitisation exposures.

95. If the underlying portfolio of a resecuritisation consists in a pool of exposures to securitisation tranches and to other assets, one should separate the exposures to securitisation tranches from exposures to assets that are not securitisations. The K_A parameter should be calculated for each subset individually, applying separate W parameters; these calculated in accordance with paragraphs [81 to 82] in the subsets where the exposures are to assets that are not securitisation tranches, and set to zero where the exposures are to securitisation tranches. The K_A for the resecuritisation exposure is then obtained as the nominal exposure weighted-average of the K_A 's for each subset considered.

96. The resulting risk weight is subject to a floor risk weight of 100%.

97. The caps described in paragraphs [88 to 93] cannot be applied to resecuritisation exposures.

G. Implicit support

98. When a bank provides implicit support to a securitisation, it must, at a minimum, hold capital against all of the underlying exposures associated with the securitisation transaction as if they had not been securitised. Additionally, banks would not be permitted to recognise in regulatory capital any gain on sale, in accordance with paragraph [36]. Furthermore, the bank is required to disclose publicly that (a) it has provided non-contractual support and (b) the capital impact of doing so.

H. Treatment of credit risk mitigation for securitisation exposures

Eligible credit risk mitigation techniques for protection buyers

99. A bank may recognise credit protection purchased on a securitisation exposure when calculating capital requirements subject to the following:

- collateral recognition is limited to that permitted under the credit risk mitigation framework – in particular, paragraphs 145 and 146 of the Basel II framework when the bank applies the SEC-ERBA or SEC-SA, and paragraph 289 of the Basel II framework when the bank applies the SEC-IRBA. Collateral pledged by SPEs may be recognised;

- credit protection provided by the entities listed in paragraph 195 of the Basel II framework may be recognised. SPEs cannot be recognised as eligible guarantors; and
- where guarantees or credit derivatives fulfil the minimum operational conditions as specified in paragraphs 189 to 194 of the Basel II framework, banks can take account of such credit protection in calculating capital requirements for securitisation exposures.

Full or proportional cover

100. When a bank provides full (or pro rata) credit protection to a securitisation exposure, the bank must calculate its capital requirements as if it directly holds the portion of the securitisation exposure on which it has provided credit protection (in accordance with the definition of tranche maturity given in paragraphs [22 and 23]).

101. Provided that the conditions set out in paragraph [99] are met, the bank buying full (or pro rata) credit protection may recognise the credit risk mitigation on the securitisation exposure in accordance with the CRM framework.

Tranched protection

102. In the case of tranched credit protection, the original securitisation tranche will be decomposed into protected and unprotected sub-tranches:³⁰

- The protection provider must calculate its capital requirement as if directly exposed to the particular sub-tranche of the securitisation exposure on which it is providing protection, and as determined by the hierarchy of approaches for securitisation exposures and according to paragraphs [103 to 105].
- Provided that the conditions set out in paragraph [99] are met, the protection buyer may recognise tranched protection on the securitisation exposure. In doing so, it must calculate capital requirements for each sub-tranche separately and as follows:
 - For the resulting unprotected exposure(s), capital requirements will be calculated as determined by the hierarchy of approaches for securitisation exposures and according to paragraphs [103 to 105].
 - For the guaranteed/protected portion, capital requirements will be calculated according to the applicable CRM framework (in accordance with the definition of tranche maturity given in paragraphs [22 and 23]).

103. If, according to the hierarchy of approaches determined by paragraphs [42 to 47], the bank must use the SEC-IRBA or SEC-SA, the parameters A and D should be calculated separately for each of the sub-tranches as if the latter would have been directly issued as separate tranches at the inception of the transaction. The value for K_{IRB} (respectively K_{SA}) will be computed on the underlying portfolio of the original transaction.

104. If, according to the hierarchy of approaches determined by paragraphs [42 to 47], the bank must use the SEC-ERBA for the original securitisation exposure, the relevant risk weights for the different sub-tranches will be calculated subject to the following:

³⁰ The envisioned decomposition is theoretical and it should not be viewed as a new securitisation transaction. The resulting sub-tranches should not be considered resecuritisations solely due to the presence of the credit protection.

- For the sub-tranche of highest priority,³¹ the bank will use the risk weight of the original securitisation exposure.
- For a sub-tranche of lower priority:
 - Banks must infer a rating from one of the subordinated tranches in the original transaction. The risk weight of the sub-tranche of lower priority will be then determined by applying the inferred rating to the SEC-ERBA. Thickness input T will be computed for the sub-tranche of lower priority only.
 - Should it not be possible to infer a rating the risk weight for the sub-tranche of lower priority will be computed using the SEC-SA applying the adjustments to the determination of A and D described in paragraph [103]. The risk weight for this sub-tranche will be obtained as the greater of a) the risk weight determined through the application of the SEC-SA with the adjusted A, D points and b) the SEC-ERBA risk weight of the original securitisation exposure prior to recognition of protection

105. Under all approaches, a lower-priority sub-tranche must be treated as a non-senior securitisation exposure even if the original securitisation exposure prior to protection qualifies as senior as defined in paragraph [18].

Maturity mismatches

106. A maturity mismatch exists when the residual maturity of a hedge is less than that of the underlying exposure.

107. When protection is bought on a securitisation exposure(s), for the purpose of setting regulatory capital against a maturity mismatch, the capital requirement will be determined in accordance with paragraphs 202 to 205 of the Basel II framework. When the exposures being hedged have different maturities, the longest maturity must be used.

108. When protection is bought on the securitised assets, maturity mismatches may arise in the context of synthetic securitisations (when, for example, a bank uses credit derivatives to transfer part or all of the credit risk of a specific pool of assets to third parties). When the credit derivatives unwind, the transaction will terminate. This implies that the effective maturity of *all* the tranches of the synthetic securitisation may differ from that of the underlying exposures. Banks that synthetically securitise exposures held on their balance sheet by purchasing tranching credit protection must treat such maturity mismatches in the following manner: For securitisation exposures that are assigned a risk weight of 1,250%, maturity mismatches are not taken into account. For all other securitisation exposures, the bank must apply the maturity mismatch treatment set forth in paragraphs 202 to 205 of the Basel II framework. When the exposures being hedged have different maturities, the longest maturity must be used.

I. Capital treatment for 'simple, transparent and comparable' (STC) securitisations

1. Scope and identification of STC securitisations for the purposes of alternative capital treatment

109. Only non-ABCP, traditional securitisations are within the scope of the STC framework. Non-ABCP, true sale securitisations that are STC-compliant will be subject to capital requirements as determined by paragraphs [115 to 118].

³¹ 'Sub-tranche of highest priority' only describes the relative priority of the decomposed tranche. The calculation of the risk weight of each sub-tranche is independent from the question if this sub-tranche is protected (ie risk is taken by the protection provider) or is unprotected (ie risk is taken by the protection buyer).

110. For regulatory capital purposes, a securitisation transaction falling within the scope of this section will be considered STC-compliant provided only that it meets all the criteria in Annex [2] of this framework.

2. Compliance with the STC criteria and the additional criteria for capital purpose and oversight

111. The originator/sponsor must disclose to investors all necessary information at the transaction level to allow investors to determine whether the securitisation is STC-compliant. Based on the information provided by the originator/sponsor, the investor must make its own assessment of the securitisation's STC compliance status as defined in paragraph [110] before applying the alternative treatment in paragraph [113 to 118].

For retained positions where the originator has achieved significant risk transfer in accordance with paragraphs [25] or [26], the determination shall be made only by the originator retaining the position.

112. STC criteria need to be met at all times. Checking the compliance with some of the criteria might only be necessary at origination (or at the time of initiating the exposure, in case of guarantees or liquidity facilities) to an STC securitisation. Notwithstanding, investors and holders of the securitisation positions are expected to take into account developments that may invalidate the previous compliance assessment, for example deficiencies in the frequency and content of the investor reports, in the alignment of interest, or changes in the transaction documentation at variance with relevant STC criteria.

In cases where the criteria refer to underlying assets – including, but not limited to Criteria D15 and D16 - and the pool is dynamic, the compliance with the criteria will be subject to dynamic checks every time that assets are added to the pool.

3. Alternative capital treatment for STC securitisations meeting the additional criteria for capital purposes

113. Securitisation transactions that are assessed as STC-compliant for capital purposes as defined in paragraph [110] shall be subject to capital requirements under the securitisation framework, taking into account that:

- When the SEC-IRBA is used, paragraphs [114] and [115] are applicable instead of paragraphs [56] and [64] respectively;
- When the SEC-ERBA is used, paragraphs [114], [116] and [117] are applicable instead of paragraphs [66], [68] and [70] respectively;
- When the SEC-SA is used, paragraphs [114] and [118] are applicable instead of paragraphs [85] and [87] respectively.

114. Under all three approaches, the resulting risk weight is subject to a floor risk weight of 10% for senior tranches, and 15% for non-senior tranches.

(i) *Internal Ratings-Based Approach (SEC-IRBA)*

115. The supervisory parameter p in SEC-IRBA for an exposure to an STC securitisation is as follows:

$$p = \max [0.3; (A + B*(1/N) + C*K_{IRB} + D*LGD + E*M_T)*0.5],$$

where:

- 0.3 denotes the p -parameter floor;
- N is the effective number of loans in the underlying pool, calculated as described in paragraph [59];
- K_{IRB} is the capital charge of the underlying pool (as defined in paragraph [49]);

- LGD is the exposure-weighted average loss-given-default of the underlying pool, calculated as described in paragraph [60]);
- M_T is the maturity of the tranche calculated according to paragraphs [22 and 23]; and
- the parameters *A*, *B*, *C*, *D*, and *E* are determined according to the following look-up table:

| | | A | B | C | D | E |
|------------------|---|----------|----------|----------|----------|----------|
| Wholesale | Senior , granular ($N \geq 25$) | 0 | 3.56 | -1.85 | 0.55 | 0.07 |
| | Senior , non-granular ($N < 25$) | 0.11 | 2.61 | -2.91 | 0.68 | 0.07 |
| | Non-senior , granular ($N \geq 25$) | 0.16 | 2.87 | -1.03 | 0.21 | 0.07 |
| | Non-senior , non-granular ($N < 25$) | 0.22 | 2.35 | -2.46 | 0.48 | 0.07 |
| Retail | Senior | 0 | 0 | -7.48 | 0.71 | 0.24 |
| | Non-senior | 0 | 0 | -5.78 | 0.55 | 0.27 |

(ii) *External Ratings-Based Approach (SEC-ERBA)*

116. For exposures with short-term ratings, or when an inferred rating based on a short-term rating is available, the following risk weights will apply:

Table 1: ERBA risk weights for short-term ratings

| External credit assessment | <i>A-1/P-1</i> | <i>A-2/P-2</i> | <i>A-3/P-3</i> | <i>All other ratings</i> |
|----------------------------|----------------|----------------|----------------|--------------------------|
| Risk weight | 10% | 30% | 60% | 1,250% |

117. For exposures with long-term ratings, risk weights will be determined according to Table 2 and will be adjusted for tranche maturity (calculated according to paragraphs [22 and 23]), and tranche thickness for non-senior tranches according to paragraph [69].

Table 2: ERBA risk weights for long-term ratings

| Rating | Senior tranche | | Non-senior (thin) tranche | |
|---------------|--|----------------|--|----------------|
| | <i>Tranche maturity (M_T)</i> | | <i>Tranche maturity (M_T)</i> | |
| | <i>1 year</i> | <i>5 years</i> | <i>1 year</i> | <i>5 years</i> |
| AAA | 10% | 10% | 15% | 40% |
| AA+ | 10% | 15% | 15% | 55% |
| AA | 15% | 20% | 15% | 70% |
| AA- | 15% | 25% | 25% | 80% |
| A+ | 20% | 30% | 35% | 95% |
| A | 30% | 40% | 60% | 135% |
| A- | 35% | 40% | 95% | 170% |
| BBB+ | 45% | 55% | 150% | 225% |
| BBB | 55% | 65% | 180% | 255% |
| BBB- | 70% | 85% | 270% | 345% |
| BB+ | 120% | 135% | 405% | 500% |
| BB | 135% | 155% | 535% | 655% |
| BB- | 170% | 195% | 645% | 740% |
| B+ | 225% | 250% | 810% | 855% |
| B | 280% | 305% | 945% | 945% |
| B- | 340% | 380% | 1,015% | 1,015% |
| CCC+/CCC/CCC- | 415% | 455% | 1,250% | 1,250% |
| Below CCC- | 1,250% | 1,250% | 1,250% | 1,250% |

(iii) *Standardised Approach (SEC-SA)*

118. The supervisory parameter p in the context of the SEC-SA is set equal to 0.5 for an exposure to an STC securitisation.

II. Other non-securitisation sections

NB: Amendments to sections other than the securitisation framework in the Basel II framework are shown in tracked changes. References to paragraphs in the revised securitisation framework contained in this document are shown [in brackets]. References to other parts of the Basel framework are shown without brackets.

(A) Components of capital (as revised by Basel III)

"Limits and minima

43. Banks using ~~the IRB approach for securitisation exposures or~~ the PD/LGD approach for equity exposures must first deduct the EL amounts subject to the corresponding conditions set out in paragraphs 563 and 386, respectively. Banks using the IRB approach for other asset classes must compare (i) the amount of total eligible provisions, as defined in paragraph 380, with (ii) the total expected loss amount as calculated within the IRB approach and defined in paragraph 375. Where the total expected loss amount exceeds total eligible provisions, banks must deduct the difference. **Securitisation exposures will be subject to paragraph [37] and will contribute to neither the total expected loss amount nor the total eligible provisions.**

(B) Credit risk – the Standardised Approach³²

1. Individual claims

"Higher-risk categories

79. The following claims will be risk-weighted at 150% or higher:

- Claims on sovereigns, PSEs, banks, and securities firms rated below B–.
- Claims on corporates rated below BB–.
- Past due loans as set out in paragraph 75.
- ~~Securitisation tranches that are rated between BB+ and BB– will be risk-weighted at 350% as set out in paragraph 567.~~

2. Credit risk mitigation

"First-to-default credit derivatives

208. With regard to the bank providing credit protection through such an instrument, ~~if the product has an external credit assessment from an eligible credit assessment institution, the risk weight in paragraph 567 applied to securitisation tranches will be applied. If the product is not rated by an eligible external credit assessment institution, the risk weights of the assets included in the basket will be aggregated up to a maximum of 1,250% and multiplied by the nominal amount of the protection provided by the credit derivative to obtain the risk-weighted asset amount.~~

³² For changes to the Standardised Approach in relation to securitisation exposures, see the Committee's forthcoming document on revisions to the standardised approach on credit risk. This will include changes to the credit risk mitigation framework, and in particular to the current treatment of nth-to-default derivatives.

(C) Credit risk – the Internal Ratings-Based approach

1. The mechanics of the IRB approach

“Categorisation of exposures

217. For a discussion of the ~~IRB~~ treatment of securitisation exposures, see Section IV.”

2. Rules for corporate, sovereign and bank exposures

“Exposure measurement for off-balance sheet items (with the exception of FX and interest rate, equity and commodity-related derivatives)

310. For off-balance sheet items, exposure is calculated as the committed but undrawn amount multiplied by a CCF. There are two approaches for the estimation of CCFs: a foundation approach and an advanced approach. **When only the drawn balances of revolving facilities have been securitised, banks must ensure that they continue to hold required capital against the undrawn balances associated with the securitised exposures.”**

3. Rules for retail exposures

“Exposure at default (EAD)

337. When only the drawn balances of **revolving** retail facilities have been securitised, banks must ensure that they continue to hold required capital against **the undrawn balances associated with the securitised exposures using the IRB approach to credit risk for commitments**. ~~their share (ie seller’s interest) of undrawn balances related to the securitised exposures using the IRB approach to credit risk. This means that for such facilities, banks must reflect the impact of CCFs in their EAD estimates rather than in the LGD estimates. For determining the EAD associated with the seller’s interest in the undrawn lines, the undrawn balances of securitised exposures would be allocated between the seller’s and investors’ interests on a pro rata basis, based on the proportions of the seller’s and investors’ shares of the securitised drawn balances. The investors’ share of undrawn balances related to the securitised exposures is subject to the treatment in paragraph 6.”~~

(This revision would replace paragraph 337 of the Basel II framework and would require that, if banks are able to securitise revolving retail credits using an amortising structure, 100% of the undrawn lines multiplied by the appropriate EAD would be included in the IRB retail capital calculation.)

4. Rules for purchased receivables

“Treatment of purchase price discounts for receivables

371. In many cases, the purchase price of receivables will reflect a discount (not to be confused with the discount concept defined in paragraphs 308 and 334 [of the Basel II framework]) that provides first-loss protection for default losses, dilution losses or both. ~~To the extent a portion of such a purchase price discount will be refunded to the seller, this refundable amount may be treated as first-loss protection under the IRB securitisation framework.~~ **To the extent that a portion of such a purchase price discount may be refunded to the seller based on the performance of the receivables, the purchaser may recognise this refundable amount as first-loss protection and hence treat this exposure under the securitisation framework, while the seller providing such a refundable purchase price discount must treat the refundable amount as a first-loss position under the securitisation framework.** Non-

refundable purchase price discounts for receivables do not affect either the EL provision calculation in Section III.G [of the Basel II framework] or the calculation of risk-weighted assets.

372. When collateral or partial guarantees obtained on receivables provide first-loss protection (collectively referred to as mitigants in this paragraph), and these mitigants cover default losses, dilution losses or both, they may also be treated as first-loss protection under the ~~IRB~~-securitisation framework (see **paragraph [51]**). When the same mitigant covers both default and dilution risk, banks using the ~~Supervisory Formula~~ **SEC-IRBA** that are able to calculate an exposure-weighted LGD must do so as defined in **paragraph [60]**.”

(D) The second pillar – supervisory review process for securitisation

(Revise paragraphs 801–807 so as to maintain consistency with the new treatment to these structures as follows. In particular, delete paragraphs 805 and 807 and references to early amortisation Pillar 1 capital requirements in paragraphs 801 and 804.)

“801. Supervisors should review how banks internally measure, monitor and manage risks associated with securitisations of revolving credit facilities, including an assessment of the risk and likelihood of early amortisation of such transactions. At a minimum, supervisors should ensure that banks have implemented reasonable methods for allocating economic capital against the economic substance of the credit risk arising from revolving securitisations and should expect banks to have adequate capital and liquidity contingency plans that evaluate the probability of an early amortisation occurring and address the implications of both scheduled and early amortisation. ~~In addition, the capital adequacy plan should address the possibility that the bank will face higher levels of required capital under the early amortisation Pillar 1 capital requirement.~~

802. Because most early amortisation triggers are tied to excess spread levels, the factors affecting these levels should be well understood, monitored and managed to the extent possible (see paragraphs 790 to 794 on implicit support) by the originating bank. For example, the following factors affecting excess spread should generally be considered:

- Interest payments made by borrowers on the underlying receivable balances.
- Other fees and charges to be paid by the underlying obligors (eg late-payment fees, cash advance fees, over-limit fees).
- Gross charge-offs.
- Principal payments.
- Recoveries on charged-off loans.
- Interchange income.
- Interest paid on investors’ certificates.
- Macroeconomic factors such as bankruptcy rates, interest rate movements and unemployment rates.

803. Banks should consider the effects that changes in portfolio management or business strategies may have on the levels of excess spread and on the likelihood of an early amortisation event. For example, marketing strategies or underwriting changes that result in lower finance charges or higher charge-offs might also lower excess spread levels and increase the likelihood of an early amortisation event.

804. Banks should use techniques such as static pool cash collection analyses and stress tests to better understand pool performance. These techniques can highlight adverse trends or potential adverse impacts. Banks should have policies in place to respond promptly to adverse or unanticipated changes. Supervisors will take appropriate action where they do not consider these policies adequate. Such action

may include, but is not limited to, directing a bank to obtain a dedicated liquidity line or raising the early amortisation credit conversion factor, thus, increasing the bank's capital requirements.

805. — While the early amortisation capital charge described in Pillar 1 is meant to address potential supervisory concerns associated with an early amortisation event, such as the inability of excess spread to cover potential losses, the policies and monitoring described in this section recognise that a given level of excess spread is not, by itself, a perfect proxy for credit performance of the underlying pool of exposures. In some circumstances, for example, excess spread levels may decline so rapidly as to not provide a timely indicator of underlying credit deterioration. Further, excess spread levels may reside far above trigger levels, but still exhibit a high degree of volatility which could warrant supervisory attention. In addition, excess spread levels can fluctuate for reasons unrelated to underlying credit risk, such as a mismatch in the rate at which finance charges reprice relative to investor certificate rates. Routine fluctuations of excess spread might not generate supervisory concerns, even when they result in different capital requirements. This is particularly the case as a bank moves in or out of the first step of the early amortisation credit conversion factors. On the other hand, existing excess spread levels may be maintained by adding (or designating) an increasing number of new accounts to the master trust, an action that would tend to mask potential deterioration in a portfolio. For all of these reasons, supervisors will place particular emphasis on internal management, controls, and risk monitoring activities with respect to securitisations with early amortisation features.

806. Supervisors expect that the sophistication of a bank's system in monitoring the likelihood and risks of an early amortisation event will be commensurate with the size and complexity of the bank's securitisation activities that involve early amortisation provisions.

807. — For controlled amortisations specifically, supervisors may also review the process by which a bank determines the minimum amortisation period required to pay down 90% of the outstanding balance at the point of early amortisation. Where a supervisor does not consider this adequate it will take appropriate action, such as increasing the conversion factor associated with a particular transaction or class of transactions."

Annex 1

Illustrative examples for recognition of dilution risk when applying the SEC-IRBA to securitisation exposures

The following examples are provided to illustrate the recognition of dilution risk according to paragraphs [52(a) and 52(b)].

A. Common waterfall for default and dilution losses

In this example, it is assumed that losses resulting from either defaults or dilution within the securitised pool will be subject to a common waterfall, ie the loss allocation process does not distinguish between different sources of losses within the pool.

Pool description:³³

- Pool of €1,000,000 of corporate receivables
- $N = 100$
- $M = 2.5$ years³⁴
- $PD_{Dilution} = 0.55\%$
- $LGD_{Dilution} = 100\%$
- $PD_{Default} = 0.95\%$
- $LGD_{Default} = 45\%$

Capital structure:

- Tranche A = senior note of €700,000
- Tranche B = second-loss guarantee of €250,000
- Tranche C = purchase discount of €50,000
- Final legal maturity of transaction/all tranches = 2.875 years; ie $M_T = 2.5$ years³⁵

RWA calculation:

Step 1: Calculate $K_{IRB,Dilution}$ and $K_{IRB,Default}$ for the underlying portfolio:

- $K_{IRB,Dilution} = €1,000,000 \times (161.44\% \times 8\% \times 1.06 + 0.55\% \times 100\%) / €1,000,000 = 14.24\%$

³³ For the sake of simplicity, it is assumed that all exposures have the same size, same PD, same LGD and same maturity.

³⁴ For the sake of simplicity, the possibility described in paragraph 369 to set $M_{Dilution} = 1$ is not used in this example.

³⁵ The rounding of the maturity calculation is shown for example purposes.

- $$K_{IRB,Default} = (\text{€}1,000,000 - \text{€}136,900)^{36} \times (90.62\% \times 8\% \times 1.06 + 0.95\% \times 45\%) / \text{€}1,000,000$$

= 7%

Step 2: Calculate $K_{IRB,Pool}$

- $$K_{IRB,Pool} = K_{IRB,Dilution} + K_{IRB,Default} = 14.24\% + 7\% = 21.24\%$$

Step 3: Apply the SEC-IRBA to the three tranches

Pool parameters

- $$N = 100$$
- $$LGD_{Pool} = (LGD_{Default} \times K_{IRB,Default} + LGD_{Dilution} \times K_{IRB,Dilution}) / K_{IRB,Pool}$$

= (45% x 7% + 100% x 14.24%) / 21.24% = 81.87%

Tranche parameters

- $M_T = 2.5$ years
- Attachment and detachment points

| | Attachment point | Detachment point |
|-----------|------------------|------------------|
| Tranche A | 30% | 100% |
| Tranche B | 5% | 30% |
| Tranche C | 0% | 5% |

Resulting risk-weighted exposure amounts

| | SEC-IRBA risk weight | RWA |
|-----------|----------------------|------------|
| Tranche A | 28.78% | €201,460 |
| Tranche B | 1,056.94% | €2,642,350 |
| Tranche C | 1,250% | €625,000 |

B. Non-common waterfall for default and dilution losses

In this example, it is assumed that the securitisation transaction does not have one common waterfall for losses due to defaults and dilutions, ie for the determination of the risk of a specific tranche it is not only relevant what losses might be realised within the pool but also if those losses are resulting from default or a dilution event.

As the SEC-IRBA assumes that there is one common waterfall, it cannot be applied without adjustments. The following example illustrates one possible scenario and a possible adjustment specific to this scenario.

While this example is meant as a guideline, a bank should nevertheless consult with its national supervisor as to how the capital calculation should be performed (see paragraph 52(b)).

Pool description:

- See example A.

³⁶ As described in paragraph 366, when calculating the default risk of exposures with non-immaterial dilution risk "EAD will be calculated as the outstanding amount minus the capital charge for dilution prior to credit risk mitigation".

Capital structure:

- Tranche A = senior note of €950,000
- Tranche C = purchase discount of €50,000
- Tranches A and C will cover both default and dilution losses.
- In addition, the structure also contains a second-loss guarantee of €250,000 (Tranche B)³⁷ that covers only dilution losses exceeding a threshold of €50,000 up to maximum aggregated amount of €300,000, which leads to the following two waterfalls:
 - (i) Default waterfall
 - Tranche A = senior note of €950,000
 - Tranche C = purchase discount of €50,000³⁸
 - (ii) Dilution waterfall
 - Tranche A = senior note of €700,000
 - Tranche B = second-loss guarantee of €250,000
 - Tranche C = purchase discount of €50,000³⁹
- M_T of all three tranches = 2.5 years

Treatment of Tranche C

Tranche C is treated as described in Example A.

Treatment of Tranche B

Tranche B (second-loss guarantee) is exposed only to dilution risk, but not to default risk. Therefore, K_{IRB} , for the purpose of calculating a capital requirement for Tranche B, can be limited to $K_{IRB,Dilution}$. However, as the holder of Tranche B cannot be sure that Tranche C will still be available to cover the first dilution losses when they are realised – because the credit enhancement might already be depleted due to earlier default losses – to ensure a prudent treatment, it cannot recognise the purchase discount as credit enhancement for dilution risk. In the capital calculation, the bank providing Tranche B should assume that €50,000 of the securitised assets have already been defaulted and hence Tranche C is no longer available as credit enhancement and the exposure of the underlying assets has been reduced to €950,000. When calculating K_{IRB} for Tranche B, the bank can assume that K_{IRB} is not affected by the reduced portfolio size.

RWA calculation for Tranche B:

Step 1: Calculate $K_{IRB,Pool}$

- $K_{IRB,Pool} = K_{IRB,Dilution} = 14.24\%$

Step 2: Apply the SEC-IRBA

Pool parameters

- $N=100$

³⁷ For the sake of simplicity, it is assumed that the second loss guarantee is cash-collateralised.

³⁸ Subject to the condition that it is not already being used for realised dilution losses.

³⁹ Subject to the condition that it is not already being used for realised default losses.

- $LGD_{Pool} = LGD_{Dilution} = 100\%$

Tranche parameters

- $M_T = 2.5$ years
- Attachment point = 0%
- Detachment point = $\text{€}250,000 / \text{€}950,000 = 26.32\%$

Resulting risk-weighted exposure amounts

| | SEC-IRBA risk weight | RWA |
|-----------|----------------------|------------|
| Tranche B | 925.47% | €2,313,675 |

Treatment of Tranche A

The holder of Tranche A (senior note) will take all default losses not covered by the purchase discount and all dilution losses not covered by the purchase discount or the second-loss guarantee. A possible treatment for Tranche A would be to add $K_{IRB,Default}$ and $K_{IRB,Dilution}$ (as in Example A), but not to recognise the second-loss guarantee as credit enhancement at all because it is covering only dilution risk.

Although this is a simple approach, it is also fairly conservative. Therefore the following alternative for the senior tranche could be considered:

- Calculate the RWA amount for Tranche A under the assumption that it is only exposed to losses resulting from defaults. This assumption implies that Tranche A is benefiting from a credit enhancement of €50,000.
- Calculate the RWA amounts for Tranche C and (hypothetical) Tranche A* under the assumption that they are only exposed to dilution losses. Tranche A* should be assumed to absorb losses above €300,000 up to €1,000,000.

With respect to dilution losses, this approach would recognise that the senior tranche investor cannot be sure if the purchase price discount will still be available to cover those losses when needed as it might have already been used for defaults. Consequently, from the perspective of the senior investor, the purchase price discount could only be recognised for the calculation of the capital requirement for default or dilution risk but not for both.^{40, 41}

- Sum up the RWA amounts under (i) and (ii) to determine the final RWA amount for the senior note investor.

⁴⁰ In this example, the purchase price discount was recognised in the default risk calculation, but banks could also choose to use it for the dilution risk calculation.

⁴¹ In this example, it is assumed that the second-loss dilution guarantee explicitly covers dilution losses above €50,000 up to €300,000. If the guarantee instead covered €250,000 dilution losses after the purchase discount has been depleted (irrespective of whether the purchase discount has been used for dilution or default losses), then the senior note holder should assume that he is exposed to dilution losses from €250,000 up to €1,000,000 (instead of €0 to €50,000 + €300,000 to €1,000,000).

RWA calculation for Tranche A:

Step 1: Calculate RWA for (i)

Pool parameters

- $K_{IRB,Pool} = K_{IRB,Default} = 7\%$
- $LGD_{Pool} = LGD_{Default} = 45\%$

Tranche parameters

- $M_T = 2.5$ years
- Attachment point = $\text{€}50,000 / \text{€}1,000,000 = 5\%$
- Detachment point = $\text{€}1,000,000 / \text{€}1,000,000 = 100\%$

Resulting risk-weighted exposure amounts

| | SEC-IRBA risk weight | RWA |
|---------------|----------------------|----------|
| Component (i) | 56.58% | €537,510 |

Step 2: Calculate RWA for (ii)

Pool parameters

- $K_{IRB,Pool} = K_{IRB,Dilution} = 14.24\%$
- $LGD_{Pool} = LGD_{Dilution} = 100\%$

Tranche parameters

- $M_T = 2.5$ years
- Attachment and detachment points

| | Attachment point | Detachment point |
|------------|------------------|------------------|
| Tranche A* | 30% | 100% |
| Tranche C | 0% | 5% |

Resulting risk-weighted exposure amounts

| | SEC-IRBA risk weight | RWA |
|------------|----------------------|----------|
| Tranche A* | 15% | €105,000 |
| Tranche C | 1,250% | €625,000 |

Step 3: Sum up the RWA of components (i) and (ii)

- Final RWA amount for investor in Tranche A = $\text{€}537,510 + \text{€}105,000 + \text{€}625,000 = \text{€}1,267,510$
- Implicit risk weight for Tranche A = $\text{€}1,267,510 / \text{€}950,000 = 133.42\%$

Annex 2

Expanded set of STC criteria for regulatory capital purposes

The expanded set of criteria includes suggested additional clarifications and enhancements to the BCBS-IOSCO July 2015 STC criteria (ie criteria A1 to C14 below). For certain criteria, this annex contains guidance and clarification, together with a short rationale for why such clarifications are needed when using the criteria for regulatory capital purposes (ie for applying a different capital treatment to STC and other securitisations). In addition, the expanded STC criteria include additional requirements (see Section D below – “Additional criteria for regulatory capital purposes”) that must be satisfied in order for a securitisation that satisfies the 14 STC criteria to receive alternative regulatory capital treatment.

A. Asset risk

A1. Nature of assets

In simple, transparent and comparable securitisations, the assets underlying the securitisation should be credit claims or receivables that are homogeneous. In assessing homogeneity, consideration should be given to asset type, jurisdiction, legal system and currency.

As more exotic asset classes require more complex and deeper analysis, credit claims or receivables should have contractually identified periodic payment streams relating to rental,⁴² principal, interest, or principal and interest payments. Any referenced interest payments or discount rates should be based on commonly encountered market interest rates,⁴³ but should not reference complex or complicated formulae or exotic derivatives.⁴⁴

Additional guidance for capital purposes

“Homogeneity”

For capital purposes, this criterion should be assessed taking into account the following principles:

- The nature of assets should be such that investors would not need to analyse and assess materially different legal and/or credit risk factors and risk profiles when carrying out risk analysis and due diligence checks.
- Homogeneity should be assessed on the basis of common risk drivers, including similar risk factors and risk profiles.
- Credit claims or receivables included in the securitisation should have standard obligations, in terms of rights to payments and/or income from assets and that result in a periodic and well-

⁴² Payments on operating and financing leases are typically considered to be rental payments rather than payments of principal and interest.

⁴³ Commonly encountered market interest rates may include rates reflective of a lender’s cost of funds, to the extent that sufficient data are provided to investors to allow them to assess their relation to other market rates.

⁴⁴ The Global Association of Risk Professionals (GARP) defines an exotic instrument as a financial asset or instrument with features making it more complex than simpler, plain vanilla, products.

defined stream of payments to investors. Credit card facilities should be deemed to result in a periodic and well-defined stream of payments to investors for the purposes of this criterion.

- Repayment of noteholders should mainly rely on the principal and interest proceeds from the securitised assets. Partial reliance on refinancing or re-sale of the asset securing the exposure may occur provided that re-financing is sufficiently distributed within the pool and the residual values on which the transaction relies are sufficiently low and that the reliance on refinancing is thus not substantial.

“Commonly encountered market interest rates”

Examples of these would include:

- interbank rates and rates set by monetary policy authorities, such as Libor, Euribor and the fed funds rate; and
- sectoral rates reflective of a lender’s cost of funds, such as internal interest rates that directly reflect the market costs of a bank’s funding or that of a subset of institutions.

“Exotic derivatives”

Interest rate caps and/or floors would not automatically be considered exotic derivatives.

A2. Asset performance history

In order to provide investors with sufficient information on an asset class to conduct appropriate due diligence and access to a sufficiently rich data set to enable a more accurate calculation of expected loss in different stress scenarios, verifiable loss performance data, such as delinquency and default data, should be available for credit claims and receivables with substantially similar risk characteristics to those being securitised, for a time period long enough to permit meaningful evaluation by investors. Sources of and access to data and the basis for claiming similarity to credit claims or receivables being securitised should be clearly disclosed to all market participants.

Additional consideration that is not part of the criterion⁴⁵

In addition to the history of the asset class within a jurisdiction, investors should consider whether the originator, sponsor, servicer and other parties with a fiduciary responsibility to the securitisation have an established performance history for substantially similar credit claims or receivables to those being securitised and for an appropriately long period of time.

It is not the intention of the criteria to form an impediment to the entry of new participants to the market, but rather that investors should take into account the performance history of the asset class and the transaction parties when deciding whether to invest in a securitisation.

Additional requirement for capital purposes

The originator/sponsor of the securitisation, as well as the original lender who underwrites the assets, must have sufficient experience in originating exposures similar to those securitised.

⁴⁵ This “additional consideration” may form part of investors’ due diligence process, but does not form part of the criteria when determining whether a securitisation can be considered “simple, transparent and comparable”.

For capital purposes, investors must determine whether the performance history of the originator and the original lender for substantially similar claims or receivables to those being securitised has been established for an "appropriately long period of time". This performance history must be no shorter than a period of seven years for non-retail exposures. For retail exposures, the minimum performance history is five years.

Rationale

The Committee considered that, in addition to the asset performance history, it is important that both the originator and the original lender should have a minimum track record in originating assets similar to those securitised, for example to avoid an originate-to-distribute model.

The Committee recommends making use of the IRB data requirements contained in paragraphs 472 and 473 to better define the term "appropriately long period of time". These data requirements would apply irrespective of the credit risk approach used to determine capital requirements on the underlying pool.

A3. Payment status

Non-performing credit claims and receivables are likely to require more complex and heightened analysis. In order to ensure that only performing credit claims and receivables are assigned to a securitisation, credit claims or receivables being transferred to the securitisation may not, at the time of inclusion in the pool, include obligations that are in default or delinquent or obligations for which the transferor⁴⁶ or parties to the securitisation⁴⁷ are aware of evidence indicating a material increase in expected losses or of enforcement actions.

Additional requirement for capital purposes

To prevent credit claims or receivables arising from credit-impaired borrowers from being transferred to the securitisation, the originator or sponsor should verify that the credit claims or receivables meet the following conditions:

- (a) the obligor has not been the subject of an insolvency or debt restructuring process due to financial difficulties within three years prior to the date of origination;⁴⁸ and,
- (b) the obligor is not recorded on a public credit registry of persons with an adverse credit history; and,
- (c) the obligor does not have a credit assessment by an ECAI or a credit score indicating a significant risk of default; and
- (d) the credit claim or receivable is not subject to a dispute between the obligor and the original lender.

The assessment of these conditions should be carried out by the originator or sponsor no earlier than 45 days prior to the closing date. Additionally, at the time of this assessment, there should be to the

⁴⁶ Eg the originator or sponsor.

⁴⁷ Eg the servicer or a party with a fiduciary responsibility.

⁴⁸ This condition would not apply to borrowers that previously had credit incidents but were subsequently removed from credit registries as a result of the borrower cleaning their records. This is the case in jurisdictions in which borrowers have the "right to be forgotten".

best knowledge of the originator or sponsor be no evidence indicating likely deterioration in the performance status of the credit claim or receivable.

Additionally, at the time of their inclusion in the pool, at least one payment should have been made on the underlying exposures, except in the case of revolving asset trust structures such as those for credit card receivables, trade receivables, and other exposures payable in a single instalment, at maturity.

Rationale

The Committee believes that providing a clear definition of credit-impaired borrowers should facilitate compliance checks.

A4. Consistency of underwriting

Investor analysis should be simpler and more straightforward where the securitisation is of credit claims or receivables that satisfy materially non-deteriorating origination standards. To ensure that the quality of the securitised credit claims and receivables is not affected by changes in underwriting standards, the originator should demonstrate to investors that any credit claims or receivables being transferred to the securitisation have been originated in the ordinary course of the originator's business to materially non-deteriorating underwriting standards. Where underwriting standards change, the originator should disclose the timing and purpose of such changes. Underwriting standards should not be less stringent than those applied to credit claims and receivables retained on the balance sheet.

These should be credit claims or receivables which have satisfied materially non-deteriorating underwriting criteria and for which the obligors have been assessed as having the ability and volition to make timely payments on obligations; or on granular pools of obligors originated in the ordinary course of the originator's business where expected cash flows have been modelled to meet stated obligations of the securitisation under prudently stressed loan loss scenarios.

Additional requirement for capital purposes

In all circumstances, all credit claims or receivables must be originated in accordance with sound and prudent underwriting criteria based on an assessment that the obligor has the "ability and volition to make timely payments" on its obligations.

The originator/sponsor of the securitisation is expected, where underlying credit claims or receivables have been acquired from third parties, to review the underwriting standards (ie to check their existence and assess their quality) of these third parties and to ascertain that they have assessed the obligors' "ability and volition to make timely payments on obligations".

Rationale

This additional condition improves the consistency of the criterion, as it requires securitised credit claims and receivables to be originated in accordance with sound and prudent underwriting standards in all circumstances, including for granular pools.

If the originator/sponsor of the securitisation did not originate the assets, the additional requirement will ensure that the originator has to check (a) the existence and quality of the standards; (b) that the borrowers to whom the acquired loans are extended have been screened by the lender, and (c) that their ability and their willingness to repay has been assessed by the original lender. This should not, however, be understood as an obligation for the originator to perform this assessment itself.

A5. Asset selection and transfer

Whilst recognising that credit claims or receivables transferred to a securitisation will be subject to defined criteria,⁴⁹ the performance of the securitisation should not rely upon the ongoing selection of assets through active management⁵⁰ on a discretionary basis of the securitisation's underlying portfolio. Credit claims or receivables transferred to a securitisation should satisfy clearly defined eligibility criteria. Credit claims or receivables transferred to a securitisation after the closing date may not be actively selected, actively managed or otherwise cherry-picked on a discretionary basis. Investors should be able to assess the credit risk of the asset pool prior to their investment decisions.

In order to meet the principle of true sale, the securitisation should effect true sale such that the underlying credit claims or receivables:

- (a) are enforceable against the obligor and their enforceability is included in the representations and warranties of the securitisation;
- (b) are beyond the reach of the seller, its creditors or liquidators and are not subject to material re-characterisation or clawback risks;
- (c) are not effected through credit default swaps, derivatives or guarantees, but by a transfer⁵¹ of the credit claims or the receivables to the securitisation; and
- (d) demonstrate effective recourse to the ultimate obligation for the underlying credit claims or receivables and are not a securitisation of other securitisations.

In applicable jurisdictions, securitisations employing transfers of credit claims or receivables by other means should demonstrate the existence of material obstacles preventing true sale at issuance⁵² and should clearly demonstrate the method of recourse to ultimate obligors.⁵³ In such jurisdictions, any conditions where the transfer of the credit claims or receivable is delayed or contingent upon specific events and any factors affecting timely perfection of claims by the securitisation should be clearly disclosed.

The originator should provide representations and warranties that the credit claims or receivables being transferred to the securitisation are not subject to any condition or encumbrance that can be foreseen to adversely affect enforceability in respect of collections due.

Additional requirement for capital purposes

An independent third-party legal opinion must support the claim that the true sale and the transfer of assets under the applicable laws comply with points (a) through (d).

⁴⁹ Eg the size of the obligation, the age of the borrower or the LTV (loan-to-value) of the property, DTI (debt-to-income) and/or DSC (debt service coverage) ratios.

⁵⁰ Provided they are not actively selected or otherwise cherry-picked on a discretionary basis, the addition of credit claims or receivables during the revolving periods or their substitution or repurchasing due to the breach of representations and warranties do not represent active portfolio management.

⁵¹ The requirement should not affect jurisdictions whose legal frameworks provide for a true sale with the same effects as described above, but by means other than a transfer of the credit claims or receivables.

⁵² Eg the immediate realisation of transfer tax or the requirement to notify all obligors of the transfer.

⁵³ Eg equitable assignment, perfected contingent transfer.

Rationale

A legal opinion will provide comfort that a transaction complies with these criteria, in particular, for cases where it is issued in accordance with non-domestic legal provisions. To avoid conflicts of interest, the legal opinion should be provided by an independent third party.

A6. Initial and ongoing data

To assist investors in conducting appropriate due diligence prior to investing in a new offering, sufficient loan-level data in accordance with applicable laws or, in the case of granular pools, summary stratification data on the relevant risk characteristics of the underlying pool should be available to potential investors before pricing of a securitisation.

To assist investors in conducting appropriate and ongoing monitoring of their investments' performance and so that investors that wish to purchase a securitisation in the secondary market have sufficient information to conduct appropriate due diligence, timely loan-level data in accordance with applicable laws or granular pool stratification data on the risk characteristics of the underlying pool and standardised investor reports should be readily available to current and potential investors at least quarterly throughout the life of the securitisation. Cut-off dates of the loan-level or granular pool stratification data should be aligned with those used for investor reporting.

To provide a level of assurance that the reporting of the underlying credit claims or receivables is accurate and that the underlying credit claims or receivables meet the eligibility requirements, the initial portfolio should be reviewed⁵⁴ for conformity with the eligibility requirements by an appropriate legally accountable and independent third party, such as an independent accounting practice or the calculation agent or management company for the securitisation.

No additional language proposed.

B. Structural risk

B7. Redemption cash flows

Liabilities subject to the refinancing risk of the underlying credit claims or receivables are likely to require more complex and heightened analysis. To help ensure that the underlying credit claims or receivables do not need to be refinanced over a short period of time, there should not be a reliance on the sale or refinancing of the underlying credit claims or receivables in order to repay the liabilities, unless the underlying pool of credit claims or receivables is sufficiently granular and has sufficiently distributed repayment profiles. Rights to receive income from the assets specified to support redemption payments should be considered as eligible credit claims or receivables in this regard.⁵⁵

No additional language proposed.

⁵⁴ The review should confirm that the credit claims or receivables transferred to the securitisation meet the portfolio eligibility requirements. The review could, for example, be undertaken on a representative sample of the initial portfolio, with the application of a minimum confidence level. The verification report need not be provided but its results, including any material exceptions, should be disclosed in the initial offering documentation.

⁵⁵ For example, associated savings plans designed to repay principal at maturity.

B8. Currency and interest rate asset and liability mismatches

To reduce the payment risk arising from the different interest rate and currency profiles of assets and liabilities and to improve investors' ability to model cash flows, interest rate and foreign currency risks should be appropriately mitigated⁵⁶ at all times, and if any hedging transaction is executed the transaction should be documented according to industry-standard master agreements. Only derivatives used for genuine hedging of asset and liability mismatches of interest rate and / or currency should be allowed.

Additional requirement for capital purposes

The term "appropriately mitigated" should be understood as not necessarily requiring a completely perfect hedge. The appropriateness of the mitigation of interest rate and foreign currency through the life of the transaction must be demonstrated by making available to potential investors, in a timely and regular manner, quantitative information including the fraction of notional amounts that are hedged, as well as sensitivity analysis that illustrates the effectiveness of the hedge under extreme but plausible scenarios.

If hedges are not performed through derivatives, then those risk-mitigating measures are only permitted if they are specifically created and used for the purpose of hedging an individual and specific risk, and not multiple risks at the same time (such as credit and interest rate risks). Non-derivative risk mitigation measures must be fully funded and available at all times.

Rationale

The Committee considered it necessary to clarify that "appropriately mitigated" should not necessarily be understood from an accounting point of view, but rather from an economic perspective.

B9. Payment priorities and observability

To prevent investors being subjected to unexpected repayment profiles during the life of a securitisation, the priorities of payments for all liabilities in all circumstances should be clearly defined at the time of securitisation and appropriate legal comfort regarding their enforceability should be provided.

To ensure that junior noteholders do not have inappropriate payment preference over senior noteholders that are due and payable, throughout the life of a securitisation, or, where there are multiple securitisations backed by the same pool of credit claims or receivables, throughout the life of the securitisation programme, junior liabilities should not have payment preference over senior liabilities which are due and payable. The securitisation should not be structured as a "reverse" cash flow waterfall such that junior liabilities are paid where due and payable senior liabilities have not been paid.

To help provide investors with full transparency over any changes to the cash flow waterfall, payment profile or priority of payments that might affect a securitisation, all triggers affecting the cash flow waterfall, payment profile or priority of payments of the securitisation should be clearly and fully disclosed both in offering documents and in investor reports, with information in the investor report that clearly identifies the breach status, the ability for the breach to be reversed and the consequences of the breach. Investor reports should contain information that allows investors to monitor the evolution over time of the indicators that are subject to triggers. Any triggers breached between payment dates should

⁵⁶ The term "appropriately mitigated" should be understood as not necessarily requiring a matching hedge. The appropriateness of hedging through the life of the transaction should be demonstrated and disclosed on a continuous basis to investors.

be disclosed to investors on a timely basis in accordance with the terms and conditions of all underlying transaction documents.

Securitisations featuring a revolving period should include provisions for appropriate early amortisation events and/or triggers of termination of the revolving period, including, notably: (i) deterioration in the credit quality of the underlying exposures; (ii) a failure to acquire sufficient new underlying exposures of similar credit quality; and (iii) the occurrence of an insolvency-related event with regard to the originator or the servicer.

Following the occurrence of a performance-related trigger, an event of default or an acceleration event, the securitisation positions should be repaid in accordance with a sequential amortisation priority of payments, in order of tranche seniority, and there should not be provisions requiring immediate liquidation of the underlying assets at market value.

To assist investors in their ability to appropriately model the cash flow waterfall of the securitisation, the originator or sponsor should make available to investors, both before pricing of the securitisation and on an ongoing basis, a liability cash flow model or information on the cash flow provisions allowing appropriate modelling of the securitisation cash flow waterfall.

To ensure that debt forgiveness, forbearance, payment holidays and other asset performance remedies can be clearly identified, policies and procedures, definitions, remedies and actions relating to delinquency, default or restructuring of underlying debtors should be provided in clear and consistent terms, such that investors can clearly identify debt forgiveness, forbearance, payment holidays, restructuring and other asset performance remedies on an ongoing basis.

No additional language proposed.

B10. Voting and enforcement rights

To help ensure clarity for securitisation note holders of their rights and ability to control and enforce on the underlying credit claims or receivables, upon insolvency of the originator or sponsor, all voting and enforcement rights related to the credit claims or receivables should be transferred to the securitisation. Investors' rights in the securitisation should be clearly defined in all circumstances, including the rights of senior versus junior note holders.

No additional language proposed.

B11. Documentation disclosure and legal review

To help investors to fully understand the terms, conditions, legal and commercial information prior to investing in a new offering⁵⁷ and to ensure that this information is set out in a clear and effective manner for all programmes and offerings, sufficient initial offering⁵⁸ and draft underlying⁵⁹ documentation should be made available to investors (and readily available to potential investors on a continuous basis) within a reasonably sufficient period of time prior to pricing, or when legally permissible, such that the investor is provided with full disclosure of the legal and commercial information and comprehensive risk factors

⁵⁷ For the avoidance of doubt, any type of securitisation should be allowed to fulfil the requirements of Criterion 11 once it meets its prescribed standards of disclosure and legal review.

⁵⁸ Eg draft offering circular, draft offering memorandum, draft offering document or draft prospectus, such as a "red herring".

⁵⁹ Eg asset sale agreement, assignment, novation or transfer agreement; servicing, backup servicing, administration and cash management agreements; trust/management deed, security deed, agency agreement, account bank agreement, guaranteed investment contract, incorporated terms or master trust framework or master definitions agreement as applicable; any relevant inter-creditor agreements, swap or derivative documentation, subordinated loan agreements, start-up loan agreements and liquidity facility agreements; and any other relevant underlying documentation, including legal opinions.

needed to make informed investment decisions. Final offering documents should be available from the closing date and all final underlying transaction documents shortly thereafter. These should be composed such that readers can readily find, understand and use relevant information.

To ensure that all the securitisation's underlying documentation has been subject to appropriate review prior to publication, the terms and documentation of the securitisation should be reviewed by an appropriately experienced third party legal practice, such as a legal counsel already instructed by one of the transaction parties, eg by the arranger or the trustee. Investors should be notified in a timely fashion of any changes in such documents that have an impact on the structural risks in the securitisation.

No additional language proposed.

B12. Alignment of interest

In order to align the interests of those responsible for the underwriting of the credit claims or receivables with those of investors, the originator or sponsor of the credit claims or receivables should retain a material net economic exposure and demonstrate a financial incentive in the performance of these assets following their securitisation.

No additional language proposed.

C. Fiduciary and servicer risk

C13. Fiduciary and contractual responsibilities

To help ensure servicers have extensive workout expertise, thorough legal and collateral knowledge and a proven track record in loss mitigation, such parties should be able to demonstrate expertise in the servicing of the underlying credit claims or receivables, supported by a management team with extensive industry experience. The servicer should at all times act in accordance with reasonable and prudent standards. Policies, procedures and risk management controls should be well documented and adhere to good market practices and relevant regulatory regimes. There should be strong systems and reporting capabilities in place.

The party or parties with fiduciary responsibility should act on a timely basis in the best interests of the securitisation note holders, and both the initial offering and all underlying documentation should contain provisions facilitating the timely resolution of conflicts between different classes of note holders by the trustees, to the extent permitted by applicable law.

The party or parties with fiduciary responsibility to the securitisation and to investors should be able to demonstrate sufficient skills and resources to comply with their duties of care in the administration of the securitisation vehicle.

To increase the likelihood that those identified as having a fiduciary responsibility towards investors as well as the servicer execute their duties in full on a timely basis, remuneration should be such that these parties are incentivised and able to meet their responsibilities in full and on a timely basis.

Additional guidance for capital purposes

In assessing whether "strong systems and reporting capabilities are in place", well documented policies, procedures and risk management controls, as well as strong systems and reporting capabilities, may be substantiated by a third-party review for non-banking entities.

Rationale

Banks are subject to an ongoing assessment of their internal reporting systems and capabilities, as outlined in Criterion 7 of Principle 15 of the Basel Core Principles for Effective Banking Supervision. To ensure an assessment that is comparable with that of banking entities, other non-bank originating entities not subject to the Basel Core Principles should provide proof of an independent assessment of their reporting capabilities. Evidence of a suitable third-party review can be based on the supervisory regime applicable to this entity (if such supervision covers internal reporting systems).

C14. Transparency to investors

To help provide full transparency to investors, assist investors in the conduct of their due diligence and to prevent investors being subject to unexpected disruptions in cash flow collections and servicing, the contractual obligations, duties and responsibilities of all key parties to the securitisation, both those with a fiduciary responsibility and of the ancillary service providers, should be defined clearly both in the initial offering and all underlying documentation. Provisions should be documented for the replacement of servicers, bank account providers, derivatives counterparties and liquidity providers in the event of failure or non-performance or insolvency or other deterioration of creditworthiness of any such counterparty to the securitisation.

To enhance transparency and visibility over all receipts, payments and ledger entries at all times, the performance reports to investors should distinguish and report the securitisation's income and disbursements, such as scheduled principal, redemption principal, scheduled interest, prepaid principal, past due interest and fees and charges, delinquent, defaulted and restructured amounts under debt forgiveness and payment holidays, including accurate accounting for amounts attributable to principal and interest deficiency ledgers.

Additional guidance for capital purposes

The terms "initial offering" and "underlying transaction documentation" should be understood in the context defined by Criterion B11. The term "income and disbursements" should also be understood as including deferment, forbearance, and repurchases among the items described.

Rationale

Certain asset classes utilise deferment and forbearance to describe the status of underlying loans, in addition to reporting a pool's standard ageing and delinquency.

D. Additional criteria for capital purposes

D15. Credit risk of underlying exposures

At the portfolio cut-off date the underlying exposures have to meet the conditions under the Standardised Approach for credit risk, and after taking into account any eligible credit risk mitigation, for being assigned a risk weight equal to or smaller than:

- [40%] on a value-weighted average exposure basis for the portfolio where the exposures are loans secured by residential mortgages or fully guaranteed residential loans;
- [50%] on an individual exposure basis where the exposure is a loan secured by a commercial mortgage;

- [75%] on an individual exposure basis where the exposure is a retail exposure; or
- [100%] on an individual exposure basis for any other exposure.

Rationale

The Committee was concerned that the absence of consistent underwriting practices across jurisdictions could result in different risk characteristics within a single asset class. A criterion based on regulatory risk weights under the Standardised Approach has the merit of using globally consistent regulatory risk measures. It also provides the benefit of applying a filter to ensure higher-risk underlying exposures are not granted an alternative capital treatment as STC-compliant transactions. Careful consideration is needed on whether the risk weight requirement should be applied on individual exposures or on a portfolio-weighted average basis.

Additionally, it should be noted that the draft risk weights included are based on the current Standardised Approach. The exact risk-weight cut-offs to be used will need to be revisited once the ongoing revisions to the Standardised Approach for credit risk are finalised.

D16. Granularity of the pool

At the portfolio cut-off date, the aggregated value of all exposures to a single obligor shall not exceed 1%⁶⁰ of the aggregated outstanding exposure value of all exposures in the portfolio.

Rationale

The Committee proposes providing a concrete definition of granularity to help ensure that granular asset portfolios would be at a level where statistical approaches to model losses can be employed, as opposed to having to review the credit quality of individual exposures.

⁶⁰ In jurisdictions with structurally concentrated corporate loan markets available for securitisation subject to ex ante supervisory approval and only for corporate exposures, the applicable maximum concentration threshold could be increased to 2% if the originator or sponsor retains subordinated tranche(s) that form loss absorbing credit enhancement, as defined in paragraph 55 of the December 2014 framework, and which cover at least the first 10% of losses. These tranche(s) retained by the originator or sponsor shall not be eligible for the STC capital treatment.