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Secretariat of the Basel Committee on Banking Supervision
Bank for International Settlements
CH-4002 Basel
Switzerland

April 16, 2010

Dear Sirs,

Please find attached the formal response from UBS AG on the BCBS consultative documents:

- Strengthening the Resilience of the Banking Sector
- International Framework for Liquidity Risk Measurement, Standards and Monitoring.

We would be glad to elaborate on the issues we raise, and which we believe are crucial for the success of Basel III, in a face-to-face meeting.

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Group Chief Risk Officer
UBS AG

John Cryan
Group Chief Financial Officer
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CC:
Eidgenössische Finanzmarkaufsicht FINMA
Swiss National Bank

UBS AG

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Group Chief Financial Officer

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Memorandum

April 16, 2010

To **Basel Committee on Banking Supervision**

Subject **Response to Consultative Documents :**

Strengthening the resilience of the banking sector

International framework for liquidity risk measurement, standards and monitoring

UBS wishes to thank the Basel Committee and FINMA for the opportunity to comment on these important and far-reaching proposals. Given their scope and potential impact, we strongly endorse the importance of an open consultative process. We stand ready to engage in ongoing dialogue on the proposals, including the comprehensive quantitative impact study (QIS) results. Moreover, given that critical elements of the proposals are not yet specified, not to mention the sheer number of topics addressed by these proposals, we consider that this consultative period should be the first of several.

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A. Overview

UBS welcomes the opportunity to provide comments and input on these important proposals. Our detailed response on the individual elements of the proposals is contained in the sections below. In this section, we articulate a set of guiding principles that have been important in shaping our overall response to the proposals as well as summarize key elements of that response.

We agree that improvements in the regulatory framework are needed.

- UBS has been one of the banks most affected by the financial crisis and we take the lessons of the crisis extremely seriously. These lessons apply both to the business and risk management practices of individual firms as well as to the prudential oversight of the financial system as a whole.

- We further agree that a primary objective of changes in bank regulation should be to enhance the ability of banks and the banking system to absorb and be resilient in the face of adverse shocks.

The most direct and effective means of increasing the ability of banks to absorb losses is to increase the buffer between minimum required capital and actual capital.

- While this point is practically self-evident, we believe that its implications are not being given sufficient attention. In particular, increases in minimum required capital, holding the absolute size of bank capital buffers fixed, will not increase the amount of loss a bank can absorb before it must raise fresh capital.

- We endorse the concept that capital buffers for internationally active banks should be sufficient for a bank to withstand a severe stress test across all its exposures and remain well capitalized. We believe the Basel Committee is under-estimating the prudential benefit and practicality of this emerging supervisory standard, particularly given its role in helping to stabilize the financial system at key points during the crisis.

- We encourage the Basel Committee to devote additional effort to ensuring consistent implementation and supervisory review of this standard within pillar two.

It is not reasonable to expect that changes to capital and liquidity standards (nor other financial and regulatory reform efforts) will banish credit and economic cycles.

- For example, we are sceptical that efforts to vary minimum capital standards counter-cyclically in mechanical fashion in response to economic and financial conditions can achieve market credibility.

- A more effective approach to enhancing the resilience of the financial system will entail improvements not only to capital and liquidity regulations, but to the full range of bank and supervisory practices.

- In particular, we believe that supervisors must go further during periods of robust economic growth and financial euphoria to constrain the forces that encourage financial institutions to excess. We acknowledge that this is far from easy and therefore support the Basel Committee focusing increased efforts on improving the effectiveness of bank supervision.

A greater emphasis on capital elements, such as common equity, that absorb losses on a "going concern" basis is appropriate, but assessments of capital elements and deductions should be based on consistent application of economic principles and not default to all-or-nothing solutions.

- Based on our own experience of the value of these elements, including experience during the crisis, we believe the proposed treatments of mandatory convertible notes, deferred tax assets, pension fund elements and minority interests are too extreme and simplistic.

- As a general principle, where a bank simultaneously takes on an exposure and sets aside capital equal to the maximum possible loss on that exposure, its capital ratio should not be affected. The latest proposal violates this principle.

The new framework should incorporate a clear role for contingent capital instruments, which if properly designed can absorb losses on a "going concern" basis.

- It is important for investors and other market participants that definitions of loss absorption triggers are easily comparable across institutions, particularly those based on regulatory capital ratios.

- Where triggers are based on regulatory capital ratios, we recommend the trigger point be no higher than 25% above minimum required capital to balance the need for "ongoing" loss absorption with the need to ensure appropriate market acceptance of the instruments.

- We support allowing contingent capital instruments to fully offset "buffer" capital needs.

The introduction of a global leverage ratio provides an additional safeguard, provided that it is defined to ensure consistent application across differentiated accounting regimes, calibrated such that it is rarely the binding constraint, and focused narrowly on a comparison of balance sheet size with capital.

- The introduction of a leverage ratio has the potential to discourage banks from the lowest-risk activities including sovereign finance and traditional banking book activities and care needs to be taken to avoid unintended consequences.

- Incorporating the gross notional amounts of trading positions within a leverage ratio will significantly distort and dilute any value that a traditional leverage ratio has.

- In many respects, we believe the practical challenges and limited information content of the leverage ratio make it a better fit for Pillar 2, where its use as a supervisory tool would be more consistent with the desire to tailor it appropriately to the needs and conventions of particular jurisdictions.

The importance of strong and conservative liquidity risk management has been amply demonstrated during the crisis, but the Committee's liquidity proposals applied on a global scale risk repudiating the very nature of banks in relation to maturity transformation and provision of liquidity to the non-financial sector.

- We welcome the increased focus of supervisors on liquidity risk management. UBS has undertaken significant efforts to establish an appropriate and comprehensive liquidity risk management framework that reflects the lessons of the crisis experience.

- As a globally active bank UBS welcomes the Committee's efforts to establish an internationally coordinated standard for liquidity regulation in contrast to independent efforts by national regulators to enforce liquidity risk frameworks on a national basis.

- However, we feel that highly prescriptive and stringent regulation imposed all at once on a global scale will undermine banks' abilities to properly manage their liquidity risks according to their understanding of the industry, their products and their clients. Therefore, we strongly encourage that supervisors instead focus close supervisory oversight on banks' internal liquidity risk models in order to comprehensively and adequately measure all inherent risks. Banks should incorporate assumptions based on evidence and experience which they should be required to document to their supervisors.

- Application of globally uniform, broad-brush liquidity requirements, both with respect to the composition of "liquid" assets and in relation to restrictions on maturity transformation, are likely to worsen the potential for "herd" behaviour by banks during future stress episodes arguably creating the very situations supervisors and banks wish to avoid. Moreover, under the proposed regime, liquidity risks will effectively be transferred to institutions that do not fall under this regulation, potentially increasing the vulnerability of the financial system.

- We fear that these proposals could have lasting and significant impacts on the global economy. In particular the envisioned shift in the maturity profile of the banking sector must by definition be exactly matched by an offsetting shift in the maturity profile of the balance sheet of the non-bank sectors of the economy. Given that these shifts in non-bank balance sheets are likely to be measured in the trillions, it is likely that the social welfare consequences could be profound.

- Finally and perhaps most important, we believe additional care is needed to avoid handing over critical management judgments to a homogeneous set of simple rules. This runs the risk of exonerating bank management from their responsibilities and thus undercutting the critical need to enhance accountability throughout the financial system.

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Changes to minimum capital calculations should reinforce incentives to adopt strong risk management practices and reflect the best collective assessment of the underlying risks.

- We are concerned that relative risk differentials that are not supported by evidence can create distortions and incentives to arbitrage the framework. The temptation to incorporate ad hoc elements that add (unknown amounts of) additional conservatism into these calculations is understandable, but ultimately counter-productive.

- We do not agree with the view that the crisis discredits the quantification of risk as an objective. We feel that risk measurements must be interpreted cautiously, with greater attention devoted to understanding the assumptions underlying those measures, as well as the conditions under which those assumptions break down. The events of the crisis do not provide an excuse for simplistic short-cut measures over greater analytical rigor. If anything, that experience provides ample evidence where measures thought to be "simple but conservative" proved instead to just be "simple".

- With respect to the proposed change in the Asset Value Correlation for financial institutions, we are concerned this will create incentives for transactions and exposures to be routed via highly rated non-financial companies that are not themselves subject to prudential regulation. In that context, we believe it would be beneficial for the Committee to provide additional details regarding the evidence cited in the proposal.

- While not strictly a part of these proposals, the new market risk rules are scheduled to go into effect in a number of jurisdictions at year-end. We are increasingly concerned that aspects of these rules remain unclear in some respects, and that there is a growing

consensus within financial markets that the new rules will substantially hinder re-establishment of securitisation markets, thereby ironically encouraging growth in the size of banks.

We support the need to incorporate the market risks of Credit Valuation Adjustments (CVA) within the regulatory capital framework and did so voluntarily last year in the context of the market risk framework. However, the approach mandated in these proposals and especially in the QIS is unworkable, departs substantially from our understanding of best practice, would discourage sound hedging and active risk management in the trading book, and would produce capital estimates that are too conservative by an order of magnitude.

- The proposed 'bond equivalent' calculation is too simplistic, does not incorporate important tenor aspects correctly, and results in market risk sensitivity estimates that are demonstrably inaccurate. In our view, the bond equivalent approach in its current form would not be allowed for use for CVA fair valuation because of these distortions.

- While not fully specified in the text of the proposals themselves, the QIS exercise implies that the Committee is considering applying several additional scaling factors in the context of the CVA charge. These include application of an "alpha factor" to the exposure amounts and the application of a final scaling factor of three to the sum of the Value-at-Risk (VaR) and stressed VaR quantities, both measured at an annual horizon. In aggregate, this implies that the CVA capital charge effectively multiplies the 10 day VaR of the current CVA by an aggregate scaling factor of more than fifty (50). This is in addition to the conservatism embedded in the bond equivalent calculation and the fact that the proposal disallows use of many hedging instruments such as index hedges that demonstrated clear value during the crisis itself.

- The proposal makes the point that losses from market movements in CVA amounts were in many cases approximately twice as large as direct losses from actual counterparty defaults. However, we calculate that given the multiple layers of conservatism as described above, the new CVA charge would be more than 10 times larger than the current counterparty credit risk charge. Needless to say, a charge of this magnitude would not simply impact relevant business activities, but would end them.

- It is clear from the industry discussions surrounding this proposal that the application of existing accounting standards to CVA differs markedly across firms. We suggest that the charge should be aligned with internal risk measurement approaches, according to the accounting regime under which we operate and that supervisors should set high standards for analytical rigor and care in such calculations.

Given the scope and potential impact of the proposals, it is critical to assess them carefully in the context of the multiple responses to the crisis that have been initiated or proposed in the public and private sectors.

- Given the far reaching effect of the proposals at the level of the specific firms, the markets and the economy, we appreciate that the QIS is in fact the key link between the conceptual discussion and the actual implementation / operations of the rules. It is imperative that quality prevails over timelines. And it is equally important that a feedback loop is provided from the results and analysis of the impact study back into the conceptual rules. More broadly, we strongly encourage the Committee to incorporate mechanisms whereby the framework can continue to be reviewed and adjusted further in light of experience in the period leading up to implementation.

The capital proposals are more far-reaching than any initiative previously undertaken by the Basel Committee and less time is allocated toward their finalization than in any previous initiative.

- We feel that the Committee is unlikely to be able to devote the time during 2010 to address every issue in proper depth. We believe this could lead to unintended consequences as a result of the implementation of the proposals.
- We believe therefore that setting an implementation date (2012) is premature, unless it is understood as preliminary and aspirational in nature, given the ambitiousness of the scale of changes.
- We support the Committee's indication that 'Appropriate grandfathering and transitional arrangements will be established which will ensure that this process is completed without aggravating near term stress'
- Grandfathering needs to be sufficiently long to avoid market disruption and unnecessary costs for issuers. If there is little or no grandfathering the effect will be that investors will anticipate existing issues may be restructured or bought back. This will place a heavy burden on the industry as both the buying back and new issuance will be expensive and volumes will be enormous.
- Moreover, the effect of the grandfathering should be to maintain the pre-existing treatment afforded by the local regulator in relation of the particular security. This is important as there is frequently divergence across jurisdictions in relation to a particular security.
- Transition to new minimum capital requirements needs to take into account a gradual transition period to avoid a 'cliff' effect. Furthermore, other regulatory changes in the insurance sector will also impact the ability for other financial institutions to be able to purchase any fresh capital.

It is of paramount importance that the implementation of the revised rules occurs under an unconditional commitment to the "level playing field".

- We believe the Committee should ensure a consistent and effective global application of the revised framework at the supervisory level. This will require promoting greater convergence by addressing the significance of the level of interaction and interdependence between accounting and regulatory regimes, for example:
    - Banks currently report under significantly different GAAP requirements (e.g. US GAAP, IFRS);
    - Banks may be subject to different capital requirements according to the requirements of their home regulator (e.g. FINMA / SNB leverage ratio for Swiss banks);
    - Not all banks have fully implemented Basel II (for example US Banks are still not required to comply).
- A number of elements of the existing framework still need to be addressed to achieve this objective.
    - The treatment of provisions generally and in relation to expected losses;
    - The treatment of open questions from the new trading book rules, in particular the treatment of short securitisation positions.

B. Raising the quality, consistency and transparency of the capital base

B.1 Observations and principles

We agree that the quality of capital in the financial system should be harmonized in a transparent manner, while considering whether the instruments are loss absorbing. Enhanced transparency of quality-of-capital requirements should be designed to prevent future misperceptions and inconsistencies. However, we highlight the following key points of concern.

- The proposal to deduct **deferred tax assets** (DTAs) pursuant to paragraph 98 seems overly conservative, as we believe that there is economic value in DTAs on a going concern basis, and the accounting standard setters already impose restrictions on the ability to record DTAs. Furthermore, we believe that this introduces a procyclical aspect which would be contrary to the objectives of the revisions.

Due to the high quality and loss absorbing nature of the capital injected through **mandatory convertible notes** (MCNs), the proposal should allow inclusion in common equity, net of coupons payable until conversion into common equity. Paragraph 95 requires that **minority interests** are not included in the common equity component of Tier 1. We seek clarification whether it is also excluded from additional going concern capital. If this is the case, it is equally inappropriate for the group to underpin 100% of the risk weighted assets of such entity, while it is only exposed to a portion of the risks

- Appropriate and transparent grandfathering provisions will be essential to minimize uncertainties and disruptions. We are concerned that the playing field for banks globally could become considerably unlevelled as every national regulator negotiates for grand-fathering arrangements resulting in the new regulatory standards being inconsistently applied. Given there may be private placements, we recommend that disclosure requirements be a consistent set of the key terms and conditions of instruments issued.

We support the ongoing discussions about the future role of contingent capital. It will be critically important to agree to terms that provide the necessary assurance to supervisors while being widely accepted by investors. It is important for investors and other market participants that definitions of loss absorption triggers are easily comparable across institutions, particularly those which are based on regulatory capital ratios. Therefore, key principles for the trigger will include market observables related to the idiosyncratic conditions of the individual institution, and not being subject to management discretion.

Finally, paragraph 76 states that the Committee will consider the appropriate treatment in the non-predominant element of Tier 1 capital instruments which have tax deductible coupons'. The sole and paramount focus of the requirements of the definition of capital should be "going concern" loss absorption. The harmonization of tax regimes across the globe is more far reaching than the definition of capital, and accordingly, there should be no requirements in relation to tax deductibility.

B.2 Criteria governing inclusion in Common Equity

We have the following comments relating to paragraph 87:

- Criterion 4 '…does nothing to create an expectation at issuance …*'* We recommend that this criterion is reworded to explicitly state that market-making in one's own shares is not prohibited.

- Criterion 5. 'distributions are paid out of..' Clarification is required as to whether the definition here is the same to that applied in paragraph 249. We recommend that this criterion either refers to "distributions to holders of common equity instruments", or replaces "distributions" with "dividends/coupons", in line with paragraph 89, criterion 7.

- Criterion 6. '…there are no circumstances under which the distributions are obligatory' Mandatory convertible notes represent fully loss absorbing capital, with a quality akin to share capital. Yet such instruments have coupons which are obligations of the issuing entity. Due to the high quality and loss absorbing nature of the capital injected through mandatory convertible notes, the criteria should allow inclusion in common equity, net of coupons payable until conversion into share capital. Indeed UBS has on 2 occasions increased its risk absorbing capital by issuing MCNs. These instruments have subsequently been converted into common equity.

- Additionally, we highlight that after the approval of the general shareholders meeting of a dividend distribution proposal, the payment of such distribution becomes obligatory until the payment is executed, and non payment would consequently become an event of default. We therefore recommend that this be allowed as an exception to the rule.

- Criterion 11. 'It is directly issued and paid-up' is problematic for banks, such as UBS, which have significant foreign currency exposures and are unable to directly issue common equity in foreign currency in their jurisdiction. If, in accordance with paragraph 85, there will be minimum ratios at the common equity level, there must also be a regulatory possibility to create a stable relationship between foreign currency denominated risk weighted assets and foreign currency denominated common equity. Therefore, we strongly suggest that criteria are defined so as to allow indirect issuance of common equity, such as through a special purpose entity or other operating entity.

- Criterion 11 "(ii) a write down mechanism…" We feel that write-down provisions should be allowed to accompany write-up provisions at a later stage, for example where the issuer has restored solvency and/or profitability. This allows investors to recover their investment when the issuer restores financial health; this would equally be the case for common equity holders. Not permitting a write-up would disadvantage non-joint stock companies unable to use the alternative conversion into common shares as a loss absorption mechanism. Criterion 11 further discusses trigger points. It is important for investors and other market participants that definitions of loss absorption triggers are easily comparable across institutions and jurisdictions. Also, where the specific trigger level is based on a regulatory capital ratio, we recommend that the trigger point is set at or moderately above the regulatory minimum. This should be appropriate on the basis that the loss absorption features are working and thereby preserving the capital base of the issuer.

- Criterion 10 and 14 are both accounting filters which are applied to regulatory criteria. We disagree with these filters. The regulatory criteria should suffice to define common equity additional going concern capital. We note that the accounting standard setters FASB and IASB are working on a new standard that defines equity. Such filter would therefore create regulatory uncertainty. Also, treating mandatory convertible notes as equity is not possible under current accounting rules, where there is a range of possible number of shares into which the notes are converted. Yet the number of shares is not relevant for the regulatory criterion of the loss absorbing nature of the capital injected. Therefore again, the accounting filter is not appropriate.

B.3 Criteria governing inclusion in Additional Going Concern Capital

We have the following comments relating to paragraph 89:

- Criterion 6 '…banks should not assume or create market expectations that supervisory approval will be given'. We recommend that this criterion is reworded to explicitly state that market-making in ones own shares is not prohibited.

- Criterion 7 a. and b. does not allow any circumstances under which distributions are obligatory. We highlight that after the approval of the necessary approvals are in place, the payment of dividends and coupons become obligatory until the payment is executed, and non payment would consequently become an event of default. We therefore recommend that this be allowed as an exception to the rule.

- The additional requirements include an accounting filter. As commented in the previous section, we believe all accounting filters should be removed.

B.4 Criteria governing inclusion in Tier 2 capital

We have the following comments relating to paragraph 90:

- We generally agree with the criteria for inclusion in Tier 2 capital. Based on the fact however, that Tier 2 capital is designed to be loss absorbing on a gone concern basis, we believe it is not appropriate to start amortizing the capital recognition already 5 years before maturity. As the Tier 2 capital is available for loss absorption in a gone concern basis until maturity, there should not be a need for any amortization period.

- The additional requirements include an accounting filter. As commented in the previous section, we believe all accounting filters should be removed. In addition, we believe that instruments which have a maturity will generally not be accounted for as minority interests, and would thereby not meet the condition for inclusion in Tier 2.

B.5 Regulatory adjustments

Paragraph 95 requires that minority interests are not included in the common equity component of Tier 1. It is unclear, yet we assume that it is implicitly also excluded from additional going concern capital. We understand and agree that such capital is not available to support all risks in the group. It is equally inappropriate however, for the group to underpin 100% of the risk weighted assets of such entity, while it is only exposed to a portion of the risks. We therefore recommend that the risk weighted assets are reduced at the percentage shareholding of the group in such entity.

We agree with the proposal of paragraph 96 to make no adjustments for unrealized gains and losses relating to debt instruments, loans and receivables, equities, own used properties and investment properties.

We agree in principle with the requirement of paragraph 97 to require a deduction from common equity of goodwill and other intangibles. We believe however that software, which is commonly classified as intangible assets is sufficiently critical to the operations of most banks, that it would be warranted to treat software as "fixed assets" rather than a deduction from going concern equity

The requirement to deduct deferred tax assets (DTAs) pursuant to paragraph 98 is of a particular concern. Firstly, we believe that this increases the procyclicality and therefore works against the objectives of the revisions. Secondly, we believe that there is economic value in DTAs on a going

concern basis, and the accounting standard setters already impose restrictions on the ability to record DTAs. We therefore recommend that (i) any deduction of DTAs be made from gone concern / Tier 2 capital, and (ii) at least a portion of DTAs (e.g. over a specific time horizon) is accepted without deduction.

We agree with the deduction of investments in own shares (paragraph 100) and investments in financial institutions exceeding a certain threshold (paragraph 101).

Paragraph 102 requires that the shortfall of provisions to expected losses is deducted from common equity. We understand this deduction in the context of safeguarding a level playing field. Conversely, where accounting standards allow or mandate provisions that exceed IRB expected losses, such excess should be reversed for regulatory capital purposes, i.e. the excess should remain a component of tier 1 capital.

We agree with the regulatory filter for cash flow hedge reserves (paragraph 104). We also agree with the filtering of own credit effects on all financial instruments, including derivatives (paragraph 105), as it reduces the volatility of capital and eliminates distortions of loss absorbing capital.

We do not believe that pension fund assets should be universally deducted, irrespective of the specific legal circumstances. Also, such requirement increases pro-cyclicality. In various jurisdictions, pension funds are bankruptcy remote from the employer and the employer has no obligation to fund any deficits of the pension fund. In such situation, we believe it would be unwarranted to deduct the respective pension asset. Furthermore, we would argue the need for more supervisory flexibility in this area given complexity and changes in pension fund rules.

In paragraph 108, a 1250% risk weight is applied to certain exposures. We understand that 1250% is appropriate in the context of an 8% capital underpinning. Where capital requirements exceed 8%, the risk weight should be reduced to cap the capital requirement at the 100% exposure equivalent to avoid the capital charge being higher than the actual exposure. This better addresses cases where the bank is holding capital equal to the maximum possible exposure. For example, if a regulator mandates a capital requirement of 16% instead of 8%, the risk weight applied should be reduced from 1250% to 625% so as to ensure that the capital requirement does not exceed the actual exposure.

B.5.1 Tier 2 and Tier 3 Capital

We support the elimination of Tier 3 and the harmonisation of Tier 2 capital elements.

C. Enhancing risk coverage

C.1 Observations and principles

Discussions across the industry in the wake of the proposals have highlighted several key points that must be borne in mind when considering the aspects of the proposals that relate to the treatment of Credit Valuation Adjustment (CVA) to the carrying value of trading positions.

- Application of existing accounting standards to CVA continues to differ markedly across firms, even for those firms subject to the same accounting standard.
- Where the BCBS has observed a range of practices in how firms approach the associated risk of CVA, a significant root cause is this divergence in accounting practice.
- Based on our discussions with the industry, wherever firms have sought to link their CVA estimates to market parameters as fully as possible, a strong incentive is created to manage the CVA risk as a market risk.
- The BCBS should be careful not to create or add to incentives for banks to avoid marking counterparty exposures in the trading book to market levels and particularly should not discourage firms from actively risk managing these exposures.
- We would envisage conceptually that the framework would continue to evolve in response to market practice, for example in the context of the IRC model.

We agree with the need to cover the market risk of CVA in the capital framework, but we suggest this should be aligned with the internal risk measurement, according to the accounting regime under which we operate. We hold the incorporation of stress periods in exposure measurement as reasonable. We warn that the total sum of the market and counterparty risk changes will significantly affect the economics of trading and broad market liquidity. We are concerned with the arbitrary character of the increase in financial counterparty capital charges and with the broad-brush nature of the treatment of collateralised trades.

C.2 Capital charge for mark-to-market losses

As noted in the introductory section, overall we believe that the current CVA proposal is unworkable in its present form. The QIS request implies that it is intended to include additional layers of conservative add-ons. The use of the alpha factor will ensure that the market risk exposure subject to credit spread movements is systematically over-stated, while the application of a final scaling factor of three is not explained anywhere in the proposal. Overall, we believe that the resulting charge will entail more than a fifty (50) times multiplier relative to a 10 day VaR measure. Assuming that the 10 day VaR is 2% or larger as a percent of current Exposure At Default (EAD), this implies a capital requirement for CVA alone in excess of the amount that would be lost should the counterparty simply default immediately with zero recovery.

We understand and appreciate that the charges are subject to further calibration following the QIS exercise. It is nevertheless concerning to us that the initial “proposal” could be so clearly excessive and that further degrees of conservatism are embodied in the bond equivalent calculation and limits on available hedges. A technical annex to our comments on the risk representation aspects of the bond equivalent approach is attached. In this context, we should add that we do not view the “stylized VaR” approach included in the QIS as a viable alternative.

UBS has incorporated CVA into VaR for internal risk control purposes. This action was driven by the scale of the trading book hedges and how these had skewed the risk measurement of the

trading portfolio. Subsequently, UBS incorporated CVA into regulatory VaR, as the skewed measurement of risk without CVA had similarly affected our measurement of market risk regulatory capital.

Given the above, the consequence of the proposal is the creation of a different framework for capital management than for risk control and P&L management. We feel that not only will this be operationally complex, but that this will be contrary to best market practice and result in conflicting hedging incentives.

Given there is no common standard within the banking industry to calculate the P&L on the CVA book, and given the diverse set of approaches is more reflective of the accounting rules, the capture of the market risk of CVA for regulatory purposes should be aligned with how the institution reports CVA P&L, which for UBS would mean the capital framework should remain in the trading book VaR.

UBS manages the CVA and its related sensitivity to market risk factors, particularly credit spreads, as a fair-valued market risk exposure. In many cases, CVA is hedged with single name CDS, but where this is not possible, the CVA is managed using single-name CDS proxies as well as CDS indices, options on CDS indices, FX vanilla products, and contingent credit default swaps. Whilst these trading book hedges cannot be specifically attributed to specific counterparties, they continue to be a key component for risk management purposes. Therefore we welcome Committee's intention to review other internal approaches that more accurately reflect the risk from the change in exposure.

Paragraph 114 states that mark-to-market losses due to credit valuation adjustments were not directly capitalised; roughly two-thirds of Counterparty Credit Risk (CCR) losses were due to CVA losses and only one-third due to actual defaults. Whilst we would agree that CVA amounts showed significant changes during the crisis, the overall P&L profile will include the gains / losses from related market hedges which is a better indication of the overall loss to the institution. Indeed, given no institution would have been marking to market the exact portfolio of their OTC derivatives portfolio, it is difficult to make a meaningful comparison across institutions. Furthermore, DVA was not accounted for in a consistent fashion across the institutions.

Paragraph 116 refers to the incorporation of a simple capital add-on to better capture CVA risk that recognises a clearly defined set of hedges. The clearly defined set of hedges encompasses only single name CDS hedges and does not cover additional hedge instruments that demonstrated their value for this purpose during the crisis. While UBS directly hedges its CVA primarily through the purchase of single name CDS, it is generally not possible for UBS to hedge all CVA exposure directly. This is particularly true in relation to small exposures across a great number of counterparties. The proposal to recognise only direct hedges will provide an economic disincentive to risk-manage the CVA exposure of these smaller names pro-actively and will skew market risk measurements for internal control and regulatory capital purposes.

It is important to remember that the purpose of the CVA charge is to capture the market risk of these exposures, together with their hedges. The risk of default is already captured in the counterparty credit risk framework. Thus, while basis risks certainly exist with respect to hedging instruments such as credit indices, in the market risk context these basis risks can be captured and observed much more readily. It would be far better for the Committee to set high standards for the capture of such basis risks within the market risk framework than to discourage in their entirety the use of hedges that can be shown empirically to have exhibited substantial correlation to the CVA risks they are currently being used to hedge.

Paragraph 125 states that. 'The general market risk charge is to be applied to the bond-equivalent amounts and associated single-name CDS hedges, separately from the rest of the market risk exposures, rather than incorporating these into the firm's overall VaR methodology, and thereby allowing for other types of offsets.' 'This should provide an incentive for banks to hedge the CVA

risk, which many failed to do prior to the crisis'. The proposed bond equivalent method is a blunt and inappropriate measure that does not help to improve the risk management of the CVA portfolio, nor is it related to how UBS or industry best practice calculates the risk and P/L for the CVA portfolio.

In our view, the bond equivalent method would be an inappropriate basis for CVA fair value calculations. It distorts the relevant market risk sensitivity calculations in comparison to what we believe are increasingly standard methods. See for example the extensive discussion in the recent textbook by Jon Gregory as well as other books on counterparty credit risk. Where banks have a sufficiently advanced method to calculate CVA risk and with regulatory approval, this should be allowed in the calculation of CVA risk for market risk capital.

Similarly, as long as the VaR model can differentiate and model CVA distinctly from direct hedges (single name CDS) and the indirect hedges (CDS indices, equity options etc.), there is no reason why indirect hedges have to be excluded. As noted above, the artificial split provides an *economic disincentive* to properly hedge CVA risk.

Paragraph124 refers '.. an advantage of this approach is that it can be implemented by firms using their current measurement systems..' This advantage would not be applicable to UBS's current measurement system which already incorporates CVA into VaR. Based on this proposal, UBS would be faced with the difference of calculation of CVA for capital purposes, and CVA for internal risk control purposes and P&L management. This would be operationally complex, and we do not believe this is in line with best practise risk management.

Finally, if an objective behind the proposal is to incentivise banks to hedge CVA risk, we also suggest revisions to allow partial recognition of hedges within the counterparty risk framework, under clear conditions. Contrary to managing the market risk exposure, for eligibility within the counterparty framework, one could argue this should be limited to liquid single-name CDS only, where 'liquid' would be defined from an external data source / information provided. Clearly further work would be needed to establish recognition of the basis risk, such as the introduction of appropriate haircuts. Furthermore, we note the changes introduced by ISDA's March 2009 Supplement to the 2003 ISDA Credit Derivatives Definitions now provides for provisions for auction-based settlement of credit derivative transactions, where all transactions covered by the new provisions will cash settle at the Final Price of obligations of the affected Reference Entity that has suffered a Credit Event, as determined by an auction conducted by Markit or Creditex.

C.3 Asset Value Correlation (AVC)

We recognize the calibration is still work in progress and comment that the definition should seek to be applied to counterparties who provide the same types of service, rather than focus on counterparty 'types'.

While we understand the motivation behind this proposal, we believe further consideration is needed before it is taken forward.

- First, the financial crisis experience reflects a "tail event.
- The AVC parameter is a means by which the framework captures the extent to which defaults across firms will cluster together. The fact that we observe multiple potential defaults clustered together in a "tail event" is in fact expected. This is to a great extent what defines a tail event from a purely statistical perspective, it would be very beneficial to review the evidence cited in the proposal publicly and assess it against normal benchmarks for statistical and economic significance.
- The preceding points are reinforced when considering that the proposed change would apply to all financial institutions, not just banks. It is not clear that default rates for hedge

funds, insurance companies, and other non-bank financial institutions exhibited substantial additional clustering beyond that seen in non-financial sectors. Even within the banking sector, banks in many of the 27 countries represented on the Basel Committee experienced the crisis in markedly different ways.

- More broadly, we believe that the BCBS should set a high threshold for differentiating AVC, and therefore capital levels, for the same exposure to a financial vs. a non-financial counterparty. This is because such differentiation will create incentives for transactions and exposures to be routed via highly rated non-financial companies that are not themselves subject to prudential regulation. We believe this could be counter-productive and could even sow the seeds of future crises.

C.4 Securitisation

Under the Revisions to the Basel II market risk framework, securitisations in the trading book which qualify within the "correlation portfolio" will have regulatory capital calculated based on the Comprehensive Risk Measure (CRM). All other securitisations in the trading book will have specific risk capital calculated "according to the method used for such positions in the banking book". Specifically as an IRB bank, UBS may apply the Rating Based Approach (RBA) in calculating the specific risk capital for such securitisations.

Calculation of capital for short exposure

The Basel II securitisation framework makes no distinction between long and short exposure. At the introduction of the securitisation framework under Basel II in 2004, there was little capacity to "go short" in the securitisation market and thus was not an issue that needed serious consideration. Given the development of the securitisation market since, and particularly in derivatives and indices on securitisations (e.g. ABX, CMBX TRX etc), it is important to clarify how shorts should be treated, as they do not have similar loss functions to equivalent long positions.

The holder of a long position loses value as the value of the position converges towards "zero" or its recovery value, so the actual loss incurred is dependent on the current value of the position. A position marked at 100 loses 100 if it goes to zero. Conversely, the holder of a short position loses value as it moves towards par or a premium above par and, as with the long position, the loss incurred is dependent on the current value of the position. A position marked at 80 loses 20 if it goes to 100 (i.e. par) or more if it trades at a premium, but gains 80 if it goes to zero. As no distinction is currently made in the rules, the specific capital charge is currently applied to short positions as if they were similar to a long exposure. Hence the short position marked at 80 has capital applied assuming it could lose 80 whereas its losses are likely to be closer to 20 as it moves to par or higher if credit spreads go towards zero.

We propose that the capital for short positions be calculated based on their loss function, with a cap assuming credit spread of, say, 1bp (for derivatives or bonds).

Grossing of Long and Short

The Basel II securitisation framework makes no provision for offsetting long and short exposures which are not the same, hence where a bank is short an exposure which reduces the risk of a portfolio economically (e.g. short an index vs. a specific ABS issue), it would be required to gross up the capital of the long and short exposure even though the economic risk is now lower compared to an outright holding in the specific issue. This provides scant incentive for a bank to hedge its portfolio unless it can find a “perfect hedge". It is admittedly difficult to account for the basis risk between similar positions under RBA; a potential alternative would be the application of the fallback treatment for the correlation portfolio. That is, the specific risk charge will be the larger

of the specific risk charge applied to the net long positions and the specific risk charge applied to the net short positions

C.5 Update of 'shortcut method'

Whilst we recognise that the current method has shortcomings with regard to the outcomes of collateral disputes, we feel the proposal is too generalised and conservative in its application to the entire netting set, as collateral disputes tend to be trade specific and not specific to the entire portfolio.

Under the proposed new rules in-the-money portfolios are subject to a degree of double-counting. The new rules propose to include current net MtM in the EAD formulae to capture cases where collateral has not yet been received, i.e. in effect when net MtM is higher than threshold. However at the same time the new rules require the calculation of the close-out EE add-on to be made as if the portfolio were at-the-money, in which case there is an expected increase in exposure. But for in-the-money portfolios we would expect less of an increase in exposure during close-out and this is reflected in our close-out calculation for internal control. So by re-centering the portfolio at net zero we have an increased EAD through the EE add-on, whilst we already also have an increased EAD through the net MtM.

C.6 Wrong way risk

UBS recognises the importance of capturing wrong way risk to maintain robust risk control and management, and continues to strengthen its internal control measures and reporting of wrong way risk.

The proposal prescribes an explicit capital charge for single-name credit default swaps where there exists a legal connection between the counterparty and the underlying issuer, for equity derivatives referencing a single company where there exists a legal connection between the counterparty and underlying company. Given this change, we seek clarification on the continued inclusion of an adjustment through the calibration of the Alpha add-on factor.

C.7 Effective Expected Positive Exposure (EPE) with stressed parameters

UBS has already responded to sub-optimal exposure simulation back-testing by implementing an approach that uses the maximum of 1yr and 3yr volatilities, and thus currently incorporates the 2008 crisis period. Therefore, the proposal to use stressed parameters in the capital charge is in line with changes already implemented at UBS. However, we seek clarification on the distinction of what is captured under Pillar 2, given the proposed explicit charge under Pillar 1.

D. Supplementing the risk-based capital requirement with a leverage ratio

D.1 Observations and principles

We appreciate the efforts to constrain the build-up of excessive leverage in the banking system, as the deleveraging process may destabilize the financial system.

We agree that this tool should be a supplementary supervisory measure, which we would envisage would fit most appropriately under Pillar 2.

We welcome the effort to achieve a level playing field in the implementation of the leverage ratio, and the inclusion of off-balance sheet items. Given that the leverage ratio is intended to be a simple non-risk based tool, we interpret that 'reinforce' means that it is not intended that the ratio acts as the binding constraint in the determination of capital adequacy and that risk-based measures remain the primary determinant. If a raw leverage ratio becomes the binding constraint, it risks the undesirable outcome that true risk management will matter less than controlling what is on the balance sheet. Banks could be incentivised to invest in higher yielding, less liquid assets. This is further reinforced by the significant influence of the gross inclusion of written credit protection at notional values.

Paragraph 218 comments that '…include all assets (including high quality liquid assets) … this approach is simple, non risk-based and avoids the problem of trying to decide where to draw the line on inclusions and exclusions from the exposure measure on relative liquidity'

The calibration of the leverage ratio must achieve this objective, and the definition of the leverage ratio must support this objective. This may require a careful weighting of the pros and cons of simple rule versus differentiated rules (different ratios for different assets' riskiness) or agreeing internationally on the exclusion of certain liquid assets, as these should not have a destabilizing effect on the financial system in a deleveraging process. There is clearly a significant difference between an illiquid proprietary asset and a financed liquid asset with appropriate haircut. Not differentiating between the types of assets may lead to unintended consequences. A further possibility would be to recognize, at least partially, the mitigating effects of collateral. These potential refinements should be weighted against the objective of maintaining a level playing field for all banks.

Care must be also taken in the calibration of the leverage ratio, not to penalize low risk traditional banking book products (e.g. with good ratings and / or collateralized lending), which do not show deficiencies under the current risk-based capital framework. An adverse leverage ratio could even lead banks to move away from such business into more risky business. This is even more important in the context of traditional lending and trade finance business, which are an integral part of the economy.

We also note that increased liquidity requirements command additional regulatory capital via leverage ratio, and that low risk assets like government bonds will carry a much higher capital charge via leverage ratio. Such duplications or accumulations should be avoided and we recognise that their avoidance requires thorough analyses of the result of a high quality QIS.

D.2 Capital measure

We agree that the leverage ratio should not have as a reference low quality capital elements. We believe that it would be appropriate to use total tier 1 capital (i.e. total going concern capital) as a capital measure for leverage ratio purposes. This is particularly important to ensure the inclusion of

foreign currency denominated tier 1 capital, which in some jurisdictions can only be issued indirectly, and therefore would not qualify as common equity under the drafted definition. Using common equity as capital measure would in such circumstances expose the leverage ratio to currency fluctuations, making it unmanageable.

D.3 Exposure measure

Our views on the key elements of the leverage ratio calculation is as follows (paragraph 206 and 238):

- We agree that exposure measures should follow the accounting treatment by netting related provisions and other valuation adjustments.

- We do not believe that cash and cash-like instruments should be included in the exposure measure, as they should not destabilize the financial system in a deleveraging process.

- The requirement to include off-balance sheet items with a 100% credit conversion factor, and thereby putting them in into the same position as loans, grossly dilutes the objective to making the leverage ratio a meaningful indicator of excessive leverage. Significant amounts of off balance sheet exposures are never drawn and indeed some are arguably not commitments, if unconditionally cancellable. We therefore believe that a reasonable scale of Credit Conversion Factor (CCF) should be defined to account for the likelihood of such exposures being drawn (e.g. Basel II standardized CCFs). This would make the leverage ratio a more meaningful tool.

- We signal that the proposal to include in the exposure measure written credit protection (e.g. written credit derivatives) at unnetted notional values would have a very significant impact to an extent that the leverage ratio may become the binding capital requirement. We believe that principally, notional values are not an appropriate exposure measure for credit derivatives given the fact that these instruments have an effect on tier 1 based on the requirements to fair value them for accounting purposes. A mark to market loss on protection sold via CDS for example would reduce not only tier 1 capital but also the maximum potential future loss on the CDS. As currently designed, a mark to market loss on a CDS would not result in a reduction of the exposure measure for leverage ratio purposes. Further, the impact of using notionals should be mitigated by reducing the notional amount for written credit derivatives where the bank has purchased protection against a written credit derivative. This can be justified by the fact that the gross inclusion would result in the same exposure (reference obligation) being counted more than once across the banking industry, where exposures are transferred from bank to bank.

- The non recognition of accounting netting does not appear to be justified other than on grounds of international comparability. We believe using regulatory netting would be appropriate and ensure a level playing field. The application of regulatory netting should be allowed irrespective of whether or not such netting is allowed for accounting purposes (e.g. netting of replacement values under US GAAP or netting of replacement values and daily margins but only for exchange traded derivatives as under IFRS). Where there is regulatory agreement that the netting effects are accepted and that therefore the EAD is reduced, such effects should also be considered in the leverage ratio exposure measurement.

- We agree that items deducted from the capital measure should be also deducted from the exposure measure.

- We agree that the accounting data should be used for the treatment of securitisation exposures.

- For derivatives (other than credit derivatives), we agree that the accounting approach should be followed. The implementation of the current exposure method would require banks that apply the expected positive exposure method to implement the current exposure method solely for leverage ratio purposes. This seems unwarranted for a tool which should be a simple measure of leverage.

D.4 Disclosures

We do not object to the requirement to disclose the leverage ratio and the components of the exposure measure. We are however concerned that such disclosures could be misinterpreted as indicators of risk. Conversely, low levels of leverage could be interpreted as low levels of risk.

E. Reducing procyclicality and promoting countercyclical buffers

E.1 Observations and principles

We understand the desire to apply a combination of several safeguards to ensure that the effects of severe swings in the global economy would be much reduced and hence contribute to a more stable framework for the financial sector.

Before commenting on the individual proposed measures in section 4 of the consultative document we wish to raise some more general issues:

- **Definition of what constitutes a cycle:** We believe that normal swings in local and global economies – involving periods of above average growth and times of recessions – would not normally pose a systemic problem and should be capable of being absorbed by financial institutions on the basis of the existing rules, such as the Basel II framework including the enhancements of July 2009 to the market risk framework and prudential measures under Pillar II. We would also add that the introduction of Basel II has been recent and, admittedly, fell into a period of economic prosperity in most countries. It would nevertheless be premature to judge the effects that the mechanisms used under Pillar I have on the volatility of banks' capital requirements based on this short observation period, which was dominated by extraordinary events in the financial markets that in our view would fall outside the definition of an "economic cycle". This underlines our view that the benefits and possible disadvantages of Basel II should be assessed over a longer time period and not in the context of the 2007/2008 crisis events.

- **Cause of banking crises**: Systemic banking crises are often the consequence of expansionary moves which differ from past events. They are often grounded in the belief that a certain economic development constitutes a change in paradigm (e.g. globalisation, fundamental change in the outlook for emerging markets, technology revolution, economic growth without inflation to name a few trends that were linked to the crisis events of the past decades) and facilitated by macroeconomic incentives, such as a low interest rate environment (often created to combat the effects of a preceding event). Asset price inflation and too high financial leverage are the most common result of such developments. History has proven over time that it is very difficult reliably to predict when a threshold is reached that signals danger and causes market participants to rein in their activities. It is likely that this fundamental behaviour does not dramatically change and we have doubts that models that try to forecast such events will be as effective as they are under more normal "cyclical" conditions.

- **Quantitative approach towards lowering "procyclicality":** We do not believe that these "mega trends" can be sufficiently countered by a mechanical, statistical approach and elaborated models as this would be tantamount to being able to peer into the future reliably. We feel that elaborated and elegant statistical models will not work to induce an anti-cyclical behaviour at banks. Even if this could be designed, there would be major hurdles, including (a) defining the optimal level of a buffer assuring stability even under rare severe conditions; and (b) defining the relevant inflection point driving the release or the build up of buffers. The same applies also to the question of "forward looking" provisioning.

- **"Worst case" assumptions:** To recognise the substantial uncertainty in this area, one option may be to safeguard against (quasi) insolvencies of financial institutions by applying ever more constraints (through applying higher capital requirements through higher assumptions of PDs or the creation of additional buffers over the minimum capital). We caution that there is a limit to managing a bank on the basis of extremely high certainty of survival even under most horrific circumstances as this will entail costs that would potentially harm the development of the economy at large.

- **Prudential measures:**

  - In the absence of "hard facts" to determine potential sources of a financial crisis, we believe that the approach should be multilayered and involve other actors next to banks - notably central banks, which control the money supply and may in future assess the risks not only on the basis of CPI and similar indicators but also the prospect of the creation of "bubbles" in parts of the economy.
  - Apart from monetary policy, fiscal and tax policies should also be called upon to promote financial stability as they can contribute to the build-up of imbalances.
  - A promising way to build up a shock absorber is given by contingent capital instruments.
  - Finally, we believe that Pillar II under the current Accord allows regulators to assess banks' preparedness to counter potential shocks, e.g. by way of requiring the performance of particular stress tests and assessing the avenues that may be open to respond to a particular stress event.

Summary

We support the ambition to provide a solid absorber to potential dramatic shocks as the one recently experienced. We would therefore suggest de-linking the cyclicality issue from the current crisis (as the recent shock is not a cyclical phenomenon) and to approach it in terms of the appropriate long term level of capital in the system.

E.1.1 Cyclicality of the minimum requirement

As stated above, we do not believe that prescribing a "downturn" Probability of Default (PD) element for the determination of RWA from counterparty risks is appropriate at this time as the time series available to test the validity of the assumptions guiding the determination of PDs and the derivation of RWA is clearly insufficient.

Technical difficulties should not be overlooked when trying to implement comparable measures to determine factors to scale PDs to the "highest average PD historically" or, alternatively, to use the average of historic PDs. Banks' portfolios and risk policies may change over time (and a cycle); to apply loss data that reflect a different lending paradigm to a current portfolio may overstate the risks and hence may slow lending activities. Also, some banks may not have data going back in time so that their "highest PDs" may still reflect a period of mostly economic growth and potentially understate the true risks in their portfolio. It will be important for banks and regulators transparently to assess the data series and management assumptions that have been used for the calibration of rating tools considering that the availability of data, their relevance for the current portfolio and the general economic outlook may differ between distinct sub-portfolios.

Summary

We appreciate that the BCBS included this element into the QIS and, in principle, share the comments made in paragraphs 239 and 240. We do not believe that this is the time, however, to introduce further complexity into the models used to determine RWA and recommend that the validity of the Basel II framework (A-IRB) be monitored over a longer time period and a cycle rather than against the background of the experiences of a very major crisis event. We are very sceptical that approaches as indicated in paragraphs 241 and 242 are feasible and desirable as they could create imbalances in capital requirements, which are significantly greater than the differences that already exist under A-IRB due to different time and data series used as well as management judgement applied when introducing specific models.

E.1.2 Forward looking provisioning

Proposals in this regard have emerged recently from IASB and are subject to a consultation period until 30 June. We are assessing the implications of the proposed new model. We expect also the imminent publication of proposals by FASB and BCBS.

Providing for "expected loss" rather than incurred losses and those incurred but not reported (or that have not manifested themselves yet through missed payments or restructuring needs) could be a means of ensuring that potential losses are recognised earlier. But while such an approach has its merits, it is both very difficult to implement and there is not yet strong evidence we are aware of that provisioning based on expected losses fundamentally affected lending standards in those jurisdictions where it was allowed. Implementation of the approach would require banks not only statistically to assess the risk factors of individual exposures over a one year horizon (A-IRB) but for the entire life of the transaction. Given the uncertainties in estimating the parameters for a short to medium-term horizon such an approach is heavily dependent on management judgement and hence may lead to a lack of comparability among institutions. Banks will use forecasting models to establish pricing grids (especially where market based pricing is not standard), but these do not have to fulfil requirements that a provisioning model would have in terms of verification and audit for published accounts.

The current proposal by IASB may actually lead to increased procyclicality, especially if banks respond quickly to an emerging change in the loss expectation as not only higher provisions/losses will be booked at that time but there is also a need to recognise immediately the difference between the cash flow estimations for the entire residual lifetime of the asset.

Any revisions of accounting standards should ensure – arguably to a greater extent than is currently the case by leaving more room for judgement of individual preparers of accounts – that banks may provide for risks in their "accrual books" in a way that is not "too little, too late" but allows banks to retain profits to cover losses that may be incurred and exceed longer-term average assumptions to some extent. Such retained loss reserves reduce profits and hence distributable reserves. One has to calibrate such an "expected loss" concept with loss reserves very carefully, as they carry the danger that they technically become yet another form of buffer above the RWA-based capital and the prudential buffer (Pillar II), because they can only be drawn in cases of substantial losses.

There may also be an asymmetry in approach as assets that are accounted for at their fair value will continue to be priced at current market values (or to models mimicking these). Market prices will react potentially earlier to changes in economic sentiment in comparison to bank-internal rating reviews, but hardly serve as truly forward looking indicators (as was seen in the recent crisis involving asset backed securities). If forward looking provisioning for loan exposures were a realistic undertaking, it would reduce procyclicality only for the loan book but not for all other exposures, e.g. OTC derivative transactions or holdings/financing of securities, which for large and systemically important banks represent very important activities.

Summary

We will follow the ensuing debate about the various fundamental approaches between standard setters and the BCBS and shall comment in due course. In our view it is imperative, however, for the FASB and IASB to develop a single converged impairment model for all financial assets that provides relevant, reliable and understandable information to users and is operable by preparers. Any new model must also meet a reasonable cost/benefit test. Accounting principles should meet the requirements for transparent reporting, and forward-looking provisioning should primarily meet these demands. Inasmuch the prudential creation of loan loss reserves would lead to increased "buffers" they would have to be assessed in conjunction with other proposed measures (e.g. building buffers through capital conservation etc.).

E.1.3 Building buffers through capital conservation

The basic concept expressed in paragraphs 248 and 249 is intuitive and we agree with the principle that banks ought to conserve capital if their position is inadequate. Banks already operate with buffers, which are set by regulators above the minimum levels set out in the Accord.

Capital conservation standards, if they are published and not set individually and confidentially between a bank and its regulator, will be very unlikely to meet the goal of creating a true "buffer". The general public may regard the new levels that need to be in place "in good times" as a new floor and react negatively, if banks show a shortfall to the "minimum buffer". This may precipitate a crisis rather than help avoiding it, and so be counterproductive. The proposals are also too vague in order for us to assess them, especially with regard to the methodology that would apply to determine the norms and conservation ratios.

If, however, capital buffers cannot realistically be drawn upon in case of a – temporary – need they simply become another incremental capital requirement (see also comments under E.1.2. in this regard) with the associated costs and potential constraint on credit in the economy.

A more promising way of ensuring that capital may be created quickly in case of need without having to raise it from the market in difficult times is through the placement of contingent capital instruments. If the conversion level is relatively close to the norm ratio of the capital buffer, such instruments may not meet significant market demand and be uneconomical. The success of creating sufficient contingent capital instruments will be in determining the market appetite in relation to the trigger level.

Summary

We recommend keeping minimum capital conservation standards within the context of Pillar II and leaving the details of measures to be taken, if the norm buffer is not met, to an individual discussion and assessment between the bank concerned and its regulator in order to maximise the benefits and not inadvertently trigger a crisis which should have been averted. The use of contingent capital instruments should be encouraged.

E.1.4 Excessive credit growth

We agree with the finding (paragraph 260) that significant losses incurred in the banking sector during a downturn are a consequence of a period of excessive credit growth. To adjust the capital buffer range, if there were signs that credit has grown to excessive levels, sounds a reasonable measure to ensure that automatic brakes are engaged. Higher capital levels would cause higher costs and hence help rein in lending activities.

We doubt, however, strongly that it is possible to identify macro-economic variables (or groups thereof) that may be used to assess the extent to which in any given jurisdiction there was a significant risk that credit had grown to excessive levels. Banks have many different sub-portfolios, international banks are active in very different economic areas and it is questionable whether variables can be defined that are stable over time and show a useful correlation to events that lead to systematic crises. As stated in our general observations (E.1) we do not believe that a mechanical, statistical approach and elaborated models provide a solution to all issues.

If not used in a formulaic way, such an assessment may be useful, under certain circumstances, to assess the general economic condition and potential macro-economic risks that affect not only banks but also the economy at large without leading to "exact" conclusions and transpose this into

a buffer requirement. It could be the basis for discussions between regulators and banks, but also for monetary, fiscal or tax policy measures that would be applied to prevent an "overheating" of the economy or sectors thereof.

Summary

We believe that the approach proposed is not workable as it would be too mechanistic. It is highly doubtful that there will be sufficiently granular models demonstrating a high correlation with potential crisis triggers, which do not carry the risk of providing false security (or creating "false alarm").

Macro-economic assessments should be used by central banks and political authorities when defining their policy reactions aimed at stabilising the economy and countering signs of "overheating".

Furthermore, regulators should discuss banks' reactions to perceived imbalances in the economy within the framework of Pillar II. This could lead to challenging banks' lending standards (e.g. loan-to-value ratios for mortgages in a property boom). However, we strongly believe that a bank's management must bear the responsibility for determining its risk policies and discourage a formulaic approach towards determining maximum lending standards, etc.

F. Introducing a Global Liquidity Standard

F.1 Observations and principles

Localized liquidity regulation multiplies the complexity and exacerbates the inefficiency of the liquidity management process for international banks. Under localized liquidity regimes it is more difficult to oversee the combined liquidity risks of an international firm, which in turn reduces banks' effectiveness in risk management and control. Liquidity risks are grossed up and liquidity requirements therefore increase significantly without improving the resilience of the consolidated firm. The resilience of an international firm is in fact weakened by a locally ring-fenced setup which hinders free flow of funds. Additionally, the reporting burden multiplies and adds to the overall complexity.

The premise of these local regulatory initiatives is that a troubled local legal entity which is ring-fenced from a liquidity perspective could be segregated from the parent more easily. We believe that this is a false conclusion, as the reputational effect of a bankruptcy of a subsidiary would be catastrophic to the Group as a whole.

We therefore encourage the BCBS' efforts to create an international standard for liquidity regulation, but at the same time we urge the BCBS to enforce a single uniform standard for consolidated international firms, rather than opening the option to apply the new standards on single legal entity level.

Because of the very substantial impact we expect the new standards from BCBS to have on the industry and the broader economy we hope that our comments below will help to constructively shape the liquidity risk management framework and foster the right incentives. With the spirit of regulatory progress in mind, we believe that certain aspects of the proposed standards overreach the target in an effort to minimize systemic risk. We think the QIS, in which UBS is participating, will show that the impacts of the proposed rules on single firms and on the industry as a whole would be detrimental and would dangerously alter the circulation of money in the macro economy. In particular, banks' primary function of maturity transformation of money and lending to the economy will be severely reduced, with adverse and lasting impacts on the prosperity and stability of the financial system and the macro economy. Lending and maturity transformation of money are a fundamental need of the economy. If banks are severely restricted in performing this function, then the liquidity risks will have to be taken by other entities which do not fall under the proposed regulation. This is an undesired effect, as it clearly increases risks in the financial system that defeats the purpose of the proposed regulation.

As a further crucial point we highlight the fact that highly prescriptive and stringent regulation will undermine banks' abilities to properly manage their liquidity risks according to their understanding of the industry, their products and their clients. In fact, we question whether banks can still be held responsible for their liquidity risk management under the proposed rules. We disagree as well with the proposed "one size fits all" approach, where the prescriptive assumptions apply to all institutions equally, without taking into account the specifics of each institution in terms of products, clients, markets and countries of operation.

Our conclusion is that the only acceptable and reasonable way forward for liquidity regulation will be that supervisors will focus on banks' internal liquidity risk models in order to comprehensively and adequately measure all inherent risks. Banks should incorporate assumptions based on evidence and experience which they should be required to document to their supervisors.

General remarks on BCBS Consultative Paper (CP)

We see fundamental problems arising from the introduction of a “one size fits all” model for liquidity regulation, where common and prescriptive model parameters are imposed for all firms equally. Banks are individually very different, with different business models, products and clients. Banks operate in different markets and in different countries. We urge regulators, for the sake of comprehensive and meaningful liquidity risk management and regulation, to focus on banks’ internal models and to get national regulators to audit those models, making sure that all assumptions are comprehensive and appropriate. Banks should be required to evidence their assumptions based on the risk and the characteristics of the underlying products and counterparties. Furthermore, banks’ internal models are the fundamental basis for product pricing, resource allocation and risk control. Intervention in liquidity risk model construction will therefore have profound impact on banks’ product offerings and on their client franchises.

We maintain that highly prescriptive and stringent models will render banks’ internal risk models futile. We question whether banks can, under tight and prescriptive regulation, still be held responsible for their own liquidity risk management. Banks will be incentivized to manage to regulatory ratios rather than to properly manage their liquidity risks according to their understanding of the industry, their products and their clients.

Model assumptions also have to be continually adapted to changing markets and business activities. Prescriptive regulation and the interference of supervisors in the modelling process would therefore be counterproductive and increase risks and costs, as we see no provision for a regular review of the proposed assumptions in the BCBS consultation paper. This will lead to misrepresentations of liquidity risks in the model.

We are also concerned about the cumulative impact on banks across other regulatory initiatives, predominantly surrounding resolution regimes, too-big-to-fail discussions and the provision for significantly increased capital requirements and the establishment of a leverage ratio, which will apply equally to liquid and illiquid assets. The higher level of capitalization, along with improved depositor protection schemes and other regulatory initiatives are not sufficiently recognized for the mitigating effect they will have on liquidity risk. We ask BCBS to take these factors into account in the new regulation for liquidity.

F.2 Liquidity Coverage Ratio (LCR)

UBS supports the requirement for a short term liquidity measure ensuring liquidity drains in a severe stress scenario can be covered by a buffer of highly liquid assets. For liquidity risk management purposes UBS introduced a similar but more comprehensive metric and a related contingency funding plan as part of its internal tools.

The definition of the LCR as outlined by the BCBS CP includes the terms of a Liquidity Buffer (Stock of highly liquid assets) and the specifications of a one-month behaviourally adjusted cash flow analysis by balance sheet item. It is striking that the LCR does not take into account any contingency measures a bank may take in the first month of a crisis to stabilize its liquidity situation. Such measures include asset sell-down activities of unencumbered assets outside the narrow liquid assets buffer or draw down of central bank cash against pre-pledged eligible collateral as part of central banks’ support facilities. Though we consider both measures as contingency actions of last resort, they should be accounted for when determining the short term liquidity situation in such a severe stress scenario. If banks cannot act on the assumption that central bank support will be available in a systemically shocked market, then the role of central banks in times of stress would have to be redefined.

Regarding the liquidity value of assets during a severe stress scenario, we question the definition of highly liquid assets according to the BCBS paper mainly for the following reasons:

1) The current definition of highly liquid assets seems extremely narrow, resulting in a chain of adverse effects. Consequences of concentration of asset holdings throughout the industry include:
    - Increased systemic risk: In the event of a general crisis, it would imply that all banks might need to liquidate similar assets at the same time, which would drive prices down and accelerate the crisis. Effectively, by narrowly defining eligible securities, these liquidity resources become illiquid precisely when their liquidity is needed most.
    - Potential capital erosion in times of stress: If prices of eligible paper deteriorate in the event of a crisis due to a lack of diversification, significant losses could be incurred by financial institutions, which cannot be the intent of the regulation.
    - Supply glut: There would be the danger of similar action by many institutions if an asset were to be downgraded or otherwise changes its liquidity or eligibility characteristics.
    - Pro-cyclicality: During stable times, prices of eligible securities may increase significantly with corresponding effect on banks' debt product pricing. During times of stress, prices of eligible securities would tend to fall due to the abovementioned concentration of risk and actions.
    - Unrealistic eligibility criteria: Requiring 10-year price variation, haircut and bid/offer histories for securities that are traded in OTC markets disqualifies those assets immediately as this data is not publicly available. Rather, it should be ensured that the criteria demanded on assets to be eligible in the liquid assets buffer remain realistic and measurable, resulting in greater diversification of holdings.

2) For the purpose of the LCR, assets which do not fit the narrow definition of highly liquid assets are deemed fully illiquid. This seems too restrictive as fundamentally all trading assets have a certain degree of liquidity value, albeit at varying haircuts or discounts. For example in our current short term liquidity measure that we report to SNB/FINMA, all assets are considered for monetization, with varying haircuts/discounts depending on asset quality. A similar method should be introduced for the LCR, regardless of the eligibility for the liquid assets buffer. Inflows which can be generated from unencumbered assets not qualifying for the liquidity buffer and which could generate inflows within 1 month (including contingent sell-down actions) should be considered as cash inflows. Deeming asset classes like corporate bonds, equities or bank paper to be completely illiquid will significantly reduce banks' propensity to hold such paper on their balance sheets and therefore reduce the liquidity of capital markets and the capacity for corporations to fund themselves, with corresponding effects on the macro economy.

We therefore urge BCBS not only to widen the definition of highly liquid assets by taking into account local market environments (incl. central bank eligible securities for major central banks around the globe) but also to give a liquidity value (inflows) to all other trading assets, albeit at varying haircuts or discounts.

Comments on detailed inflow and outflow assumptions are outlined in the "Detailed Comments" section below. Generally, it appears difficult to follow some of the in- and outflow assumptions and it would be helpful to gain some insight on the quantitative study that influenced the classifications and explicit parameters (e.g. deposit classification). Further, we are of the opinion that related line items on the asset and liability side are to be treated symmetrically whenever this makes sense. In the current BCBS proposal there are some instances where this symmetry principle was not applied (e.g. committed credit facilities).

UBS thoroughly reviewed its deposit structure by statistically analysing the relation between client/deposit attributes and client behaviour for its internal LCR equivalent model. This analysis

showed that client behaviour in the context of Wealth Management and Private Banking differs significantly from behaviour of clients being part of an Investment Banking franchise. Thus our experience does not corroborate the distinction between natural and non-natural clients that the BCBS has introduced and which treats client groups within Wealth Management (such as family offices and other legal structures that were built around sophisticated High Net Worth Individuals) the same way as institutional investors found in the wholesale context. We therefore solicit BCBS to review the client deposit classification proposed in the consultation paper (See also section "Detailed Comments" below).

As final general comment on LCR, we believe that this metric in its current definition will force banks to hold a substantially higher stock of highly liquid assets, which will restrict banks' ability to lend to the economy. This in turn will have a lasting negative impact on economic growth. In conjunction with similar concerns raised on NSFR mentioned below, the possible scaling impact of introducing such regulation globally needs to be taken into consideration.
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F.3 Net Stable Funding Ratio (NSFR)

We support the introduction of a metric measuring required stable funding. UBS implemented such a metric for its internal liquidity management purposes as well, namely the UBS cash capital model. The purpose of such metric and related limit framework should be to reduce over-reliance on short term funding of illiquid assets and to put a reasonable limit on maturity transformation. Maturity transformation and its risk management should continue to be a core competency of the banking industry. However, we are concerned that the current version of the BCBS proposed NSFR metric may severely reduce capacity for term transformation, which would have lasting consequences on the financial system and the macro economy.

The following considerations outline the dilemma which the introduction of the current definition of the NSFR would create. Analyst reports issued in recent weeks showed that the gap between the total amount of Required Stable Funding (RSF) and available stable funding (ASF) according to BCBS definition is in the range of several trillion US dollars for the global financial industry[1]. We expect the comprehensive quantitative impact study (QIS) to yield similar results. Consequently, banks would have to increase the ASF, meaning that they have to issue significant volumes of additional equity and long-term debt. This would result in a material increase in product pricing due to increased funding costs with related significant impact on the global economy. On the other hand, as the market does not have the appetite to absorb this enormous volume (long-term debt issued globally by financial institutions equals approx. USD 1 trillion per annum measured by total amount of benchmark sized transactions), a reduction in RSF is necessary to close the NSFR gap. This statement can be further underpinned by the abovementioned strictness of the liquid assets buffer definition. Banks are among the largest holders of bank debt, and the LCR as well as the tighter capital requirements envisaged by the BCBS will clearly restrict banks from holding long term bank debt on their balance sheets. Additionally, if other regulatory approaches were implemented at the same time, a global imbalance between banks that need to borrow long term and asset managers that must invest short term will arise, exposing the entire financial system to much higher risks. For example, French regulation reduces average duration on holdings of money market funds, or US regulation obliges fund managers to increase liquidity and shorten the duration of their investments. As a result, it is highly unlikely that the required stable funding supply will be available and banks will have to reduce their RSF. Therefore, the responsibility for funding illiquid assets and assuming maturity transformation risk will be forced increasingly on to other market players who do not fall under this regulation (e.g. non-financial corporate institutions or hedge funds). This can not be the aim of this regulation as it would defeat the purpose of BCBS to reduce liquidity risks in the system.

[1] JPM Europe Equity Research: „Global Banks – Too Big to Fail?", 17 February 2010

The major issue in the definition of the NSFR is related to the underlying stress scenario and deduced asset haircuts for the NSFR metric (haircuts being equivalent to the illiquid portion of an asset, or the required stable funding RSF for the asset). The consultation paper bases the NSFR on a similarly stressed scenario as the LCR, applying different time horizons of 30 days and 1 year respectively. While we agree that a severe stress needs to be assumed in the short term, with little room to significantly change a bank's balance sheet structure, the NSFR scenario should take into account a bank's ability over time to react to the crisis by taking appropriate measures, i.e. by changing its balance sheet structure (e.g. asset roll- and sell-down and strategic asset deployments) and by invoking contingency funding plans.

In order to contribute constructively to this important discussion we rather propose the following approach to determine the RSF percentages:
Our proposal is based on UBS' internal cash capital model and its inherent haircut definition process. While we still assume a market and firm specific stress scenario, we reduce the severity of the stress for the purpose of the 1 year scenario. We assume that unsecured wholesale funding will not be possible to be renewed upon maturity and that there is a reduction in retail deposits. Secured funding however is available at stressed repo haircuts. The milder scenario recognizes that banks will have greater ability to take corrective actions over the extended horizon. Haircuts on assets are determined as a combination of the following components:

- Current market haircut base: observable haircut values in the secured funding markets for counterparties with a comparable credit quality.

- Stressed liquidity component: increase in haircut to reflect deterioration of market conditions (market crisis). Depending on the asset, this surcharge can either be determined by market observation (e.g. development of haircuts throughout the financial crisis), published data (e.g. "Global Financial Stability Report" by IMF) or a calculation based on observed volatilities throughout the crisis.

- Secured Funding Capacity component: increase in haircut due to the possibility that the secured funding market has difficulty absorbing secured funding demand in a market wide stress. This surcharge is rather judgmental yet should be based on experience and market observations (e.g. secured funding market size versus unencumbered and unused position).

- Credit Quality component: increase in haircut to reflect a deterioration of the idiosyncratic credit quality (name specific stress). This component is typically a "product type" versus "institute credit rating" matrix and should be based on observed haircut mark-ups for counterparties with lower credit rating.

The advantage of our evidence based approach is increased transparency as well as a more realistic reflection of increases in haircuts due to market and firm specific stress. The increases in haircuts are mainly determined based on market observables during the financial crisis and take into account the general condition the financial institution is in under the stress scenario. In the section "Detailed Comments" below we compared some of the BCBS proposed RSF percentages with RSF percentages calculated based on the above methodology. We observe that the RSF factors determined by BCBS are much larger than our evidence based approach would suggest, and we would appreciate insight into how BCBS determined their RSF factors. Further we question the treatment of derivatives replacement values in the NSFR as they default to the most punitive buckets (PRVs and NRVs default to 100% RSF and 0% ASF respectively).

We reiterate that, similar to the comments made under section 1 on the LCR of this document, it is inappropriate to apply a "one size fits all", highly prescriptive and stringent model across all banks. Rather, regulators should get banks to develop an NSFR model internally and then require banks to provide evidence of the suitability of the methods and assumptions.

F.4 Feasibility of implementing above mentioned metrics

As outlined in our response to the feasibility study of the QIS for the proposed liquidity metrics, certain classifications of asset and liability items employed in BCBS' consultation paper require a degree of information and granularity which is currently not available and will require significant enhancements to banks' current reporting systems. Some of the data required cannot be determined at all (see section "Detailed Comments" below). Non availability of data forces assets and liabilities into the next worse inflow and outflow category respectively, which adversely affects above mentioned concerns and impacts further.

F.5 Public disclosure and reporting frequency

The BCBS paper foresees that proposed metrics are made publicly available. Due to the highly technical and sensitive nature of this information, public disclosure of liquidity ratios may elicit an adverse public reaction based on wrongful conclusions. We maintain that disclosure to national regulators should be sufficient in order to protect clients and investors.
In this respect we refer to an ECB discussion paper on EU banks' liquidity stress testing and contingency funding plans (2008) [2]:":...public disclosure could have negative repercussions on the liquidity situation of some banks under certain circumstances.....in the case of liquidity stress test results, the detrimental effects of mandatory public disclosure are likely to outweigh the benefits."

Further, we would like to point out that data required to produce the above stressed metrics would have to be sourced from consolidated on- and off-balance sheet financial reporting in order to be comprehensive and consistent. Though we have sound systems, processes and data available to manage day to day and intraday liquidity, information required for the BCBS metrics comprises full books and records of the entire balance sheet of the firm, which needs to be consistent with financial reporting and therefore is currently only available on a monthly basis. The BCBS paper however requires the possibility to produce these metrics on a weekly or even daily basis. This is not possible for comprehensive and consolidated data for international banks. At best, banks will be able to produce select relevant data reporting in an ad-hoc fashion on a more frequent basis.

Remarks on specific items of BCBS consultative paper

F.6 Definitions

Some definitions introduced in the BCBS consultation paper seem unclear or difficult to apply (see also our response to the feasibility study of the QIS):

1. The definition of highly liquid corporate and covered bonds in paragraphs 36 & 37 includes a criterion on bid-ask-yield spread during the last 10 years as well as a criterion on maximum decline of price or increase in haircut over a 30-day period during the last 10 years. Such data is not available as these bonds trade in OTC markets.
   Consequently, most of the corporate and covered bonds will not classify as highly liquid assets, worsening the institute specific LCR significantly. For the same reason, the fact that almost all corporate bonds will require stable funding and will not qualify as liquid assets will make it prohibitive for banks to hold such assets on their balance sheets, reducing corporate access to the capital markets.

2. The definition of stable deposits in paragraph 41 applies a preferential treatment for deposits "where the depositors have other established relationships with the same bank which make deposit withdrawal highly unlikely". This definition is unclear and imprecise and we question whether financial institutions have information on "other established relationships with the same bank" easily available. BCBS would have to give clearer guidelines on what such other

[2] http://www.ecb.int/pub/pdf/other/eubanksliquiditystresstesting200811en.pdf

relationships banks can assume stability of deposits. We would also welcome if the BCBS gave a clearer definition of what their understanding of a depositor is. Is it single private clients or should the information rather be aggregated up to household levels where possible? Typically several persons within one household have relationships to one and the same bank, and whereas deposit relationships are often booked to single clients, mortgage contracts are often booked to joint accounts.

3. The same argument as above (second bullet) also applies to the broad definition of unsecured wholesale funding by non-financial corporate clients, sovereigns, and central banks in paragraph 51. We question the ability to identify deposits that are "demonstrated to be specifically needed for operational purposes" or clients that have "established cash management or other administrative funds relationship with the bank upon which it has a substantive dependency". Let alone that those values will certainly exhibit volatilities over the business cycle.

4. The BCBS makes a distinction between retail deposits that are held by natural persons and those held by legal entities. Looking at UBS' client base we find that a substantial share of the Wealth Management business is wrapped into legal structures that the BCBS would classify as financial institutions (e.g. family offices). In analysing UBS's past experiences we found that those clients do not exhibit materially different deposit withdrawal behaviour compared to natural persons. In fact, some of those deposits (e.g. in booking centres outside Switzerland: -22% in 2008) are effectively more stable than the deposits of natural persons in Wealth Management in Switzerland (-29% in 2008). We would therefore favour to establish a third client category for exactly those private clients wrapped in legal structures.

   Alternatively we propose to distinguish clients irrespective of the legal status by balance classes. Analysing roughly 200 attributes that could have had potential explanatory power for the deposit withdrawal behaviour, we found that the attribute "balance class" (i.e. the total amount of deposits held by one client) best explains the client's behaviour during the crisis.
   The higher the client's deposit balance, the higher his withdrawals. No other attribute we looked at had a similar explanatory power, i.e. would segregate our client base in different pools with significant volumes and with the clients in the pools having clearly distinct behaviour. This was also the case for the legal status of the clients which had little explanatory power (e.g. private client, stock corporation, business clients, collective clients, endowments, other). Those findings were confirmed for different locations around the world.

5. Further it appears to be difficult to identify unsecured wholesale funding from small business customers as mentioned in paragraph 48. The definition of small business customers involves reported sales figures of each of the clients which banks do not carry in their own financial reporting systems.

F.7 In and Outflow Assumptions

In and Outflow Assumptions:

Mentioned as a general comment above, the in- and outflow assumptions proposed by BCBS are in some instances difficult to follow and we would appreciate a better understanding of the analytics and rationale underpinning these assumptions. Such items include:

1. Reverse repos against liquid collateral: Holding short term reverse repos against liquid collateral is typically one manner to maintain a stock of highly liquid assets (in the case that the collateral is not re-hypothecated and remains unencumbered). In times of a crisis the bank would have the option to let the reverse repo mature or to re-hypothecate the collateral in order to cover outflows on the liability side. The BCBS assumptions do not acknowledge this as no

liquidity value is given to such reverse repos where the collateral remains unencumbered, and cash-inflows are not recognized due to the roll-over assumption proposed in paragraph 75. We propose that the assumption is changed such that highly liquid securities sourced in reverse repos where the firm has full re-hypothecation rights of the collateral and the collateral remains unencumbered should be included in the liquid assets buffer for the term of the reverse repo transaction. Upon maturity of the reverse repo transaction, the cash inflow should also be recognized.

2. For liquidity and credit facilities in paragraph 66: Our experience regarding amounts of draws for committed credit facilities to "other legal entity customers" during the recent stress event has shown that the actual amount is not close to 100%. Rather, the behaviours were very similar to non-financial corporate customers. We therefore question the 100% outflow assumption and propose the same 10% outflow assumption as for non-financial corporates.

3. Derivative collateral haircuts in paragraph 63: The rationale for applying a 20% haircut on collateral which has already been discounted for the market haircut is difficult to follow. Market practice in the collateral margining process takes into account historic volatility and price variance of collateral assets, and of course market practice reflects the experience of the crisis. Collateral which has proven to be less liquid during the crisis already attracts higher haircuts e.g. depending on the collateral maturity, there are already haircuts in the area of 20% being applied to corporate debt, even with ratings above AA-/Aa3. We therefore question the BCBS proposal to apply an additional haircut of 20% on already discounted collateral.

4. We question the treatment of assets and liabilities related to derivative transactions in the NSFR calculation. Positive replacement values (PRVs) related to derivatives require 100% stable funding as they classify as "other assets". On the other hand, negative replacement values (NRVs) are not given any long term funding value as they fall under "other liabilities". Based on UBS's financial statements as of 2009 year end, the required stable funding attributable to PRVs would amount to CHF 422 billion or 31.5% of UBS's total balance sheet. This treatment would pose an unreasonable burden on banks and their derivatives business. Further, the required stable funding related to PRVs may vary significantly depending on netting rules of the applied accounting standard (e.g. IFRS vs US GAAP). We assume that this was a glitch in the NSFR definitions and assumptions and suggest that BCBS adapts the treatment of derivatives in the NSFR by treating PRVs and NRVs symmetrically.

F.8 Determination of RSF factors:

In paragraph 89 of the consultation paper the Basel Committee lists proposed RSF factors by asset category. We understand that the underlying scenario to determine these RSF factors is a similarly stressed scenario as the one on which the LCR is based. We maintain that such a scenario is not realistic as a bank under stress would have time to change its business strategy, restructure its balance sheet and enact contingency funding plans. Therefore our proposal which we outlined above, namely the UBS cash capital model, applies a less severe stress. Below we listed the asset categories for which we believe the BCBS assumptions are overly conservative and added proposed RSF factors based on our method that we outlined above in section 2:

Asset Category	UBS proposed RSF factor	BCBS proposed RSF factor
Gold	0%	50%
Debt issued or guaranteed by sovereigns, CB, BIS, IMF, EC, non-central government, multilateral development banks, 0% risk weight	2-3%	5%
Qualifying unencumbered non-financial senior unsecured corporate bonds rated at least Aa2	3%	20%
Unencumbered listed equity or qualifying non-financial senior corporate bonds rated at least A2	5-10%	50%

Arguments to support our proposed RSF factors:

- Gold has a well established role as save haven asset during a crisis and has proven to be highly liquid in times of stress. In fact, gold is regarded as being cash equivalent. During a crisis gold prices tend to rise and such positions can be rather sold-off with a gain. We therefore propose an RSF factor of 0% for this category.

- Sovereign and sovereign like debt: A similar flight to quality argument applies to this category to which we propose to apply a 2%-3% RSF factor.

- Non-financial senior unsecured corporate bonds rated at least Aa2: Senior high quality corporate bonds (non-financial) demonstrated to remain liquid and price stable during the crisis. Therefore we propose to apply an RSF factor 3% for this category.

- Listed equity and non-financial senior corporate bonds rated at least A2: Listed equities have proven to be highly liquid even during severe stress. If required, these positions can be sold within a short time frame generating cash-inflow to cover outflows on the liability side. A similar argument applies to senior corporate bonds rated at least A2. We therefore propose to apply an RSF factor between 5% and 10% for this category (5% for corporate bonds and 10% for equities).

Additionally, we note a strong asymmetric treatment between “other liabilities” and “other assets” in the NSFR, where “other liabilities” are given zero stable funding credit and “other assets” require 100% stable funding. We maintain that more granularity is required for these items and that funding neutral and matched items (e.g. accruals, gross-ups, fails, receivables and payables, etc.) have to be treated symmetrically.

Given the long time horizon of the NSFR scenario, we also maintain that the inclusion of off-B/S exposures and the required underpinning with stable funding is not appropriate. Rather, unexpected off-B/S outflows should be covered by means of the liquid assets buffer.

F.9 Harmonized Approach

We understand that the BCBS proposals are aimed at establishing globally consistent minimum requirements for liquidity standards for all banks. In that respect, it is of utmost importance that the new standards are applied equally across all jurisdictions to create a level playing field.

We note however, that EU commission’s CRD IV working document, which in the liquidity section lays out the principles for implementation of the Basel rules, foresees that EU credit institutions should be treated differently to non-EU credit institutions. In particular, paragraph 19 of the liquidity section states that “The Commission services currently do not envisage making available a waiver for individual firms’ liquidity requirements based on consolidated liquidity supervision over a group

comprising entities outside the EEA because the condition of free asset transferability mentioned in paragraph 17 could not be met for groups including institutions outside the EEA".

We find this position problematic in the light of harmonized international implementation and we see legal uncertainties as well with regards to this position when applied to branches of international firms, as branches are in fact part of the same legal entity as their parents. In particular, the UK FSA's concept of granting waivers to the liquidity requirements of branches of international parent firms would in this case be applicable only to EEA-parent firms, which seems inappropriate where there is an established and close relationship and cooperation between the UK FSA and home regulators outside the EEA.

F.10 Conclusion and Closing Remarks

In our view, the rationale behind the metrics which BCBS intends to introduce – i.e. to be appropriately armed to survive a short-term severe stress and not to be overly reliant on short-term funding for illiquid assets – focuses on the right issues. The way the current consultation paper aims to achieve this goal, though, seems extremely rigid, stringent and prescriptive and would have some severe unwanted effects on financial markets and the macro economy.

Very prescriptive and stringent models will force banks to manage against regulatory ratios, rather than to comprehensively manage liquidity risks based on models that are fit to their individual business models, clients, products, markets and countries they operate in. Further it is questionable whether banks can continue to take ownership and responsibility for liquidity risk management under the proposed stringent and prescriptive regulation. We therefore urge BCBS to advise supervisors to build on banks' internal risk management models, to audit them, and to require banks to evidence their methods and assumptions.

The individuality of each institution will require a more flexible model as opposed to standardized industry assumptions. Banks need to be able to run their liquidity management with models that are fit for their businesses and reflect the expertise of their liquidity management functions.

Stringent assumptions will also have profound impacts on the way banks price their products and on risk control and resource allocation, with consequences for clients and the broader economy. Assumptions should therefore be set carefully and based on evidence of the risks and characteristics of the products and clients.

Very stringent liquidity requirements, both to hold liquid assets and to severely restrict maturity transformation, will have lasting and significant impacts on the macro economy. Under the proposed regime, banks will have limited capacity to lend to clients or use their balance sheets to support the capital markets. This will force liquidity risks over to institutions that do not fall under this regulation, which will have the undesired effect of increasing the vulnerability of the financial system.

We pointed out as well that public disclosure of liquidity ratios is self-defeating and could dramatically exacerbate a potential liquidity stress.

G. Glossary

AVC	Asset Value Correlation
BCBS	Basel Committee on Banking Supervision
CCF	Credit Conversion Factor
CCR	Counterparty Credit Risk
CDS	Credit Default Swap
CRM	Comprehensive Risk Measure
CS01	Sensitivity to a 1bp parallel move in the underlying credit spread
CVA	Credit Valuation Adjustment
DTAs	Deferred Tax Assets
EAD	Exposure At Default
EPE	Expected Positive Exposure
EE	Expected Exposure
IRB	Internal Ratings-Based
LCR	Liquidity Coverage Ratio
MCNs	Mandatory Convertible Notes
MtM	Mark-to-Market
NSFR	Net Stable Funding Ratio
PD	Probability of Default
QIS	Quantitative Impact Study
RBA	Rating Based Approach
RSF	Required Stable Funding
VaR	Value-at-Risk

H. Technical Annex – Proposed bond equivalent approach for CVA capital

H.1 Introduction

The core approximation of the proposed bond equivalent approach is to calculate the CVA associated with a counterparty as the difference between the price of a riskless zero coupon bond and a risky zero coupon bond, where the additional spread applied to the risky bond is the spread the bank actually uses in its CVA calculations.

In practice, actual CVA calculations should make use of the hazard curve that can be extracted from a term structure of CDS par spreads. These are applied to the expected exposure amounts for all relevant tenors (expected exposure or EE profile). When combined with a discounting curve, it is possible to calculate the discounted expected loss conditional on default occurring within each future time interval. The risk neutral default probability corresponding to each future time interval is given by the integral of the hazard rate over that interval, multiplied by the probability the counterparty has survived until the start of that interval. Among those firms that mark their CVA to market spreads, this approach is standard and considered to be best practice. In the remainder of this technical annex we refer to this calculation as the benchmark.

CS01 is defined as the CVA value change due to 1bp parallel shift in the underlying CDS par spread curve. In the context of those firms that mark their CVA to market and reflect the CVA risk in VaR, the core question is not whether the bond equivalent representation provides a good proxy for CVA, but whether it provides a reliable CS01 estimate. We provide several examples that highlight the degree of CS01 distortion the bond equivalent representation can induce.

The distortions are many fold. While we believe it introduces a substantial conservative bias on average, the bond equivalent method can result in distorted CS01 estimates that are multiples or fractions of the true CS01.

The focus of the discussion here is on the technical shortcomings of the bond equivalent method and its inputs. Our other comments on the CVA approach are covered in the main text of the comment letter.

In section 2 of this annex we discuss the inclusion of the alpha factor. Section 3 highlights the issues that the effective maturity calculation induces. Section 4 shows that the bond equivalent calculation can in some cases lead to substantially understated CS01 figures. Section 5 discusses an operational leverage effect that will tend to magnify the consequences of the other issues in the context of the CVA charge. Section 6 contains our comments on “stylized VaR” and section 7 provides a summary as well as our conclusion.

H.2 Market risk of CVA and the “alpha factor”

The BIS's primary justification for the alpha factor is set out in paragraph 37 of the BIS paper "The Application of Basel II to Trading Activities and the Treatment of Double Default Effects" (July 2005): "The alpha multiplier provides a means of conditioning internal estimates of EPE on a “bad state” of the economy consistent with the determination of credit risk under the Revised Framework. In addition, it acts to adjust internal EPE estimates for both (1) correlations of exposures across counterparties exposed to common risk factors and (2) the potential lack of granularity across a firm’s counterparty exposures. The alpha multiplier is also viewed as a method to offset model error or estimation error."

So the primary justification of the alpha factor is the conditioning of EPE on a bad state of the economy. As part of the revisions to the Basel II market risk framework that will go live end of this year, banks are required to compute stressed VaR for regulatory capital in addition to VaR. The proposed CVA treatment under the bond equivalent approach requires the computation of stressed VaR for CVA as well. Hence we are at least double counting the effect of a bad state of the economy, as alpha enters the bond equivalent VaR and stressed bond equivalent VaR, whereby the bad state of the economy is obviously reflected twice in the stressed VaR component. We conservatively estimate stressed VaR being a multiplier of 2 with respect to VaR. This clearly shows that the stressed VaR component more than compensates for the same effect that the alpha factor intends to capture.

The only valid justification we see for any adjustment factor is the potential market risk of CVA due to non-spread factors that might not be captured in VaR. The bond equivalent approach already accounts to some degree for these missing effects by means of the rather arbitrary interest rate sensitivity induced by the bond equivalent representation.

Based on our internal stress testing results we have evidence that the market risk of CVA due to non-spread factors to which the EE profile is sensitive too are small compared to the spread component. We assess the order of magnitude being 5% to 10%, which also from a theoretical point of view is very plausible.

It would therefore be preferable for the BCBS to establish standards for the capture of non-spread risk factors that are not captured in the CVA VaR calculation, rather than to apply a single aggregate “alpha factor” multiplier that is already accounted for in the stressed VaR calculation.

H.3 Netting set based effective maturity vs. counterparty based EE profile

The effective maturity and the EE profile are two of the inputs to the bond equivalent calculation. The effective maturity that represents the zero bond maturity is taken as the longest effective maturity across netting sets. This means that for a counterparty with two non-nettable trades, the regulatory formula requires using the maximum of the trade level effective maturities for the zero bond maturities. This is very problematic.

Let’s assume a counterparty has two non-nettable trades, trade A with a large short-dated EE profile, and trade B with a small long-dated EE profile. By construction we have that the bond equivalent calculation is based on the large effective maturity of trade B and the large EAD driven by trade A. The degree of overstatement of CS01 therefore grows with the maturity of a trade that essentially bears no risk. We demonstrate the effect in the following table. Note that in all calculations, if not stated otherwise, we assume a flat interest rate curve of 3%, a recovery value of 40%, a flat spread curve of 200bps, and an alpha factor of 1. Tenor is expressed in years.

Let’s consider the following 3 configurations:

	EE profile		Tenor	
Config	Trade A	Trade B	Trade A	Trade B
1	100	10	1	1
2	100	10	1	5
3	100	10	1	10

This yields the following results, where the last column labelled “Delta” shows the percentage change of CS01 of the bond equivalent method compared to the benchmark:

	Benchmark		Bond equivalent				Delta
Config	CVA	CS01	EAD	Eff M	CVA	CS01	CS01
1	2.100	-0.010	110	1.0	2.114	-0.010	1%
2	2.753	-0.013	110	4.7	8.590	-0.041	209%
3	3.368	-0.016	110	8.8	13.602	-0.062	299%

As we can see, the above described effect is drastic. For the third example we have the bond equivalent based CS01 is 4 times larger than the benchmark CS01. We also observe that the CS01 grows totally disproportionate with respect to the risk of trade B.

Next we consider another 3 configurations, where we set the tenor of trade B to 10 years, and decrease the trade B expected exposure from 10 to 1.

	EE profile		Tenor	
Config	Trade A	Trade B	Trade A	Trade B
4	100	10	1	10
5	100	5	1	10
6	100	1	1	10

This yields the following results:

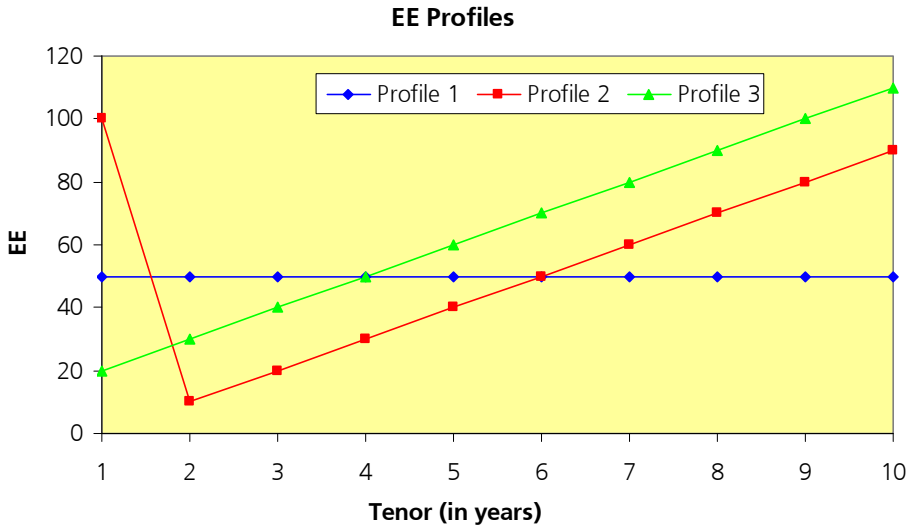
	Benchmark		Bond equivalent				Delta
Config	CVA	CS01	EAD	Eff M	CVA	CS01	CS01
4	3.368	-0.016	110	8.8	13.602	-0.062	299%
5	2.639	-0.012	105	8.8	12.984	-0.059	375%
6	2.055	-0.010	101	8.8	12.490	-0.057	471%

This set of examples clearly highlights the incoherency of the proposed approach. By adding a non-nettable trade to a counterparty with close to zero risk but a long tenor the CS01 distortion is beyond any reasonable boundaries.

H.4 Bond equivalent CS01 distortions are not necessarily conservative

In the previous section we have dealt with the issue that is caused by multiple netting sets or non-nettable trades. Here we assume that all trades are part of one netting set. We provide 3 examples of tenor profiles where the bond equivalent approach yields good, conservative and aggressive CS01 estimates. In these examples we assume a flat spread curve of 350bps, else all other assumptions from section 3 are applied.

We consider the following 3 profiles:



This yields the following results:

	Benchmark		Bond equivalent				Delta
Profile	CVA	CS01	EAD	Eff M	CVA	CS01	CS01
1	11.446	-0.025	50	8.8	10.158	-0.025	1%
2	11.954	-0.025	100	4.7	13.238	-0.035	41%
3	13.233	-0.025	20	27.4	5.421	-0.009	-64%

We conclude that the bond equivalent approach towards calculating CS01 can go either direction and hence yield plausible, conservative or aggressive results, depending on the underlying EE profile and its impact on EAD and the effective maturity.

H.5 Operational leverage

It is important to understand, that because the CVA portfolio will typically be substantially hedged, errors in representing the long CVA CS01 exposure will be multiplied in terms of their effect on the total CVA charge being contemplated.

Consider a simplified case where the bank estimates the CS01 of its long CVA exposures as -100 and the CS01 of its single name CDS hedges as +75. The net CS01 is -25. However, the proposed approach will require an alternative calculation for the long CVA exposures but not for the hedges. If the proposed calculation overstates the long CVA CS01 by a factor of two (which is feasible, as shown by the examples outlined above), then the new net CS01 will be -200 + 75 = -125. The capital charge is five times as large as would have been estimated without the overstatement in the CS01 of the long CVA exposure.

There is “operational leverage” associated with this example – an overstatement of 100% in the long CVA CS01 translates into an overstatement of 400% in the resulting capital charge. The better the CVA portfolio is hedged, the larger the relative overstatement of the resulting capital charge.

The operational leverage effect is further accentuated by the fact that the eligible hedge set under the bond equivalent approach is reduced compared to the true CVA hedge portfolio. This means that not only is the CS01 of the long CVA exposures increased, but the CS01 of the short CVA hedges is decreased.

This highlights why it is especially important to try to get the risk representation accurate in the case of the CVA portfolio. Firms are seeking to actively hedge the CVA and regulatory distortions in the capital calculations will create incentives to diverge from optimal hedging approaches. In fact, the current proposal will incentivise banks to over-hedge if necessary to bring down the CVA charge, leading in general to greater P&L volatility (and hence increased risk) than would be experienced otherwise.

H.6 Stylized VaR

As part of the QIS the banks were asked to assess the impact of stylized VaR, an alternative to the bond equivalent approach for computing VaR on the CVA book. We have not seen any regulatory discussion or comment on the idea and motivation behind the stylized VaR formula and hence we find it difficult to comment on it. But given that stylized VaR has no element of credit spread sensitivity in its formula we interpret the approach to be clearly inferior to the industry standard approach and by no means a viable alternative to the bond equivalent approach.

H.7 Summary

While the bond equivalent approach seems to introduce a conservative bias on average, it can for any particular counterparty provide heavily aggressive estimates of CS01. Aspects of the proposed CVA calculations are likely to result in estimates of aggregate credit spread sensitivity from two to three times the right levels, depending on the level of the “alpha factor” and the actual prevalence of cross-partial effects.

In the case where the credit spread sensitivity is over-stated by a factor of 2.5 and the bank sought to hedge 75% of the CVA sensitivity (using allowed single name hedges), the resulting total CVA charge would be a factor of 9 larger than the bank itself would estimate using its risk representation estimates.

The bond equivalent based CVA calculation requires the same input parameters as the industry-wide standard computation for marking CVA to market. It is therefore unclear to us why the regulators propose an incoherent and hence inferior method to underpin capital for CVA if there are no other savings or benefits that come with the inferior approach.

It would be preferable for the BCBS to set standards for exposure profile and CS01 calculations for the CVA portfolio. If banks can meet these standards, they should be allowed to apply a more analytically correct calculation.

Consider also that the CVA VaR calculation must then be scaled to a one year horizon (multiplier of five) and further multiplied by three, that it is required to be calculated on a stand-alone basis separate from other VaR calculations, and that only single name hedges are allowed to be applied, even if the bank has empirical evidence that index hedges and other instruments exhibited meaningful market correlation during the crisis itself.

This is still only half or less of the total CVA charge. The entire calculation must be repeated again using a stressed VaR period and added to the original result. We conservatively assume that this is equivalent to multiplying the charge by 2. In most cases, the stress case will exceed the normal case in severity, resulting in a multiplier larger than two.

The resulting charge can realistically therefore be on the order of 270 times as large as the 10-day VaR calculated using the bank’s own credit spreads.