

ISDA

International Swaps and Derivatives Association, Inc.
One New Change
London, EC4M 9QQ
Telephone: 44 (20) 7330 3550
Facsimile: 44 (20) 7330 3555
email: isda@isda-eur.org
website: www.isda.org

September 17, 2001

Stephen Bland
Models Task Force
Financial Services Authority
25 North Colonnade
Canary Wharf
London
E14 5HS

Dear Stephen,

Capital Treatment of Equity Holdings in the Banking Book

I attach a note prepared by the ISDA Equity Working Group outlining our comments on the recently released Models Task Force paper on equity holdings in the banking book.

I hope this may be useful to you.

Yours sincerely,



Emmanuelle Sebtou
Co-Head of European Office
ISDA

NEW YORK • LONDON • SINGAPORE • TOKYO

Incorporated as a Non-For-Profit Corporation with limited liability in the State of New York, United States of America

Modelling Equity Risk Exposures

Response to the Models Task Force

1. Introduction

1. ISDA welcomes the publication by the Basel Committee of a Working Paper on Risk Sensitive Approaches for Equity Exposures in the Banking Book for IRB Banks. The Association set up an Equity Working Group to review the issues raised in this paper. As is explained below, we focused on only some of the approaches mentioned by the Models Task Force (MTF). We are pleased to present our comments and hope that they will contribute to the establishment of a risk sensitive regulatory capital framework for equity holdings
2. The Models Task Force states in the Working Paper that it is open to the use of both a market-based approach and a PD/LGD approach to the treatment of equity exposures. It goes on to propose that a models-based IRB and a standard market-based approach should be offered to banks as alternatives in respect of their equity holdings held for investment purposes, and that a PD/LGD approach should be adopted in respect of certain classes of long-term equity holdings where investment is not the primary motivation of the holding. This response is specifically focussed only on the first of these approaches, since ISDA perceives that it is in the field of risk modelling that it can make the greatest contribution to this debate. The fact that this response does not address the PD/LGD approach does not imply any agreement or disagreement with the proposals advanced by the MTF.
3. ISDA's primary concern is that the outcome of the consultation process should be a regime which
 - levies capital charges which are in keeping with banks' own assessments of risk;
 - is risk sensitive; and
 - incorporates an incentive for banks to move towards modelling of unexpected loss on equity holdings.
4. It will also be important to ensure that this approach, when compared with other methodologies, does not produce systematically higher capital charges. This we hope can be achieved by carefully setting the parameters of the market based approach.

2. Scope

Definition of Equity

5. Neither the English nor the US legal system offer an exhaustive definition of a "share". Equity finance is probably best regarded as that form of corporate finance which is subject to a degree of statutory or contractual subordination. Consequently, we are somewhat concerned by the elaborate categorisations set out in the discussion document as to what classes of investment are included in the term "equity". We believe that the determination of what is and what is not equity is a matter of economic substance rather than legal form, and that the most appropriate method for applying this categorisation is for individual banks to develop their own methodologies subject to supervisory review. By way of illustration of this point, a company with three classes of shares and four

classes of debt, each subordinated to the other, is not in a different position from a company which has raised the same financing using seven tranches of debt, again each subordinated to the other. A properly constructed risk model should attribute the same capital utilisation to each equivalent layer regardless of its legal categorisation, and the approach which the MTF should adopt in this respect is to encourage banks to develop seamless models which correctly identify risk exposure regardless of legal technical issues.

6. Furthermore, it should be noted that the primary characteristic of equity finance is that it is generally irredeemable, so that the investor expects to obtain the return of his invested capital by sale of the rights to his investment to a third party rather than by repayment of his investment by the investee company. The price which an investor will expect to receive on the sale of an equity investment will be determined as a result of both market-related factors and of idiosyncratic factors related to the investee company itself. Consequently we believe that a market based approach is appropriate to the nature of equity investment in general (although as noted above we do not express a view on the relative merits of the market-based versus the PD/LGD approaches).
7. We believe that it is essential that banks should have the flexibility to decide which of their equity holdings will be treated under the market-based approach, not least since in general terms a bank should be permitted to decide for itself which of its holdings are appropriately dealt with through its particular model - it must be clear that no bank should be compelled to apply a model to a holding which it does not believe is appropriate for that model. This is not a request for absolute freedom to determine classification - the approach to be used should involve a formal methodology which will of course be subject to supervisory review. We would strongly argue that the MTF should avoid writing specific rules defining an arbitrary boundary. This is because we do not believe that it is possible to establish precise criteria as to the classification of holdings in this respect without creating imprecision and arbitrage opportunities.
8. We note that it is currently unclear in the regulatory proposals whether all forms of equity will be available for treatment under the market-based approach. We would recommend that the Committee clarifies its thinking on this issue.

Interaction of Equity Weightings with Trading Book and Consolidation/Deduction treatment

9. As the BCBS recognised in the January 2001 paper, the treatment of equity investments must be correlated with the approach to consolidation adopted in the Accord as a whole. The particular issue which arises here is the proposed rule that requires deduction from capital of the value of any holding of more than 20% of non-insurance financial companies, 15% of the bank's capital invested in a commercial company, and 60% of the bank's capital invested in aggregate in significant investments. Certain regulators currently impose stricter requirements than these. In any event the concern is the creation of a "cliff face" effect whereby the acquisition of a relatively small holding in a company can have a dramatic effect on the amount of regulatory capital which is required in respect of the holding.
10. We suggest that this issue can be addressed by disapplying the deduction cut-offs in respect of securities with a short holding period. What is meant by "short" could be defined by reference to "short term", as determined in the standardised approach.

Consistency between IRB and Standardised Approaches

11. We also note that there should be consistency between the standardised and the IRB approach in respect of equities issued by companies whose debt securities attract a 0% weighting. If these are to be allocated a 0% weighting in the standardised approach they should also be excluded from the IRB approach.

3. Modelling Concept

12. Influences on the market price of an equity are multifarious, and the market price of a share will regularly move significantly for reasons which are totally unconnected with the creditworthiness of the company. However, creditworthiness is also a factor in equity price movements.
13. The existing industry models which are used to measure public equity risk in general follow the Capital Asset Pricing Model ("CAPM") approach and attempt to capture the aggregate effect of all relevant risks. In contrast with the models used to assess equity risk (which capture all the risks involved in the price of an equity including credit risk), the regulatory approach to charging capital in the banking book captures only credit risk. As a result it is arguable that any properly developed equity valuation model will deliver a higher risk charge than would be the case under standard banking book treatment (essentially since liquidity risk and general market risk will be charged on top of credit risk), and that there is therefore an unacceptable distortion in the regulatory framework.
14. This distortion could be remedied by stripping out the non-credit risk elements captured by market-based models but not captured in the banking book credit risk framework. However, despite the fact that this would reduce the capital charge for banks, we would not support such a proposal. This is primarily because the stripping-out mechanism and resulting model output would be difficult to validate, since there is no generally applied methodology for identifying pure liquidity risk.
15. We therefore believe that the better approach is to build a market based approach upon currently used models even if this results in more conservative capital requirements for equities than for loans. However, because of the fact that the use of market-based models in this context produces a more conservative capital requirement than would otherwise be the case, we believe that these models should be calibrated to produce wherever possible results reasonably consistent with the PD/LGD approach. This may be achieved by carefully setting the model parameters (e.g. confidence interval, holding period).
16. We also note that when liquidity risk models which can be verified are more widely available it may be appropriate to revisit the above conclusions and consider stripping the liquidity risk element out of the output of market-based models relating to equity in order to harmonise the treatment of debt and equity exposures.

Public and Private Equity Holdings

17. We accept that a market-based approach is to some extent dependent on the availability of public data. Data in respect of publicly traded equities is more easily available for longer periods than is the equivalent data for debt. However, this position is different in respect of equity investments in companies which are either traded privately or untraded. The issues which arise in respect of the modelling of the risks of equity investments are therefore best discussed under these separate headings to reflect the different approaches which are required in an information-rich and an information-poor environment.

4. Capital Treatment of Public Equities*Definition of Public Equity :*

18. Public equities can be defined as equities which are admitted to trading on an appropriate exchange. We believe it is appropriate to designate certain exchanges as exchanges on which a listing is proof of liquidity and the availability of a market price (the Recognised Investment Exchange approach adopted in the August document). However, we do not believe that this list should be exclusive. There may be situations in which there are a handful of liquid securities traded on an exchange which is mostly illiquid, and we believe in such cases that banks should be permitted to treat such equities as public. The test to be applied should be the bank being satisfied that sufficient pricing and trading information is available in respect of a specific equity.

Valuation

19. Marking to market tends to be standard practice for banks for valuation and risk control purposes, although the impact on the accounts of any economic capital calculations will depend on which accounting methodology applies (MTM versus Lower of Cost or Market, or even pure cost).
20. The issue which arises here is that if the values of assets are set by reference to MTM valuations but the values of liabilities are not given some compensating adjustment, then a significant tension is established within the regulatory system. This could have the effect that a rapid increase in equity market values would force banks with significant equity holdings either to raise capital quickly or to divest themselves of other financial assets, despite the fact that their risk position would have improved rather than deteriorated. This would be tantamount to punishing banks for making successful investments, and would be highly undesirable.
21. If a market-based approach is adopted for regulatory purposes, the amount of any increase in value in equities subject to the mark to market approach must be reflected by an increase in the amount of regulatory capital available to absorb the charge resulting from such increase. This increase is a recognition of the profit which would be made on the sale of the securities, and therefore should in principle be treated in the same way as any other profit as tier 1. Regulators have not traditionally discriminated against undistributable profits – indeed the two most common classes of undistributable profits, share capital and share premium accounts, are treated as tier 1. Consequently we do not believe that there is any justification for treating such profits as anything other than tier 1. There is an apparent weakness in undistributable profits in that they have not been

realised. However for risk purposes the risk profile of a bank is not altered if it sells and repurchases securities in order to realise a gain - at this point the profit on the transaction becomes "realised", but the risk absorption capability of the bank has not changed. We accept that there are issues relating to the quantum of the "profits" realised - for example, it may be necessary to consider tax effects - but we believe that in principle all profits resulting from MTM should be counted as tier 1 in the same way as other profits from securities transactions.

22. It is also worth noting that the approaches used to MTM vary from market to market and from bank to bank. Each bank employs its own methodology in assessing and applying haircuts to reflect the tradability of equity holdings. Our discussions with members have shown that the development of such haircuts reflects a wide variety of issues including local market conditions, potential restrictions on transferability and other matters accumulated from the experience and specialist knowledge of the bank concerned. Our work does not lead us to believe that these haircuts can be mechanically harmonised across countries and banks since they vary according to the specific nature of the holdings, as well as the local accounting and tax environment.
23. We also believe that the structure of the regulatory system should incorporate a limitation rule in respect of the treatment of equity holdings. This rule would be to the effect that the impact of an increase in the value of an equity holding net of the consequential impact of any increment to regulatory capital arising from that gain should never be negative - in other words, that the regulatory capital position of a bank should never be negatively affected by a rise in the market value of a banking book equity investment.

Modelling Charge

24. We strongly welcome the acceptance by the MTF in the August paper of non-VaR as well as VaR models. We believe that the non-VaR approach to modelling produces valid results, and would propose that regulators be prepared to accept any non-VaR model which is capable of being assessed under supervisory review and whose output can be quantified in the form of a loss percentile, which may then be compared with that measured using a VaR model. We also welcome the use of the quarterly holding period in the models used by the MTF.
25. We do not accept the suggested use of the 99.5% percentile. We believe that it would be more appropriate to use a figure of 99.0%, thus achieving equivalence with the structure used in the trading book.
26. We believe that the application of what is in effect internal modelling of public equity exposures can be empirically verified using the same techniques as are used in any other area of modelling. It will be important for supervisors to agree internationally on how such models may be vetted, keeping in mind that any test applied should be reasonable. In this respect, we do not understand the need for a floor to apply. Such a floor, which is not predicated on actual portfolio characteristics, undermines the conceptual credibility of the internal models approach. Imposing a floor also goes against what we believe to be the primary objective of the Basel II process, being an attempt to move away from arbitrary restrictions and towards a risk-sensitive regulatory framework.

Simple Charge

27. Members of the ISDA working group in general accept the approach set out in the paper for the proposed standard charge. We believe that a 300% risk weight is reasonable, and is consistent in broad terms with our own research into public equity indices volatility.

5. Capital Treatment of Private Equities

28. The primary issue in respect of private equities is valuation. Here the accounting issues are less relevant, since accountants are unlikely to permit upward revaluation of holdings without clear evidence in support of that valuation, and where there is no public market in the equities such evidence will be rare (the classical example is the completion of a round of funding for a start-up company, where the offer price for the offer of new equities serves as a revaluation benchmark for existing equity holders). It should not systematically follow that for risk management purposes LOCOM values prevail, although in some instances this may be justified. We support the open position adopted by the Committee in this respect : there are a number of instances where a fair value can be defined for private equity investments. The fact that an equity is not publicly traded does not necessarily mean that it cannot be accurately valued. Examples of cases where untraded equity can be valued would include equity investments in untraded investment companies where it is possible to arrive at a relatively accurate valuation of the company assets, investments in companies which have the benefit of substantial guarantees (e.g. joint venture or project finance vehicles) and investments where the investor has the benefit of a put option to a creditworthy third party. However, even in the absence of such phenomena it is still clearly the case that a properly informed substantial minority equity investor should be able to arrive at a defensible valuation of his stake in the company. In particular, where a bank has a very long term investment in a particular company and has regular access to financial information about that company, it is likely that the bank's own estimate of the value of its investment will be significantly more accurate than the historical acquisition cost.
29. Once again, we assert our primary belief that it would be wrong to use a demonstrably incorrect valuation figure where a more accurate figure is available. We accept that banks cannot be given a free hand to revalue their non-public investments as they see fit, but we believe that the MTF should accept that where a bank has appropriate procedures in place and can demonstrate that these procedures are generally and impartially applied across the whole of its non-public equity portfolio, that it should be permitted to use its own valuations even of non-public equity holdings.

Modelling Non-Public Equities

30. Where banks make significant equity investment in non-public companies they will almost invariably have procedures in place for monitoring their investments by obtaining financial and other information, remaining in contact with the company management (and possibly other investors) and accessing independent sources of information. This information will be used to assess the level of risk to which the investment bank is subject. We believe that many of our members have systems which enable them effectively to model exposures to non-public equities in the same way that exposures to public equities may be modelled.

31. Many of the comments made above as to public equities; in particular those on the use of the simple approach "floor" and on the calibration of holding periods and percentile output requirements, are also applicable to private equity holdings.

The Simple Market-Based Approach

32. We support the idea of a single capital weighting to be used for all non-public equities. We have discussed various proposals to permit greater differentiation amongst equity holdings, notably through some form of mechanism linking weighting to bank's internal credit assessments of the issuing company. However, we have not been able to identify a readily assessable factor which is at once sufficiently robust and sufficiently accurate to be used for this purpose.
33. In constructing the "simple market-based approach" we appreciate that the MTF is striving for a mechanism which can be quickly and easily applied over a wide range of investments. We note that similar issues were addressed when a standard treatment was devised by the Basel Committee for equity holdings in the trading book. Under this treatment, private equity holdings would normally receive a capital charge 1.3 times higher than liquid public investments. We would suggest, for consistency, and in view of the fact that the trading book multiplier is not wholly inconsistent with empirical research conducted by the regulators, to apply a similar ratio in the banking book.

6. Recognition of Hedging in the Banking Book

34. We are pleased to note the MTF's view that hedging in respect of equities held as investments should be fully recognised. Hedging of equity positions is currently under-developed in the banking book; we were as a result unable to identify significant market practice in this area. However, we do not believe that the maturity issue which the task force has identified poses a particularly serious problem. In the context of the IRB approach hedging can be comprehensively dealt with within the relevant model. In the simple market based approach, we would suggest, for simplicity, that any hedge with a maturity longer than one year should be treated as a full hedge.