BNP PARIBAS

M E M O R A N D U M

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ATTENTION TO : Basel Committee, D. Nouy

FROM : BNP Paribas, Christian Lajoie

COPY : French Commission Bancaire, P.Y. Thoraval;
BNP Paribas: D. Hoenn, B. Allorent

SUBJECT : Comment on CP 3

BNP Paribas supports the objectives of the regulatory capital reform and cannot but praise the Basel Committee for its continuing dialog with the banking industry. CP 3, which reflects to some extent the outcome of intensive exchanges between regulators and industry representatives, is an expression of this openness and willingness to have this fundamental reform shared and accepted by banks. In that regard, the present consultation, which is probably the last chance for banks to have their remaining claims gone through, takes on particular importance. BNP Paribas has therefore actively participated in elaborating the response of several banking associations as the French Banking Federation, the European Banking Federation, the Institute of International Finance and the ISDA. Although we fully support the work of these institutions, we believe appropriate to formulate our own views especially on points, which we feel have not been fully represented, or emphasized as much as we would have liked. This opinion is structured in a general overview (i) followed by some detailed reactions on specific issues (ii) we consider as very significant in the context of the reform.

1. General overview

Many adjustments have been made for the last four years in order to set up a risk sensitive regulatory capital framework as robust and reliable as possible. We believe however that some additional improvements or further steps still have to take place to achieve the stated Basel Committee objectives. In that regard, we would like to highlight some key areas which require such attention:

- Accounting and regulatory coordination
- Robustness and capital requirement management
- Balanced and risk effective calibration
- Simplicity and precedence of substance over form
- Coherent and cost effective implementation
- Major technical recommendations for a more accurate risk measurement

1.1. Accounting and regulatory coordination

Undertaking to implement almost at the same time an accounting reform and a new regulatory capital framework is a true challenge, which takes for granted the necessary significant information system developments. This implementation risk may be dwarfed however by the **lack of coherence** between these two fundamental changes of the banks' paradigms.

So far, the Basel Committee proposals have been formulated as if the accounting standards were not to reflect on the expression of the risk exposure and the Equity definition when we know, for the later case, that Equity may become highly volatile due to banking book macro-hedges and available for sale securities marked to market and hence the solvency ratio. On the other side, the IASB does not seem to consider the Basel Committee's risk analyses and ignores, for example, the stabilizing merits of ex-ante provisioning. Such a situation is truly a threat for the economic stability; **we urge the Basel Committee and the IASB to work closely in order to make the two reforms coherent** and sound for the financial industry.

1.2. Robustness and capital requirement management

A risk sensitive capital framework is necessarily impacted by the risk parameter values, which are a reflection of economic conditions and measurement methodologies. In that regard, two objectives should be achieved:

- reducing differences between banks due to inconsistencies in the determination of risk parameters;
- avoiding over sensitivity of the banking industry to the volatility of the capital requirements

The QIS 3 showed a wide spectrum of results, which cannot only be explained by the loan portfolio structure. Data reliability and risk parameter consistency are also part of the answer. Banks and regulators have to work together to reduce the scope of methodological interpretations through an organized dialogue. We would suggest the Accord Implementation Group supervises it and we would also **recommend using additional QIS exercises as a practical way to monitor and assist the methodological convergence**.

These QIS exercises would also help in assessing the volatility of capital requirements over time and economic cycles. **Re-calibration should not be ruled out.** Humility must prevail when it comes to understand the impact of such a fundamental change in the banks' business conditions. Although there is already quite an abundant literature on the subject, none of these studies are really convincing since they are based on past experience, in some cases questionable rating methodologies and cannot take into account the implied changes in the banks' behavior due to the new rules. All in all, we believe that the capital requirement volatility, which is a direct and normal consequence of what the reform tries to achieve, is sustainable provided that some precautionary measures are taken:

- **Reaffirming the "trough the cycle " rating approach**
- **Allowing ex-ante provisioning**
- **Managing the solvency ratio target**

Two main factors drive the capital requirements: rating migrations and debtors' defaults. The first one plays a secondary role when following a "through the cycle" approach, which we believe should be clearly reaffirmed in order to avoid the excessive adjustments of the "point in time" technique. The second one is, by far, the most influential. We are convinced that providing on a steady basis for a loan loss reserve that will be available to absorb credit shocks down the cycle is certainly the best answer to the pro-cyclicality question raised by many institutions. To agree on an ex-ante provisioning scheme with the IASB should be an objective of the Basel Committee, as stated in our plea for a better coordination between the regulatory and accounting bodies. The most counter-intuitive issue however will be for the regulators and probably the financial market to accept that the capital cushion over the minimum requirements be used up in a recession phase, which means **a lower solvency**

ratio in hard times. An education process should be started in that regard and recognition by the Basel Committee that such a situation is well grounded would certainly help a lot.

1.3. Balanced and risk effective calibration

The overall calibration of the Accord is a sensitive and difficult issue, especially under the global constraint of keeping the capital requirements of the world banking system unchanged, an objective which is politically understandable but questionable from an economic standpoint since justified decreases in some portfolios have to be offset by symmetrical increases for others even if there is little economic ground to do so.

The risk diversification has thus been taken into account when calibrating the requirement for the retail portfolio and to some extent for the SMEs while no such benefit is available for the corporate portfolio whatever the level and nature of diversification that is reached by the bank through the granularity of its borrower base, the variety of its industry and country exposures. This situation creates an undue disadvantage for the corporate financing activity and more generally for universal banks, which are not credited of the stabilizing effect of their involvement in differentiated activities. We consider that favoring heavily, in relative terms, retail and mono-line banking is a serious threat for the banking and financial market and **we urge the Basel Committee to launch without delay the work on the recognition of internal model**. Meanwhile, **existence of genuine diversification of risks and activities,** assessed qualitatively or quantitatively through the economic capital of the bank, **should be taken into account by regulators** as an offset to any additional layers of requirement under the Pillar 2 provisions.

Another difficult exercise is the adequate calibrating hierarchy between the different approaches. The main thrust should be to encourage banks using the most sophisticated risk management techniques and we are afraid that continuing demand from the banking industry to lower the requirements through the standard risk parameters may turn the "Foundation" option into the most palatable one. The Basel Committee should continuously verify that the risk parameters set by default are conservative enough to keep an incentive for an internal assessment.

1.4. Simplicity and precedence of substance over form

Partially due to the industry demand for improvements or details but also to the multiplication of options, the present draft of the Accord has reached a high degree of complexity. Although complexity is inherent to the banking activity and its development, regulatory complexity turns out to be a burden when the regulator is taking the place of the management and set procedures, which could be at odds with the internal ones. We do not think that it was the intention of the Committee but, in many instances, we could argue that the CP 3 is much too prescriptive. Validation criteria and disclosure requirements under Pillar 3 are illustration of our contention. As written, any breach of the multiple statistical requirements could formally give ground to a validation turn down. Pillar 3 disclosures are meant to turn the market into a Pillar 2 censor when it requests for example comparison between estimates and actual data, a back-testing exercise that requires technical skills and in depth analyses far beyond the market capabilities.

We believe that the only effective way to avoid this pitfall is **to express the rules as objectives to achieve rather than ways to follow**. It is up to the banks' management to decide on the most effective way to abide by the spirit of the rule while it is the regulators' responsibility to assess how relevant and reliable the bank risk measurement system is. As well, it is up to the market to decide on the nature and details of the information expected from banks, which may vary according to economic conditions and increase as long as the market understanding of the risk drivers improves. The second part of this paper will give many examples of what we mean by substance proceeding over form and why and where we are concerned by excessive prescription. We firmly believe that additional flexibility is needed not only to avoid rubber tape but also to allow advances in risk management and changes in the financial landscape.

Another way to streamline the future Accord is also probably to reduce the number of options offered to banks and regulators, which make the rule cumbersome to understand, may jeopardize the coherence of the text, create uneven playing fields. In that perspective, we would suggest **to consider merging the Foundation and the Advanced approaches into a single IRB approach** where the risk parameters may be the standard LGD and EAD set by the Committee when they cannot reliably be estimated by the bank itself. Such a restructuring could eliminate cliff effects between the two approaches, would allow for reviewing the recognition of non financial collateral, which brings only disincentives and costly compliance burdens under the present Foundation approach, may make easier the roll out across portfolios and countries. Our last recommendation would be **to encourage the Committee to shorten the scope of national discretion.** At least, the AIG should identify area of possible further convergence.

1.5. Consistent and cost effective implementation

Whatever convergence level is achieved, differences of interpretation and choice of options will remain. Besides, local markets have characteristics that cannot be ignored and each supervisor has its own legal framework, which it has to abide by. On the other hand, the banking businesses are increasingly global and some features of the Accord, like Pillar 2 and Pillar 3, can only be rightly assessed at the consolidated level.

Such a situation could lead to conflicting rules and multiple reporting which are a source of confusion and undue cost for the industry. Regulatory coordination will therefore play a major role in the success of the Accord and should be based on **the recognition of the leading role of the home regulator**. The home regulator should have the responsibility to set up implementation plans and conflict resolving procedures in order to fulfill the following objectives:

- **No bank should have to go through validation processes twice** in order to satisfy the competing demand of the home and host regulators. This requirement does not mean the exclusion of the host regulator but rather the definition of its contribution to the decision. Assessment of the validity of the risk parameters for the host country is an example of the possible allocation of responsibilities among regulators.
- **No bank should be forced to operate two different sets of rules** or interpretations of the Basel Accord in the same jurisdiction;
- Capital requirements at sub-consolidated level should be set in a proportionate and consistent manner with the consolidated approach. Accordingly, the Operational Risk capital charges at sub-consolidated level may result from an allocation when the measurement of risk can only be established at the consolidated level.
- No Bank should be compelled to provide for additional capital requirements under Pillar 2 provisions at sub-consolidated level except for exceptional cases.

This prominent role of the home regulator should not preclude the host regulator from exercising its basic responsibilities, which are:

- verify that the characteristics of the local market are rightly taking into account and avoid competitive distortions
- audit the local implementation of the Accord

1.6. Main technical recommendations

In line with the previous general comment, we would like to outline some technical recommendations that we consider as critical and which will be detailed in the second part of this paper.

- **Easing the statistical requirements** and especially giving time to banks to build up their internal LGD and EAD data bases through **transitional arrangement**: 4 years of data at implementation date with an objective of a minimum 7 year observation period. The Committee has rightly granted a similar relief to PD and the retail portfolio; there is no ground not to expand it to LGD and EAD.
- **Removing the LGD floor** of the mortgage portfolio, which has no theoretical grounds. This measure penalizes the soundest portfolios and does not make sense in presence of extra guarantees. We understand the Committee's worry but we believe that setting a LGD floor is not the right answer, at least for residential real estate markets financed on a fixed rate basis which are much more stable than those indexed to floating rates.
- **Correcting the maturity adjustment below 1-Year** opened to some short term financing in AIRB, which is of a different nature than the one over the rating time horizon. Not only is this amendment technically justified, it is also critical to the development of market and trade activities, which should not be penalized by unjustified harsh capital requirements.
- **Withdrawing the substitution approach**, which does not correctly express the risk mitigation of a guarantor who is not tied to the borrower, **in favor of the double default** and double recovery effects for hedged exposures.
- **Taking into account the distinctive features of leasing and purchased receivables,** which are not fully represented in the present proposal.
- **Keeping the capital treatment of securitization as neutral as possible**, which means eliminating cumulative highly conservative assumptions. Contrary to what could be inferred from the QIS 3 results, the global capital requirements after securitization are still much higher than before, which cannot be reasonably explained and unduly increases the cost of such transactions. The present proposal could indeed jeopardize the development of a risk transfer technique, which is critical to portfolio risk management, and therefore dispersion of unexpected losses.
- **Modernizing the counterparty risk treatment** of OTC derivatives through the use of Expected **Positive Exposures** based measures to calculate Loan Equivalent Exposures for capital calculation purposes.
- **Focusing on the qualitative nature of Pillar 2** should be the objective set by the Committee to the regulators. Additional layers of capital cushions should be exceptional as Pillar 1 is supposed to determine the minimum capital requirements and already embodies conservative assumptions. Stress tests must be kept specific to each banking institution and must be handled with care. In that regard, the present CP 3 is already too prescriptive. Comparisons with the economic capital, which needs thorough understanding of the bank's internal model, must not misinterpreted and should be construed as a mean to assess the benefit of diversification.

Through the solvency ratio reform, the Basel Committee is strongly contributing to the development of modern risk management techniques. The Committee rightly emphasizes that the regulatory requirements should be part of the internal processes and be incorporated in the decision making. However, this objective can only be achieved when the regulatory measurement is fully in line with the internal view of the risk situation. The regulatory and economic capital may share, at least, the risk parameters but they diverge on the diversification issue, which makes the bank's management particularly complex and clumsy. Such a situation should not last too long and we, again, urge the Committee to consider as soon as possible allowing validated internal risk model to determine the minimum capital requirements.

2. Detailed comments and focus on some specific issues

2.1 Credit risk

2.1.1. Double default versus substitution approach

BNP Paribas generally supports the principle that the risk mitigating effect of unfunded guarantees should be as accurately as possible reflected in the assessment of capital charges, as well for corporate as for retail exposures.

The Basel Committee's current substitution approach for guarantees has proved flawed, as it is based on the assumption that if the guarantor (the most creditworthy counterpart) defaults, the borrower (the less creditworthy counterpart) also automatically defaults, thus assimilating the risk on the guaranteed part of the exposure to the risk of a direct exposure on the guarantor. This assumption only makes sense when there is perfect correlation between the guarantor and the borrower, which cannot be supposed in most cases, and must therefore be replaced by a more adequate framework.

It is widely admitted throughout the industry that the most suitable counter-proposal as of today lies in the paper recently issued by the Board of Governors of the Federal Reserve System, *Treatment of Double-Default and Double-Recovery Effects for Hedged Exposures under Pillar I of the Proposed New Basel Capital Accord* ("the Federal Reserve's paper"). This paper is of particular interest as it establishes the theoretical basis of an assessment of "double default" effects that is consistent with the fundamental assumptions of the "asymptotic single risk factor model" that underpins the IRB function.

The Federal Reserve's paper supports the criticisms of the industry against the substitution approach:

- ☛ the substitution approach runs counter the Basel Committee's stated objective of aligning regulatory and economic capital requirements,
- ☛ it is a strong disincentive to obtain valid guarantees and treats in the same manner guarantees from a parent company and guarantees from an independent guarantor, which stands against the fair management of risks.

It must be added that, as we are not ready to weaken our internal rating systems in order to reflect substitution rather than double default (the latter being the best picture of reality), we could have to deliver two PD or LGD values for the same loan, one being used for regulatory purposes and the other one for economic capital and internal management. That would be both unfeasible and inconsistent with the objective of the "use test" (using the same measures in regulatory capital and in the life of the credit process).

We are thus strongly opposed to the current requirement of substitution and we urge the Basel Committee to derive amendments to its proposal from the Federal Reserve's analyses. The comments underneath may serve that purpose.

- ❑ ***Questions about calibration raised by the Federal Reserve's paper :***
  - ☛ The Federal Reserve asks whether the correlation of guarantors (ρ_G) to systemic risk should be set at a higher level than what is delivered by the standard calculation of correlation in the IRB formulae (ρ_{IRB}), arguing that guarantors are often major banks or institutions with higher correlation than average. For our part, we do not see any reason for setting correlation at different levels for the same counterpart, depending on whether it is a guarantor or a direct borrower. If regulators consider that correlation levels

for bank or sovereign exposures have not been properly calibrated, they should revise them accordingly, based on the principle that one counterpart is assigned one single correlation;

- ☛ The Federal Reserve also asks whether there is a need for an additional correlation parameter that would express the correlation between the assets of the guarantor and the obligor (ρ_{OG}), in excess of the correlation due to systemic risk; if $\rho_{OG} = \sqrt{\rho_O} \times \sqrt{\rho_G}$, it is assumed that there is no specific risk correlation atop systemic risk correlation. Internal practices of banks already assessing the impact of double default show that this parameter is considered of critical importance, as it allows giving preferential capital relief to guaranteed transactions with guarantor independent from the borrower. We thus consider that at least two different levels of ρ_{OG} should be used in the IRB framework:

  1. one for guarantors linked with the obligor (same group...), where $\rho_{OG} = 100\%$, which is equivalent to substitution ("wrong way risk"),
  2. one for guarantors independent from the obligor. In this case, a reasonable margin of conservatism could be set: $\rho_{OG} = (\sqrt{\rho_O} \times \sqrt{\rho_G}) + 20\%$ would lead to results close to those of the internal systems of banks managing cautiously double default effects.

- ❑ ***Questions about the concrete implementation of the "double default" framework:***

  - ☛ *How should it be implemented in the Foundation IRB approach?* Two options:

    1. either through the Federal Reserve's complete formula, with 4 inputs (obligor's PD, obligor's LGD, guarantor's PD, and guarantor's LGD). Pros: accuracy. Cons: complexity of using different formulae for hedged loans on one side, and unsecured loans on the other;
    2. or by simplifying this formula through a "haircut" approach, calibrated on the Federal Reserve's formula, with 2 inputs (obligor's PD, transaction's LGD) and a supervisory haircut;

  - ☛ *How should it be implemented in the Advanced IRB approach?* We are convinced that assessing the impact of guarantees on PD and/or LGD in the A-IRB approach is an inseparable part of the rating process, and that banks should be free to produce their own PDs and LGDs, whether the loan is hedged or not. Thus the "ordinary" IRB formula must always be used in the A-IRB approach; supervisors will make sure that the impact of double default is correctly assessed by A-IRB banks by requiring that they demonstrate the overall consistency between their own system and the framework used in the F-IRB approach.

If we fully support the double default approach, we remain cautious about the systematic inclusion of "double recovery" effects into the IRB framework. We would not totally follow the Federal Reserve's paper when it states that the double recovery effect can be measured with $LGD_O \times LGD_G$, which supposes a complete independence between the obligor's and the guarantor's assets in case of joint default and a full ability by the bank to recover on a defaulted guarantor the amounts that it has not been able to collect from a defaulted obligor, and conversely. We consider that, given the state of art in this matter, F-IRB banks should only be allowed to use the lowest LGD between obligor's and guarantor's (which will often be identical), and A-IRB banks should apply the existing provisions that require them to measure a conservative LGD based on historical loss data.

2.1.2. Maturity adjustment below 1-Year

The exception to the 1-Year floor of the maturity adjustment for A-IRB banks is explicitly limited to "financial market transactions and one-off short-term exposures that are transaction-oriented" (§ 291-292).

This provision could have a critical impact on capital allocated to market and trade finance activities. Therefore we pay particular attention to building a fair comparative capital treatment for those activities. From this standpoint, two main comments should be made to the current proposals:

- ☛ the Basel Committee duly restricts the use of the one-day floor to transactions that "are not a part of the ongoing term financing of the obligor", even though this perimeter needs to be slightly modified,
- ☛ but the formula used in order to derive risk weights for less than 1-Year transactions is wrong and inconsistent with the underlying model assumptions.

❑ ***Perimeter***

We support the "steady state" hypothesis that underpins the IRB model under the liquidity horizon, i.e. that capital is based on what average risk should be during the following Year and that current portfolios are the best and most simple approximation of what future portfolios will look like. We also support the exemption that is targeted to market or trade transactions with short original maturity, as they are most likely not to be replaced if the counterpart's credit quality is perceived to have materially decreased within one Year.

However, we believe this perimeter needs to be extended so as to include exposures with the same characteristics:

- ☛ the maximum original maturity for eligible assets should be set at 6 months instead of 3 months, as a maturity between those two bounds does not imply that the facility is part of the ongoing term financing of the obligor,
- ☛ all assets included in the "purchased receivables" regulatory portfolio should qualify for the 1-Year maturity floor exemption, as they represent trade receivables that cannot be considered in any case as term financing,
- ☛ we do not understand why OTC derivatives are not included among exposures benefiting from the maturity floor exemption, whereas inter-bank loans and deposits or securities lending operations do.

❑ ***Calculation of the maturity adjustment below 1-Year***

Absent opposite mentions, we suppose that the maturity adjustment formula applying below one Year is the same that applies beyond, i.e.:

(1 - 1.5 × (0.08451 – 0.05898 × log (PD))^2)^ -1 × (1 + (M - 2.5) × (0.08451 – 0.05898 × log(PD))^2)

For transactions with more than 1-Year remaining maturity, this formula represents the surplus of capital due to **migration risk**, i.e. the statistical probability that credit quality declines before the transactions expires.

By definition, migration risk only appears beyond the liquidity horizon; below, banks are exposed only to **default risk**, i.e. the predicted defaults happening or not. Thus, applying the same formula on both sides of the liquidity horizon simply makes no sense and is theoretically inconsistent with the underlying assumptions of the IRB model.

Practically, this formula also appears to generate inconsistent capital adjustments. A formula measuring default risk under 1-Year should smoothly lead from 0 capital charge for intra-day transactions to the full one-Year capital charge for one-Year transactions, which is not the case. The results of the current Basel formula are displayed in the following table:

PD	Current capital adjustment (1D)*	Current capital adjustment (1M)	Current capital adjustment (3M)	Current capital adjustment (6M)
0,03%	0,399	0,446	0,547	0,698
0,05%	0,508	0,547	0,629	0,753
0,10%	0,622	0,652	0,715	0,810
0,20%	0,709	0,732	0,780	0,854
0,40%	0,776	0,794	0,831	0,887
0,50%	0,795	0,811	0,845	0,897
0,70%	0,820	0,834	0,864	0,910
1,00%	0,844	0,856	0,883	0,922
2,00%	0,884	0,893	0,912	0,942
3,00%	0,903	0,911	0,927	0,951
5,00%	0,924	0,930	0,943	0,962
10,00%	0,948	0,952	0,961	0,974
15,00%	0,959	0,962	0,969	0,980
20,00%	0,966	0,969	0,975	0,983

** based on 220 business days*

Those results show that even overnight transactions will receive weak capital relief from the current formula. **This excessively conservative calculation removes most substance from the exemption to the 1-Year maturity floor.**

- ***Alternative proposal***

Consistently with other industry participants and with the underlying IRB model, we propose an alternative way to adjust capital requirements for eligible transactions below 1-Year. This proposal is based on the following assumptions:

- the reasons why market and trade transactions were singled out are that, (i) they are not part of the ongoing financing of the obligors and cannot be rolled over without motivation, (ii) such obligors and transactions are frequently monitored, and not only reviewed each Year as is the case for the overall credit portfolio, a review being performed before the bank engages in each transaction;
- the "liquidity horizon" of a model must be consistent with the overall rating practice of banks: it represents the moment when all current transactions will have been reviewed at least once. Below this horizon, the bank is exposed to default risk; beyond, it is exposed to migration risk;
- if a bank can demonstrate that it reviews all the exposures of a given portfolio with shorter periodicity, then the liquidity horizon could be adjusted downwards so as to reflect the fact that the bank is able to turn down new advances to a counterpart whose credit quality would have declined;

- ☛ in order to remain consistent with the objective that the whole banking system has a 1-year PD of 0,1%, equivalent to a A- rating, the confidence interval of the IRB formula has to be increased so as to match with the PD of a A-rated firm at a closer time horizon. As such, the results of the IRB formula with a short-term PD are "annualized": if the bank is able not to provide new credits to counterparts whose credit quality has declined, it is still exposed to default without rating downgrade during the life of each transaction. The 1-year capital charge is therefore calculated as, for example, capital for twelve 1-month transactions with identical credit quality at origination. **In no case this amounts to a calculation of capital charges for a complete stop of business.**

The proposed adjustment would be obtained by reducing the PD of the transactions through a simple interpolation formula, such as:

$$\mathbf{PD_n = 1 - (1 - PD_1) \wedge n}$$

where PD_n is PD at horizon *n*, n is the fraction of 1 year corresponding to horizon *n*, and PD_1 is the one-Year PD. In this framework, capital requirements would remain calculated by using a correlation based on the one-Year PD (of course any other interpolation formula can be used).

Symmetrically, the confidence interval would have to be equal to:

$$\mathbf{C_n = C_1 \wedge n}$$

where C_n is the confidence interval at horizon *n*, n is the fraction of 1-Year corresponding to horizon *n*, and C_1 is the 1-Year required confidence interval (this interpolation formula being strictly identical to the one proposed for PD). For example, the confidence interval for a 3-month transaction would be 99,9% ^ (1/4) = 99,975%.

The results of this alternative method are the following:

1-year PD	Proposed PD_n (1D)*	Proposed PD_n (1M)	Proposed PD_n (3M)	Proposed PD_n (6M)	Proposed capital adjustment (1D)*	Proposed capital adjustment (1M)	Proposed capital adjustment (3M)	Proposed capital adjustment (6M)
0,03%	0,000%	0,00%	0,01%	0,02%	0,136	0,401	0,602	0,774
0,05%	0,000%	0,00%	0,01%	0,03%	0,135	0,394	0,594	0,770
0,10%	0,000%	0,01%	0,03%	0,05%	0,131	0,386	0,586	0,765
0,20%	0,001%	0,02%	0,05%	0,10%	0,124	0,377	0,579	0,760
0,40%	0,002%	0,03%	0,10%	0,20%	0,117	0,367	0,570	0,754
0,50%	0,002%	0,04%	0,13%	0,25%	0,113	0,363	0,566	0,752
0,70%	0,003%	0,06%	0,18%	0,35%	0,108	0,356	0,560	0,748
1,00%	0,005%	0,08%	0,25%	0,50%	0,102	0,347	0,553	0,743
2,00%	0,009%	0,17%	0,50%	1,01%	0,088	0,325	0,534	0,731
3,00%	0,014%	0,25%	0,76%	1,51%	0,080	0,313	0,524	0,724
5,00%	0,023%	0,43%	1,27%	2,53%	0,073	0,303	0,516	0,720
10,00%	0,048%	0,87%	2,60%	5,13%	0,073	0,309	0,526	0,730
15,00%	0,074%	1,35%	3,98%	7,80%	0,078	0,323	0,544	0,745
20,00%	0,101%	1,84%	5,43%	10,56%	0,082	0,339	0,562	0,760
				Confidence interval:	99,9995%	99,992%	99,975%	99,95%

** based on 220 business days*

This scheme preserves simplicity of calculation (whether asset correlation is constant or not), as no additional input is necessary and as it can be implemented in a single Excel cell.

2.1.3. The 10% LGD floor for mortgage exposures

We are strongly opposed to setting a LGD floor at 10% for the exposures contained in the "residential mortgage" portfolio:

- considering that many pools of retail mortgage exposures exhibit LGDs lower than 10%, which are grounded on historical experience, this provision singles out residential real estate loans to individuals by imposing them capital requirements substantially higher than what is needed for other retail loans bearing the same risk level,
- the LGD floor provides a substantial advantage to banks that choose to assess the impact of unfunded guarantees on PDs rather than on LGDs, especially in countries like France where this kind of guarantees is current practice,
- the cyclicality of losses on mortgage exposures, which the floor is intended to prevent banks from ignoring, is not equivalent for all markets in the world. For example, markets characterised by the predominance of variable rate exposures tend to exhibit higher volatility of losses on mortgage exposures as borrower solvency and property prices are negatively modified by interest rate rise, whereas markets characterized by the predominance of fixed rate loans show more stability.

We recognize that very low LGDs based on the minimum historical data required for retail exposures at the outset of the Accord (2 years) would be somewhat questionable if the appropriate margin of conservatism was not included in the assessment of LGDs. We nevertheless consider that banks relying on more robust data and/or analytical processes should not be imposed any floor at all; furthermore, we think that the floor is too rigid a tool in this matter and that this topic should be addressed in Pillar 2 rather than by creating additional distortions in Pillar 1.

2.1.4. More flexible eligibility criteria

Most of our observations aim at avoiding that inappropriate requirements or formulations may lead some regulators to abrupt invalidation of an efficient rating system; we also wish that no specific kind of rating system be considered as the only acceptable one (for example model-based system). In some cases, this inappropriateness comes from the way that the Basel Committee's provisions have been written in the CP 3 and may thus be too harshly interpreted; in some others, it results from direct and explicit requirements.

- ***Reduce the length of required historical data periods***

We understand that, on an ongoing basis after the implementation of the new Accord, banks must ground their internal estimates of PD, LGD and EAD on sufficient historical data, ideally reaching a complete business cycle. Nevertheless we state again our continuous concern, already expressed in our answer to CP 2, that:

- required data observation periods should not be unworkably long at the time of inception of the Accord, in 2007. 7 years might be a strong obstacle for many banks on their path towards A-IRB, and a disincentive for many others,
- there should be no distortion between portfolios: 2 years required at the outset of the Accord for the LGD and EAD of retail exposures and 7 years for corporate exposures,
- there should be no distortion either between loss characteristics inside the same asset class (2 years for corporate PD and 7 years for corporate LGD and EAD).

We have been continuously expressing strong criticisms against this requirement; if data observation periods cannot be made identical for all asset classes and loss characteristics, we ask that at least a 3-year transition period be granted for LGD and EAD of corporate exposures, reducing the initial observation period to 4 years. Furthermore, the existing inequality between F-IRB and A-IRB on the topic of historical data length, at the disadvantage of the latter, runs counter to the Basel Committee's stated objective of providing reasonable incentives to move towards the most advanced approaches of the new framework.

- ***Remove exclusive references to mechanical quantification***

We first consider that the Basel Accord should not contain implicit or explicit requirements of use of mechanical quantification for PD, LGD and EAD, based exclusively on historical data and calculation formulae. These requirements are particularly obvious in the sections referring to LGD and EAD quantification (§ 430 to 441):

> *"This estimate must be based on the average economic loss of all observed defaults within the data source (referred to elsewhere in this section as the default weighted average) and should not, for example, be the average of average annual loss rates. Since defaults are likely to be clustered during times of economic distress and LGDs may be correlated with default rates, a time-weighted average may materially understate loss severity per occurrence. Thus, it is important that banks use default-weighted averages as defined above in computing loss severity estimates. "*

This wording seems to exclude LGD assessments that do not simply result from "the average economic loss of all observed defaults within the data source". The usual way to work out LGD estimates for corporate exposures rather lies on an analytical process in which all components of LGD are separately analyzed and then aggregated to deliver a single figure. We consider that, if an incentive for one method or another should exist in the Accord, it should favor sound processes of analysis tracking separately all components of LGD; supervisors may usefully focus on the quality of the assessment of each component taken individually, and then on their overall aggregation to compute LGD.

We also feel that, especially in the field of corporate lending, sufficient human judgment should be allowed to play a critical role in the assessment of PD, LGD and EAD. For example, we believe that most of the impact of guarantees or liens on the borrower's strategic assets does not come from calling the guarantees or foreclosing on collateral, but from the pressure that the lender can exert because of their existence. Therefore, tracking the proceeds of each guarantee or collateral in a recovery process is useless and costly and may even lead to wrong assessment of LGDs.

Human judgment becomes essential in the fields where few comparable default and loss examples exist. Specialized Lending has been highlighted, but it is also the case for bank or sovereign lending, as well as for the financing of industries where defaults are rare. Complex structured lending is also obviously a field where mechanical quantification could produce unsatisfactory results. In these cases, expert judgment would use tools such as comparisons with other industries or countries, scenarios based on the knowledge of the client or any other means that are not available for statistical models and that are likely to produce more adequate results than the average of historical data.

We thus favor a wording of the Basel Committee's proposals where the emphasis would be on the quality of the overall assessment process, making appropriate use of the data sources that are relevant and available, each sub-segment taking advantage from the global quality of the overall system as a whole.

Validation of PD, LGD and EAD estimates ("back-testing") is also a part of this framework and should be addressed by supervisors with the same flexibility. Particularly, default and loss estimates assigned to the exposures of a given sub-segment may be considered as validated in regard of realized losses, even when numerous default and loss observations are not available for this specific sub-segment, if the bank's assessment

method for this sub-segment is consistent with the assessment methods used for other comparable exposures, and if back-testing does not produce evidence that the bank's estimates are flawed. One technique that could be used jointly or alternatively with global validation for LGD estimates would also be separate testing of some or all components (collateral values, guarantee enforcement, unsecured recoveries...).

- ***Data collection and storage***

The Basel Committee's requirements regarding data collection and storage are clearly excessive (§ 391 to 395):

- history of ratings since the start of the relationship with any borrower,
- key data used to assign a rating,
- people responsible for each rating assignment,
- more particularly, detailed components of loss and recovery given default:
- tracking the source of repayment, specifying the guarantee or collateral involved, is often impossible or useless
- administrative costs are generally assigned to each facility on a conventional basis,
- the period necessary for a complete recovery process is often longer than available in data sources, which makes the measurement of in fine recoveries difficult.

More generally, the usefulness of storing such detailed data is quite questionable. The Basel Committee indicates that one of the aims may be "to allow retrospective reallocation of obligors and facilities to grades, for example if increasing sophistication of the internal rating systems suggests that finer segregation of portfolios can be achieved". This retrospective rating is unworkable in many cases, especially in the context of human judgment-based rating assignment, and the necessary consolidation of detailed data would entail disproportionate costs for uncertain benefits (detailed data widely vary from one activity to another, and a single format for all data across a banking group would reduce their appropriateness). These remarks do not mean banks should not assess the impact and efficiency of changes in their rating system. They will do it differently according to the rating system types (model or expert based) and generally on a sample basis.

- ***Balance between conservatism and accuracy / stress tests***

  - *Stress tests*

  The rationale for systematic stress testing is not obvious. If a general and homogeneous downgrade of ratings is assumed, the IRB function will delivered increased capital requirements that are the exact reflect of the initial assumption and will not bring any relevant information to the knowledge of the bank. Furthermore, the probability that all exposures experience simultaneous downgrades is quite low, especially for large and diversified banking groups.

  The Basel Committee should not consider either that banks must be able to assess the impact of macro-economic conditions on the credit quality of the portfolio ("two consecutive quarters of zero growth" for example, § 397). This is not feasible in the case of modeled exposures (as models generally use bottom up approaches that do not specifically address the impact of macro-economic factors), and still less in the case of human judgment-based rating assignments.

  As a matter of fact, the only stress tests that could be used in the analyses of potential losses consist in scenarios specific to a given sub-portfolio (country, industry...), based on expert economic analyses and individual study of exposures.

☛ *"Stressed" LGDs and EADs*

It is stated in § 430 and 437 that banks must use LGD and EAD estimates that are "appropriate for an economic downturn if these are more conservative than the long-run average" when these estimates are volatile over the economic cycle. This requirement comes in addition to the understandable one that LGDs and EADs are default-weighted rather than time-weighted, and is therefore questionable; except if we consider that the IRB model does not take into account LGD and EAD volatility but alterations in the assessment of average LGDs and EADs should not be seen as the remedy to shortfalls in regulatory capital models.

☛ *Treatment of seasoning for retail exposures*

Another shortfall in the IRB model is that it lies on standardized transition matrixes and thus cannot take into account atypical default trajectories, such as the peak in the number of defaults experienced by mortgage loans after their third Year. We consider that this phenomenon should exclusively be taken into account through the correlation levels that have been set for these exposures, except in the exceptional case of a rapid exposure growth, which should be addressed on a portfolio-by-portfolio basis, at the occasion of the Pillar 2 review and not by increasing PDs (which would be inconsistent with realized default rates on those exposures.

☛ *Back-testing, conservatism and "through the cycle"*

The results of back-testing will have to be very cautiously interpreted by supervisors as this process may meet two obstacles:

- many years of historical data will have to be collected before through the cycle ratings can be validated by through the cycle realized default and loss rates. At implementation date, the future Accord does not require any precise length of historical data to be used for back-testing, but only "as long as possible" and "ideally covering one or more complete business cycles" periods. Therefore, the first back-testing exercises may produce results that show apparent discrepancies between through the cycle ratings and more "point in time" realized rates;
- as uncertainties must lead to additional conservatism in rating assignments (§ 373), realized default rates may not apparently validate such ratings.

Furthermore, the results of back-testing should allow invalidating rating assignments only when they show consistent and sufficient data that disqualify the estimated PD of the assigned ratings.

❑ ***Other topics***

☛ The monitoring for possible inconsistencies between several rating systems must not be understood as compelling banks to systematically rate the same exposures in several rating systems across their departments or business lines in order to check that they produce identical results.

☛ When banks choose to impact the effect of guarantees and credit derivatives on LGD in the Advanced approach, they should not be required to check systematically that the adjusted LGD leads to an IRB risk weight that is lower than the risk weight of a direct exposure on the guarantor, which is practically unworkable. The IRB function is not symmetrically impacted by PD and LGD, so internal rating methods replicating the effect of a PD adjustment in LGD will necessarily lead to some approximation. Furthermore, LGDs could be calibrated so as to give equality in internal economic capital as a direct exposure on the guarantor, which could not have the same effect as equality in regulatory capital. This comment remains valid in the case of recognition of "double default" in the IRB framework, which is asked besides.

☛ As in the Advanced IRB approach banks must be free to determine their own EAD estimates provided that they are grounded on historical experience, we strongly oppose the compulsory use of a 100% CCF in the A-IRB when it is required in the F-IRB approach (§ 286).

2.1.5. Some guidelines are deficient

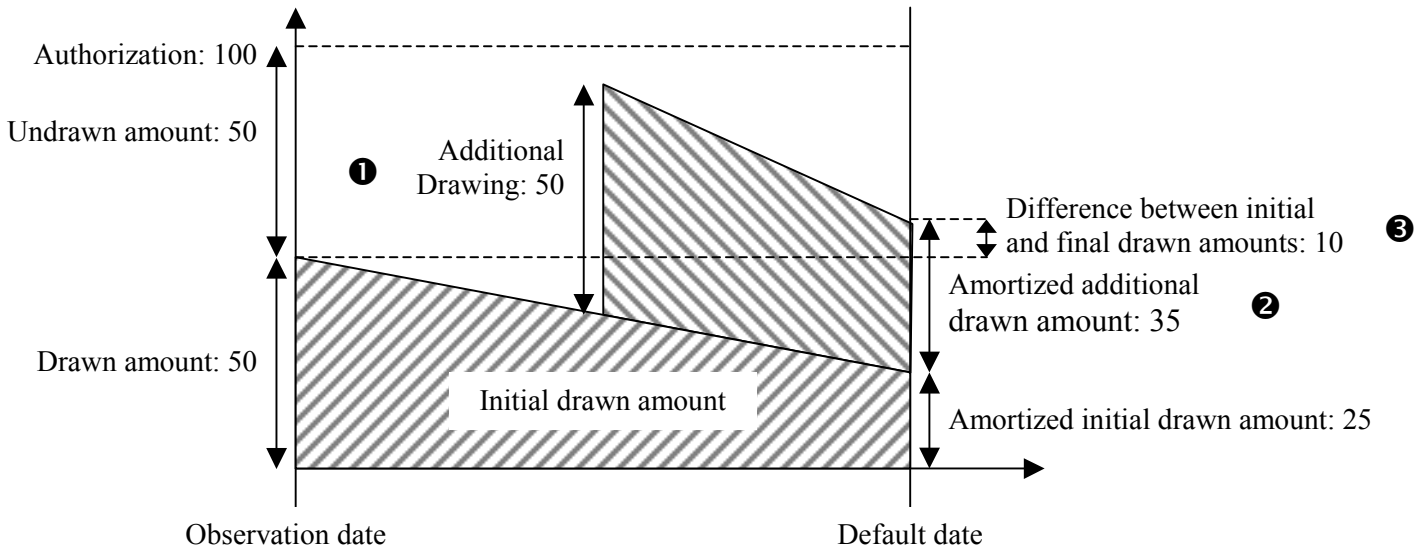
- ***Definition and horizon of EAD***

  - *What is EAD?*

  The only definition of EAD in the A-IRB approach is provided in § 436 of CP 3: "Advanced approach banks must have established procedures in place for the estimation of EAD for off-balance sheet items. [...] Banks estimates should reflect the possibility of additional drawings by the borrower up to and after the time a default event is triggered."

  This definition restricts the scope of EAD to a quantification of potential additional drawings for the undrawn part of a facility at the observation date. Thus, the EAD estimate for a given exposure will not be equal to its observed drawn amount at or after the date of default, provided that phenomena such as contractual or voluntary amortization cannot be taken into account; furthermore, the "floor" at 100% of the current drawn amount limits the possibility of fair assessment of the real exposure at default.

  Consequently, PD × LGD × EAD will not be comparable with the actual recorded losses in one year, and will be systematically higher, thus overestimating capital requirements. The Basel Committee should review how to reach a correct assessment of EAD and provide greater clarity on what should be measured (as has been done for the definition of default and loss).



Three definitions of EAD for the undrawn part of the facility are possible:

- the **gross amount of the additional drawings** (50). This solution is clearly unacceptable, as (i) the ratio of drawings to the initial undrawn amount can be higher than 100% (in the example it is 100%), (ii) it requires a constant and dynamic monitoring of drawings, much more complex than an instantaneous measurement of outstandings at the moment of default and (iii) it completely ignores possible repayments before default;
- the **amortized additional drawings** (35 – EAD of 70%). This is the way we have interpreted current texts; nevertheless it still leads to overestimation of overall outstandings at the moment of default, which are calculated as 100% of initial drawn amounts (50) + 35 = 85, whereas the observed exposure at default

is 60. This solution appears consistent with the basic assumption of "steady state" (i.e. the current portfolio remains stable during the next year) that underpins the whole IRB model, as it prevents contractual amortization of loans from leading to a decreasing amount for the portfolio used in capital calculation. When only the initial and final drawn amounts are available, which is often the case, this definition requires a complex calculation of the impact of amortization on the initial outstandings, so as not to undervalue the contribution of the additional drawings to EAD;

☛ the **difference between the initial and final drawn amounts** (10 – EAD of 20%). This solution allows a fair anticipation of the real EAD for individual transactions and is quite easy to work out, as it simply requires the initial and final outstanding amounts. This solution shows possible inconsistencies with the "steady state" assumption as it implies that the amortized amounts of the loans initially in portfolio are not replaced by new loans; furthermore, as amortization may lead to a drawn amount at default that is lower than the initial outstandings, the EAD ratio on the undrawn amount could be negative.

Measuring EAD requires heavy investments in data, models and rating policies; if a bank engages in an option which is later deemed as not being the right one, the necessary modifications could prove very costly or simply impossible. Therefore, we urge the Committee to clarify its definition of EAD; we also think that appropriate supervision should be performed so that some banks do not adopt internal definitions of EAD that would provide them with undue competitive advantages.

In order to promote a realistic A-IRB approach, the Basel Committee should thus forget about the narrow concept of Credit Conversion Factor in use in the Cooke context and try to establish a sound framework for the assessment of exposure at default. As a matter of fact, we are not convinced that the best way to model EAD is to distinguish between a drawn part of the facility that would be taken for 100% and an undrawn part to which a CCF would be applied: EAD could certainly be modeled independently from the drawn/undrawn part at the time of observation.

The Basel Committee should also promote clear distinctions between loss characteristics: PD should only reflect the risk of default of the borrower or transaction, EAD should only reflect the anticipation of outstandings at the moment of default and LGD should only reflect the loss incurred on these outstandings at the end of the recovery process. Consequently, we consider that the possibility to reflect the likelihood of additional drawings in LGD estimates must be removed from § 307, as this practice would blur the readability of loss characteristics and would open a way for competitive distortions.

☛ *What is the horizon of EAD?*

We consider that, just like PD but conversely to LGD, EAD is a "pre-default" risk characteristic, as it measures the potential increase of exposure between the observation date and the time of default (eventually being corrected with additional drawings that would occur after default). As such, it must have a horizon consistent with the one of default, i.e. 1-Year: EAD would be the exposure of a facility experiencing default at any random time between the observation date and the time of default.

The idea that EAD must be measured under the liquidity horizon of the model is strengthened by the fact that it is also submitted to migration risk beyond that liquidity horizon: for example, in the case of amortizing loans, the remaining maturity used in the IRB approach will be reduced in comparison with bullet loans, showing that reductions in EAD after one year are thus taken into account.

☛ *What parameters should be used for LGD assessment?*

The CP 3 has been somewhat clearer for LGD, but critical information are lacking on the following topics:

- it should be stated that the horizon of the default that entails the assessed loss is life of the credit: LGDs must take into account defaults occurring at any time of the life of the loan. In turn, the horizon of recovery is clearly set at the end of the recovery process;

- the Basel Committee should seek convergence with IAS when specifying the costs that should be taken into account (internal or external costs linked with recovery, discount rates...)

☛ Remaining problems with the retail/corporate boundary: the 1 M € threshold

The Basel Committee restricts the perimeter of exposures on legal entities included in the retail asset class to:

- "small businesses", imprecise term which in our opinion must not imply any additional restriction to the type of counterpart that may be included in the retail portfolio,
- loans that are not part of a consolidated exposure of the banking group on the concerned counterpart exceeding 1 M €.

This latter condition is mitigated by the end of § 199: "It is expected that supervisors will provide flexibility in the practical application of such thresholds such that banks are not forced to develop extensive new information systems simply for the purpose of ensuring perfect compliance. It will, however, be important for supervisors to ensure that such flexibility (and the implied acceptance of exposure amounts in excess of the thresholds that are not treated as violations) is not being abused."

We are afraid that § 199 may be interpreted in too stringent a way, and that banks will nevertheless be compelled to develop extensive information systems so as to ensure broad (and not even "perfect") compliance with its requirements. We understand from the current provisions that a bank should check all consolidated existing amounts on a given counterpart before treating it as retail or as corporate, which implies very different processes (see § 200 of CP 3).

We believe that such a need for a compulsory **pre-origination** consolidation would jeopardize the commercial reactivity of some business lines, especially in the case of transactional activities that are focused on one-off financing rather than on a long-term relationship with a client. Lease financing, especially when originated through the seller of the financed asset, is typically the kind of transaction-oriented activity in which a small-amount financing ticket is concluded within a very short time, just leaving to the bank's agent the time to perform a score, but certainly not to consolidate all exposures on that client over the whole banking group. Of course, a deeper analysis is performed by the concerned subsidiary of the banking group and the corporate risk-weights are used when total material exposures on a particular counterpart are at stake.

For practical reasons, we believe that the retail rating system should apply to any of those exposures of low individual amount; we would however understand that the capital requirement be based on the corporate formula when the group's aggregated exposures on one counterpart appear to be material relatively to the size of the retail portfolio.

This simply requires, in such cases, that corporate capital requirements be allowed to be calculated on the basis of ratings assigned by a retail-oriented rating system. This improvement would require two modifications in the wording of § 199 and 200:

- it should be clear that the main criterion for allowing PDs, LGDs and EADs to be assessed by **retail-style rating systems** is the consistency between the characteristics of the concerned exposures and their risk management ("large pool of exposures, managed by the bank on a pooled basis"),
- the 1 M € limit should only apply for the choice of the **regulatory capital calculation formula**. As such, should only be eligible to retail capital charges transactions that fulfill both conditions (i) to be assessed through retail-style rating systems and (ii) not to be a part of a global exposure by the banking group on the counterpart exceeding 1 M €.

Attention could also be paid to the possibility of replacing the 1 M € threshold with the granularity criterion (i.e. no aggregate exposure to one counterpart exceeding 0.2% of the regulatory retail portfolio) disclosed in §44 for the Standardized approach.

2.1.6. Financial leasing

In France as in a number of other countries, financial leasing services are provided by companies which have a 'credit institution' status and thus are subject to the international solvency ratio. As this is not the case for all countries, competition could be quite distorted. Financial leasing should not then be unduly penalized (i) compared with other banking transactions not based on the property of the collateral and (ii) compared with similar transactions provided by non-bank companies.

We have identified the following drawbacks in the currently proposed treatment of financial leasing:

- **The corporate / retail boundary is inadequately set** considering the way that most leasing companies structure their business (see the point dedicated to this topic).
- In both IRB approaches, § 487 of CP 3 requires that leases with **residual value** be treated as two separate exposures, the discounted lease payment stream on one side with associated PDs and LGDs, and the residual value on the other side with a fixed 100% risk weight. This method, whose rationale is already weak for the F-IRB approach, is especially inconsistent for the A-IRB approach.
  - ☛ We understand that the Basel Committee intends to capture both the risk of loss resulting from the default of the counterpart and the risk of loss stemming from the depreciation of the leased asset, even if the counterpart performs well until the end of its contract. We would like to stress that adding both risks by allocating each one to a distinct part of the exposure leads to mechanical overstatement of risks: **either** the counterpart performs well until the end of the contract and there is a market risk on the value of the asset, **or** the counterpart defaults during the contract and the LGD assigned to the transaction also includes the loss due to the depreciation of the asset (we recall that F-IRB LGDs for loans secured by physical collateral include overestimated haircuts that are supposed to represent the erosion of the asset value).
  - ☛ Thus, in the F-IRB approach, the capital requirement should be the **highest** of (i) 100% of the residual value and (ii) the risk weight stemming from the PD and LGD of the transaction, and not the **addition** of both figures.
  - ☛ In the A-IRB approach, market risk on the residual value and credit risk on unpaid installments are assessed on the basis of an expert appraisal of the future value of the asset. We strongly oppose splitting all leasing transactions in two parts, whereas the LGDs produced by A-IRB banks include both risks. We rather ask that the eligibility requirements for A-IRB regarding leasing mention that the LGD of each transaction must notably take into account the risk on the residual value of the leased asset.

2.1.7. Purchased receivables: factoring and ABCP

The method for assessing capital requirements for purchased receivables, which first appeared in the instructions for QIS 3, has still considerably to be improved in order to suit with the reality of risks for those operations. We are focusing on factoring (see appendix 2 for a detailed analysis) and ABCP conduits to elaborate our recommendations, but those remain valid for other kinds of receivable purchasing.

Our main criticisms are related to:

- ☛ the way that loss characteristics on short-term receivables will be used in a capital framework that usually requires "annualized" values,
- ☛ the definition and treatment of dilution risk,
- ☛ the absence of a real pool-level "top down" approach,
- ☛ the treatment of protections against first losses,
- ☛ the fixed 75% EAD rate for undrawn purchase commitments.

Taken together, those characteristics simply make capital requirements for purchased receivables unbearable and disconnected with actual risk.

- ***Animalization of loss characteristics***

  As purchased receivables are usually very short-term claims, observed PDs or ELs are related to much shorter horizons than the one-year horizon that is usually required for regulatory capital calculations (for example, the average initial maturity of receivables in an ABCP's asset pool is 3 months). Therefore the animalization technique has a critical impact: for example, multiplying by 4 PDs observed on 3-months receivables in order to obtain one-year PDs and insert them into the usual IRB formula leads to excessive capital requirements.

  We refer there to the previous argumentation on maturity: we are convinced that purchased receivables, especially in factoring operations and ABCP asset pools, are the kind of assets that should be eligible for a carve-out to the one-year maturity floor; furthermore, eligible receivables should be allowed to have initial maturities up to 6 months (instead of 3).

  The treatment we recommend for eligible short-term exposures should thus apply to purchased receivables: use of a short-term PD, compensated by a proportional increase in the confidence interval of the IRB formula.

- ***Definition and treatment of dilution risk***

  Dilution risk should be more precisely defined: § 338 only refers to "ordinary" dilution (i.e. credit to the receivable obligor coming from discounts or disputes); but there also exists a dilution stemming from fraud or even directly from the default of the seller (invoice netting / "commingling") – see appendix 3 for more details about dilution risk. If these cases of "exceptional" dilution are not comprised in the definition of dilution risk, some banks may just measure the dilution on their usual non-defaulted seller contracts and infer that it is "immaterial", which allows them not to bear any capital requirement for dilution risk (§ 338).

  In all cases, it should be highlighted that there is no loss as long as the factor can require the seller to pay for dilution; in other words, dilution risk is conditional to the default of the seller. Therefore, the inputs to evaluate dilution risk are:

  - The PD is the one of the seller, as there never is any dilution loss for the bank unless the seller defaults.
  - The EAD is:
    - either the average diluted amount assumed by the bank in case of default of the seller, which will generally be higher than the historic level. The dilution rate has to be stressed because the default of the seller will generate some forms of dilution that are invisible during the normal life of a deal;
    - or the nominal amount of purchased receivables at the time of default.
  - The LGD is, these options being tied with those for EAD:
    - either the standard LGD associated to the seller in default / average diluted amount assumed by the bank, as the bank will be entitled to produce its remaining exposure in the procedures following the default of the seller;
    - or the seller's standard LGD times the percentage of the seller balance that is concerned by dilution at the time of default / the nominal amount of purchased receivables at the time of default.

    This could be achieved through an assessment of LGD that would incorporate the effect of first loss protections, taking into account the volatility of average losses and therefore the (usually low) possibility that they may exceed the amount of first loss protections.

  There is consequently no reason for requiring banks to directly express dilution risks in terms of EL with a compulsory and penalizing LGD of 100%, thus refusing any A-IRB for dilution risks. LGD can be assessed as

the probable amount of loss stemming from the diluted assets outstanding at the time the seller defaults; it must include the dilution that only appears when the seller has defaulted ("commingling" for example) and not only ordinary dilution, that exists even when the seller performs well.

Actually, we do not see how a bottom-up approach could be used to assess dilution risk for pools of receivables, as this risk is related to the seller's global invoicing process rather than to any particular receivable.

- ***Treatment of protections against first losses***

  Mechanisms such as reserve funds, restricted funding (factoring) or over-collateralisation (ABCP) serve as protection against first losses, mitigating dilution risk in the case of factoring. In the case of ABCP programs, the overall treatment of securitization allows these mechanisms to be considered as credit enhancements for more senior positions, which therefore benefit from this protection.

  This is not the case for factoring; we understand that, at best, reserve funds can be considered as purchase discounts and offset the EL part of capital requirements. We ask that they be treated as real first loss positions, available to absorb expected as well as unexpected losses, and therefore also may offset a part of UL in the capital requirements; this could be achieved through an assessment of LGD that would incorporate the effect of first loss protections and loss volatility.

- ***Absence of a real pool-level "top down" approach***

  § 334 (default risk) and 338 (dilution risk) refer to a "top-down" approach for assessing risks. § 455 gives further details: "the purchasing bank will be required to group the receivables into sufficiently homogeneous pools so that accurate and consistent estimates of PD and LGD (or EL) for default losses and EL estimates of dilution losses can be determined. [...] methods and data for estimating PD, LGD and EL must comply with the existing risk quantification standards for retail exposures."

  We consider that, on the whole, the retail IRB approach is a "bottom-up" approach: the individual characteristics of each exposure are used in order to determine the segment to which it belongs, and each exposure is individually assigned to a given pool. A real "top-down" approach would conversely lie only on pool-level information, such as granularity, industry/country concentration/diversification, underwriting practices of the seller, etc. This top-down approach is the only one that would not require unnecessary and expensive changes in operational processes and systems for factoring and ABCP activities; we therefore ask that the reference to "sufficiently homogeneous pools" and "risk quantification standards for retail exposures" be unambiguously removed from § 455.

- ***Fixed 75% EAD rate for undrawn purchase commitments***

  There are two levels of undrawn purchase commitments:

  - ☛ a global limit on the seller, that requires prior notice to be terminated; the 75% CCF (§ 336) is understandable when applied to that amount, even if questionable in its level (see below),
  - ☛ limits on each receivable obligor, whose cumulated amount is (sometimes much) higher than the global limit on the seller. The factor is free to reduce or cancel the limit on any obligor without prior notice; therefore the 75% CCF must not be considered as applying to the sum of obligor limits.

  Furthermore, we question the 75% CCF level imposed by the Basel Committee: in a Foundation approach, this level is much higher than experienced by banks; in an Advanced approach, we do not understand why banks should not be allowed to use their own EAD estimates grounded on historical experience. It should be stressed that EAD usually models the drawing behavior of counterparts at the approach of default; in the case of purchased receivables, the counterpart that defaults (obligors) and the counterpart that may draw the line (seller) are not connected with each other, and thus it is impossible to prove a positive relationship between obligors' defaults and seller's drawings.

2.2. Securitization

We consider that, as drafted, the CP 3 acts as a disincentive for banks to use securitization as a portfolio management tool. Yet credit portfolio management is of increasing importance to the banking industry. It is widely used to optimize the risk reward profile of loan portfolios across credit cycles, through selling or buying risks on specific names or, more globally, through securitizing segments of these portfolios. In doing so, banks not only have more stable performance but also contribute to economic stability in making credit availability less cyclical. **We would then expect that regulators actually encourage banks to use the whole range of credit risk mitigation techniques, including securitization.**

We are therefore extremely concerned that the current proposal does not adequately recognize the effective risk transfer embedded in securitization transactions. Looking at new securitization deals, rather than to seasoned ones (where the first loss piece has been partly reduced by recent defaults), we have seen that the mismatch and counterparty risk charges applied to these transactions means that from a capital perspective there is little deal recognition despite the fact that the securitization does transfer credit risk. These points, which were not included in the QIS 3 study, means that the already optimistic views conveyed from the results, in fact, painted a picture that was truly over-optimistic. The result of this further level of analysis is not only the reduction in regulatory recognition of securitization but also to further increase the capital required by the banking system for that securitized pool.

By maintaining this highly conservative treatment of securitization despite the many comments that the industry has voiced since WP2, the Basel Committee is taking the risk that **banks will have to stop securitizing their assets, which will severely reduce the liquidity of their portfolios and their ability to disperse their risks.** Indeed, for a large universal bank, servicing its client base means originating and holding large portfolios of loans and securitization is the only efficient way to globally manage industry or country concentration and transfer risks on illiquid credits, at least partially.

These programs have visible costs that must be justified to shareholders and analysts by a corresponding regulatory capital relief. In the absence of any externally measurable capital relief, **securitization transactions would actually appear to destroy shareholder value, whereas they actually add value through the risk transfer.** Therefore, we strongly disagree with comments that have been made that securitization transactions do not need regulatory capital savings to be viable for banks, especially as regulatory capital aims at being a proxy for economic capital. On the contrary, we believe it is essential that the new framework appropriately takes into account the effective risk transfer achieved through securitization. Without this recognition, the only option visible to the market, in order to shift large portions of risks out of the bank's balance sheet, would be to reduce the bank's appetite to grant new loans, thus damaging its franchise and increasing pro-cyclicality.

We therefore urge the Committee that **the effective risk transfer realized through securitization be recognized by a commensurate capital relief.**

It has been an ongoing concern of the industry that **securitization does not create risk** (apart from counterparty risk in synthetic transactions) but rather redistributes risks between originators and investors. Although a moderate increase between the capital charge of the pool before securitization and the sum of the capital charges of all tranches could be accepted, we consider that the current level of increase (in the order of 50% considering that all tranches are kept within the banking system) clearly demonstrates that the proposed framework encompasses a double penalty to securitization:

- ☛ once by not considering properly the risk transfer from the originator (deduction up to K_{IRB}),
- ☛ a second time in applying overly conservative risk weights to sold tranches.

The following points particularly stand out:

- The Supervisory Formula Approach would obviously be the best method for a fair assessment of regulatory capital requirements from an originator's point of view, as it is sensitive to the main risk drivers of these structures (granularity, thickness, seniority...). However it fails to achieve such objective because of the inclusion of two floors, one under K_{IRB} and one for senior tranches. These floors mean that over 95% of the notional amount of a typical securitization would have risk weights that are in excess of what a "clean SFA"* formula would generate. It is this **"clean SFA"** (i.e. excluding the Kirb deduction floor and the senior floor) which has broad support from the industry which would deliver a much more accurate representation of risk.

- Supervisors should review the treatment of first loss positions below K_{IRB}. Requiring **deduction for all positions under K_{IRB}** makes little economic sense as it does not recognize any risk transfer to investors and lies on a misunderstanding of the way first loss pieces behave during the life of a securitization operation. The regulatory community should accept that advanced IRB banks are, in many cases, able to model the risk characteristics for both the sold and retained tranches of securitizations. Therefore, subject to regulatory supervision and testing, banks should be able to use their own models either to demonstrate the risk reduction effect of securitisation at an asset level or to calculate the PD/LGD of retained tranches which can then be used to calculate **K_{IRB}** of those retained tranches. Failing this, various recommendations are articulated in appendix in order to overcome this situation.

- Supervisors must thoughtfully decide if they wish to provide any incentive for selling or retaining any given tranche of securitization programs. The current intent to promote selling tranches just below K_{IRB} shows that there is still a misunderstanding in the regulatory community as to what securitisation achieves. **Securitization transactions are not a way to manage expected losses, these should by definition be covered by revenue.**

  If banks have specific credit concerns on names or industries, they manage these risks by reducing the exposure, selling the asset or hedging on a single name basis. By definition, large securitization transactions are not a way to manage such specific risks; banks **rather use them to shift to the market the unexpected loss component of portfolios,** which, at inception, have acceptable credit quality but where banks want to "buy an insurance" against potential downturns. The recent credit cycle has demonstrated the efficiency of such strategies, and the pro-cyclical aspect of Basel II will make the management of unexpected losses and migration risk increasingly vital for large commercial banks and for the health of the financial system.

  Indeed, as the capital requirement is defined as the amount of capital to cover both expected <u>and</u> unexpected losses, shifting only the unexpected loss while keeping the expected loss should, by definition, deserve a legitimate regulatory capital relief..

- Supervisors must pay more attention to the treatment of **senior tranches** (which can be defined as tranches that would experience losses only under a confidence interval higher than the regulatory 99.9%), which indiscriminately receive a 7% risk weight. Analyses show that, if any floor was deemed necessary (which we think it is not), a 1% value would be adequate. We underscore that a 7% risk weight for those tranches is an unnecessary and costly incentive to sell them, without any value from a risk management perspective.

- Synthetic securitizations are unduly penalized by the "substitution" rule applied to guarantees and CDS, like other guaranteed transactions, and even much more in the case of super senior tranches of CLOs (which on the average represent more than 90% of the nominal amount of those securitizations). The 7% risk weight will apply to those tranches, be they sold or retained since it will prove almost impossible to find any guarantor with a risk weight lower than 7% (with a 0.03% PD, a 21% unsecured LGD would be necessary), leading automatically almost all synthetic securitizations to the use of the cap at K_{IRB} and depriving them from any

* This "Clean SFA" was discussed and put forward in the combined ESF/ASF/ISDA response to QIS3/WP2 in january of this year.

capital saving at all. This undeserved situation can only be solved by the removal of the floors (see above) and the use of a framework that recognizes **"double default"** effects (refer to the "credit risk" section).

From the industry point of view, it is clear that a significant amount of work still has to be carried out. With this in mind and considering the complexity of securitization issues, we suggest that the final decisions on securitization be deferred until completion of a longer consultation process than the present one. Securitization may be handled as a separate matter, which could eventually amend the final Accord, without jeopardizing the implementation timeframe.

2.3. Counterparty Risk treatment of OTC Derivatives and Securities Financing Transactions

While the treatment of securities financing transactions has been extensively reviewed by the Basel Committee, the counterparty risk treatment of OTC Derivatives has not yet been given the same level of attention. Furthermore, the Basle Committee has given the impression that these two subjects can be reviewed in isolation.

We would like to strongly support a review of the counterparty risk treatment of OTC derivatives and advocate for the inclusion of securities financing transactions in this review. We believe the latter is fully justified by the fact that OTC derivatives and securities financing are very similar from an economic point of view, and are increasingly managed together (in particular, with the development of cross-product netting agreements).

2.3.1. Expected Positive Exposure (EPE) measure for OTC derivatives

The International Swaps and Derivatives Association (ISDA) and other banking associations recently issued a detailed set of recommendations concerning the counterparty risk treatment of OTC derivatives and securities financing transactions[*].

This set of recommendations is underpinned by the use of EPE-based measures to calculate Loan Equivalent Exposures for capital calculation purposes. We believe the use of EPE-based measures is consistent with best practices, and do currently apply it for our own Economic Capital calculations.

2.3.2. Wrong-way exposure, granularity and exposure correlation

The Basle Committee rightfully highlighted some factors that could lead to an understatement of risk when using EPE in capital calculations.

As far as wrong-way exposure is concerned, we believe that most of the risk resides within the structure of some particular transactions (e.g. transactions collateralized by own shares). We also believe that it is key to identify the latter transactions in order to apply to them a specific treatment (e.g. using worst-case exposure), regardless of the degree of sophistication in the derivatives exposure measurement framework.

With regards to the influence of "systemic" wrong-way exposure as well as granularity and exposure correlation, we believe it is rather limited for the derivatives portfolios of most large, internationally active banks. Recent studies and surveys among market participants[†] as well as simulations performed on our own portfolio of OTC derivatives give us some comfort in this belief. We therefore sympathize with the point of view expressed by ISDA that an adjustment factor of no more than 120% will suffice to adjust EPE for a viable capital calculation.

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[*] Recommendations to the Basel Committee on the Counterparty Risk Treatment of OTC Derivatives and Securities Financing Transactions, 25 June 2003

[†] For instance , the 2003 ISDA-LIBA-TBMA Counterparty Risk Market Survey

2.3.3. Collateralized derivatives exposures and securities financing transactions

We believe that EPE (possibly increased by an adjustment factor - as mentioned above) is an adequate measure for collateralized derivatives exposures provided that the EPE value correctly reflects the details of the collateral agreement. This is incidentally the practice at BNP Paribas, where collateral agreement characteristics are fully taken into account in the future exposure calculation.

We also increasingly view securities financing transactions as a particular type of collateralized exposures and we aim at shortly integrating them in the same risk measurement framework. We believe this is important not only for consistency purposes but also because we feel that the development of cross-product netting agreement is bound to accelerate in the future. We would therefore like to reiterate the need to have the same consistent and global approach from a Regulatory point of view.

2.4. Equity

Although the revised Pillar 1 of the new Basel Committee consultative paper (April 2003) does not bring major changes compared to previous documents, we would like to highlight a number of points of concern regarding Equity exposures.

2.4.1. Choice of approach

The Basel Committee offers two methodologies to calculate risk weighted assets for Equity exposures not held in the trading book: a market-based approach and a PD/LGD approach. The choice between the methodologies is left to national discretion. We believe it should remain in the hands of the banks under the control of their supervisors. Banks should be allowed to propose the application of either of the two methods regardless of whether the equity is quoted or not. At a minimum, banks should be allowed to use PD/LGD for unquoted securities and long-term strategic holdings and should be allowed to apply an internal model to any type of holdings. With regards to the internal model, we would welcome a less restrictive definition of the method used, so as to allow banks to use mixed credit & market models (instead of just volatility-based models), or earnings-based models (as opposed to pure asset-value-based models) in the future.

2.4.2. Undrawn commitments to private equity fund

In a FAQ document, it appeared that the Basel Committee recommended that banks convert private equity funds' undrawn commitments to a credit equivalent. In the case of LBO funds, BNP Paribas has looked at its funds' history and concluded that the drawing of new funds by fund managers in the case of non-performing investments only represented 0.8% of the outstanding capital of the fund and 4.3% of the undrawn commitments. This indicates that the undrawn commitment should not be considered as a facility that would systematically be used by fund managers when holdings are in difficult situations. As a result, we would consider it very penalizing to risk weight the undrawn commitment as a credit.

2.5. Operational Risk

We believe that further specificity is required regarding the validation process of the operational risk management and measurement processes.

2.5.1. Allowance for flexibility

Supervisors should examine a bank's incorporation of the four basic AMA elements (i.e., internal data, external data, scenario analysis, factors reflecting internal control environments) into their AMA methodologies as well as their use of operational risk data during the AMA review and approval process. The AMA review and approval process should allow flexibility in the weighting of each of the four elements and the use of operational risk data. We believe that that failure to approve an AMA should not rest solely on the determination that a bank assigns any particular weight to one of the four elements, as long as a bank has a considered and documented judgment indicating the appropriateness of the weighting used.

2.5.2. Reliance on bank processes:

Supervisors should rely on bank validation processes, whether internal or third-party, to the extent that is deemed reasonable in the AMA review and approval process. Supervisors should not specify or require the use of any particular process by a bank, but instead should rely on the processes that banks use themselves, while focusing on gaining assurance that the bank's processes are sufficient and appropriate.

2.5.3. Application of the use test

When assessing whether banks integrate the AMA methodology into operational risk management and measurement processes, supervisors should adopt a flexible approach in recognition that the AMA methodology inputs, processes, and outputs may vary in their usefulness for risk management and measurement purposes. Banks should have discretion to determine the use of the components in the risk management and measurement process and they may vary this use per component.

2.5.4. Timeliness of Review and Approval Process

Supervisors should review and make a final determination on an AMA application within one year of receiving the application. Supervisors should engage in dialogue with a bank applying to use the AMA during the review period in order to ensure that the bank has an opportunity to modify, if required, its AMA methodology before a final decision to approve or deny the use of the AMA is made. Regulators could review individual components and comment on them as they are implemented rather than waiting until the final integrated AMA risk management and measurement process has been implemented.

2.5.5. Home and Host Country Supervisory Responsibility:

The Home supervisor should have primary responsibility for reviewing and approving a bank's AMA application, including the incorporation of the four elements into the AMA methodology and the use of operational risk data. Host supervisors may choose to verify the integrity of AMA implementation in their jurisdictions, but should rely on the Home supervisor for verification of the general soundness of the AMA methodology and the use of operational risk data.

The imposition of full AMA review and approval processes in Host states would impose undue burdens on both banks and supervisors. In addition, confusion could arise resulting from different assessments offered by different supervisors.

2.6. Pillar 3

We welcome the progress made towards a general decrease of the information required by Pillar 3. However, we still have some reservations on a few provisions as we feel they could infringe on proprietary rights, involve disproportionate costs or simply bring confusion to the market rather than convey relevant information.

2.6.1. Scope of application

The Basle Committee requires to disclose capital deficiencies of subsidiaries (table 1 – points (c) and (e)). We do not support this recommendation on the ground that there is a wide range of potential explanations for such situations (e.g. : local regulation rule) that an investor may not be aware of. Hence his judgment could be misled. We believe it is up to the national regulators to assess the acceptable allocation of capital within a banking group.

Moreover, as far as investments in insurance companies are concerned (table1 – point (f)), we consider that disclosure on deduction is not consistent with the possibility given by the Basle Committee to implement alternative approach to deduction (The new Basle Capital Accord §12). Therefore, we recommend the point (f) to be amended in order to remove the disclosure of quantitative impact on regulatory capital of using alternative methods compared to deduction method.

2.6.2. Capital adequacy

We understand that Pillar 3 is construed as being applied at top-consolidated level and that "disclosures related to individual banks within the groups would not generally be required to fulfill the disclosure requirements" (§ 771). Consequently we do not agree with the exception to the rules (total and Tier 1 capital) required by the point (f) in table 3.

We noticed that information on securitization and Equity risk have been introduced (table 3 – points (b) and (c)). We agree to communicate on these items as long as the disclosure remain global and thus provide investors with comparable information between banks, which are biased by the specific structure of their portfolios

2.6.3. Credit risk:

We believe that the market cannot be in a position to "assess the performance of the rating process". Only the regulator can perform such a difficult duty, which request expertise, time and in depth analyses of statistical data. We are strongly opposed to providing the market with detailed comparisons between actual values of risk parameters versus estimates, which we all know, would raise more questions than answers and lead to erroneous conclusions. Disclosing information to the market in order for it to take the place of the regulator is simply an illusion, source of confusion.

Besides, disclosing names of credit risk mitigation technique providers belongs to proprietary information. In addition there could be legal impediments that we cannot ignore (table 8 – point (a)). Moreover guarantees can be exercised in many different ways (conditionally, partially or under certain circumstances - e.g., after first losses-) that figures do not reflect. Finally, we do not see the rationale for such a requirement as the credit quality of guarantors is taken into account directly in Pillar 1.

2.6.4. Equity risk

We underscore the fact that only global-based disclosure may have true information value since portfolio structure may vary from a bank to another, which could only blur the bank risk profile's understanding (table 7 – points (b) to (f)). Besides, we do not believe that segregating holdings on which capital gains are expected from "strategic" ones makes great sense. This provision should be withdrawn.

2.6.5. Securitization

The point (e) of the table 9 requires that "amount of impaired/past due assets securitized and losses recognized by the bank during the current period broken down by exposure type" to be disclosed. We are more than reluctant to disclose information on risks that we do not bear any longer. Indeed, if the clean break criteria are met, the risk transfer must be assumed. Therefore, disclosing on this basis could only introduce confusion among investors. We recommend that disclosure should only be necessary when the clean break criteria are not reached.

Appendix: Securitization

Context.

Securitisation is a tool to enable large scale credit portfolio management. It is the aim of credit portfolio management to optimise the risk reward profile of the credit portfolio across the credit cycle, by selling or buying risks on specific names or portfolios. Through this active management of the credit portfolio, banks not only have more stable performance but also contribute to economic stability through making credit availability less cyclical. We would therefore expect that regulators actually encourage banks to use the whole range of credit risk mitigation techniques, including securitization.

It is within this context that we are extremely concerned that the current proposals on securitization do not adequately recognise the effective risk transfer embedded in securitization transactions. It should be emphasised that QIS3 results have probably given to the Committee an overly optimistic view of capital relief obtained through securitization under Basel II since:

- when adding the impact of mismatches and of counterparty risks, capital relief is largely reduced compared to the levels shown in QIS 3.
- when applying CP3 rules to new securitization, rather than to seasoned ones (where the first loss piece has been partly reduced by recent defaults), capital relief reduces to zero in most circumstances.

By maintaining this highly conservative treatment of securitization, despite the many comments that the industry has voiced since WP2, the Committee is taking the risk that banks will not afford to issue securitization for managing their balance sheet, which will severely reduce the liquidity of their portfolios. Indeed, for a large universal bank, for which holding large portfolios of credit is a core activity in servicing the client base, having a material impact on the overall portfolio profile can only be achieved through large scale transactions, such as securitization. As a tool, securitization is unique in offering also the ability to deal with illiquid credits (which represent most any commercial bank's activities) or large industry / geography concentrations.

These programs can have visible costs, and as a result, it is a necessity that the costs associated with these programmes are justified to shareholders and analysts by disclosing a corresponding regulatory capital relief. In the absence of any externally measurable capital relief, securitization transactions would actually appear to destroy shareholder value, whereas they actually add value through the risk transfer.

We strongly disagree with some comments that have been made that securitization transactions do not need regulatory capital saving to be viable for banks. On the contrary, it is essential for the transparency of disclosure of risk to the market that the new regulatory capital that is disclosed appropriately takes into account the effective risk transfer that has been achieved through securitization. Otherwise, the only option visible to the market, in order to modify the credit portfolio would be to reduce credit offering to clients, thus damaging banking franchises and increasing pro-cyclicality.

We therefore urge the Committee that the effective risk transfer component of securitization be recognised by a commensurate capital relief.

It has been an ongoing concern of the industry that securitization does not create risk (apart from counterparty risk in synthetic transactions) but rather redistributes risks between originators and investors. Although a moderate increase between the capital charge of the pool before securitization and the sum of the capital charges of all tranches could be accepted, the current level of increase (to the order of 50% on average) clearly demonstrates that the proposed framework applies a double penalty to securitization :

- once by not considering properly the risk transfer from the originator (deduction up to Kirb)
- once in applying overly conservative risk weights to sold tranches

1. Risk transfer from the originator

1.1. Should banks sell the first loss?

The current framework applies a prohibitive capital charge to first loss pieces through the full deduction approach up to K_{IRB}. This seems to be considered by the Committee as **an incentive for banks to sell these first loss pieces.** We believe that this objective is not realistic, at least in the current development of the markets in Europe. It is fair to accept that investors require some alignment of interest between the originator and the investors. Some opportunities, including CLOs of CLOs may develop, but we doubt there can ever be the capacity to absorb the volumes of first loss pieces that will be generated by large banks actively managing their portfolios.

More importantly, **securitization transactions are not a way to manage expected losses.** If banks have specific credit concerns on names or industries, they manage these risks by reducing the exposure, selling the asset, or hedging on a single name basis. By definition, large securitization transactions are not a way to manage such specific risks, banks **rather use them to shift to the market the unexpected loss component of portfolios,** which at inception have acceptable credit quality, but where banks want to "buy an insurance" against potential downturns. The recent credit cycle has demonstrated the efficiency of such strategies, and the pro-cyclical aspect of Basel II will make the management of unexpected losses and migration risk increasingly vital for large commercial banks and for the health of the financial system.

Indeed, as the capital requirement is defined as the amount of capital to cover both expected <u>and</u> unexpected losses, keeping the expected loss while shifting the unexpected component should deserve a legitimate regulatory capital relief.

1.2. Comparing K_{IRB} and first loss

The underpinning paradigm of the current framework is that risk transfer only occurs if and when the first loss kept by the originator is smaller than K_{IRB}. The risk transfer would simply be measured by the difference between K_{IRB} and the first loss. Although this principle can seem sound from an intuitive point of view, we believe it is in itself largely flawed.

It would actually be right only if the calibration of K_{IRB} and the calibration of the first loss would be based on similar frameworks, which is far from being the case. In the real world, the calibration of the first loss (by rating agencies or Securitization models) leads to results that by definition should be expected to exceed K_{IRB} :

- ☛ PDs and LGDs are stressed compared to internal data (especially when securitizing illiquid assets based on internal ratings)
- ☛ The granularity of the securitization pool (in the corporate world) is much less than the one of the overall portfolio of a bank originator. This translates into a loss distribution for the CLO portfolio, which has a much fatter tail than the banks' loss distribution.
- ☛ The first loss is sized to cover potential losses up to the confidence interval of the next rated tranche at a horizon equal to the maturity of the structure whereas K_{IRB} is calibrated at a 1-year horizon[*].
- ☛ In most transactions, the originator has substitution rights, therefore the first loss is calibrated to cover future losses on a bullet portfolio, whereas K_{IRB} only measures the capital charge of the assets currently securitized, for which the average maturity is generally significantly smaller than the maturity of the structure.

For all these reasons, the likelihood originators will be able to structure a transaction where the first loss is smaller than K_{IRB} is very remote unless:

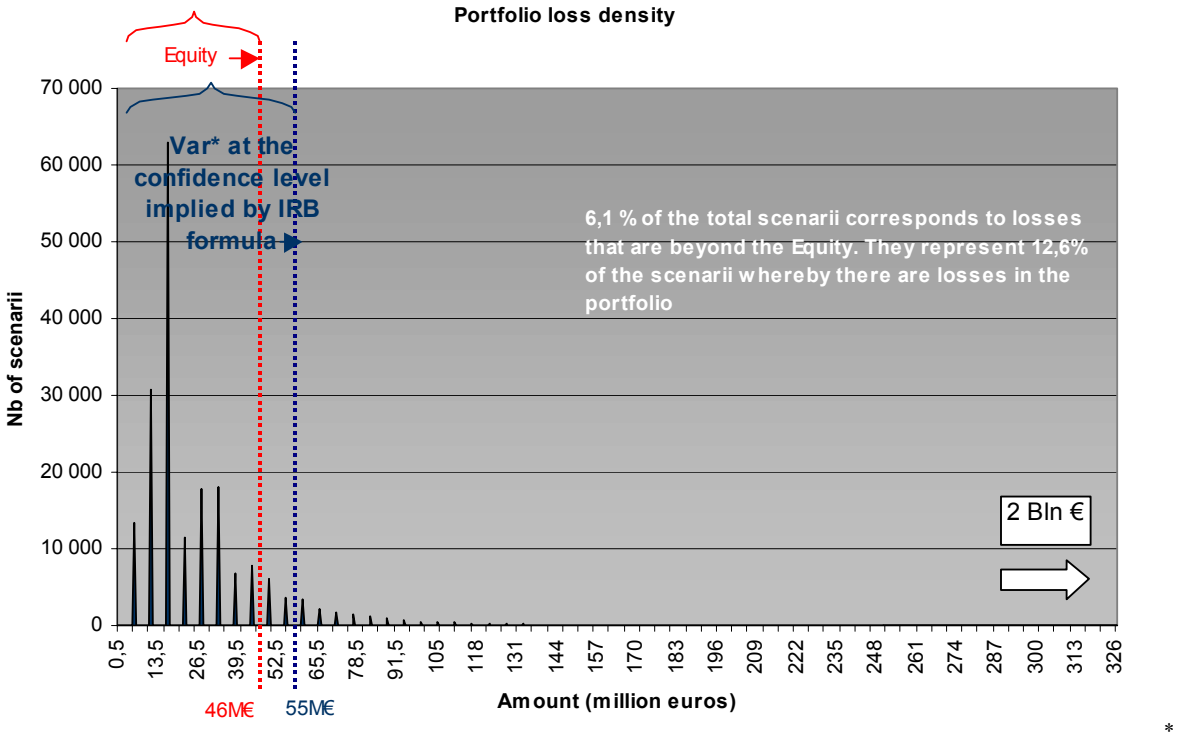
- They concentrate on portfolios where K_{IRB} would be unduly overstated, as is currently the case under the current Accord for some corporate credits. However this would result in regulatory arbitrage rather than sound risk transfer.
- The transaction is a short term one, which will offer positive capital benefit but do not offer the same protection against future downturns.

However, these results should not be interpreted as a lack of effective risk transfer, but as a lack of robustness in the comparison between K_{IRB} and the first loss.

[*] The first loss position of a 1 year deal is genertaly between 35% and 60% (depending on asset type) less than an equivalent 5 year deal. This implies that a 1 year deal is more likley to have the first loss position below Kirb than a 5 year deal.

1.3 Framework for measuring risk transfer

Through using their own models, banks can analyse the loss distribution for each tranche of a securitized pool of assets. By defining the entire loss distribution, the EL, UL and centile at a given confidence interval can be calculated. This analysis shows that, although the Equity accounts for a significant portion of the losses, mezzanine and senior tranches also attract the more unexpected part of the losses as illustrated in the graph below:



*

Although the percentage of scenarios (in the above example, 6%) where losses exceed the equity (i.e. are transferred to investors), may look small, is actually significantly higher than the confidence interval of losses used to calibrate Kirb (or to allocate economic capital internally). Therefore the originating bank has indeed reduced its unexpected loss on this portfolio (in this case by 16%), meaning that there is significant risk transfer, which justifies that the originator should not have to deduct from capital the first loss up to Kirb, but only a fraction of Kirb. Subject to regulatory supervision and testing, banks should be able to use their own models either to demonstrate the risk reduction effect of securitization at an asset level or to calculate the PD/LGD of retained tranches that can then be used to calculate Kirb of that retained tranche.

* Results based on a €2 billion investment grade CLO. The €55M corresponds to the maximum loss at the confidence level corresponding to the 5 years maturity (maturity of the vehicle) cumulated default probability implied by the IRB formula (i.e. the 5 years default probability which corresponds to a 1 year PD of 0.1%)

1.4. Potential improvements within the current framework

We believe that A-IRB banks should be encouraged by their regulators to develop internal models for the assessment of securitization as a sound risk management practice to assess the risk of first loss retained or bought. However, as an alternative to adopt a full IRB approach for securitization, **we strongly support the employment of a "clean SFA"** in which the various floors would have been removed. This "clean SFA" has been widely tested and supported by the industry and it appears that its results are sensitive to the main drivers of losses for securitization tranches (granularity of the underlying asset portfolio, thickness and position of the tranches) and on the whole consistent with banks' internal models.

If an alternative to this "clean SFA" nevertheless had to be found, we believe some amendments to the current framework could at least mitigate the current biases:

1. We suggest that some allowance be at least taken of a lifetime expected losses of the securitized credit portfolio when looking at the retained first loss position. This can be represented by the following formula:

   First loss amount retained against K_{IRB} = First Loss Position – (EL to maturity – EL 1 Year)

   This option would be more realistic as it would fit in with the fact that, when no mechanism for trapping excess spread exists, first loss positions are reduced by the amount of realized losses during the lifetime of the securitization (this option would thus not apply to securitization retaining excess spread) and more risk is transferred to investors. It would still have a conservative bias insofar that the volatility of losses embedded in the first loss position is also sized to maturity, but it would be an important step in the right direction.

2. In the case that the originating bank is able to have the retained tranches rated by an ECAI, the originating bank should at least be able to treat these positions under RBA without regard to whether it is above or below K_{IRB}. As ratings are based on potential losses to maturity, this approach would also, at least, partially address the bias of the comparison of the first loss sized to maturity and the K_{IRB} sized at 1-Year horizon. Indeed this approach would also be consistent with the broadly shared view that the capital charge for credit risk should be independent of the status of the owner of that credit risk. However it would be regrettable to have to use the RBA as a means to escape the effects of the mis-calibration of the SFA, as the SFA should adequately reflect the risk distributed / retained by a securitization originator.

3. Other mechanisms could be studied so as not to lead to compulsory deduction of all positions below K_{IRB}. One example could be based on the recognition that securitized portfolios are not as granular as the overall portfolio of the originating bank, and thus more volatile losses lead to more risk transfer to investors and less risk retained by the originator. We therefore suggest that the N parameter be used to make the deductible amount fall below K_{IRB} as N decreases.

4. Recognising that a significant portion of risk is securitised away from the first loss position could also be achieved through an adjustment to the tier 1 requirement for capital deductions. Case by case reduction, where the originator can demonstrate (perhaps using a clean SFA) that a significant proportion of risk has been transferred would then result in the tier 1 component of capital deduction falling below the current 50% requirement.

2. Assessing the risk weights for mezzanine and senior tranches

2.1 Mezzanine tranches

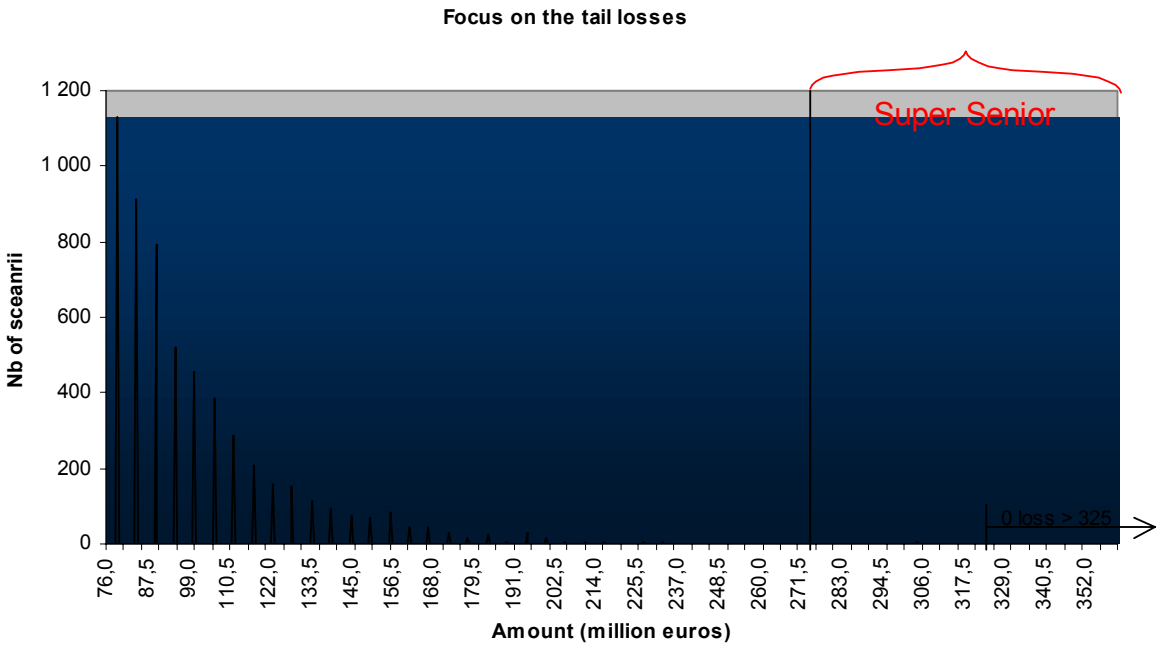
We believe that IRB banks should be allowed to use their internal assessments of PD/LGDs to assess the capital charge linked to securitization tranches, and we regret that the current proposal, by allowing only the use of external ratings, falls short of proposing a real IRB approach.

Because of the complexity of the various structures, we believe that no regulatory model will be able to adequately capture the risk profile of the tranches, and we share the comments of the industry on the fact that the proposed framework is already too complex. We believe the way out of the dilemma between complexity and risk sensitivity should be found in more reliance to internal PD/LGD estimates, based on adequate

level of validation of such models by regulators, rather than in more refinements of the SFA formula, which would be costly and diverge anyway from the investments required for internal assessment of risk. We believe that the concept of "use test" that the Committee has established in the Accord should also apply to securitization tranches, and that the best possible protection against pure regulatory arbitrage is to ensure that the capital charge is based on the same assumptions as the bank uses for internal risk measurement.

2.2.Senior tranches

The risk weight floor at 7% (56 bps of capital requirement) is also one of our major concerns. Although the whole community agrees there is very little benefit for banks to shift these tranches, the floor creates a significant incentive to indeed sell those tranches outside the banking industry, which only increases the cost of securitization without bringing real risk relief.



The risk profile of the most senior tranches (as illustrated above) is actually completely different than the one of a mezzanine tranche, as the most senior tranches cover the tail of the loss distribution. It is also quite different from the risk profile of a AAA corporate as the default of a AAA corporate, also being a small probability of occurrence, is a more digital event, and may translate into a significant LGD, which is not the case for a senior securitization tranche.

Banks' models as well as the "clean SFA" concur to show that, even in the remote event that this tranche would be hit by some losses, the losses as a percentage of notional would in all scenarios be minimal. Therefore, the parameters used to set the floor at 56 bps are not realistic.

In all simulated transactions, the LGD of the most senior tranche ranges between 0% and 3%. Therefore use of a a 5% LGD is a conservative assumption that could be used , instead of the implicit 50% LGD used in the current formula. This would allow banks to either retain these senior tranches at a reasonable capital charge, rather than sell them at an unnecessary cost.

We would also like to raise the Basel Committee's attention on the fact that the recognition of "double default" is also very important for synthetic Securitization, where huge nominal amounts are usually sold to investors in CDS form. The substitution method does not reflect the fact that a bank's exposure to the counterparty is conditional to the fact that losses on the underlying portfolio would reach the level of the tranche, which makes it a very small probability.

Conclusion

From the enclosed comment is can be seen that a fundamental review is needed to securitization within the Accord. On the industry part, it is clear that a significant amount of work still has to be carried out which will be providing further valuable information into the debate. With this in mind and considering the complexity of securitization issues it is clear that rather than finalizing a far from perfect solution in the short timeframe until the Accord needs to be released, the final decisions on securitization are deferred until completion of a longer consultation process. This could possibly include a further QIS study (bearing in mind that the QIS3 was in fact the first time securitization was reviewed). Securitisation is sufficiently contained within the Basel 2 process that final proposals on securitization could be issued as an amendment posterior to the delivery of the final Accord, without jeopardizing the timeframe for implementation.