

Clients & Friends Memo

Revised Basel Capital Accord

July 14, 2004 The Basel Committee on Banking Supervision¹ (the "Committee") in late June 2004 issued the final version of the revised Basel Capital Accord ("International Convergence of Capital Measurement and Capital Standards: A Revised Framework") (the "Revised Accord"). The Revised Accord replaces the original Basel Capital Accord adopted in 1988 (the "Original Accord"). It sets forth a model set of capital adequacy guidelines that - subject to implementation in individual jurisdictions - is intended for use by regulators and banking organizations both in the countries represented on the Committee and elsewhere.

The Committee intends for the Revised Accord to be available for implementation by the end of 2006; *provided* that the most advanced approaches to risk measurement will not be available for implementation until year-end 2007. The delay in the implementation of the advanced approaches is intended to provide banks and supervisors with an additional year to conduct impact analysis or parallel capital calculations under the existing and new rules.

The Revised Accord consists of three principal components: (a) minimum regulatory capital requirements; (b) guidelines for the supervisory review of each institution's capital adequacy and internal assessment process; and (c) guidelines pertaining to the effective use of market discipline. This memorandum discusses the minimum regulatory capital requirements in the Revised Accord with a particular focus on the treatment of asset securitizations.

Scope of the Securitization Framework

In general, the securitization framework applies to transactions that involve the stratification or tranching of credit risk. Securitization exposures include, but are not restricted to, the following: asset-backed securities, mortgage-backed securities, credit enhancements, liquidity facilities, interest rate or currency swaps and credit derivatives. Transactions that constitute "specialized lending" ("SL") will not be treated as securitizations but will instead be treated as corporate exposures as described in Exhibit A hereto.

¹ The Basel Committee on Banking Supervision is a committee of banking supervisory authorities which was established by the central bank governors of the Group of Ten countries in 1975. It consists of senior representatives of banking supervisory authorities and central banks from Belgium, Canada, France, Germany, Italy, Japan, Luxembourg, the Netherlands, Sweden, Switzerland, the United Kingdom and the United States. It usually meets at the Bank for International Settlements in Basel, where its permanent Secretariat is located.

The securitization framework focuses on the risk related to different exposures and, in certain circumstances, it applies different capital requirements for originating banks, as described herein.² In order for a bank to obtain capital relief with respect to a securitization transaction (including both funded and synthetic transactions) certain operational criteria must be satisfied, as further described in Exhibit B hereto. In addition, certain operational criteria apply to the ability of a bank to use credit ratings provided by rating agencies to obtain capital relief with respect to a securitization transaction, as further described in Exhibit C hereto.

The framework for the treatment of securitizations permits banks to calculate the capital requirements in securitizations under either a Standardized Approach or (if the bank has received regulatory approval) an Internal Ratings-Based (“IRB”) Approach. The Standardized Approach and the IRB Approach are each discussed in detail below.

Standardized Approach for Securitization Exposures

The risk-weighted amount of a securitization exposure is computed under the Standardized Approach by multiplying the amount of the position by the appropriate risk weight determined in accordance with the following tables. For off-balance sheet exposures, banks must apply a credit conversion factor (“CCF”) and then risk weight the resultant credit equivalent amount. For positions with long-term ratings of B+ and below and for those that are unrated, deduction from capital will generally be required. Deduction is also generally required for positions with short-term ratings other than A-1/P-1 (or higher), A-2/P-2 or A-3/P-3.

The capital treatment of positions retained by originators, liquidity facilities, recognition of credit risk mitigants, and securitizations of revolving exposures are identified separately.

Long-term rating category

External Credit Assessment	AAA to AA-	A+ to A-	BBB+ to BBB-	BB+ to BB-	B+ and below or unrated
Risk Weight	20%	50%	100%	350%	Deduction

² A bank is considered to be an originator with regard to a certain securitization if it meets either of the following conditions:

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

Short-term rating category

External Credit Assessment	A-1/P-1	A-2/P-2	A-3/P-3	All other ratings or unrated
Risk Weight	20%	50%	100%	Deduction

Only third-party investors, as opposed to banks that serve as originators, may recognize external credit assessments that are equivalent to BB+ to BB- for risk weighting purposes of securitization exposures. Originating banks must deduct all retained securitization exposures rated below investment grade (i.e., BBB-).

Exceptions to General Treatment of Unrated Securitization Exposures*(a) Treatment of unrated most senior securitization exposures in securitizations*

If the most senior securitization exposure of a traditional or synthetic securitization is unrated, a bank that holds or guarantees such an exposure may apply a “look-through” treatment provided the composition of the underlying pool is known at all times. Banks are not required to consider interest rate or currency swaps when determining whether a position is most senior for the purpose of applying the “look-through” approach. In the “look-through” treatment, the unrated most senior position receives the average risk weight of the underlying exposures subject to supervisory review. Where the bank is unable to determine the risk weights assigned to the underlying credit risk exposure(s), the unrated position must be deducted.

(b) Treatment of exposures that are in a second loss position or better in asset-backed commercial paper (“ABCP”) programs

Deduction is not required for unrated securitization exposures provided by sponsoring banks to ABCP programs that satisfy the following requirements:

1. The exposure is economically in a second loss position or better and the first loss position provides significant credit protection to the second loss position;
2. The associated credit risk is the equivalent of investment grade or better; and
3. The bank holding the unrated securitization exposure must not retain or provide the first loss position.

Where these conditions are satisfied, the risk weight is the greater of (i) 100% or (ii) the highest risk weight assigned to any of the underlying individual exposures covered by the facility.

(c) Risk weights for eligible liquidity facilities

For eligible liquidity facilities, the risk weight applied to the exposure's credit equivalent amount is equal to the highest risk weight assigned to any of the underlying individual exposures covered by the facility.

Eligible Liquidity Facilities

Banks are permitted to treat off-balance sheet securitization exposures as eligible liquidity facilities if the following minimum requirements are satisfied:

- (a) The facility documentation must clearly identify and limit the circumstances under which it may be drawn. Draws under the facility must be limited to the amount that is likely to be repaid fully from the liquidation of the underlying exposures and any seller-provided credit enhancements. In addition, the facility must not cover any losses incurred in the underlying pool of exposures prior to a draw, or be structured such that draw-down is certain (as indicated by regular or continuous draws);
- (b) The facility must be subject to an asset quality test that precludes it from being drawn to cover credit risk exposures that are in default.³ In addition, if the exposures that a liquidity facility is required to fund are externally rated securities, the facility can only be used to fund securities that are externally rated investment grade at the time of funding;
- (c) The facility cannot be drawn after all applicable (e.g., transaction specific and program-wide) credit enhancements from which the liquidity would benefit have been exhausted; and
- (d) Repayment of draws on the facility (i.e., assets acquired under a purchase agreement or loans made under a lending agreement) must not be subordinated to any interests of any note holders in the program (e.g., ABCP program) or subject to deferral or waiver.

Where these conditions are met, the bank may apply a 20% CCF to the amount of eligible liquidity facilities with an original maturity of one year or less, or a 50% CCF if the facility has an original maturity of more than one year. However, if an external rating of the facility itself is used for risk-weighting the facility, a 100% CCF must be applied.

Treatment of Overlapping Exposures

Banks are required to hold risk-based capital only once for any exposure covered by overlapping facilities provided by the same bank. In particular, banks are required to hold risk-based capital based on the highest

³ A 'default' is considered to have occurred with regard to a particular obligor when either or both of the two following events has taken place:

- The bank considers that the obligor is unlikely to pay its credit obligations to the banking group in full, without recourse by the bank to actions such as realizing security (if held).
- The obligor is past due more than 90 days on any material credit obligation to the banking group. Overdrafts will be considered as being past due once the customer has breached an advised limit or been advised of a limit smaller than current outstandings.

amount of risk-based capital assessed against any such overlapping facility. For example, if a bank provides a program-wide credit enhancement covering 10 percent of the underlying asset pools in an ABCP program and pool-specific liquidity facilities covering 100 percent of each of the underlying asset pools, the bank would be required to hold capital against (i) 10 percent of the underlying asset pools because it is providing the program-wide credit enhancement and (ii) 90 percent of the liquidity facilities it is providing to each of the underlying asset pools.

If different banks provide overlapping exposures to an asset-backed issuer, each bank is required by the final rule to hold capital against the entire maximum amount of its exposure. As a result, duplication of capital charges could occur where multiple banking organizations have overlapping exposures to the same asset-backed issuer.

Eligible Servicer Cash Advance Facilities

Subject to national discretion, 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, such undrawn servicer cash advances of facilities that are unconditionally cancelable without prior notice may be eligible for a 0% CCF.

Capital Requirement for Early Amortization Provisions

Scope

An originating bank is required to hold capital against all or a portion of the investor's interest (i.e., against both the drawn and the undrawn balances related to the securitized exposure) when:

- (a) It sells exposures into a structure that contains an early amortization feature; and
- (b) The exposures sold are of a revolving nature. These involve exposures where the borrower is permitted to vary the drawn amount and repayments within an agreed limit under a line of credit (e.g., credit card receivables and corporate loan commitments).

Replenishment structures where the underlying exposures do not revolve and early amortization ends the ability of the bank to add new exposures would not receive an additional capital charge under the early amortization treatment.

Also exempt from the early amortization treatment are the following: transactions of revolving assets containing early amortization features that mimic term structures (i.e., where the risk on the underlying facilities does not return to the originating bank); structures where a bank securitizes one or more credit lines and where investors remain fully exposed to future draws by borrowers even after an early amortization event has occurred; and transactions where the early amortization clause is solely triggered by events not related to the performance of the securitized assets or the selling bank, such as material changes in tax laws or regulations.

Maximum capital requirement

For a bank subject to the early amortization treatment, the total capital charge for all of its positions will be subject to a maximum capital charge (i.e., a 'cap') equal to the greater of (i) that required for retained securitization exposures, or (ii) the capital requirement that would apply had the exposures not been securitized. In addition, banks must deduct the entire amount of any gain-on-sale and credit enhancing I/Os arising from the securitization transaction.

General mechanics

The originator's capital charge for the investors' interest is determined as the product of (a) the investor's interest, (b) the appropriate CCF (as discussed below) and (c) the risk weight appropriate to the underlying exposure type, as if the exposures had not been securitized. As described below, the CCFs depend upon whether the early amortization repays investors through a controlled or non-controlled mechanism. They also differ according to whether the securitized exposures are uncommitted retail credit lines (e.g., credit card receivables) or other credit lines (e.g., revolving corporate facilities). The uncommitted lines must be unconditionally cancelable without prior notice.

Controlled Early Amortization Features

A controlled early amortization provision must meet the following conditions:

- (a) The bank must have an appropriate capital/liquidity plan in place to ensure that it has sufficient capital and liquidity available in the event of an early amortization;
- (b) Throughout the duration of the transaction, including the amortization period, there is a pro rata sharing of interest, principal, expenses, losses and recoveries based on the bank's and investor's shares of the receivables outstanding at the beginning of each month;
- (c) The bank must set a period for amortization that would be sufficient for 90% of the total debt outstanding at the beginning of the early amortization period to have been repaid or recognized as in default; and
- (d) The pace of repayment should not be any more rapid than would be allowed by straight-line amortization over the period set out in clause (c) above.

An early amortization provision that does not satisfy the conditions for a controlled early amortization provision will be treated as a non-controlled early amortization provision.

Mechanics

For uncommitted retail credit lines (e.g., credit card receivables) in securitizations containing controlled early amortization features, banks must compare the three-month average excess spread to the point at which the

bank is required to trap excess spread as economically required by the structure. In cases where such a transaction does not require excess spread to be trapped, the trapping point is deemed to be 4.5 percentage points. The bank must divide the excess spread level by the transaction's excess spread trapping point to determine the appropriate segments and apply the corresponding conversion factors, as outlined in the following table.

Controlled early amortization features

	Uncommitted	Committed
Retail credit lines	<p>3-month average excess spread Credit Conversion Factor (CCF)</p> <p>133.33% of trapping point or more 0% CCF</p> <p>Less than 133.33% to 100% of trapping point 1% CCF</p> <p>Less than 100% to 75% of trapping point 2% CCF</p> <p>Less than 75% to 50% of trapping point 10% CCF</p> <p>Less than 50% to 25% of trapping point 20% CCF</p> <p>Less than 25% 40% CCF</p>	90% CCF
Non-retail credit lines	90% CCF	90% CCF

Banks are required to apply the conversion factors outlined above for controlled mechanisms to the investor's interest (determined as described above).

All other securitized revolving exposures (i.e., those that are committed and all non-retail exposures) with controlled early amortization features will be subject to a CCF of 90% against the off-balance sheet exposures.

Non-controlled Early Amortization Features

Early amortization features that do not satisfy the definition of a controlled early amortization will be considered non-controlled and treated as described below.

Uncommitted retail exposures

For uncommitted retail credit lines (e.g., credit card receivables) in securitizations containing non-controlled early amortization features, banks must compare the three-month average to the point at which the bank is required to trap excess spread as economically required by the structure. In cases where such a transaction does not require excess spread to be trapped, the trapping point is deemed to be 4.5 percentage points. The bank must divide the excess spread level by the transaction’s excess spread trapping point to determine the appropriate segments and apply the corresponding conversion factors, as outlined in the following table.

Non-controlled early amortization features

	Uncommitted	Committed
Retail credit lines	<p>3-month average excess spread Credit Conversion Factor (CCF)</p> <p>133.33% or more of trapping point 0% CCF</p> <p>Less than 133.33% to 100% of trapping point 5% CCF</p> <p>Less than 100% to 75% of trapping point 15% CCF</p> <p>Less than 75% to 50% of trapping point 50% CCF</p> <p>Less than 50% of trapping point 100% CCF</p>	100% CCF
Non-retail credit lines	100% CCF	100% CCF

All other securitized revolving exposures (i.e., those that are committed and all non-retail exposures) with non-controlled early amortization features will be subject to a CCF of 100% against the off-balance sheet exposures.

Internal Ratings-Based Approach for Securitizations

Banks that have received approval to use the IRB approach for the type of underlying exposure(s) securitized (e.g., for their corporate, retail or SL portfolio) must use the IRB approach for securitizations. Conversely, banks may not use the IRB approach to securitization unless they receive approval to use the IRB approach for the underlying exposures from their national supervisors. If the bank is using the IRB approach for some exposures and the standardized approach for other exposures in the underlying pool, it should generally use the approach corresponding to the predominant share of exposures within the pool. The bank should consult with its national supervisors on which approach to apply to its securitization exposures. To ensure appropriate capital levels, there may be instances where the supervisor requires a treatment other than this general rule. Where there is no specific IRB treatment for the underlying asset type, originating banks that have received approval to use the IRB approach must calculate capital charges on their securitization exposures using the standardized approach in the securitization framework, and investing banks with approval to use the IRB approach must apply the ratings-based approach.

Hierarchy of approaches

The Ratings-Based Approach (“RBA”) must be applied to securitization exposures that are rated, or where a rating can be inferred. Where an external or an inferred rating is not available, either the Supervisory Formula (“SF”) or the Internal Assessment Approach (“IAA”) must be applied. The IAA is only available to exposures (e.g., liquidity facilities and credit enhancements) that banks (including third-party banks) extend to ABCP programs. Such exposures must satisfy the IAA conditions (as described below). Liquidity facilities to which none of these approaches can be applied may qualify for an alternative formula that avoids the need for deduction. See “Liquidity Facilities” below. Eligible servicer cash advance facilities may qualify for a 0% CCF as described above. Securitization exposures to which none of these exposures can be applied must be deducted.

Maximum capital requirement

For a bank using the IRB approach to securitization, the maximum capital requirement for the securitization exposures it holds is equal to the IRB capital requirement that would have been assessed against the underlying exposures had they not been securitized and treated under the IRB framework. In addition, banks must deduct the entire amount of any gain-on-sale and credit enhancing I/Os arising from the securitization transaction in accordance with the Revised Accord.

Ratings Based Approach (“RBA”)

Under the RBA, the risk-weighted assets are determined by multiplying the amount of the exposure by the appropriate risk weights, provided in the tables below.

The risk weights depend on (i) the external rating grade or an available inferred rating, (ii) whether the credit assessment (external or inferred) represents a long-term or a short-term credit rating, (iii) the granularity of the underlying pool and (iv) the seniority of the position.

For purposes of the RBA, a securitization exposure is treated as a senior tranche if it is effectively backed or secured by a first claim on the entire amount of the assets in the underlying securitized pool. While this generally includes only the most senior position within a securitization transaction, in some instances there may be some other claim that, in a technical sense, may be more senior in the waterfall (e.g., a swap claim) but may be disregarded for purposes of determining which positions are subject to the “senior tranches” column.

Examples:

- (a) In a typical synthetic securitization, the “super-senior” tranche would be treated as a senior tranche, provided that all of the conditions for inferring a rating from a lower tranche are fulfilled.
- (b) In a traditional securitization where all tranches above the first loss piece are rated, the most highly rated position would be treated as a senior tranche. However, when there are several tranches that share the same rating, only the most senior one in the waterfall would be treated as senior.
- (c) Usually a liquidity facility supporting an ABCP program would not be the most senior position within the program; the commercial paper, which benefits from the liquidity support, typically would be the most senior position. However, if the liquidity facility is sized to cover all of the outstanding commercial paper, it can be viewed as covering all losses on the underlying receivables pool that exceed the amount of over-collateralization/reserves provided by the seller and as being most senior. As a result, the RBA risk weights in the left-most column can be used for such positions. On the other hand, if a liquidity or credit enhancement facility constituted a mezzanine position in economic substance rather than a senior position in the underlying pool, then the “Base risk weights” column is applicable.

The ABS risk weights provided in the first table below apply when the external assessment represents a long-term credit rating, as well as when an inferred rating based on a long-term rating is available.

Banks may apply the risk weights for senior positions if the effective number of underlying exposures (N)⁴ is 6 or more and the position is senior as described above. When N is less than 6, the risk weights in column 4 of the first table below apply. In all other cases, the risk weights in column 3 of the first table below apply.

⁴ (N) is defined in Exhibit D.

ABS risk weights when the external assessment represents a long-term credit rating and/or an inferred rating derived from a long-term assessment

External Rating (Illustrative)	Risk weights for senior positions and eligible senior IAA exposures	Base risk weights	Risk weights for tranches backed by non-granular pools
AAA	7%	12%	20%
AA	8%	15%	25%
A+	10%	18%	35%
A	12%	20%	35%
A-	20%	35%	35%
BBB+	35%	50%	50%
BBB	60%	75%	75%
BBB-	100%	100%	100%
BB+	250%	250%	250%
BB	425%	425%	425%
BB-	650%	650%	650%
Below BB- and unrated	Deduction	Deduction	Deduction

The ABS risk weights in the table below apply when the external assessment represents a short-term credit rating, as well as when an inferred rating based on a short-term rating is available. The decision rules outlined above also apply for short-term ratings.

RBA risk weights when the external assessment represents a short-term credit rating and/or an inferred rating derived from a short-term assessment

External Rating (Illustrative)	Risk weights for senior positions and eligible senior IAA exposures	Base risk weights	Risk weights for tranches backed by non-granular pools
A-1/P-1	7%	12%	20%
A-2/P-2	12%	20%	35%
A-3/P-3	60%	75%	75%
All other ratings/unrated	Deduction	Deduction	Deduction

Use of Inferred Ratings

When the following minimum operational requirements are satisfied a bank *must* attribute an inferred rating to an unrated position. These requirements are intended to ensure that the unrated position is senior in *all* respects to an externally rated securitization exposure termed the 'reference securitization exposure'.

Operational requirements for inferred ratings

The following operational requirements must be satisfied to recognize inferred ratings:

- (a) The reference securitization exposure (e.g., ABS) must be subordinate in *all* respects to the unrated securitization exposure. Credit enhancements, if any, must be taken into account when assessing the relative subordination of the unrated exposure and the reference securitization exposure. For example, if the reference securitization 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 securitization exposure.
- (b) The maturity of the reference securitization 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 changes in the external rating of the reference securitization exposure.

- (d) The external rating of the reference securitization exposure must satisfy the general requirements for recognition of external ratings as delineated in the standardized approach to external credit assessments.

Internal Assessment Approach (“IAA”)

A bank may use its internal assessments of the credit quality of the securitization exposures the bank extends to ABCP programs (e.g., liquidity facilities and credit enhancements) if the bank's internal assessment process meets the operational requirements below. Internal assessments of exposures provided to ABCP programs must be mapped to equivalent external ratings of an external credit assessment institution (“ECAI”). Those rating equivalents are used to determine the appropriate risk weights under the RBA for purposes of assigning the notional amounts of the exposures.

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 program.

- (a) For the unrated exposure to qualify for the IAA, the ABCP must be externally rated. The ABCP itself is subject to the RBA.
- (b) The internal assessment of the credit quality of a securitization exposure to the ABCP program must be based on an 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 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 with 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 program's commercial paper for the asset type

being purchased by the program. However, banks should consider, to some extent, all publicly available ECAI ratings methodologies in developing their internal assessments.

- In the case where (i) the commercial paper issued by an ABCP program 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 2 to 3 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 program's commercial paper, then the revised rating methodology must be considered in evaluating whether the internal assessments assigned to ABCP program exposures are in need of revision.
 - A bank cannot utilize an ECAI's rating methodology to derive an internal assessment if the ECAI's process or rating criteria is 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 program'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 program 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 program must have credit and investment guidelines, i.e., underwriting standards, for the ABCP program. In the consideration of an asset purchase, the ABCP program (i.e., the program 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 program'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 geographic area; and
 - limit the tenor of the assets to be purchased.
- (k) The ABCP program should have collections processes established that consider the operational capability and credit quality of the servicer. The program 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 program.
- (l) The aggregate estimate of loss on an asset pool that the ABCP program 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, e.g., weighted average credit score, identify any concentrations to an individual obligor or geographic region, and the granularity of the asset pool.
- (m) The ABCP program 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.

The notional amount of the securitization exposure to the ABCP program must be assigned to the risk weight in the RBA appropriate to the credit rating equivalent assigned to the bank's exposure.

If a bank's internal assessment process is no longer considered adequate, the bank's supervisor may preclude the bank from applying the internal assessment approach 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 SF or, if not available, to a specified alternative method.

Liquidity Facilities

Liquidity facilities are treated as any other securitization exposure and will generally receive a CCF of 100%, except as provided below. If the facility is externally rated, the bank may rely on the external rating under the RBA. If the facility is not rated and an inferred rating is not available, the bank must apply the Supervisory Formula (as described below), unless the IAA can be applied.

When (i) a bank's position under a liquidity facility is not rated, (ii) a rating cannot be inferred, (iii) the IAA is not available, and (iv) it is not practical for the bank to use either the bottom-up or the top-down approach in calculating risk capital requirements under the Supervisory Formula (the bottom-up and top-down approaches are specific methods set forth in the Revised Accord for use in the calculation of the risk capital requirements for purchased receivables), the bank may, on an exceptional basis and subject to supervisory consent, temporarily be allowed to apply the following method. If the liquidity facility satisfies the eligibility criteria for an "eligible" liquidity facility, as described above under "Standardized Approach for Securitization Exposures—Eligible Liquidity Facilities," the highest risk weight assigned under the standardized approach to any of the underlying individual exposures covered by the liquidity facility can be applied to the liquidity facility, and the CCF must be 50% for a facility with an original maturity of one year or less, or 100% if the facility has an original maturity of more than one year. In all other cases, the notional amount of the liquidity facility must be deducted.

Treatment of Overlapping Exposures

Overlapping exposures are treated as described above under "Standardized Approach for Securitization Exposures—Treatment of Overlapping Exposures."

Supervisory Formula ("SF")

Under the SF, the capital charge for a securitization tranche depends on five bank-supplied inputs: the IRB capital charge had the underlying securitized exposures not been securitized (K_{IRB}); the tranche's credit enhancement level (L) and thickness (T); the pool's effective number of exposures (N); and the pool's exposure-weighted average loss-given-default (LGD). Given these inputs, the IRB capital charge for the securitization tranche is calculated with regard to the SF. Each of (i) the formula for determining the IRB capital charge for this purpose, (ii) the definitions of (L), (T), (N) and (LGD), (iii) the SF and (iv) a simplified method for computing (N) and (LGD) in securitizations of retail exposures, have been reproduced in Exhibit D hereto.

If you would like to discuss any aspect of the Revised Accord, please contact Jim Croke at 212-504-6139 or Peter Manbeck at 212-504-6626.

EXHIBIT A

Specialized Lending

In general, a corporate exposure is defined as a debt obligation of a corporation, partnership or proprietorship. The five sub-classes are project finance, object finance, commodities finance, income-producing real estate and high-volatility commercial real estate. Each of these sub-classes is defined below. Such lending possesses all the following characteristics, either in legal form or economic substance:

- The exposure is typically an entity (often a special purpose entity (“SPE”)) which was created specifically to finance and/or operate physical assets;
- The borrowing entity has little or no other material assets or activities, and therefore little or no independent capacity to repay the obligation, apart from the income that it receives from the asset(s) being financed;
- The terms of the obligation give the lender a substantial degree of control over the asset(s) and the income that it generates; and
- As a result of the preceding factors, the primary source of repayment of the obligation is the income generated by the asset(s), rather than the independent capacity of a broader commercial enterprise.

Project Finance

Project finance (“PF”) is a method of funding in which the lender looks primarily to the revenues generated by a single project, both as the source of repayment and as security for the exposure. This type of financing is usually for large, complex and expensive installations that might include, for example, power plants, chemical processing plants, mines, transportation infrastructure, environment, and telecommunications infrastructure. Project finance may take the form of financing of the construction of a new capital installation, or refinancing of an existing installation, with or without improvements.

In PF transactions, the lender is usually paid solely or almost exclusively out of the money generated by the contracts for the facility’s output, such as the electricity sold by a power plant. The borrower is usually an SPE that is not permitted to perform any function other than developing, owning, and operating the installation. The consequence is that repayment depends primarily on the project’s cash flow and on the collateral value of the project’s assets. In contrast, if repayment of the exposure depends primarily on a well established, diversified, credit-worthy, contractually obligated end-user for repayment, it is considered a secured exposure to that end-user.

Object Finance

Object finance (“OF”) refers to a method of funding the acquisition of physical assets (e.g., ships, aircraft, satellites, railcars, and fleets) where the repayment of the exposure is dependent on the cash flows generated by the specific assets that have been financed and pledged or assigned to the lender. A primary source of these cash flows might be a rental or lease contract with one or several third parties. In contrast, if the exposure is to a borrower whose financial condition and debt-servicing capacity enables it to repay the debt

without undue reliance on the specifically pledged assets, the exposure should be treated as a collateralized corporate exposure.

Commodities Finance

Commodities finance (“CF”) refers to structured short-term lending to finance reserves, inventories, or receivables of exchange-traded commodities (e.g., crude oil, metals, or crops), where the exposure will be repaid from the proceeds of the sale of the commodity and the borrower has no independent capacity to repay the exposure. This is the case when the borrower has no other activities and no other material assets on its balance sheet. The structured nature of the financing is designed to compensate for the weak credit quality of the borrower. The exposure’s rating reflects its self-liquidating nature and the lender’s skill in structuring the transaction rather than the credit quality of the borrower.

CF lending can be distinguished from exposures financing the reserves, inventories, or receivables of other more diversified corporate borrowers. Banks are able to rate the credit quality of the latter type of borrowers based on their broader ongoing operations. In such cases, the value of the commodity serves as a risk mitigant rather than as the primary source of repayment.

Income-producing Real Estate

Income-producing real estate (“IPRE”) refers to a method of providing funding to real estate (such as, office buildings to let, retail space, multifamily residential buildings, industrial or warehouse space, and hotels) where the prospects for repayment and recovery on the exposure depend primarily on the cash flows generated by the asset. The primary source of these cash flows would generally be lease or rental payments or the sale of the asset. The borrower may be, but is not required to be, an SPE, an operating company focused on real estate construction or holdings, or an operating company with sources of revenue other than real estate. The distinguishing characteristic of IPRE versus other corporate exposures that are collateralized by real estate is the strong positive correlation between the prospects for repayment of the exposure and the prospects for recovery in the event of default, with both depending primarily on the cash flows generated by a property.

High-volatility Commercial Real Estate

High-volatility commercial real estate (“HVCRE”) lending is the financing of commercial real estate that exhibits higher loss rate volatility (i.e., higher asset correlation) compared to other types of SL. HVCRE includes:

- Commercial real estate exposures secured by properties of types that are categorized by the national supervisor as sharing higher volatilities in portfolio default rates;
- Loans financing any of the land acquisition, development and construction (“ADC”) phases for properties of those types in such jurisdictions; and
- Loans financing ADC of any other properties where the source of repayment at origination of the exposure is either the future uncertain sale of the property or cash flows whose source of repayment is substantially uncertain (e.g., the property has not yet been leased to the occupancy rate prevailing in that geographic market for that type of commercial real estate), unless the borrower has substantial equity at risk. Commercial ADC loans exempted from treatment as HVCRE loans on the basis of

certainty of repayment of borrower equity are, however, ineligible for certain additional reductions in the bank's deemed exposure that may apply to certain other SL exposures.

Where supervisors categorize certain types of commercial real estate exposures as HVCRE in their jurisdictions, they are required to make public such determinations. Other supervisors need to ensure that such treatment is then applied equally to banks under their supervision when making such HVCRE loans in that jurisdiction.

EXHIBIT B

Operational Criteria for the Recognition of Risk Transference

Traditional securitizations

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

Significant credit risk associated with the securitized exposures has been transferred to third parties.

The transferor does not maintain effective or indirect control over the transferred exposures.¹ The assets are legally isolated from the transferor in such a way (e.g., 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. These conditions must be supported by an opinion provided by a qualified legal counsel.

The securities issued are not obligations of the transferor. Thus, investors by purchasing the securities only have claim to the underlying pool of exposures.

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.

Clean-up calls may be included in the contract only if (i) the exercise thereof is not mandatory in substance or in form, but rather at the discretion of the originating bank, (ii) they are not structured to avoid allocating losses to credit enhancements or positions held by investors or otherwise structured to provide credit enhancement and (iii) they must only be exercisable when 10% or less of the original underlying portfolio, or securities issued remain, or, for synthetic securitizations, when 10% or less of the original reference portfolio value remains. If a clean-up call, when exercised, is found to serve as a credit enhancement, the action will be considered a form of implicit support provided by the bank and must be treated in accordance with the supervisory guidance pertaining to securitization transactions. In addition, the presence of a clean-up call which does not meet all of the criteria listed herein will result in a capital requirement.²

The securitization does not contain clauses that (i) require the originating bank to alter systematically the underlying exposures such that the pool's weighted average credit quality is improved unless this is achieved by selling assets 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

¹ It will be determined that a transferor has 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 realize 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.

² For a traditional securitization, the underlying exposures must be treated as if they were not securitized. Banks must not recognize in regulatory capital any gain on sale. For synthetic securitizations, the banks that have purchased protection must hold capital against the entire amount of the securitized exposures as if they did not benefit from any credit protection. Other specific requirements apply when a synthetic security incorporates a call (other than a clean-up call) that effectively terminates the transaction and the purchased credit protection on a specific date.

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.

Synthetic securitizations

For synthetic securitizations, the use of credit risk mitigation (“CRM”) techniques (i.e., collateral, guarantees and credit derivatives) for hedging the underlying exposure may be recognized for risk-based capital purposes only if the conditions outlined below are satisfied:

- (a) Credit risk mitigants must comply with specified guidelines regarding netting, valuation haircuts, legal certainty, the consequences of maturity mismatches, internal risk measurement procedures, internal audits, required document terms and other matters.
- (b) Eligible collateral is limited to specified instruments including, among others, cash on deposit with the bank which is incurring the counterparty exposure (including certificates of deposit or comparable instruments issued by the lending bank); debt securities rated at least BB- that are issued by sovereigns and public sector entities that are treated as sovereigns by the national supervisor; debt securities of other issuers rated at least BBB-; short-term debt securities rated at least A-3/P-3; unrated debt securities (so long as (i) such securities are issued by a bank, (ii) such securities are listed on a recognized exchange, (iii) such securities qualify as senior debt, (iv) if there are other rated issues of the issuing bank having the same seniority as such securities, the rated issues are rated at least BBB- or A-3/P-3 by a recognized external credit assessment institution, (v) if such securities are held as collateral by a bank, such bank has no information justifying a rating below BBB- or A-3/P-3 (as applicable) and (vi) the supervisor is sufficiently knowledgeable about the market liquidity of such security); and equities that are included in a main index or (if specified risk weighting procedures are followed) are listed on a recognized exchange.
- (c) Eligible guarantors are limited to core market participants including, at the discretion of the national supervisor, sovereign entities, public sector entities, banks and securities firms with a lower risk weight than the counterparty and other entities rated A- or better. This would include credit protection provided by parent, subsidiary and affiliate companies when they have a lower risk weight than the obligor. Banks may not recognize SPEs as eligible guarantors in the securitization framework.
- (d) Banks must transfer significant credit risk associated with the underlying exposure 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 (e.g., significant materiality thresholds below which credit protection is deemed not to be triggered even if a credit event occurs or those 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 weighted 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 banks, such as investors and third-party providers of credit enhancements, in response to a deterioration in the credit quality of the underlying 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) An opinion must be obtained from a qualified legal counsel that confirms the enforceability of the contracts in all relevant jurisdictions.

(g) Clean-up calls must satisfy the requirements set forth in clause (d) above under the heading "Traditional securitizations."

EXHIBIT C

Operational Requirements for Use of External Credit Assessments

National supervisors are responsible for determining whether an external credit assessment institution (“ECAI”) (e.g., a rating agency) meets the criteria listed below. An ECAI must satisfy each of the following six criteria.

- **Objectivity:** The methodology for assigning credit assessments must be rigorous, systematic, and subject to some form of validation based on historical experience. Moreover, assessments must be subject to ongoing review and responsive to changes in financial condition. Before being recognized by supervisors, an assessment methodology for each market segment, including rigorous back testing, must have been established for at least one year and preferably three years.
- **Independence:** An ECAI should be independent and should not be subject to political or economic pressures that may influence the rating. The assessment process should be as free as possible from any constraints that could arise in situations where the composition of the board of directors or the shareholder structure of the assessment institution may be seen as creating a conflict of interest.
- **International Access/Transparency:** The individual assessments should be available to both domestic and foreign institutions with legitimate interests and at equivalent terms. In addition, the general methodology used by the ECAI should be publicly available.
- **Disclosure:** An ECAI should disclose the following information: its assessment methodologies, including the definition of default, the time horizon, and the meaning of each rating; the actual default rates experienced in each assessment category; and the transitions of the assessments, e.g., the likelihood of AA ratings becoming A over time.
- **Resources:** An ECAI should have sufficient resources to carry out high quality credit assessments. These resources should allow for substantial ongoing contact with senior and operational levels within the entities assessed in order to add value to the credit assessments. Such assessments should be based on methodologies combining qualitative and quantitative approaches.
- **Credibility:** To some extent, credibility is derived from the criteria above. In addition, the reliance on an ECAI’s external credit assessments by independent parties (investors, insurers, trading partners) is evidence of the credibility of the assessments of an ECAI. The credibility of an ECAI is also underpinned by the existence of internal procedures to prevent the misuse of confidential information. In order to be eligible for recognition, an ECAI does not have to assess firms in more than one country.

The following operational criteria concerning the use of external credit assessments apply in both the standardized and IRB approaches of the securitization 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 ECAI as recognized by the bank’s national supervisor and must be “publicly available”:

- Eligible external credit assessments will only include those that are available publicly to the market, meaning that the rating is of the type that is published in an accessible form and included in the ECAI's transition matrix. Accordingly, eligible assessments for securitizations do not include those that are only made available to domestic and foreign institutions with legitimate interests and at equivalent terms. In addition, "private ratings" will not qualify for this condition, even if they are available to all parties of the transaction.
- (c) Eligible ECAIs must have a demonstrated expertise in securitizations, which may be evidenced by strong market acceptance.
- (d) A bank is expected to apply external credit assessments from eligible ECAIs consistently across a given type of securitization exposure. Further, a bank cannot use one institution's credit assessments for one or more tranches and another ECAI's credit assessment for other positions (whether retained or purchased) within the same securitization structure that may or may not be rated by the first ECAI.
- (e) In cases where two or more eligible ECAIs can be used and these assess the credit risk of the same securitization exposure differently, then (i) if there is only one assessment by an ECAI chosen by a bank for a particular claim, that assessment should be used, (ii) if there are two assessments by ECAIs chosen by a bank which map into different risk weights, the higher risk weight will be applied, and (iii) if there are three or more assessments with different risk weights, the assessments corresponding to the two lowest risk weights should be referred to and the higher of those two risk weights will be applied.
- (f) Where CRM is provided directly to an SPE of a structure by a provider assessed A- or better and reflected in the external credit assessment assigned to the securitization exposure(s), the risk weight appropriate to that assessment assigned to the exposure should be used. In order to avoid any double counting, there will be no additional capital recognition of the CRM techniques. If the CRM provider is assessed below A-, the covered securitization exposure should be treated as unrated.
- (g) In the situation where a credit risk mitigant is not obtained by the SPE but rather applied to a specific securitization exposure within a given structure (e.g., ABS tranche) the bank would treat the exposure as if it is unrated and then use the CRM treatment to recognize the hedge.

EXHIBIT D

IRB capital charge = the amount of exposures that have been securitized times the greater of (a) 0.0056*T or (b) (S[L+T] – S(L),

where the function S[.] (termed the “Supervisory Formula”) is defined in the following paragraph. When the bank holds only a proportional interest in the tranche, that position's capital charge equals the prorated share of the capital charge for the entire tranche.

The Supervisory Formula is given by the following expression:

$$S[L] = \begin{cases} L & \text{when } L \leq K_{IRB} \\ K_{IRB} + K[L] - K[K_{IRB}] + (d \cdot K_{IRB} / \omega)(1 - e^{\omega(K_{IRB}-L) / K_{IRB}}) & \text{when } K_{IRB} < L \end{cases}$$

where

$$\begin{aligned} h &= (1 - K_{IRB} / LGD)^N \\ c &= K_{IRB} / (1 - h) \\ v &= \frac{(LGD - K_{IRB})K_{IRB} + 0.25(1 - LGD)K_{IRB}}{N} \\ f &= \left(\frac{v + K_{IRB}^2}{1 - h} - c^2 \right) + \frac{(1 - K_{IRB})K_{IRB} - v}{(1 - h)\tau} \\ g &= \frac{(1 - c)c}{f} - 1 \\ a &= g \cdot c \\ b &= g \cdot (1 - c) \\ d &= 1 - (1 - h) \cdot (1 - Beta[K_{IRB}; a, b]) \\ K[L] &= (1 - h) \cdot ((1 - Beta[L; a, b])L + Beta[L; a + 1, b]c). \end{aligned}$$

In these expressions, Beta [L; a, b] refers to the cumulative beta distribution with parameters a and b evaluated at L.¹

¹ The cumulative beta distribution function is available in Excel as the function BETADIST.

The supervisory-determined parameters in the above expressions are as follows:

$$\delta = 1000, \text{ and } \dot{u} = 20$$

Definition of K_{IRB}

K_{IRB} is the ratio of (a) the IRB capital requirement included in the expected loss portion for the underlying exposures in the pool to (b) the exposure amount of the pool (e.g., the sum of drawn amounts plus the exposure at default associated with undrawn commitments related to securitization exposures). Quantity (a) above must be calculated in accordance with the applicable minimum IRB standards as if the securitized exposures 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 securitization exposures. K_{IRB} is expressed in decimal form (e.g., a capital charge equal to 15% of the pool would be expressed as 0.15). For structures involving an SPE, all the assets of the SPE that are related to the securitizations are to be treated as exposures in the pool, including assets in which the SPE may have invested in a reserve account, such as a cash collateral account. If the risk weight resulting from the SF is 1250%, banks must deduct the securitization exposure subject to that risk weight.

In cases where a bank has set aside a specific provision or has a non-refundable purchase protection discount on an exposure in the pool, quantity (a) defined above and quantity (b) also defined above must be calculated using the gross amount of the exposure without the specific provision and/or non-refundable purchase price discount. In this case, the amount of the non-refundable purchase price discount on a defaulted asset or the specific provision can be used to reduce the amount of any deduction from capital associated with the securitization exposure.

Credit enhancement level (L)

L is measured (in decimal form) as the ratio of (a) the notional amount of all securitization exposures subordinate to the tranche in question to (b) the notional amount of exposures in the pool. Banks will be required to determine L before considering the effects of any tranche-specific credit enhancements, such as third-party guarantees that benefit only a single mezzanine tranche. Any gain on sale and/or credit enhancing I/Os associated with the securitization must not be included in the measured L.

The size of interest rate or currency swaps that are more junior than the tranche in question may be measured at their current values (without the potential future exposures) in calculating the enhancement level. If the current value of the instrument cannot be measured, the instrument should be ignored in the calculation of L. If there is any reserve account funded by accumulated cash flows from the underlying exposures that is more junior than the tranche in question, this can be included in the calculation of L. Unfunded reserve accounts may not be included if they are to be funded from future receipts from the underlying exposures.

Thickness of exposure (T)

T is measured as the ratio of (a) the nominal size of the tranche of interest to (b) the notional amount of exposures in the pool. In case of an exposure arising from an interest rate or currency swap, the bank must incorporate potential future exposure. If the current value of the instrument is non-negative, the exposure size

should be measured by the current value plus the add-on as in the current Accord. If the current value is negative, the exposure should be measured using the potential future exposure part only.

Effective number of exposures (N)

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 all exposures to the i^{th} obligor. Multiple exposures to the same obligor must be consolidated (i.e., treated as a single instrument). In the case of resecuritizations (securitization of securitization exposures), the formula applies to the number of securitization exposures in the pool and not the number of underlying exposures in the original pools.

Exposure-weighted average loss-given-default (LGD)

The exposure-weighted average loss-given-default is calculated as follows:

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

where LGD_i represents the average loss-given-default associated with all exposures to the i^{th} obligor. In the case of resecuritization, a loss-given default of 100% must be assumed for the underlying securitized exposures.

Simplified Method for Computing N and LGD

For securitizations involving retail exposures, subject to supervisory review, the SF may be implemented using the simplifications: $h = 0$ and $v = 0$.

Under the conditions provided 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 largest 'm' exposures (e.g., a 15% share corresponds to a value of 0.15). The level of m is to be 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 SF the bank may set $LGD=0.50$ and N equal to the following amount

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

Alternatively, if only C1 is available and this amount is no more than 0.03, then the bank may set LGD=0.50 and N=1/C1.