

## UBS RESPONSE TO THE NEW BASEL CAPITAL ACCORD

Although generally welcoming the basic approach of the New Basel Capital Accord ("the Accord"), published by the Basel Committee on Banking Supervision ("the Committee") on 16 January, 2001, UBS has considerable reservations and concerns about some aspects of the proposals which are detailed in this paper.

### 1 GENERAL ISSUES

#### 1.1 OVERALL CAPITAL CHARGE AND CALIBRATION

The Committee expresses the desire to produce, on average, neither a net increase nor a net decrease in minimum regulatory capital, after allowing for operational risk. It is, however, difficult to see how, in practice, the Committee can calibrate the charges in such a way as to retain the current levels of capital, given the variety of approaches on offer, an uncertain migration path for many of the major banks and the lack of detail currently attaching to many aspects of the proposals.

Moreover, based on our internal estimates and the results of the Quantitative Impact Study, it appears that the new credit charges alone could, depending on the ultimate treatment of impaired assets, leave regulatory capital at best unchanged from current levels, even before the addition of the operational risk charge. We do not believe that this would have been the Committee's intention for a bank with a good quality portfolio, without undue concentration risks in poorer quality assets. Unfortunately, the parallel running of the consultation period with the QIS has left both the industry and the Committee unable to test the concepts fully against real data, to run sensitivity analyses and scenarios, and, thereby, to propose solutions as well as identify problems.

Nevertheless, our internal estimates show that for loan books, for example, even excluding impaired assets, there will be no significant change, either beneficial or detrimental, in investment banking, whereas the domestic corporate sector will be heavily penalised, irrespective of whether the Standardised Approach or Foundation IRB is used. This highlights the fact that even if, overall, the capital charge can be calibrated to accommodate operational risk without increasing the total, there will be a major redistribution of regulatory capital between businesses, in a way that we find inconsistent with our internal assessments of relative risk. The securities financing business (repos, securities borrowing/lending) is also very adversely impacted by the new charges, especially compared with current rules of the EU and the Swiss regulators.

We therefore recommend that the calibration be thoroughly reviewed and, if necessary, re-tested before Pillar 1 charges are finalised.

#### 1.2 COST / BENEFIT ASSESSMENT

Although it is impossible, at this stage, to make a full empirical assessment of the impact of the Accord, it seems clear that there are inadequate incentives to encourage banks to improve their risk control environment and risk management and control practices, particularly in the credit risk capital charges. The costs of meeting the detailed operational requirements and qualitative standards will be high, while the capital benefits of making these changes are intended to be relatively small: the benefit of moving from the Standardised to the Foundation IRB approach is intentionally set at about 2-3%, while the benefit of moving from the Foundation to the Advanced IRB approach is capped at 10% for the first two years from implementation (implying that banks qualifying for the Advanced IRB approach will have to perform a burdensome double calculation).

We do not believe these incentives, even if they are realised, are adequate, and our own internal estimates suggest that they may not be realised under the current formulation. There are, moreover, strong disincentives for banks with more than a nominal amount of low quality, unrated assets to move to more advanced credit risk approaches.

The 10% floor should be removed and better incentives provided to encourage banks to adopt the more advanced approaches, in order to promote improvements in risk management and control practices. The Accord must avoid the paradox that, for banks with low quality assets or poor operational risk data, the most attractive option is the least demanding in terms of risk management and control.

The Committee should also carefully consider the cost of these changes across the whole industry and ensure that the benefits in terms of enhanced safety and soundness in the system justify them.

### **1.3 AGGREGATION**

The total capital charge is a simple summation of charges for the three risk categories, credit risk, market risk and operational risk (and other miscellaneous balance sheet items). This implies that there is no diversification effect between the risk categories – the risks are fully correlated. There is also limited recognition of diversification within the credit and operational risk capital charges.

For a bank with diverse business lines, in diverse sectors, across diverse geographical regions, the simple sum aggregation within risk category and across risk categories is likely to lead to a significant overstatement of risk and, therefore, of capital requirements.

There are significant challenges to developing a robust alternative method, some of which are inherent in the Accord itself – lack of clarity as to the intended time frame (holding period) and level of confidence, and the many layers of conservatism built into the current proposals. We do, however, urge the Committee to work with the industry to develop a generic risk sensitive aggregation method and, if this cannot be completed by December 2001, to leave this possibility open when the Accord is published in January 2002.

### **1.4 ACCOUNTING STANDARDS**

There are many accounting standards globally and although there is growing convergence, there remain significant differences in areas which are pertinent to the determination of regulatory capital. These include, but are not confined to:

- the measurement and recognition of assets, including financial assets, which can vary significantly depending on the accounting standard adopted – IAS, US GAAP or local – or may allow the application of significantly different options
- creation of general banking risk provisions (not permitted under IAS and US GAAP but permitted under certain local standards)
- undisclosed reserves (not permitted under IAS and US GAAP but permitted under certain local standards)
- hybrid debt equity instruments (different treatments under different standards)
- treasury shares (IAS and US GAAP require the cost of them be deducted from equity while this is not the case under some local standards).

The Accord makes no reference to such differences or to the need to adjust capital calculations where accounting practice differs from that assumed by the Committee in formulating Pillar 1.

We recommend that the Committee should publish the broad accounting principles on which the Accord is based and the adjustments that regulators should make where local accounting standards are materially different.

## 1.5 CAPITAL RATIOS

Within the life of the new Accord, many banks will be determining their regulatory capital requirement based on models which, like Value at Risk, produce a potential loss figure, rather than deriving it from some total or weighted value of assets or positions. In the circumstances, we feel that the expression of actual capital as a percentage of "risk weighted assets" is an anachronism.

Instead, we recommend that the regulatory capital requirement be determined by an institution according to the various methods adopted for each risk category, including any multiplier or additional risk cushion imposed by the regulator, and that actual capital then be expressed as a multiple of this regulatory requirement. (This can of course continue to be separately calculated for Tier 1 and Total Capital.)

Apart from the obvious simplicity of this approach, it has the advantage that it distinguishes between an institution which has a high ratio because it is very well capitalised and one that has a high ratio because the regulator has insisted that it maintain additional regulatory capital because of a defined weakness.

## 2 PILLAR 1 – CREDIT RISK

### 2.1 GENERAL OBSERVATIONS

UBS welcomes the approach to credit risk, namely

- the introduction of an internal rating based (IRB) approach that goes further than originally anticipated and allows many more banks to measure their capital requirements based on an assessment of the obligor's default probability, even in cases where external benchmark information is not available
- the recognition of a wider spectrum of credit risk mitigation for exposure measurement
- the calibration of the obligor's default probability, as the major value driver for Expected Loss (EL), to a measure of risk that is essentially based on the principle of determining the Unexpected Loss (UL) at portfolio level, which should ensure that the determination of an individual institution's regulatory capital is broadly in line with economic reality.

We cannot, however, fully endorse the Accord at this stage, not only because there are significant elements with which we disagree, but also because there are other areas that are at best only outlined and at worst completely omitted.

We have outlined in our letter to the Committee our principal concerns which, with other matters, are discussed in detail below.

Clearly, there will be changes before final publication, if only to fill the gaps. We strongly recommend that the Committee conduct a second round of consultation on these areas before final publication of the Accord.

#### USE OF MODELS FOR INTERNAL MANAGEMENT

We have a fundamental concern with the prescriptiveness of the Accord in relation to internal models. We accept that a bank must use a model for its internal risk management and control to make it eligible for use for determining regulatory capital, but the Committee cannot then dictate detailed aspects of the model. As with market risk models, the Accord should lay down the fundamental principles and parameters and allow management to determine the model itself.

#### CREDIT VAR MODELS

The Committee has ruled out full "Credit VaR" modelling in the present revision of the Accord. UBS regrets this choice. The internal ratings based approaches (IRB) already use a function to convert EL to regulatory capital, in a similar way to a VaR model, but the resulting benchmark risk weights are based on highly stylised portfolios with assumptions that do not hold true in a diverse banking world (client/product segmentation, industry/geographic concentrations).

Subject to clearly defined standards for the estimation of correlations and the robustness of the method of determining UL and capital, banks could, from their own internal models, produce an improved assessment of risk in their portfolios on which a regulatory capital charge could be based. Given progress to date, major banks could well be in a position to implement full Credit VaR models by 2006. Thus, within a year of the full benefit of the Advanced IRB approach (AIRB) being made available (when the 10% floor on capital benefit is removed), banks may have achieved a level of credit risk modelling that can be used for internal risk management and for pricing transactions. There is then a risk that the widening gap between regulatory capital and internal risk management practices will open the way for undesirable capital arbitrage.

UBS hopes, therefore, that the Committee will continue to explore how to incorporate full Credit VaR models into the capital framework in the near to medium term future.

## VOLATILITY OF CAPITAL ACROSS THE CYCLE

The new approaches (Foundation Internal Ratings-based Approach – FIRB – and AIRB) will lead to an increased volatility of regulatory capital requirements, especially for those banks that use forward looking calibration assumptions for their rating classes. The Committee has chosen to counter this problem by conservative measurements (estimation of PD, calibration of PD to regulatory capital and further adjustments, e.g. for maturity), which – taken together – lead to an overestimation of regulatory capital by comparison with economic capital (Credit VaR) calculations. We question whether it would not be more transparent to use unbiased input values and model outputs for the calibration and to adjust these to the desired level of capital by means of one factor (similar to the multiplier for market risk). A part of such a “cushion” would also serve to absorb the effects of volatility of regulatory capital requirements.

We note that the Committee wished to avoid a debate about the definitions of capital and the structure (Tier One, Tier Two) during this revision of the Accord. However, some changes might be necessary. A possible approach would be for Tier One capital to be defined as the minimum required to cover regulatory capital on “pure” model output and that Tier Two capital may be used to cover (all or part of) the further capital required to absorb model risks etc. and the increased volatility of the capital calculations over time. If doubts exist as to the capacity of certain elements of Tier Two capital to absorb losses, this issue should be clarified at the same time.

This concept could be applied to the other risk categories where models are used. Furthermore, if the same level of statistical confidence were used for all risk categories, some of the difficulties of finding a sound method of aggregation (see 1.3) could be overcome.

## 2.2 INCENTIVES BETWEEN APPROACHES

UBS is not convinced, based on what we have seen from the results of the QIS, that the current calibration of IRB versus the Standardised Approach (SA) sets the right incentives and expects that amendments will be made to correct any major distortions, although this is critically dependent on how impaired assets are to be treated. The original intention of the Committee may have been to construct a framework that creates a level playing field for internationally active banks, but competitive disadvantages at the *domestic* banking level must not be disregarded. If major, internationally active banks are “expected” by their regulators to use IRB, this will include their domestic portfolios where they compete with smaller regional banks that have no ambition to move away from SA and whose risk management and control practices may be less rigorous. It is therefore important that the use of IRB does not unfairly disadvantage the larger banks, which would be a perverse development. It could lead large banks to reduce their corporate exposure, especially to those with ratings at the lower end, which in turn could lead to a potential credit crunch, depending on the extent to which the riskier loans can be absorbed by smaller banks, operating under the SA. At the same time, small banks will acquire higher risk assets with relatively lower capital against them.

There are other illogical discrepancies between SA and FIRB that need to be addressed, in particular:

- the difference in loan equivalents of commitments to lend. The FIRB conversion factors of 50% up to one year and 75% over one year seem to be extremely high and should be brought down to the level suggested for SA (20% / 50%)
- it is not logical to set a minimum regulatory capital requirement for the highest counterparty category – a AAA sovereign – in FIRB, which results in a minimum capital charge of 1.12%, but to set a 0% risk weight in SA for the same exposure.

If FIRB is used as the benchmark to calibrate the overall capital for credit risk in the banking system, the relative capital requirements for banks using SA should clearly be *higher* to create an incentive to use the more costly and onerous, but more risk sensitive, IRB framework. We question whether the intended reduction in capital of 2% to 3% is sufficient to create an incentive to move away from SA, but also note that the evidence of the QIS suggests that even this small benefit will not accrue if the treatment of impaired assets stipulated in the QIS is retained.

UBS does not understand the rationale for imposing a 90% floor on the AIRB versus FIRB. For banks with large exposures in segments where LGD is below 50% (e.g. investment property financing) this threshold may be reached relatively easily, and the framework therefore ceases to be risk sensitive. In any case, as a practical consideration we would challenge the requirement to run parallel capital calculations for AIRB and FIRB for two years.

## 2.3 STANDARDISED APPROACH (SA)

We have limited our comments on the SA, because this is not the approach that UBS will generally adopt, assuming that the issues identified in 2.2 are satisfactorily resolved.

### LACK OF GRANULARITY OF RISK WEIGHTS

The buckets that are available are insufficiently granular – the incremental steps in capital requirements are too high at the top/investment grade level and insufficiently differentiated at the bottom of the sub-investment grade categories, when compared with the default histories published by rating agencies. This is confirmed by the gap that is created between SA and IRB in determining the benchmark risk weights for obligors with a higher default probability.

UBS recommends using the final IRB calibration as the basis from which suitable categories and their risk relative to the overall model portfolio can be established for the SA, and including one or two further risk weights.

The suggestion that local regulators can demand higher risk weights for unrated obligors is too weak and does nothing to achieve a level playing field, while the implementation of a 100% risk weight for all unrated obligors will always make SA more attractive to banks with a significant loan book in “middle market” domestic banking.

### APPLICATION OF EXTERNAL RATINGS

External assessments for one entity in a corporate group may not be used to risk weight other entities in the same group. Many groups issue securities through a special, rated vehicle while the vehicle through which they raise bank debt is often unrated. In many cases, the unrated entity is better positioned than the rated vehicle in terms of covenants and proximity to cash flows and assets but, since the whole group is reliant on these assets and cash flows, their probability of default is the same. Provided a bank has sound policies and practices for applying the public rating of one entity to other, unrated, entities in the same group, supervisors should recognise this practice for regulatory capital purposes.

### MORTGAGE LOANS

A 50% weight for loans secured on residential property (whether owner-occupied or rented) is proposed, but mortgage loans on commercial properties attract the standard 100% weighting regardless of loan-to-value ratios. Given that the risk weights should be related to the risk of loss, this implies that the default probability of mortgage loans against commercial properties is actually higher than for normal unsecured loans to corporate clients because the LGD – at least as evidenced in UBS’s internal loss history – is clearly lower. UBS accepts that loans on residential mortgages (especially the owner-occupied single family apartments or home financings) have a much lower risk profile than the rest of the portfolio, but would suggest that a 100% weight on all commercial property financings is too harsh.

## RETAIL

Under SA, retail exposures will only receive beneficial capital treatment if they are secured on residential property (see above). Whilst this is basically in line with the current rules, it does not produce the increased risk differentiation, even on the basis of few(er) “buckets”, that one would expect from the new Accord.

## BANKS

UBS opposes Option 1 for the determination of risk weights for banks, and advocates Option 2, i.e. an individual assessment of each individual bank.

We note, also, that for many banks the three-month window for short-term exposures at a lower risk weight may be too narrowly defined and a six-month period might be more suitable.

## IMPAIRED ASSETS

The risk weight of 150% on the net carrying value of an impaired asset is onerous and in contrast to the rest of the scale of risk weights, which is poorly differentiated. It should, at the very least, be assumed that the risk of further loss on an already well provided, impaired loan is no higher than the risk of future loss on an as yet unimpaired loan with a standard 100% weight.

Whilst UBS objects to including impaired assets at all in the IRB approaches, we could accept a 100% risk weight for the recoverable amount under the SA, since the risk weights are based on an arbitrary ranking of external ratings and by no means on a simplification of the output of a “standard” portfolio model into distinct risk categories.

We also oppose the strict imposition of a 150% weight on any asset 90 days past due. Delayed payment does not necessarily imply that the bank will suffer an economic loss (in particular in retail, where it might be a technical or a timing issue that will be cured with good value). In fact, the definition of “statistical” default should be relevant, i.e. under what circumstances the bank classifies an asset as impaired and creates a specific provision. UBS strongly advocates not differentiating between regulatory and accounting rules to determine the “event of default”. Since loss histories are based on a bank’s practice in classifying exposures as impaired and LGD is determined on the basis of the ultimate loss (i.e. charge to the profit and loss account for a deficiency in principal value including the cost of carry under the provisions of IAS 39), the figures for calibrating PD (and, for AIRB, LGD) have a direct link to the accounting standards.

## 2.4 FOUNDATION INTERNAL RATING BASED APPROACH (FIRB)

### 2.4.1 Implementation

UBS accepts, in principle, that banks qualifying for IRB should ensure that all material businesses and/or subsidiaries are subject to the same approach and should not be free to pick and choose IRB or SA for individual portfolios to gain a capital advantage. Too strict an interpretation of this rule will, however, reduce the number of banks able to use IRB, at least for some time to come, which is not desirable:

- banks beginning to use empirically validated rating tools for important segments of their activities should not be debarred from employing IRB
- practicality will dictate deviations from a strictly defined de minimis exception rule – for instance, if a bank acquires another institution that cannot produce a historical loss database sufficiently granular to permit immediate use of empirically validated rating tools
- there are portfolios for which the effort involved in computing FIRB is totally out of proportion to the risk they carry (see also comments under 2.4.3)

- whilst a transition period of three years will give many banks the opportunity to adopt IRB, the requirement of a minimum historical observation period of five years may be difficult for individual sub-segments or subsidiaries.

UBS therefore advocates some less strictly formulated rules under Pillar 1 to enable as many banks as reasonably possible to adopt IRB. If sufficient principles are stated, banks can then establish their policies and local regulators can judge them within the framework of Pillar 2. A more flexible rule for partial moves from FIRB to AIRB, would be particularly welcome, especially in the area of determining LGD (consideration of collateral that is not recognised in FIRB),

## 2.4.2 Ratings and PD Exposure for Corporate Exposures

### PRINCIPLES VERSUS RULES

UBS supports the requirements for Ratings/PD Estimation by and large, but we would emphasise the importance of setting principles and guidelines ("...a bank *should* articulate...") as opposed to rigid rules ("... internal audit *must* review annually .."). A sense of perfectionism, with too rigid a system of rules that "must" be adhered to should be avoided, especially since credit risk modelling is an evolving science and banks are changing their business profiles more frequently than in the past. Best practice rules will be commonly known by 2004 and local regulators will be able to benchmark individual institutions within the framework of Pillar 2.

### DEFAULT VERSUS LOSS

Credit risk models differentiate between PD and LGD as factors that determine EL. The Committee proposes for FIRB a standard LGD, whereas individual banks determine the PD. It is not, however, clear from the proposal that client ratings should be based strictly on the probability of customer default – indeed, the Accord (238, 239) suggests a second dimension in the form of a transaction rating which implicitly includes an aspect of LGD. This seems confusing and should be clarified.

### APPLICABILITY TO SMALL TO MEDIUM-SIZED ENTITIES (SMEs)

The Accord aims to broaden the use of IRB compared with the 1999 proposal. This will particularly affect banks that have a significant portfolio of loans to SMEs. But, if SME exposures do not fall under the "retail" segment (or into their own category as discussed in 2.4.3), credit analysis must follow the rules set out for the corporate segment. For SMEs, where individual exposures are relatively small and therefore a misclassification for rating purposes has no material consequences for the institution and its overall capitalisation, credit processes need to be optimised. In such cases UBS would *not* perform analyses of companies' projections, even assuming they were available, but would assign a rating to the customer based on a scoring model that uses relevant historical financial and non-financial factors. The Committee must ensure that the final rules are meaningful and do not require banks to incur costs that are not justifiable from a risk/return point of view.

### COUNTRY RISK

Some principles should be specified covering the extent to which the rating of the sovereign should cap the rating of the country's banks and corporates. Institutions should then be required to demonstrate that their rating system takes appropriate account of country risks.



## PD ESTIMATION, EXPECTED LOSS AND PRICING

Customer analysis must be based on historical information and an assessment of the outlook based on the information that is available at that time. UBS does not disagree with this principle and requires its credit officers to perform their reviews on this basis before loans are approved, especially for a medium-term period. However, it should be noted that the outcome of the rating would be expressed as the probability of the customer defaulting on its obligations within one year. The requirements to look at a longer horizon for the analysis and to quantify the risk of default over a one-year period are contradictory and need clarification.

The minimum requirements for estimation of PD are somewhat contradictory – a long run average PD that should at the same time be forward looking – although there is a statement that historical information may be adjusted to reflect the bank's views about current and future economic conditions. UBS urges the Committee to be more precise in describing its intentions beyond the statement that banks may incorporate adjustments, in particular in the section that deals with mapping internal grades to the categories of rating agencies for the definition of PD. Even if the estimation of PD were based on historical information only (i.e. represented the average of the actual defaults observed for a rating class in the past), this would vary significantly between banks, depending on the time series that formed part of the analysis (minimum of five years or longer, if data exist).<sup>1</sup>

This problem is not merely academic. It is a requirement that banks use their calibrated rating tools for pricing in order to qualify to use them for regulatory capital calculations. But a rating calibrated to PD based on long term historical averages may introduce bias and may lead to adverse client selection compared with a bank using a different time horizon or making explicit EL forecasts. While conditioning EL to expected economic developments is difficult and partly subjective, banks must be allowed to use econometric models for such forecasts. Finally, in the large corporate sector, where clients have access to the capital markets, pricing based on long run historical averages is not possible. The draft Accord is too rigid in this respect.

## DEFAULT – LINK TO ACCOUNTING STANDARDS

A definition of default is given in the draft proposal. UBS recognises that for FIRB, where LGD is static, the determination of a "statistical" event of default for the determination of PD is needed. It should be noted, however, that the statistical definition of default for rating purposes must be fully aligned to the accounting standards that prescribe when loans are declared impaired and specific provisions established. The criteria stipulated in the draft proposal do not, in UBS's view, contradict the accounting principles, but it should be made clear that these are not two separate concepts.

## DATA AND SYSTEMS

Whilst data collection and IT systems play a very important role in ensuring the statistical basis for the development and "back testing" of rating tools, the Accord has onerous requirements that are unnecessary and barely practicable. To have a complete rating history for clients on an individual basis for literally decades adds no value and is costly. UBS

---

<sup>1</sup> The default statistics of Moody's or S&P indicate that loss experience for individual grades, especially investment grade categories, varies considerably over time. For example, the average observed default frequency for Ba issues amounted to 1.21% for 1970-99, 2.76% for 1985-91 and 0.36% for 1992-98). A bank using the past seven year history will have very different PD estimations for their grades compared with a bank that uses the data since, say, the introduction of the default statistics some thirty years ago. Yet neither institution has answered the question how they estimate the forward-looking PD (conditioning to the prevailing economic conditions). A bank that uses a very long term data set for its PD allocation and adopts a "through the cycle" rating approach, i.e. aims at a low level of rating migrations, if companies behave within the expected band of earnings volatility etc., will exhibit a relatively low volatility in its EL and hence Regulatory Capital, but will fare badly when comparing actual outcomes with expected values. A bank that uses economic models to try to condition historical information to the expected economic situation in the near to medium term and that uses rating tools that respond more quickly to changes in conditions would show a much more volatile EL and Regulatory Capital but a smaller gap between its EL and the actual outcome and would therefore be viewed as "best in class" from the point of view of estimating defaults.

recommends restricting the level of detail required. Banks should be obliged to collate as many data as reasonably possible (feasibility and cost/benefit relationship) in order to be in a position to validate existing rating tools and develop new statistical rating models. With the continued consolidation in the industry, banks will always be confronted with changing situations that require transition rules following a merger or acquisition. Some caution must also be expressed with respect to the analysis of customer migration and defaults, especially at the highest end of the scale where defaults are very rare and thus meaningful statistical data sparse.

### 2.4.3 LGD and Exposure at Default for Corporate Exposures

#### SMEs

The standard LGDs of 50% for senior and 75% for subordinated obligations are adequate for large corporate exposures.

For SMEs, the recognition of CRE and RRE collateral aims at some differentiation between unsecured and secured obligations. UBS would agree with the low benefit that is given for CRE collateral, if the underlying property is not (significantly) rented to independent third parties and income producing, i.e. if it constitutes the business premises of the obligor. On average we can accept an LGD of 50% for SMEs, but our internal experience of loans secured on companies' properties have historically shown a lower LGD than that assumed under the Accord, while the severity of loss for unsecured senior obligations was in excess of 50%.

UBS disagrees with the lack of favourable treatment in determination of LGD for collateral in the form of mortgages on income producing properties (residential and commercial). If such properties are financed on the basis of a sound loan-to-value relationship, are valued based on achievable market rents, and are tenanted so that the required income actually flows, the risk mitigation factor is significantly higher than that offered in the Accord for CRE/RRE. UBS recommends that this distinction be made and a more granular LGD table introduced.

UBS feels, therefore, that a separate SME segment should be introduced not only with its own benchmark risk weights but also with more differentiated LGDs.

#### EXPOSURE AT DEFAULT

UBS urges the Committee to revise the rules for the estimation of future utilisations under committed but undrawn lines of credit. The 75% utilisation assumption is in stark contrast to the rules proposed under SA and the difference cannot be logically explained. The 20% / 50% proposed for SA are a more realistic assumption and should also apply to FIRB.

### 2.4.4 Retail

UBS conducts its retail business with individual clients on a client, not a product based structure. The definition of the client base that falls under this segment requires further discussion. UBS strongly recommends including incorporated entities under retail if they are investment vehicles of private individuals, since a number of Private Banking clients operate via incorporated entities rather than in their personal capacity. There is no difference in the risk profile of Lombard loans to such companies and those to private individuals.

We have made specific comments on mortgages on residential properties in 2.4.5 and on Lombard loans in 2.5.2). More generally, our broad recommendation is that, for retail portfolios where the historical and expected future losses are very small in relation to retail income, a very simplified method of determining benchmark risk weights should be used, including the possibility of mapping customer segments to rating categories based on the segment's central tendency of PD without the costly development of rating tools or scoring models for rating purposes (which would not be updated over time, since the data are not obtained from clients during the life of a loan). This would lead to concentrations of exposures in one category, but this is not unwarranted given that the segment is composed of homogeneous transactions where the differentiation in terms of PD and LGD is minimal.

In conclusion, UBS recommends having a differentiated approach to the "retail segment" depending on the importance of the risks of this business in relation to the revenue potential. Especially for residential mortgages and Lombard loans, UBS does not see a regulatory need for a sophisticated rating process and advocates an empirically validated approach to determining PD and LGD per homogeneous client/product segment rather than an absolute requirement for sophisticated rating tools.

#### **2.4.5 Investment Properties**

The Accord considers the financing of investment properties a special business similar to Project Finance, but the intended treatment of this category of loans is not yet clear.

Mortgage loans on investment properties are an important business for UBS. The underlying real estate is residential in nature or related to commercial buildings and construction land. We accept that lending against mortgages on undeveloped land or for speculative developments is risky and should attract a corresponding level of capital, but the bulk of our business is against income producing properties with sound loan-to-value ratios.

The SA provides for a 50% weight on all loans against mortgages on residential properties (owner-occupied and rented), whereas the treatment under FIRB is likely to be much more conservative, for which there is no justification. We recommend the establishment of separate rules for the treatment of investment property financings (to the extent that they do not fall under the retail category due to the nature of the obligor not the transaction) to avoid marginalising an important business, and the development of a risk weight that is fair in the light of past experience and the future outlook.

#### **2.4.6 Calibration of PD to Regulatory Capital**

##### **EL VERSUS UL**

UBS disagrees with the inclusion of EL in the calculation of the benchmark risk weights based on the principle that EL should be covered by revenues (the Accord states that internal ratings and PD must be reflected in pricing decisions) and capital should be held to cover *unexpected* negative earnings.

Whilst UBS agrees that the proposed framework is correct in its general approach, we note a lack of transparency in respect of the underlying assumptions, the data used, the tests performed etc. A detailed comment on the model is not, therefore, possible.

## SMEs

The benchmark risk weights have been determined on a sample portfolio that assumes a certain level of diversification and uses average loss correlation coefficients based on the Merton model approach (Corporate Segment).<sup>2</sup>

UBS strongly recommends the introduction of a third major category, SME obligors, because the major factor that drives the portfolio model – the loss correlation – is significantly different from that applicable to larger and internationally active corporates. This would create a third conversion of PD to benchmark risk weights somewhere between Corporate and Retail exposures. This would be much more consistent with observations from proprietary credit risk models and would reduce the gap between the SA and IRB approaches.

## BENCHMARK RISK WEIGHTS

UBS disagrees with the exclusion of a zero weighted category under IRB. Transactions with governments or central banks of the highest rated countries – which are the benchmark for the so called “risk free rates” – should have a zero weighting. For all other cases, UBS recommends a minimum PD of 1.5 basis points since, based on external benchmarks, the best ratings – AAA, Aaa – carry a PD of less than 3 basis points.

UBS understands the logic of the basic premise that regulatory capital should cover 99.5% of the “standardised” loss distribution, which would mean that a bank requires a debt rating at the lowest level of the investment grade category. This is, however, inconsistent with the 99% confidence level applied to the market risk capital charge, which contributes to the difficulties of aggregation as we have noted in 1.3.

Furthermore, we understand that a straight application of the model output would have led to benchmark risk weights one third lower than those proposed, a conservative bias confirmed by our own portfolio analyses. It leads to a steep and, we believe, extreme increase in the risk weights, and results in a significant overestimation of the portfolio risks. UBS takes issue with the two adjustment factors:

- the PD Estimation Error assumes that all banks are consistently wrong and excessively optimistic about their credit risk when clients are rated and rating categories are mapped to PD.

A flat “charge” for model errors sets inappropriate incentives and serves no other purpose than to inflate the capital charge. UBS strongly recommends replacing this charge with a risk sensitive factor according to which regulators can impose a multiplier if individual banks’ methodologies have proved to be less robust (lack of data or discrepancies in default estimations and actual observations that are significantly different from the market’s general result)

- adjusting risk weights to take account of the “Absorptive Capacity of Tier Two Capital” is neither appropriate nor advisable. If concerns exist with respect to the definition of capital they should be addressed directly and independent from the establishment of model based benchmark risk weights.

## MATURITY ADJUSTMENT

We appreciate the idea behind the maturity adjustment, and basically concur with the notion of an average 3 year “economic” maturity, but we have serious concerns with the proposal:

<sup>2</sup> The lack of differentiation of loss correlations may lead to capital arbitrage between economic capital estimations and regulatory capital requirements (concentration in industries, geographic exposures, products – e.g. leveraged finance).

- the effect of using a maturity adjustment brings an element of marking to market into the treatment of what is, under current standards, accounted for on an accruals basis, which we believe is inconsistent
- banks will have to put up regulatory capital based on the actual rating of each counterparty at any time. As a rating changes over the life of an obligation, it will have an immediate impact on capital, which should be sufficient reflection of the risk.

For these reasons, UBS recommends eliminating the maturity adjustment for the calibration of PD to regulatory capital.

If the Committee is unwilling to abandon a maturity adjustment, it should take into consideration that, while migration analyses based on S&P data may be a reasonable proxy for loans to large(r) companies with a similar profile to the S&P "population", they are not necessarily representative for other market segments or product categories.

#### GRANULARITY INDEX

UBS understands why a granularity adjustment is proposed but the index does not include a number of important dimensions of concentration (industry, geography, product etc.) and the result is therefore likely to deviate significantly from the output of proprietary portfolio models.

The index is not transparent and is complex, and the calculation and related data gathering processes will be cumbersome and expensive. UBS feels that the benefit of applying the granularity adjustment does not warrant the cost of implementation.

#### IMPAIRED ASSETS

We have noted in several places in our response the critical impact which the treatment of impaired assets has on the outcome of the new measures. The Accord does not, unfortunately, state how they are to be treated, but in the context of the QIS UBS was instructed to treat the recoverable amount (book value under IAS) in the same way as an unimpaired but risky loan with a 100% PD. This would lead to a capital requirement of 50% of the recoverable amount, regardless of the level to which the obligation has been provisioned and regardless of the degree of certainty attached to the estimated recoverable amount. This appears harsh and illogical.

In the context of credit modelling, the BRW represents a measure of UL. Since the volatility of EL is determined by the standard deviations of PD and LGD, the uncertainty surrounding the LGD assumptions is implicit in the model. It follows that the recoverable amount of impaired assets should attract no further capital requirement.

As an alternative, we could accept a capital charge of the amount, if any, by which provisions already made against impaired assets fall short of the standard LGD for those assets: but if the provisions are equal to or exceed the LGD, no capital should be required. The appropriateness and adequacy of the bank's provisioning policy and its consistency with accounting standards should be assessed under Pillar 2.

This is a critical issue. The final text of the Accord must address impaired assets without ambiguity and we strongly recommend further discussion with the industry before this matter is finalised.

## 2.5 CREDIT RISK MITIGATION (SA/FIRB)

### 2.5.1 "w" Floor

UBS notes that the Accord provides for a wider recognition of collateral in the form of guarantees and liquid instruments and welcomes this approach. The perceived lack of recognition of some forms of physical collateral, in particular for loans against mortgages on income producing real estate, has already been highlighted in 2.4.5.

The Accord introduces a new concept of disallowing the full extent of credit risk mitigation for the vast majority of transactions, the so-called "w" floor of 15%. During the consultation period, the basis on which the floor and its weight were determined has not been made fully transparent, the reasons generally cited being legal uncertainty, and operational and residual risks, but without substantiation. With respect to the reference to operational risk, we note the potential for double counting, given the introduction of a capital requirement for Operational Risk.

Without evidence, UBS cannot believe that, historically, on average one in seven cases posed significant problems which had the effect of changing the profile of a transaction that was believed to be "fully secured" to a de facto unsecured position. Furthermore, with the introduction of a Pillar 1 charge for Operational Risk, the potential consequences of an operational error or a legal dispute is amply covered.

UBS therefore strongly disagrees with the concept of the "w" floor and recommends that it be eliminated. If the Committee insists on its retention, it must be clearly defined, significantly lower in amount and linked to qualitative criteria which would define the conditions to be met to reduce "w" to zero, i.e. "w", if retained at all, should be linked to identifiable risks and not to arbitrary product distinctions. Banks will then have appropriate incentives to ensure "state-of-the-art" control frameworks for collateral management etc.. The loss history of the industry seems to indicate that losses due to lack of documentation or operational control in connection with loans secured by liquid collateral or bank guarantees have been minimal compared with the results in their corporate and retail loan books. This should be clearly reflected in the new regulation. In particular, cash collateral should always be exempt (consistent with "on-balance sheet netting").

### 2.5.2 Liquid Collateral

#### HAIRCUTS

We fully accept the principle of haircuts but the choice of a universal 10 day close out period results in a harsh treatment of collateral in securities financing businesses (repurchase / reverse repurchase agreements and stock lending / borrowing). Many securities financing transactions other than "government repo-style transactions", would be liquidated in a much shorter time-span than 10 days from the point of marking the position to market and establishing a deficit. UBS recommends a 5-day close out period to determine haircuts for transactions with core market participants, other professional firms and any counterparty where it can be demonstrated (based on policy, procedures and practice) that close out would be concluded within this interval. It should be noted that, whereas it can sometimes take 10 days to close out a portfolio of OTC derivatives to crystallise a deficit it does not take 10 days to sell or buy in securities and net them against each other and cash, and a grace or cure period is not incorporated in the relevant master agreements.

A haircut " $H_e$ " is proposed to cover potential change in value of the underlying exposure. We do not understand its purpose. Where the underlying exposure can change in value, the potential loss must be driven by – and added to – the value of that exposure, not adjusted via the collateral but, in any case:

- collateralised OTC derivatives already carry an add-on and  $H_e$  is therefore redundant, and we recommend that it be eliminated

- if both legs of a stock borrowing / lending transaction involve a security, and if both securities are sensitive to the same risk factor (e.g. same equity index, same interest rate) it would be inequitable to make a double charge. The methodology applicable to haircuts for securities financing transactions should be re-considered in the context of a wider review of the measurement of regulatory capital for these transactions, consistent with OTC derivatives – see 2.7.

#### CURRENCY MISMATCHES

The standard 8 percentage point surcharge on haircuts is an overestimation of currency risks. If the standard haircuts are established using a VaR based method, the currency risks should be analysed on the same basis. UBS recommends a more granular approach by creating, for instance, two or three volatility classes depending on the currency pairs involved.

The Committee should also consider fully the treatment of currency mismatches where varied collateral is held against a counterparty's OTC derivatives, and both are denominated in a number of currencies. It would be inappropriate, as well as technically demanding, to disentangle the matched from the unmatched parts of the portfolio, especially since the exposure per transaction is lost in the netting treatment. There are similar problems with determining currency mismatch on a portfolio of repos and reverse repos or stock borrowing and lending transactions with a single counterparty, where top up margin is provided in cash. The Committee should consider more equitable and risk sensitive approaches to such cases.

#### USE OF OWN HAIRCUTS

It is inappropriate to make model approval under the 1996 Market Risk Amendment a precondition for banks to use their own haircuts – it is a sufficient, but not a necessary condition. A bank should simply have to demonstrate to its regulator that its internal calculations are based on the standards set and properly implemented.

Where a bank is permitted to determine its own haircuts, and those haircuts adequately reflect market volatility and liquidity, it should not be restricted to the standard list of eligible collateral. Supervisors should be permitted to approve other collateral provided they are satisfied with the haircuts applied to it.

#### SPECIAL CONSIDERATIONS FOR SECURITIES FINANCING TRANSACTIONS (REPO/REVERSE REPO AND STOCK BORROWING/LENDING)

The proposed treatment of these transactions, which can be large in terms of gross exposure but which have a proven low risk profile, has a considerable effect on the overall capital requirement for international banks.

The implementation of the original 1988 Accord differs significantly between countries. In Europe, different, more favourable rules were established in the Capital Adequacy Directive for transactions in the trading book, and a similar approach is currently in operation in Switzerland. US securities firms, which are not subject to the Basel Accord, are also subject to much lower capital requirements.

While these transactions should be subject to the same prudential standards as other business, which may increase the capital allocated to them, this should not lead to a *ten fold* increase as appears to be the case for some transactions.

Securities financing transactions are neither legally nor effectively collateralised loans:

- they are part of the trading book and are marked to market and margined daily
- they are “whole transactions” – two legs making up a single trade not a loan and a separate placement of collateral

- they are margined between counterparties on a netted basis – margin is paid between the parties not on a trade by trade basis but across all trades under the agreement
- the documentation is standardised for each market and well tried and tested, reinforcing the above concepts
- in many cases there is high correlation between the securities received and the securities given and the likelihood of all those received falling and all those given increasing in value is extremely remote.

The capital treatment of securities financing transactions should therefore be reconsidered:

- to reflect the strong legal certainty and operational practice surrounding them, "w" should be eliminated for securities financing
- to take a more holistic approach to business which is managed at the client not the transaction level, a measurement approach consistent with that applied to OTC derivatives, for which netting is recognised and portfolio based calculations are applied, should be adopted where the documentation and market practice support it (although, as explained in 2.7, we are also seeking an enhanced approach in this area).

These markets are an important source of liquidity and should not be disadvantaged by inappropriate capital charges.

UBS accepts, however, that some transactions are relatively high risk – where, for example, the securities are relatively illiquid or where the counterparty and the security are highly correlated – and that, in these cases, the capital requirement should be commensurately higher.

#### SPECIAL CONSIDERATIONS FOR LOMBARD LOANS (SECURED LENDING TRANSACTIONS)

The Accord uses a 20-day close out period to determine the haircuts for secured lending transactions (as opposed to capital market driven transactions), implying doubts as to the efficacy of collateral management procedures in the area of secured lending. UBS recommends that this be taken into account by means of standards and not as a straight adjustment to the close out period, which does not set the appropriate incentives.

Under IRB, banks are required to use the "comprehensive" approach to determine the capital requirement for secured loans. We would argue strongly in favour of using a simplified and somewhat conservative model to determine the capital for Lombard loans in the context of asset management businesses, where a large number of clients with relatively low amounts of exposure exist and where a sophisticated calculation of haircuts (and "w" factors if retained) will be costly and cumbersome, while adding no value.

Most of these loans are to individuals or incorporated entities that pursue no other purpose than holding assets for investment. UBS recommends that Lombard loans to such borrowers be captured under the "Retail" segment of IRB and that, therefore, banks can use their own LGD estimations, based on loss experience and on prudent policies with respect to advance ratios and supervision. Alternatively, Lombard loans should have a specified simple treatment that is based on standards, e.g. banks' advance ratios which are equal to or more conservative than the haircuts established in the comprehensive approach.

#### COLLATERAL PLACED BY THE BANK

Paragraph 64 of the Accord could be read to imply that collateral in the form of securities given by the bank will be subject to a capital charge, although it is not entirely clear. We would have concerns particularly about two situations:

- initial margin placed with a clearing house in support of exchange traded transactions. Under the current rules, capital is only required if initial margin is paid in cash (which is reasonable since cash cannot be segregated).



We understand the legal basis of initial margins to be clear and do not believe that a capital charge would be justified. Any change could have a significant impact on the economics of these markets

- collateral given by the bank to a counterparty under a credit support agreement for OTC derivatives (e.g. an ISDA credit support annex), and where the bank has no credit exposure because the net negative mark to market on the transactions exceeds the value of the collateral placed.

It seems unlikely that this was the Committee's intention and we would welcome an explicit statement to this effect.

### 2.5.3 Guarantees and Credit Derivatives

UBS questions why credit mitigation by way of guarantees or credit derivatives is limited to corporates rated A or better. This might be unduly restrictive, particularly in leveraged finance transactions or Emerging Markets business.

UBS has addressed its concerns with the "w" floor in 2.5.1, but nevertheless questions the difference in treatment between guarantees issued by a sovereign or central bank and credit derivatives with the same entities. There should be no separate treatment for credit derivatives. Most regulators have already set minimum standards to address the basis risk in the banking book, and operational risks should be assessed in the same way as for any other products, i.e. covered by operational risk capital. Over the past four years, UBS has actively used its credit securitisation vehicles and individual credit derivative structures to mitigate credit risk, and from the handful of defaults and claims under default protection UBS has, to date, incurred no loss due to unclear documentation etc. Although credit derivative structures are quite new compared with bank guarantees, it should be emphasised that they are standardised and have clear definitions, in contrast to the bespoke guarantees concluded for various purposes and interpreted differently in numerous jurisdictions.

## 2.6 ADVANCED INTERNAL RATING BASED APPROACH (AIRB)

Many of the more general statements about implementation rules and IT/data requirements made for FIRB apply equally to AIRB and, as noted in 2.2, we question the need to run parallel capital calculations for AIRB and FIRB for two years.

### LGD

The Accord specifies that LGD represents economic loss. UBS agrees in general with this statement but the link to accounting rules must not be overlooked. The loss history will be measured on the basis of a bank's loss experience and the latter is represented by the charge to the profit and loss account under "credit loss expenses". Creation of a different measurement basis must be avoided since it will distort the comparability of external information on loan losses that is based on IAS, where section 39 prescribes how provisions, and hence loan losses, are determined and UBS strongly recommends adoption of the same definition for the determination of LGD.

## 2.7 EXPOSURE MEASUREMENT OF OTC DERIVATIVES

The Accord makes no proposal to amend the treatment of counterparty credit risk on OTC derivatives. Given the increased risk sensitivity and sophistication being introduced in other aspects of credit risk, this is an unfortunate omission. The static, undifferentiated add-on tables, and the crude – and in some cases highly misleading – netting formula are in urgent need of revision. It should be noted that risk may as easily be under- as over-estimated under the current netting formula.

Regulators have encouraged and, indeed, pressed international banks to develop more sophisticated and risk sensitive measures of counterparty credit risk, and even small banks have moved away from the outmoded “mark to market plus add-on” approach.

The Committee should encourage these developments further by amending the Accord. We recommend that, within some well-defined parameters, a variety of methods should be recognised from the quite simple to the most sophisticated models for projecting exposure over the appropriate time frame, at the counterparty portfolio level.

UBS strongly supports the initiative of the International Swaps and Derivatives Association in opening debate with the regulators on this subject, and urges the Committee to include in the final text of the Accord at least a statement of intent to introduce changes in time for implementation in January 2004.

We also recommend, as noted in 2.5.2, that measurement of exposure on and regulatory capital for securities financing transactions be included in this revision.

## 2.8 ASSET SECURITISATION

The proposals for asset securitisation were not discussed with the industry before the release of the Accord and, as they stand, contain some serious flaws. If not corrected, these could damage the market which is an important source of liquidity in credit trading. We therefore urge the Committee to work with the industry and to produce a second consultative paper before finalising these proposals. We have provided a full critique of the proposals in Annex A but set out our most serious concerns below.

First and foremost, the Accord makes unwarranted distinctions between conventional and synthetic securitisations, and between originating and investing banks, that are based on form, rather than substance. Instead, the Accord should focus on the effective amount of risk transferred or retained.

We encourage the Committee to specify in a more detailed way the operational requirements for achieving a “clean break”.

Capital requirements for ABS tranches, credit enhancements (including first loss retention), cash advances and for liquidity lines should be determined by the risk weights in paragraph 526 rather than on a separate, arbitrary and inconsistent basis. A risk weighted approach is especially crucial under IRB, where the Committee wishes to incorporate greater risk sensitivity.

The treatment of liquidity facilities provided by sponsoring banks in revolving securitisations should be determined based on the economic credit quality of the liquidity line (internal rating) and risk weighted accordingly. Capital requirements for unrated tranches should also be determined by a risk weighted approach.

We welcome the proposed “look-through” approach, but believe it should be applied to all unrated tranches, including mezzanine and subordinated tranches. Retained, unrated tranches should be treated under a “look-through” approach in the same way, especially under IRB.

Early amortisation triggers should not be a concern to regulators. Any minimum capital requirements for economic triggers in revolving securitisations would be economically redundant and an unjustified obstruction of business.

The proposed flat LGD assumption of 100% under AIRB, regardless of the internal estimate, runs against the spirit of this approach. Even under FIRB, senior claims on corporates without specifically recognised collateral will be assigned only a 50% LGD, and subordinated claims without collateral a 75% LGD.

In structuring a traditional / synthetic securitisation (tranching, retention and transfer of risk) banks should have the discretion to choose the structure which best achieves their economic targets. The regulatory system should simply ensure that the correct amount of capital is provided when risk is retained. Any restrictions on tranching of securitisations would be highly dysfunctional. The only issue should be the amount of risk transferred and retained.

Regarding implicit recourse, UBS believes that the measures proposed in paragraph 544 are tough but far preferable to the ex-ante minimum capital charge threatened in paragraph 545.

## 2.9 EQUITY IN THE BANKING BOOK

There are quite significant differences between equity and debt: equity has no nominal and no coupon (though may pay a dividend), there is no maturity date etc, and although economically one might try to model it rather like a perpetual bond, the legal position is very different especially in default. It is therefore questionable why a debt-like capital treatment should be contemplated – equity should have a treatment appropriate to equity.

UBS believes that a distinction should be made between investments which constitute a business, such as venture capital and private equity, and investments which are ancillary to business – strategic and structural holdings

### STRATEGIC INVESTMENTS AND STRUCTURAL HOLDINGS

Firms should have clear policies governing the process and authorities for decisions to take strategic investments and structural holdings.

It is crucial that, in determining the necessary regulatory capital, the accounting treatment and valuation of holdings is taken into account. For a position for which there is a market value but which is held at historical cost, the difference between market price and book value may be well in excess of the loss the firm would suffer in the event of a steep decline in value, even in a forced sale. The capital calculation should begin with and be based on some assessment of “fair value”, albeit a conservative one, but if the book value is less than this fair value, then the assessed capital charge should be reduced accordingly and should be zero if the book value is less than fair value minus assessed capital charge.

### NON-TRADING EQUITY INVESTMENTS WHICH ARE THEMSELVES PART OF A BUSINESS

Calculation of UL should, ideally, be based on a Value at Risk approach, with an appropriate holding period, but we accept that this may not always be possible, where positions are illiquid and / or large, there are legal constraints on sale, or there is no appropriate historical time series etc.

Where a VaR-type approach is not possible, some sort of “shock” or “scenario” measure may be a better approach. Even taking such an approach, however, there need to be global rules about treatment of illiquidity, concentration / diversification and correlation and it may be relevant to look at the overall size of the portfolio relative to the bank’s capital.

In general, the treatment of equity positions not qualifying for the trading book requires more work and further consultation is needed before the treatment is finalised.

### 3 PILLAR 1 – OPERATIONAL RISK

#### 3.1 OVERVIEW

UBS welcomes the evolutionary approach adopted for operational risk (OR) and supports the tenet that the core methodology should be predominantly quantitative, evolving in a manner consistent with that established for market and credit risk. There has been industry debate about the relative merits of qualitative and quantitative approaches. UBS firmly endorses a quantitative approach but with an adjustment for qualitative factors, as detailed in 3.4 and 3.5 below.

We accept the need for simple options suitable for firms with little OR data or for whom building more advanced approaches is not cost effective. We also support the principle that migration from option to option should be at the discretion of a bank, subject to its meeting pre-defined qualifying criteria. We believe that this framework will provide proper incentives for individual firms and the industry to migrate to more sophisticated options as they develop better understanding, management and measurement of their OR, provided progress is rewarded with reductions in regulatory capital. Qualifying criteria based on the strength of management, the organisation and the mechanisms used to identify and report qualifying events will produce additional incentives for improvements in OR management and control.

We recognise the challenges faced by the Committee in formulating such a framework and believe that, in general, the right balance has been struck, with one notable exception – the absence of a further option at the outset – a Loss Distribution Approach (LDA) – which we discuss in 3.6 below.

#### 3.2 DEFINITION

##### RISKS COVERED

UBS agrees that the scope of Operational Risk for capital purposes should focus on categories of event risk. Internally, we categorise event types differently from those proposed, but the categories can be mapped to each other.

We support the exclusion of strategic risk and reputational risk, and we urge the Committee explicitly to add business risk to the list of exclusions. These risks pertain only to the shareholder and are actively taken in return for earnings expectations.

##### OVERLAP WITH CREDIT RISK AND BOUNDARY ISSUES

The risk of contracts being unenforceable – “legal risk” – is double counted under the current proposal since it is at least in part the rationale for the “w” floor in credit risk mitigation (see 2.5.1), but is also defined as a constituent of OR.

The Accord does not currently make clear the boundaries between credit and operational losses. Without clarification of these boundaries, there is likely to be inconsistency in the categorisation of losses across the industry which, in turn, will have major implications for the further work to be undertaken in establishing a truly risk sensitive regulatory capital regime, including:

- internal allocation of loss data, which is necessary for determining both credit and OR capital charges
- industry sharing of loss data, which may be necessary for some firms to use particular methods for OR
- ensuring comparable disclosures across firms.

UBS believes that all firms should be required to *identify* material OR contingent credit risk losses from those credit losses resulting purely from default (i.e. losses on known unsecured credit exposure) – this will prompt the necessary adjustments to risk management and control processes. The guidelines for identification should be standardised across the industry and should be aligned with the agreed OR loss based regulatory framework.

The incorporation of these OR contingent credit losses into the OR regulatory capital framework should, however, be optional.

For firms deciding to treat such losses as OR for regulatory capital purposes, practical needs relating to the implied adjustment to loss histories used in credit risk will need to be considered. The change from credit to OR losses could only be achieved after the data had been separately identified for a long enough period (the length of loss history required to operate an IRB approach) to make a full adjustment to the loss history. In the meantime, these operational contingent credit losses should continue to be treated as part of the credit loss history.

Once implemented, such an OR capital calculation framework should be recognised as a more advanced IMA, and rewarded accordingly.

It is worth noting that OR contingent credit loss data is, and will continue to be, included in either credit loss data or OR loss data. Either way, the proposed “w” floor for credit risk mitigation appears invalid because it double counts loss potential already included in the loss history.

#### COST TO FIX

UBS does not agree that loss data should include the internal cost to fix. It is almost impossible to define what constitutes the cost to fix alone, as opposed to enhancements made as a complement to pure remedial efforts, nor would it be possible to isolate such costs even if the theoretical distinction could be made. This proposal introduces uncertainty of measurement and should be excluded.

### 3.3 CALIBRATION

#### LEVEL OF CAPITAL FOR OR

The proposed calibration of OR has serious problems.

The Committee has suggested that the OR capital charge should be equivalent to 20% of current total market and credit risk charges “in the system”. We appreciate that this is not intended to be a simple proportion for each individual bank but, given the concentration of existing regulatory capital in the larger international institutions, if this overall calibration is to be achieved then it will inevitably have to be more or less replicated in these firms.

If this rule of thumb measure is applied at the level of the individual firm it is certainly inappropriate for a bank like UBS. We have conservatively estimated UL for OR based on an assessment of EL derived from empirical loss data. The result is less than 10% of our current minimum regulatory capital requirement, well below the 20% proposed by the Committee. At 20%, the regulatory capital would be protecting against stress losses and would be disproportionate when compared to an economic capital measure of the same risks. It should also be noted that, for UBS, the Basic Indicator approach calibrated at 30% of gross income yields an OR capital requirement nearer to 40% of current regulatory capital. This suggests that the starting point for calibration is incorrect and unlikely to deliver even the level of capital targeted by the Committee, let alone a reasonable level.

We understand that this original calibration was based on a survey performed some time ago on economic capital allocation by a limited number of firms. Our knowledge of this survey indicates that there was inconsistency in the definition of OR used by different banks, in many cases business, strategic and reputational risks were included, and there was little empirical loss data underpinning estimates. It is not, therefore, a valid basis for calibration.

We therefore urge the Committee to thoroughly reconsider the calibration of OR, both at a conceptual level and as applied in each of the proposed approaches, and to base revised proposals on unexpected loss figures derived from banks' actual loss data as part of the forthcoming OR QIS.

#### INCLUSION OF A FLOOR

UBS does not accept the validity of a floor to limit the capital benefit realised on migrating from a more simple to a more sophisticated approach. The calibration of each approach should ensure that the capital gradient from option to option is reasonable, conferring a capital benefit which provides incentives to banks to develop the more sophisticated approaches.

### 3.4 STANDARDISED APPROACH

#### LINEARITY OF BETA WITH SIZE

The central assumption of the Standardised approach is that OR and the capital required to support it are proportional to the exposure indicators which, in turn, are directly related to the size of the institution and the scale of its activity. Our experience does not support this assumption. Increased automation and controls usually accompany significant increases in business activity and often lead to higher risk awareness. Risk *does* increase with the scale of activity but not in a linear way. A number of external consultants have analysed industry disclosed loss data and have concluded that the relationship is closer to a power of 0.25. Intuitively, this relationship appears to us to be closer to reality. We recommend that more work is done on this core assumption by the Committee in cooperation with the industry, and that the functional form of the relationship is left open in the meantime.

#### QUALITATIVE ADJUSTMENT IN THE STANDARDISED APPROACH

As the starting point for most internationally active banks, the Standardised approach needs to incorporate a degree of risk sensitivity. As it is currently formulated, two banks of the same size (as defined by the exposure indicator) will be charged the same capital even if their loss experience differs as a result of differing standards of risk management and control. UBS strongly recommends incorporation of a mechanism to benefit the "better controlled" organisation and, conversely, to penalise a "less controlled" organisation. A number of industry working groups have been developing a framework to ensure consistency in such an adjustment and we would strongly support the inclusion of the output in the capital formula. This adjustment will be particularly important for banks that cannot meet the requirements for migration to the IMA.

### 3.5 INTERNAL MEASUREMENT APPROACH (IMA)

#### LEVEL OF AGGREGATION AND BUSINESS LINES

The IMA is significantly more risk sensitive than the Standardised approach, the differentiating factor being that the quantum of risk is determined by each bank using the average level of loss suffered. By reducing the occurrence or frequency of loss and, thereby, generally also reducing its mean loss, an institution is able to reduce the amount of the capital charge. Additionally, with this information, a firm can better assess the resulting value of management actions taken.

In our experience, many OR types are not business line dependent, for example damage to physical assets and loss from employee actions. Such risks tend to be managed firm wide, and there is little justification for using a business line based measure for regulatory capital. UBS believes that, in these cases, the OR measure should be based on firm-wide exposure to each loss type. This is wholly consistent with the approaches adopted for market and credit risk.

The benefits of this simplification include:

- simplification of the data model in terms of Exposure Indicators and loss reporting by business line
- stabilisation of the resulting EL measures, by reducing the problems of insufficiency of data and potential reliance on external data sources
- easing the calibration of gamma by condensing more industry data into a distribution.

#### QUALITATIVE ADJUSTMENT

There will be circumstances when the historical losses observed by an institution materially misrepresent the future risk of loss, and there should therefore be a mechanism to adjust the measure of capital derived. In essence, this adjustment would reflect:

- major business changes, e.g. integration of businesses through merger or acquisition (increase) or divestment of part of the business (decrease)
- major control changes e.g. implementation of a qualitative assessment programme (decrease) or explosion of trading volume beyond sustainable processing capacity (increase)
- major corrective actions taken to prevent recurrence of material events suffered, such as major internal fraud (decrease).

The adjustment for the first two categories could be either up or down, but in all cases should be restricted to material change only, and the adjustment should be exceptional – under normal conditions, historical loss should be assumed to be the best indicator of future risk exposure.

#### CORRELATIONS BETWEEN OPERATIONAL RISKS

Implicit in the simple summation of OR charges across event types is an assumption that losses in risk categories could occur at the same time. We believe this is unrealistic and unnecessarily conservative.

If the risks were perfectly un-correlated, a “root sum of squares” aggregation method would be appropriate.

Either an alternative aggregation method should be developed or the resultant overestimate of the risks involved should be factored into the calibration of the IMA.

### 3.6 A FURTHER OPTION – LOSS DISTRIBUTION APPROACH

The IMA was designed as a transition from simple approaches to the use of internal measures, principally losses, to derive regulatory capital for OR. As such it makes a number of approximations and simplifying assumptions. UBS fully supports this concept, but believes that it can only be fully realised if a further approach is offered from the outset, an approach under which a firm generates a measure of UL to a defined level of confidence based primarily on its internal loss experience – a Loss Distribution Approach (LDA).

IMA assumes that the shape of the loss distribution is constant across the industry for each loss type by using a fixed ratio ( $\gamma$ ) between UL and EL. This is a major assumption, but it clearly generates incentives for a firm to collate and disclose loss data. It also establishes the base data from which a firm-specific UL measure for OR can be more robustly determined. As such, we believe IMA is a stepping stone to LDA and not an end state in its own right. Banks that decide to move in this direction will want to determine internal measures of EL for economic capital and risk management purposes.

We therefore strongly recommend that the evolutionary framework should include a fourth option – LDA – as the logical extension to IMA to ensure the proper alignment of economic and regulatory capital. Without this option, the spectrum is invalidated as the assumptions made in IMA have no context and cannot be justified.

### 3.7 RECOGNITION OF INSURANCE AS A RISK MITIGANT

There is no doubt that insurance can mitigate some forms of OR by transferring them to the insurance market, and that many institutions use this protection, and yet there is no recognition of insurance as a risk mitigant in the Accord. This is inconsistent with the treatment of credit risk mitigation such as credit derivatives and guarantees. We believe that recognition of the risk reducing effects of insurance is important to the success of the proposals for OR.

Little has been suggested by the Committee, but we believe there are two possible approaches: incorporating insurance recoveries on an ex post basis; or incorporating future coverage taken on an ex ante basis.

At a minimum, insurance (and, for that matter, other forms of risk transfer for OR) should be incorporated into the capital charge on an ex post basis by deducting recoveries from historical loss experience, thereby reducing EL and, by implication, UL. This would be easy to implement but, by nature, backward looking only, and could be misleading if the extent of insurance cover changes significantly – either up or down – over time.

An ex ante or “coverage” basis, i.e. reflection of insurance cover actually taken when projecting future UL, would better represent the protection in a forward-looking sense and align to the more risk sensitive computations under IMA or LDA. There are, however, issues to be considered in relation to the specific cover, including:

- level of coverage of the underlying risks in terms of event scope and amount
- the level of deductible (how much loss is payable by the insured)
- certainty and timing of payout
- renewability of the cover.

The resultant credit risk on the insurer must also be taken into account in determining the amount of relief given.

### 3.8 TIMELINE

We have appreciated the open stance adopted by the RMG and individual regulators and the dialogue to date on how to develop a framework for OR. This dialogue has accelerated progress and generated prompt feedback. It must, however, continue well past the end of the comment period in order to achieve an acceptable outcome for the industry.

UBS believes that the current timeline to specify and test the evolutionary framework for OR, specifically the IMA, is not attainable. Moreover, provisions have not been made by the Committee for comments to be taken on the forthcoming second consultative paper on OR.



Many issues must be resolved in determining the boundaries of OR and refining each of the approaches. In particular, IMA is accepted by UBS and, we believe, by the industry only as a hypothesis, which needs further development, testing and validation. The overall system requires better calibration, as do each of the approaches (i.e. the  $\alpha$ ,  $\beta$  and  $\gamma$  parameters) and the justification for a floor in capital savings between options. Testing will be impacted by changes made in the forthcoming paper.

This essential work will inevitably take time and it is unlikely it can be completed much before the end of 2002. A considerable amount of work is still required to specify and test the workings of IMA and LDA. We recommend that a process be established to fully test and provide feedback on these significant areas of detail.

Notwithstanding our commitment to a quantitative approach, we believe that the Committee must be prepared to consider abandoning a Pillar 1 capital charge for OR if satisfactory loss based approaches cannot be devised in time for the intended implementation date: it is not acceptable to impose a framework which is not risk sensitive (Basic Indicator and Standardised approaches) and which will penalise size, in order to meet an arbitrary deadline.

UBS will make every effort to work with the industry and the regulators to further the development of best practices and a regulatory framework for OR.

## **4 PILLAR 2 – SUPERVISORY REVIEW PROCESS**

### **4.1 GENERAL APPROACH**

UBS supports the basic aims of Pillar 2 in ensuring appropriate internal risk management, measurement and control, adequate internal capital assessment and planning, and compliance with the qualitative requirements associated with the more advanced methods of risk measurement for credit and operational risk. We also welcome the recognition that the first two of these objectives are seen not simply as requirements for banks adopting more advanced measures of risk but rather as key components of the management of any bank.

### **4.2 IMPORTANCE OF LIQUIDITY**

The Committee has focused on regulatory capital as the means by which the safety and soundness of individual banks is ensured and systemic risk thereby avoided. Clearly, capital is essential to the solvency of a bank and to the market's confidence in it, but reliance solely upon capital, in the apparent belief that requiring banks to hold ever higher levels of capital will avert failure, is fundamentally misplaced. Banks can fail while still solvent because they cannot fund themselves.

Ensuring that an adequate liquidity framework is in place is therefore of critical importance, and we believe this should be given more prominence under Pillar 2. Paragraph 607 recognises that liquidity has a part to play but indicates the Committee's belief that capital can compensate for a lack of liquidity.

Unless international banks adopt appropriate liquidity management practices – and central banks stand ready to provide liquidity by lending against good collateral – banks with otherwise good prospects may be driven to default during a widespread liquidity crisis or when they are affected by regional or unique difficulties.

We recommend that regulators should address this issue further under Pillar 2, although we would *not* support the application of prescribed formulae or routine reporting – bank specific policies and contingency plans are needed and must be evaluated by regulators.

### **4.3 IMPOSITION OF ADDITIONAL CAPITAL REQUIREMENTS UNDER PILLAR 2**

Pillar 1 has been formulated to cover the underlying risks with a high level of confidence, and includes a number of buffers for uncertainties. It also gives regulatory discretion on scaling factors and on the recognition of certain risk mitigation techniques. Pillar 1 thus already incorporates a considerable capital safety margin and therefore a bank with sound internal risk management and control practices and standards should be required to hold only the regulatory minimum capital calculated under Pillar 1 with no further buffer imposed by its regulator.

Principle 3 suggests, however, that regulators will, as a matter of course, require banks to hold capital above the regulatory minimum even where there is no well defined weakness or lack of management and control. We believe this to be inappropriate and inequitable. Not only will it lead to opaque and excessive capital requirements, it will lead to further distortions between jurisdictions, and to uncertainty in the planning and management process for banks, particularly in the period up to implementation of the Accord and in its early years.

A target / trigger ratio approach is a reasonable way of providing regulators with an early warning of potential difficulties, but only if the trigger is set at the regulatory minimum (in the absence of any specific weakness) and only if the target is seen as a point at which to open discussions and not as the point at which the regulator takes action against the bank or intervenes actively in the bank's affairs.

UBS strongly supports the statement that capital should not be regarded as a substitute for fundamentally inadequate controls or risk management. We agree that increasing the minimum capital requirement on a temporary basis to mitigate the effects of identified risk management and control inadequacies might be an appropriate step, pending remediation, but a bank subject to such a penalty should be informed of the steps necessary to reduce its regulatory capital requirement back to the Pillar 1 minimum.

The Accord should, however, be explicit about the circumstances in which a regulator can impose such an additional capital charge and which parameters will be affected. National regulators should publish their internal criteria to allow comparison and encourage consistency across jurisdictions. It should be noted that, currently, regulators in some jurisdictions are precluded from imposing capital requirements above the regulatory minimum. The Committee must strive to ensure that what is mandated in the Accord can be implemented even-handedly in all member states.

#### **4.4 LEVEL PLAYING FIELD**

We recognise that achievement of a more risk sensitive framework inevitably entails qualitative judgements by regulators, but believe that the Committee should do its utmost to ensure that the implementation of Pillar 2 is consistent across jurisdictions.

Regulators should publish their criteria for approval of banks using the credit risk IRB approaches and the more advanced OR approaches, and the Committee should make regular comparisons and work with national regulators to achieve common standards. We have also recommended regulatory disclosures in our comments on Pillar 3 – see 5.4.

#### **4.5 INTRUSIVENESS OF REVIEW PROCESS**

Although the Accord states that the purpose of supervisory review is to assess the quality of a bank's risk management and controls and not for supervisors to "function as bank management", the detailed requirements of Pillar 2 and the references to increased regulatory capital suggest that the supervisory review *will* be intrusive and could, indeed, result in supervisors second guessing management in matters of strategic, business and reputational risks and economic capital.

This must be avoided. It is unclear, for example, why the failure of a bank to meet its strategic goals should be the concern of its supervisor if this failure does not threaten the financial system. Any such failures will, in any case, be watched and punished by the markets and the rating agencies. This is not the role of the supervisor.

#### **4.6 ROLE OF THE HOME COUNTRY REGULATOR**

The Accord makes no mention of the principle of "Lead Home Country Regulator". As institutions progress through the spectrum of approaches for credit and operational risk, the level of regulatory supervision increases, with international firms facing a proliferation of Pillar 2 inspections, with a consequent burden on resources and systems.

We would welcome explicit reference in the Accord to the principle that the home country regulator is the primary Pillar 2 supervisor, and concrete efforts to enforce the principle internationally.

#### **4.7 REGULATORY RESOURCES**

The implementation of Pillar 2 imposes considerable additional resource requirements on regulators and, given the complexity of many of the issues involved, will require highly qualified staff. It is likely that some regulators will struggle to achieve the necessary staffing and may be tempted to compensate by imposing an additional safety margin under Pillar 1.

We urge the Committee and other relevant supranational bodies to develop programmes to ensure, as far as possible, that regulators in all countries are equipped to supervise the banks in their jurisdictions.

## 5 PILLAR 3 – MARKET DISCIPLINE

### 5.1 DISCLOSURE AND MARKET DISCIPLINE

UBS is a supporter and exponent of transparency in banks' financial statements, and disclosure as a means to promote market discipline. The philosophy behind Pillar 3 is therefore close to our thinking and we fully support it – indeed, we would like to see it extended to other financial institutions, including securities firms, insurance companies and intermediaries.

For a publicly quoted financial institution, market discipline is a three-step feedback loop:

- evidence of a firm's practices and their results through disclosure
- market reaction to the disclosure, and its impact on shareholder value
- change in behaviour or strategy by firms seeking to maximise shareholder value.

For a smaller institution with few shareholders, or with only a small proportion or none of its shares publicly traded, discipline may be exerted through the allocation of credit and trading lines by counterparty banks. This is generally a less immediate process but can, nevertheless, influence a firm's risk practices and culture.

Although the effect of market discipline is not uniform, enhanced disclosure requirements can, undoubtedly, contribute to improved risk management and control. In this we fully support the aims of Pillar 3. Where we differ from the Committee is in our assessment of the amount and type of disclosure which will achieve the desired effect.

The Accord takes as given that the market is an efficient interpreter of disclosure, and that its reaction sufficiently influences management decisions. While in principle correct, this could be seen as somewhat idealistic, leading to the conclusion that more disclosure always means better behaviour. The Committee should also note, as a caveat, that their aims and those of the market may not always coincide: the equity market in particular supports a *well*-capitalised firm, but it does not look favourably on an *over*-capitalised firm, and may therefore drive a firm to reduce, rather than increase, its capital ratio.

### 5.2 STATE OF DISCLOSURE PRACTICES

Current disclosure requirements for banks have been legally driven by accounting standards, recently augmented by suggestions from working groups or committees such as the Working Group on Public Disclosure (chaired by Walter V. Shipley).

Disclosure by UBS is already much broader than is required by the standard setters or Shipley – we are seen to be among the market leaders in terms of content, granularity and frequency. We have verified this through a number of recent studies:

- a global peer analysis, which confirmed to us that many peers tend to disclose close to the required minimum
- a survey of leading equity analysts, which confirmed that our current disclosure is among the “best in class” and, with respect to risk reporting, covers all analysts' needs. (The most often articulated shortcoming of current disclosure is the difficulty of comparing risks in general and stress loss in particular across financial institutions.)

We have, in addition, identified areas where further improvements to our risk disclosure can be made, taking into account the needs of both equity and credit analysts. This is not surprising – new developments and standards in risk management and control emerge all the time, and risk disclosure is therefore a moving target, but we are committed to remaining at the forefront of meaningful disclosure.

### 5.3 PROBLEMS WITH PROPOSED DISCLOSURES

If we compare UBS's proposed disclosure standards with the proposals of Pillar 3, the gap is significant. A detailed analysis of the differences forces us to conclude that the requirements in question:

- are excessive and onerous
- do not fit well with the published financial statements
- are, at best, of limited practical value for even well informed market participants, and
- are not digestible in terms of volume.

It is misguided to believe that disclosing much more raw data on a more frequent basis will automatically result in better market discipline. Such disclosure might, in fact, be counterproductive since it may be difficult to distinguish that which is truly meaningful and may therefore obscure, rather than illuminate. The time of equity and credit analysts and of investors is finite: the granularity of disclosure must be pitched at a sensible level and the focus should be on the risk elements that are of most importance.

For certain areas, a qualitative description of how management addresses the various risks (organisational structure, responsibilities, processes) is of more value to the market than additional tables of data.

Lastly, we note that template 7.2 in the supporting document for Pillar 3, assumes that economic capital allocation procedures derived from market risk practices are universally used, are an accepted capital management practice and are applicable to all risk categories. This is not necessarily the case. There are problems with such economic capital allocation procedures and some banks, including UBS, have opted for alternative approaches.

### 5.4 PROPOSED DISCLOSURE FRAMEWORK AND REGULATORY ENDORSEMENT

UBS recommends that a clear distinction is made between the information needed by regulators to perform their supervisory function – for which the disclosures set out under Pillar 3 may be applicable – and the needs of investors and analysts in enforcing market discipline.

We have outlined in Annex B a possible framework for public disclosure consisting of both qualitative and quantitative elements. It is intended as an *example* of what we consider to be a relevant and meaningful set of information to disclose on risk and capital adequacy. It consists mainly of currently reported items, but includes those additional elements which UBS intends to move towards including in its risk disclosure going forward.

Banks should publicly disclose the Pillar 1 approaches they are authorised to use. If, in addition, regulators publish their assessment standards, there will be public appreciation of banks' risk management and control standards.

We believe that this would be of value the market, and that it would give market participants a better feel for the level of professionalism and appropriateness achieved by a financial institution in risk management and control. It would certainly have a more immediate disciplinary impact than the compulsory disclosure of raw data.

There would be a further benefit in that it would allow market participants to distinguish between regulators' approaches. Banks would then see a real market benefit from being regulated by a regulator seen to be rigorous, and this in turn could help to push up regulatory standards. It would also contribute to the achievement of a level playing field or at least to transparency.

## **5.5 RESPONSIBILITY FOR FURTHER DEVELOPMENT**

It is essential that, in further developing Pillar 3, the Committee works closely with the accounting standards setting bodies. Both are seeking to ensure that firms' financial statements and accompanying publications provide a true and fair representation of the state of the firm and both broadly serve the interests of shareholders, depositors and creditors. The legitimate needs of regulators must be enshrined in accounting standards and guidelines, but regulators must consider and specify their public disclosure needs in the context of statements that are widely used by a varied audience.

Accounting standards vary by jurisdiction, but there is increasing convergence, and as firms seek multiple listings across borders, this trend can only increase. It is an opportune time for regulators, accounting standard setters and industry participants to work together to achieve a disclosure framework that meets the needs of all relevant parties.

**Annex A****ASSET SECURITISATION**

In this Annex we have provided a more detailed critique of the Committee's proposals and answered the specific questions raised in the consultative document "Asset Securitisation".

**Fundamental Concern**

Asset securitisation may serve many purposes. Originally a funding / refinancing tool, it is applied these days by many banks as a means of repackaging or transferring credit risk.

While traditional and synthetic transactions differ in structure in many ways, the rationale and resulting risk transfer can be quite similar. It is essential to ensure that the capital framework applied to both these methods accurately reflects the credit risk that the issuing entity is left with following the transaction.

Any regulatory capital approach to asset securitisation should concentrate on the effective amount of risk transferred or retained. It should not attempt to draw artificial distinctions between conventional and synthetic securitisation. In other words, the regulatory capital treatment of asset securitisation should not focus on structural, legal and operational issues (which are different between classical and synthetic securitisation) but on the effective amount of risk transferred, in order to deliver an appropriate measure for equity redundancy and therefore equity relief.

The operational details of the structuring of a traditional / synthetic securitisation (tranching, retention and transfer of risk) should be left at the discretion of the banks, which choose appropriate structures to achieve their economic targets. The regulatory system should focus on determining the correct amount of capital underpinning required when risk is retained. Any technical restrictions in regard to the structuring of securitisations are highly dysfunctional. Again, the key concern of the regulators should be the amount of risk transferred / retained.

**Clean Break**

Achieving a clean break between originator and transfer vehicle is key to any asset securitisation. UBS believes that the operational requirements for achieving a "clean break" should be outlined in a more detailed way. We encourage the Committee, if necessary, to provide scope for national discretion.

**Risk Weights**

The risk weights proposed in the Accord (paragraph 526) for the SA could be refined for PD and LGD granularity without any modelling based on data readily available (which is important for the SA). The accuracy of the risk weights would be raised considerably in parallel to the overall consistency of the risk weight framework. Banks should be allowed to determine the risk weights under IRB.

**Look Through**

UBS welcomes the proposed "look through" approach, but we suggest that its application should not be limited to senior tranches but extended to all unrated tranches, including mezzanine and subordinated (which are otherwise assigned an arbitrary 100% weight).

Unrated tranches retained by the originating bank should be treated in much the same way under a look through approach, especially under IRB. UBS can see no economically convincing argument for a differentiation in treatment for originating and investing banks. There should be no difference in regulation for a bank issuing a CDO and immediately re-investing in one of these tranches (i.e. retaining it) and for investing in a CDO tranche issued by a third party bank, as long as these tranches have the same risk profile.



## **Early Amortisation**

UBS believes that early amortisation triggers should not be a cause for concern to regulators. Under clean-break conditions, any minimum capital requirements for economic triggers in revolving securitisations are economically redundant and represent an unjustified obstruction of business. The bank originating the assets only gets capital relief on those assets actually transferred to the vehicle. Any assets remaining on the bank's balance sheet will attract capital in the normal way, whether or not the bank has used securitisation in the past.

## **LGD**

We believe that, under AIRB, the proposed flat LGD assumption of 100%, independent of internal estimates, is far too conservative and runs counter to the spirit of AIRB. Even under FIRB, claims on corporates without specifically recognised collateral will be assigned only a 50% LGD for senior and 75% for subordinated.

## **Implicit Recourse**

UBS believes that the measures proposed in paragraph 544, are rather harsh, but finds them more acceptable than the highly aggressive and dysfunctional ex-ante minimum capital charge suggested in paragraph 545. We agree that malpractice should be punished, but not that all market participants should be punished ex ante, which would have a significant economic impact on a developing business.

## **Credit Enhancements / Liquidity Lines**

Capital requirements for credit enhancements (including first loss retention), cash advances and liquidity lines should be risk weighted according to the economic credit quality (internal rating) of the instrument rather than by means of arbitrary and inconsistent capital charges.

Under the SA, a standardised conversion factor seems reasonable for all such facilities (unless unconditionally cancellable) regardless of whether they are long or short term, as long as the risk is assessed as AA or above.

The risk weighting table presented in paragraph 526 of the Accord would be a first step in the right direction. A differentiated, risk weighted approach is especially crucial under IRB, where the Committee intends the capital charge to be more risk-sensitive. The proposed treatment of first loss credit enhancement is particularly onerous and takes no account of the underlying economic risk. First and second loss credit enhancements (as well as any other tranche of a securitisation) should be risk weighted based on their internal or external ratings, analogous to the treatment accorded to the investing bank. Again, there should be no differentiation in treatment for originating and investing banks.

## **Synthetic Securitisation under the Standardised Approach (SA)**

Synthetic securitisation (which makes use of credit derivatives to achieve the desired risk transfer) is not mentioned in the consultative document under the SA. Synthetic securitisation is an ideal means of economic risk transfer. It has greater flexibility and is cheaper and quicker to arrange than a traditional securitisation.

Banks that are not eligible for IRB may legitimately wish to engage in synthetic securitisations to transfer large exposures using Portfolio Swaps. UBS therefore believes that a treatment for synthetic securitisations is needed in the SA, subject to robust operational requirements.

## Q & A

*"What are the industry's views on the best way forward for the development of a more risk sensitive approach to Securitisation in the IRB approach?"*

UBS believes that IRB, as it applies to asset securitisations, must be consistent with the rest of the IRB approach. It is therefore necessary to implement different approaches for FIRB and AIRB.

In particular, since, under FIRB, claims on corporates without specifically recognised collateral will be assigned a 50% LGD for senior and 75% for subordinated, an LGD of 100% for asset securitisation tranches is too conservative.

For the AIRB, an LGD of 100%, independent of the internal estimates, runs against the philosophy of that approach. Under AIRB, banks should be allowed to use an LGD figure based on their internal experiences or on publicly available data.

*"With respect to the two-legged or sliding-scale approach, what are the industry's views on possible methods for calibrating numbers for the adjustment factor consistent with less than dollar-for-dollar deduction of first-loss positions?"*

The Committee should not introduce a market-remote, synthesised approach to determine risk weights because it would generate major inconsistencies with best market practice and provide scope for arbitrage. Instead, the Committee should allow IRB banks to use internal credit risk models.

*"Does the differentiation in treatment on the basis of being an issuer or investor bank provide a balanced and consistent economic approach?"*

UBS believes that only the credit risk that the bank retains / transfers should determine the level of capital that is required / released. A differentiation of treatment between the issuing bank and the investing bank could provide scope for arbitrage, e.g., two banks arbitraging holdings of the lower rated tranches of a securitisation by transferring holdings between themselves. The result would be a lower capital requirement while the total risk in the system would be unchanged.

*"In a framework that relies on the presence of an external rating, how could PDs be attributed either by banks or supervisors to unrated Securitisation tranches? Does the use of external rating create the possibility of regulatory capital arbitrage under an IRB approach because of potential difference between the default correlation imbedded in the IRB framework and those used by ECAs?"*

Banks should be allowed to use internal credit risk models to calculate PD for unrated securitisation tranches. UBS does not believe that this would lead to systematic arbitrage opportunities. The IRB capital requirements could be mapped to the ECAI equivalent rating and the commensurate capital underpinning. Inconsistencies in relation to model output could then be analysed in the light of the Committee's wish to maintain total capital at existing levels, taking into account operational risk.

## Annex B

### PROPOSED DISCLOSURES BY FINANCIAL INSTITUTIONS

The attached tables set out a proposal for disclosure of key risk and capital adequacy data, distinguishing between that which is part of the financial statements and that which would be included elsewhere in a firm's regular publications. We have also highlighted that which UBS already discloses and that which we intend to disclose going forward.

This framework includes standardised, comparable and comprehensive quantitative disclosure of exposures, sensitivities and loss experience relating to the "normal" course of business risks. The list is not ordered strictly in accordance with the Pillar 3 proposal, but covers all the topics covered by Pillar 3, grouped by "theme".

The quantitative disclosure should be accompanied by

- a qualitative description of internal risk management and control processes for all relevant risk categories with enough detail to give investors and analysts an insight into the firm's risk attitude and culture
- an explanation of how and why material changes in risks have occurred
- publication of the firm's authorised Pillar 1 approaches
- a discussion of the way management views and guards against stress events.

It is evident that this is an area of concern to analysts but that quantitative comparisons are extremely difficult – as a recent report by the BIS Committee on the Global Financial System noted, firms may interpret what might appear to be a generic stress scenario in very different ways and therefore stress testing results as pure numbers tend to be neither comparable nor particularly meaningful. The key for the market is to be convinced that a robust scenario planning and control process is in place, that stress testing is sufficiently broad and varied and that the firm has a management process to respond to the results. A regulatory endorsement of the stress testing framework, based on disclosed principles, would, however, provide benefit to the market, which in turn reinforces market discipline.

## Quantitative disclosure proposal going forward

Audited Financial Statements	Management Discussion & Analysis (MD&A)	Quarterly Interim Reports
------------------------------------	---	---------------------------------

### 1 Capital adequacy, RWA, BIS ratios

1.1 Capital elements (template 2.1.)	x		
1.2 Reconciliation between Shareholders Equity (IAS) and Tier 1 Capital (BIS)	new		
1.3 Capital adequacy (template 7.1) or at least a break-down of RWA into its main components (BS, off-BS, market risk; or loans, lending commitments, trading)	x	x	
1.4 Disclose overall RWA by business segment	new	new	new
1.5 BIS capital ratios: Tier 1 and Total (%)	x		x

### 2 Credit risk / Asset Quality

2.1 Credit risk exposure - Group and by business segment:		x	
- banking products (loans utilized, contingent claims, unutilized committed lines)		x	
- traded products (unsecured OTC, other derivatives, securities lending, repo)		x	
- tradable assets		x	
- total gross exposure and net of allowances		x	
Credit risk exposure Group before and after credit risk mitigation		new	
Collateralized vs. non-collateralized Group exposure (by product)		new	
Credit risk exposure - Group to individual countries:			
Crossborder outstandings - Group by major countries (>0.75% of assets)		x	
Emerging markets exposure by region, broken down into:		x	
- banking products		x	
- traded products		x	
- tradable assets		x	
Credit risk exposure to "endangered countries"		ad-hoc	ad-hoc
2.1.1 Banking products exposure - Group and by business segment:		x	
- gross loans		x	x
- contingent claims		x	
- unutilized committed lines		x	
- annual expected loss	x	x	x
- actual credit loss expense	x	x	x
Maturity profile of banking products exposure - Group		new	
Banking products exposure of CIC and PCC segments by:		x	
- industry sector		x	
- counterparty rating class for overall exposure		x	
- counterparty rating class for uncollateralized, unsecured exposure		new	
- y-o-y rating migration (by volume and by number of counterparties)		new	
Banking products exposure of PCC segment, broken down by:		x	
- commercial credits		x	
- mortgages		x	
- recovery portfolio		x	
- movements in recovery portfolio over 3 years		x	
Banking products of UBS Warburg, broken down by:		x	
- gross loans		x	x
- commitments		x	
- contingent liabilities		x	
2.1.2 Loan portfolio - Group and by business segment:		x	x
- loans to banks	x	x	
- loans to customers	x	x	
- by type of collateral		new	
- part of which is 0% risk weighted		new	
Loan portfolio - Group, broken down by:		x	
- domestic/foreign industry sectors		x	
- maturity profile by type of loan (banks, mortgages, other loans)		x	
- type of collateral	x		
- region	x		
2.1.3 Mortgage exposure - Group, broken down by:		x	
- domestic/foreign		x	
- residential /commercial		x	
2.1.4 Mortgage exposure of PCC segment, broken down by:		x	
- residential (single-family homes)		x	
- residential (multi-family homes)		x	
- commercial		x	

## Quantitative disclosure proposal going forward

	Audited Financial Statements	Management Discussion & Analysis (MD&A)	Quarterly Interim Reports
<b>2.2 Traded products exposure of CIC segment, by counterparty rating classes:</b>			
- counterparty rating class overall		x	
- counterparty rating class for uncollateralized, unsecured exposure		new	
<b>2.3 OTC derivative exposure - Group, by product type and maturity:</b>	x	x	
- total and average PRV and NRV by product type for trading and non-trading	x		
<b>2.4 Impaired / Non-performing loans overall, and by:</b>	x	x	x
- business segments		x	x
- industry sectors		new	
- domestic/foreign			x
- region	x		
- emerging market regions		new	
- type of collateral		new	
- movements from prior period	x		
- some asset quality ratios		x	x
<b>Non-performing loans by type of exposure (mortgages, other)</b>	x		
<b>Foreign restructured loans</b>		x	
<b>Recovery portfolio of PCC segment and movements from prior periods</b>		x	
<b>2.5 Allowances for credit &amp; country losses overall, and by:</b>	x		
- business segments		x	x
- domestic/foreign allowances for industry sectors		x	
- movements from prior periods	x		
- domestic/foreign write-offs by industry segment		x	
- some asset quality ratios		x	x
<b>Allowances - Group, and by business segment for:</b>		x	x
- non-performing loans		x	x
- impaired loans		x	x
- country allowances		x	x
<b>2.6 Credit loss expense &amp; EL overall, and by:</b>	x	x	x
- business segments	x	x	x
- 3 year comparison of EL and actual credit loss expense by business segment	x		
- credit loss history by business segment		x	x
<b>2.7 Credit risk stress loss according to a regulatory-predefined shock scenario</b>		in future (if defined)	
<b>3 Market risk</b>			
<b>3.1 VaR figures - Group and by business segment, broken down by:</b>			
- minimum, maximum, average, period-end, and limit		x	x
<b>VaR figures - UBS Warburg by risk categories, broken down by:</b>		x	x
- minimum, maximum, average, period-end		x	x
<b>Histogram with UBS Warburg's daily trading revenue distribution &amp; VaR</b>		new graph	
<b>Backtesting of UBS Warburg's daily revenues and VaR (10 days and 1 day)</b>		x	
<b>3.2 Market risk stress loss:</b>			
- based on proprietary scenario (not comparable to peers, but interesting over time)			x
- according to a regulatory-predefined shock scenario		in future (if defined)	
<b>4 Level of interest rate risk:</b>			
Interest rate risk sensitivity of the banking book by currency and maturity buckets		x	
Interest rate sensitivity positions by currency and maturity buckets	x		
Net interest income at risk		x	
Economic value sensitivity		x	
<b>5 Level of currency risk:</b>			
Breakdown of assets and liabilities by major currencies	x		
Non-trading currency VaR		x	
<b>6 Level of liquidity risk:</b>			
Maturity analysis of assets and liabilities by maturity buckets	x		
<b>7 Operational Risk Exposure for some categories</b>		in future	
new = identified areas, where we intend to extend our risk disclosure going forward			

**CONTACTS**

Jan Cobley  
Head of Group Risk & Regulatory Policy  
UBS AG  
Pelikanstrasse 6  
P.O. Box  
CH-8098 Zurich

41 1 234 2867 (Zurich)  
44 207 567 2812 (London)  
[jan.cobley@ubsw.com](mailto:jan.cobley@ubsw.com)

Mattia Rattaggi  
Director, Group Risk & Regulatory Policy  
UBS AG  
Pelikanstrasse 6  
P.O. Box  
CH-8098 Zurich

41 1 234 8205  
[mattia.rattaggi@ubs.com](mailto:mattia.rattaggi@ubs.com)

---