

**PROPOSALS FOR
THE REGULATION OF CREDIT DERIVATIVES**

**Comments of
the International Swaps and Derivatives Association, Inc.**

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EXECUTIVE SUMMARY

Acknowledging the efforts that the Office of the Superintendent of Financial Institutions (OSFI) in designing a capital adequacy framework for credit derivatives, ISDA would like to offer OSFI some comments and suggestions based on the Superintendent's paper "Policy for Credit Derivatives".

In summary, we strongly believe that the supervisory capital treatment for credit derivatives should be governed by two fundamental principles:

- recognition of the essential similarities between credit derivatives and other derivatives and the consequent equality in the application of existing capital rules; and
- encouragement of good credit risk management techniques by full recognition of the hedging benefits of credit derivatives.

We emphasise the fact that credit derivatives are similar to other types of derivatives in many ways: risk profile, documentation, valuation and risk management. They are unlike guarantees and an analysis based upon comparison with guarantees is, in our view, unrealistic.

We discuss in some detail the appropriate basis for applying capital charges to credit derivatives in both the banking and trading books and note, in particular, the importance of allowing offsets provided by credit derivatives to be recognised for this purpose. We propose a method whereby maturity and instrument mismatches may be factored into the calculation of an appropriate calculation of such offsets. In summary, we suggest that:

- in spite of the fact that recent action by the Basle Committee will allow some scope to recognise offsets under specific risk models, standardised rules to recognise offsets in cases of maturity and instrument mismatches should be developed as a matter of priority and, where possible, be adopted immediately under national discretion or quickly incorporated under Basle rules;
- the industry and supervisory community should work together to explore a portfolio approach to credit risk capital standards and to reform the current banking book capital rules. However, this longer-term effort should not prevent immediate action on the question of offsets.

PROPOSALS FOR THE REGULATION OF CREDIT DERIVATIVES

INTRODUCTION

The International Swaps and Derivatives Association, Inc. ("ISDA") welcomes the opportunity to comment on the discussion paper issued by the Office of the Superintendent of Financial Institutions called "Policy for Credit Derivatives". These comments relate not only to the banking book proposals in that paper, but more broadly to the capital treatment in both banking and trading book.

ISDA is an international financial trade association whose membership comprises over 340 of the world's largest commercial, merchant and investment banks, corporations, governmental entities and other institutions.¹ ISDA's members represent a broad cross-section of the institutions that act as dealers and end-users in swaps and other privately negotiated derivative transactions. Naturally, ISDA's members include many of the firms dealing in privately negotiated derivatives in Canada. ISDA's Canadian members are very active within the Association and are represented on ISDA's Board of Directors.

ISDA has been closely involved with many initiatives designed to articulate prudent risk management practices. These initiatives include the publication in 1993 of "Derivatives: Practices and Principles" by the Global Derivatives Study Group of the Group of Thirty, a think tank based in Washington, D.C., and the publication in August 1995 of "Principles and Practices for Wholesale Financial Market Transactions" by several trade groups that represent participants in the financial markets.

One aspect of our commitment to promoting sound risk management practice is reflected in our standard form documentation for privately negotiated derivatives transactions. We have published netting agreements, such as the 1992 ISDA Master Agreement, as well as definitional booklets and confirmation templates for the documentation of interest rate, currency, commodity, equity and bond derivatives. We have also carried out extensive work in relation to credit derivatives (CDs), which comprises, for instance, the development of a standard form of confirmation for the documentation of such instruments within the scope of the ISDA Master Agreement (see Annex II). Moreover, ISDA has been engaged in extensive discussions with US, UK and other banking authorities over capital adequacy standards for credit derivatives.

ISDA is not only focusing on CDs, but more broadly, it is pressing for a reform of the credit risk capital rules. Last March, ISDA issued the paper "Credit Risk and Regulatory Capital", which contains specific proposals for a regulatory regime for credit risk. ISDA argues for a three stages evolutionary approach, from a standard methodology and a simplified models approach, to a sophisticated models approach. These proposals are attached as Annex III.

Our comments are organised into three sections. The first one explains the risk management benefits of credit derivatives, stressing the need to see the similarities rather than the differences between the various types of credit derivatives. The section also discusses valuation techniques. The second part considers the concrete exposures arising from these derivatives and proposes a

¹ A list of members is attached as Annex I to this paper.

regulatory treatment. The third part emphasises the importance of recognising the offsetting capacity of credit derivatives and its key role in accurate risk management.

We would very much welcome an opportunity to meet and discuss the analysis in this paper, and the OSFI's supervisory plans for credit derivatives, in greater depth.

I. CAPITAL ADEQUACY TREATMENT OF CREDIT DERIVATIVES

1. Risk Management Benefits of Credit Derivatives

Regarding credit derivatives, it is enough to point out that, in the same way as equity, commodity, foreign exchange and interest rate derivatives enable the management and transfer of a variety of types of risk, these derivatives enable institutions to manage credit risk. We will, however, focus on the risk management benefits of credit derivatives and the supervisory environment and capital rules that reflect and encourage best practices in credit risk management.

Banks and other financial institutions provide credit intermediation services. As a result, they are constantly subject to credit risk.. Credit derivatives provide these institutions with powerful tools to manage such risk exposures. For example, credit derivatives allow banks to isolate and transfer their underlying loans in a way that may not otherwise be possible due to legal or relationship reasons. In addition, the instruments may help strengthen the quality of a bank's loan portfolio, counteracting the loss of higher quality credits to the securities markets.

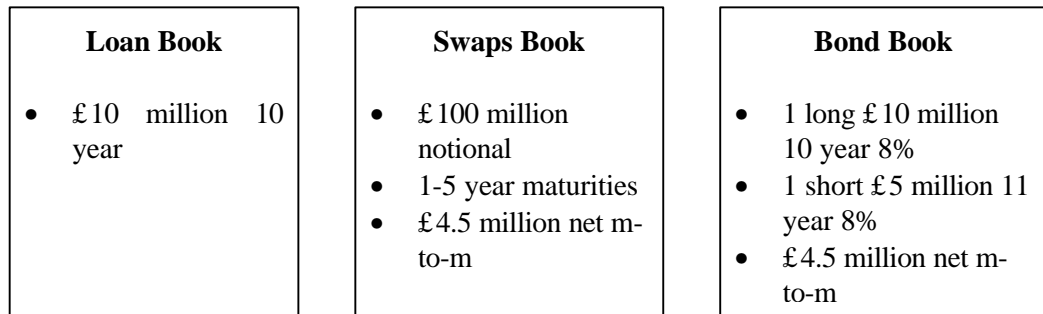
It is important to recognise, however, that the benefits of credit derivatives extend not only to the full range of exposures arising from commercial banking but also to exposures from trading activities. Credit derivatives may, for example, be used to hedge a concentrated position in an issuer's bonds or securities. Similarly, an institution could protect itself against default from a current net mark-to-market counterparty exposure in its swaps portfolio by entering into a credit derivative transaction.

Private sector financial institutions are moving towards such a "portfolio approach" to credit risk management, recognising that an institution's true net credit exposure can only be analysed across the full range of its instruments. Credit derivatives are an important component in the development of this approach, as they can provide greater customisation, ease of execution, enhanced liquidity and price transparency for credit risk. They are also of vital importance for the traditional credit risk management methods of diversification, securitisation, and the development of credit policies and limits. In sum, credit derivatives make it easier for institutions to realise the July 1994 Basle/IOSCO risk management guidelines goal "to evaluate credit risk at the customer level across all products."

We are convinced that the supervisory framework for credit derivatives should adequately encourage or accommodate this development toward an integrated approach to risk management. The current rules apportion credit risk into three categories: banking book credit risk, trading book specific risk for each issue and counterparty risk from each book, rather than facilitating an integrated approach to this risk and its management with credit derivatives. Figure 1 below shows an example of an integrated approach to risk management.

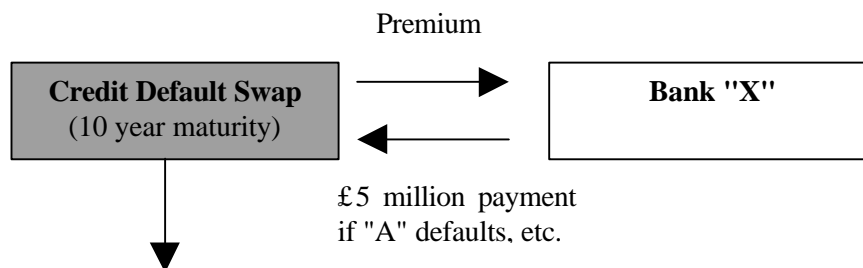
**Figure 1 : An Integrated Approach
to Credit Risk Management**

Three sources of exposure to bank "A":



TOTAL* CREDIT EXPOSURE TO BANK "A" : £ 20 MILLION
 (£10 million loans) + (£5 million current + potential future exposure)
 + (£5 million net** specific risk)

THEN, TO HEDGE £5 MILLION OF EXPOSURE:



NET CREDIT EXPOSURE TO "A": £ 15 MILLION

* Risks for different books are simply summed, more advanced portfolio credit risk management might permit recognition of long and short credit risks in different books.
 ** Note that supervisory rules would not permit such netting because of maturity mismatch.

We are aware that establishing an integrated supervisory approach to credit derivatives would require a radical shift from current international regulatory practice. We look forward to assisting the OSFI and others in implementing such structural changes aimed at moving toward integrated regulatory solutions. Our proposals for such wholesale reform are reproduced in Annex III. However, we also strongly believe that the interim capital rules should provide for such developments to the extent possible under current Basle rules. As discussed above, we believe that credit derivatives should be eligible for a trading book capital regime, financial institutions should enjoy wide discretion to employ internal modelling techniques, and offsets between credit derivatives and underlying hedges should be recognised.

2. Relationship to Other Swaps and Derivatives Products

In establishing regulatory guidelines, it is crucial to recognise the similarities between CDs and other types of derivative instruments, and not to attempt to assimilate CDs into guarantees. Indeed, these derivatives are not guarantees and would be seriously punished by receiving a more conservative capital treatment than that of other derivatives.² CDs share with other forms of derivatives similar risk profiles, risk management methodologies and documentation. These similarities, as laid out below, are directly relevant to the formulation of an effective regulatory framework characterised by appropriate capital standards.

First, as with other swap transactions, the total notional values of credit derivatives do not adequately capture the risks to which the parties are subject. Instead, as with other derivative instruments, credit derivatives exhibit two types of risk: market risk and counterparty risk. Market risk is derived from volatility in the value of the underlying reference asset. It is independent of counterparty quality and is only a function of the value of the underlying reference asset. Counterparty risk, on the other hand, arises from the potential that the other party to the transaction will default. Counterparty risk is dependent on market risk because it only arises if the market value of the credit derivative is positive. This is the same risk profile found in other derivative products.

Second, credit derivatives are documented under ISDA Master Agreements and progress has advanced quickly in developing standard confirmations for these instruments (see Annex II for a copy of our recently published credit default swap confirmation. We would be happy to discuss this with the OSFI, if it would be helpful). ISDA documentation invests the instruments with markedly different legal characteristics from, for example, guarantees, in terms of standardisation, transferability, relevant covenants, etc. It also means that counterparty risk exposures may be netted with other derivatives. This ability to net exposures weighs heavily in favour of recognising these instruments as derivatives for capital adequacy purposes. Recognition will increase the incentives for institutions to engage in prudent risk management strategies through netting arrangements.

Third, and most important, CDs are also similar to other derivatives in the way they are managed by financial institutions. Credit derivatives books are usually marked to market with profits and losses recognised immediately. Swap dealers actively manage their credit derivatives as part of their trading activities on a portfolio basis, using transactions in the cash market or recognising the offsetting effects of other credit risks in order to hedge the risks in the credit derivatives portfolio. In addition, credit derivatives like other derivative instruments are

² We would be happy to discuss further the differences between CDs and guarantees and to provide more information on the subject.

generally subject to risk limits imposed by senior management and monitored by risk management systems.

In light of the above, we strongly believe that the OSFI's regulatory framework should reflect the similarity between credit derivatives and swaps and other derivative products, especially with regard to trading book status. As outlined above, credit derivatives exhibit the same fundamental characteristics as other derivative instruments with respect to overall risk profile, risk management and documentation. Moreover, these similarities are patently true for the different types of credit derivatives such as total return swaps and default products.

3. Treating Credit Derivative Types Consistently

It is important to note that the similarities between different types of credit derivatives are more significant than the differences between individual product constructions. This position should be reflected in the capital treatment of these products. For example, there are no fundamental differences between credit default products and total return swaps, both of which are termed "credit derivatives" in the OSFI's paper.

There is a temptation to single out credit default products for different treatment on the basis that they involve a new type of underlying (default risk), that there are doubts about the liquidity of these instruments and/or their underlying, or that there are doubts about the valuation and pricing of these instruments. In fact, *none of these propositions are correct*. Default products do not involve some particularly problematic underlying risk that deserves distinct capital treatment. Structures based on total return swaps, for example, can be used to create synthetic credit default products. Figure 2 below sets out a number of examples of these structures. Treating default products differently from total return swaps for capital purposes would encourage financial institutions to develop complex synthetic hybrid structures which emulate the effect of credit default options but are constructed from underlying instruments chosen because they attract a more appropriate capital treatment. Forcing banks to restructure instruments in this way is clearly to be avoided.

Liquidity is not a relevant feature for the determination of capital treatment. There are many examples of illiquid and infrequently traded bonds which are eligible for trading book treatment, and equally of loans which are in practice traded in a liquid market, although invariably subject to banking book treatment.

Naturally, the ability to mark-to-market should be a key test of the appropriate supervisory framework for credit default instruments and is a necessary condition for trading book treatment under international rules. We go on to discuss the appropriate valuation techniques in the following section.

We should also clarify that there should be no difference in capital treatment between credit derivatives where the reference asset is a security (as in the OSFI's example of a credit default option in Annex 1 to its paper) and credit derivatives where the reference asset is a loan. There may be certain additional legal issues arising in relation to this type of product, given the drafting of international rules. Nonetheless, the valuation methods applied to this type of product are the same as those that would apply to any other type of credit derivative.

Consequently, we believe that these instruments should also be eligible for trading book treatment.

Figure 2: Credit Default Products and Equivalent Structures

CREDIT DEFAULT SWAP

Risk Profile: *Credit exposure to reference asset*

SIMILAR TO:

TOTAL RETURN SWAP PLUS INTEREST RATE SWAP

Credit exposure to reference asset and interest rate risk under TRS. Interest rate risk hedged by interest rate swap or asset swap leaving *credit exposure to reference asset*.

TOTAL RETURN SWAP WITH DELAYED MARK AT MATURITY

If only final mark at maturity then no interim cash flows and interest rate risk, so only *credit exposure to reference asset*.

ASSET SWAP ON BOND

Asset swap hedges interest rate risk leaving *credit exposure to reference asset*.

ASSET SWAP PLUS BOND OPTION

As above: *credit exposure to reference asset*.

DOWN AND IN BOND OPTION

Depending on barrier level, drop in value (e.g. default) triggers option exercise creating *credit exposure to reference asset*.

BOND OPTION SOLD DEEPLY OUT OF THE MONEY

Option worthless in normal trading conditions, but in event of default swings into the money creating *credit exposure to reference asset*.

FLOATING RATE NOTE

Rates move with prevailing interest rates so *credit exposure to reference asset* remains.

4. Valuation Techniques

Given the importance of establishing a mark to market value for trading book eligibility, we believe it would be helpful to discuss credit derivative valuation techniques. Firstly, it is important to note the distinction between credit risk modelling and valuation. Credit risk modelling refers to techniques relating to models designed to assess credit risk on a portfolio basis, recognising the interrelationship between different aspects of risk of a particular credit and for some also capturing the relationship between different credits in a portfolio. Valuation,

on the other hand, is simply an exercise in marking to market a single instrument and is related to the valuation of the underlying.

While trading book treatment does rightly depend on the ability of a bank to establish a mark-to-market value for an instrument, it is not dependent on the development of modelling techniques. Swaps, FRAs, options and a range of other instruments all may qualify for trading book treatment so long as they are marked-to-market (and meet the other trading book criteria), but there is no obligation to employ a risk model. Indeed, this distinction also applies for specific risk. The Basle rules have no requirements for the development of specific risk modelling techniques as a precondition to trading book eligibility: a failure to model specific risk on, say, a bond option, in no way disqualifies the instrument from trading book treatment. Instead, standardised specific risk requirements are applied.

For a wide range of credit derivatives, including credit default products, valuation is in fact relatively straightforward and a robust and established basis for valuation exists. Where the reference asset for a transaction is itself traded and auditors and risk managers are satisfied that a reliable price can be determined (whether, as noted above, this is a loan or a bond), then that price would be used as the basis for the valuation of the instrument by implying the probability of default by looking to the spread over Libor (or some other reference curve).

Where the particular reference asset in question is not sufficiently traded, then valuation will be derived by looking to comparable instruments of the same issuer, with due account taken for differences in seniority. Even if there are no analogous instruments to the reference asset which are issued by the underlying credit in question, then comparable instruments issued by similar credit types may be used with appropriate conservative adjustments.

It is important to note that these recognised valuation procedures are subject to stringent review and full documentation, with underlying prices and recovery rates subject to on-going review.

Default data is sometimes used to develop valuation models. However, we would strongly object to the conclusion that the use of a modelling approach by some implies that the standard valuation techniques described above, which are widely used, are somehow deficient, especially for the range of default products where a liquid underlying or comparable instrument can be observed.

We believe it is significant that these valuation techniques meet not only the approval of the senior and risk management of the institutions themselves, but for nearly all institutions active in the business, have been recognised by external auditors as a basis for marking to market for the statutory accounts.

**Figure 3: Key Characteristics of Credit Derivatives
and Other Instruments**

	Interest Rate Swap	Total Return Swap	Credit Default Swap	Guarantee
Pricing	Market	Market	Market	Private
Post-Default Costs	n/a	None	None	Work out participation
Risk Management with other Derivatives	Yes	Yes	Yes	No
ISDA Documentation	Yes	Yes	Yes	No
Marked-to- market	Yes	Yes	Yes	No
Legal Structure	Standardised	Standardised	Standardised	Bespoke
Generic Risk Management use	Yes	Yes	Yes	No-Attached to specific obligation
Netting with other Derivatives	Yes	Yes	Yes	No

II. EXPOSURE TO UNDERLYING ASSET ISSUER

1. Overview

The capital adequacy rules adopted by the OSFI for credit derivatives will have an important influence on the development of these products and credit risk management techniques more generally. We therefore believe it is important that both the interim capital regime and later revisions to the capital rules are structured in such a manner as to encourage, or at least not inhibit, the use of credit derivatives in order to promote prudent credit risk management techniques.

Establishing an appropriate capital regime for these instruments requires the identification of an approach which, in principle, best facilitates prudent credit risk management, and then analysis of the extent to which this approach can be accommodated under current international rules. These rules may, of course, need to be revised. However, we believe it is important that an appropriate capital regime be progressed as far as possible under existing rules, rather than postponing policy changes until international standards are revised, which could take some time.

In principle, we believe that credit derivatives should be treated consistently with other swaps under the existing capital adequacy framework. Thus, credit derivatives would be assigned between the trading and banking books based on existing criteria:

- a. whether the instruments are, in fact, traded (by looking at the intention for which they are held and the way in which they are managed) and
- b. whether the instruments are marked to market.

This test should apply, as with existing derivatives, to all types of credit derivatives³.

Adopting the above approach would allow credit derivatives to be treated for capital adequacy purposes in a manner consistent with the way they are managed for internal risk management purposes. This is essential, as it should allow capital charges to be determined in conjunction with associated offsetting positions and therefore credit risk charges to be determined, to some extent at least, on a portfolio basis. It also permits a closer link between regulatory capital charges and internal risk management practice, a goal that has been recognised by the Basle Committee in its recent adoption of an internal models-based approach to market risk capital adequacy charges.

A consistent treatment is also important for ensuring that the supervisory regime does not undermine the ability of banks to net their credit derivative counterparty exposures with those arising from other derivative transactions. Applying similar counterparty risk capital rules encourages this netting and therefore has strong prudential benefits.

We consider in more detail below the importance of offsets in the context of credit derivatives. However, in summary we feel that the key basis for the capital treatment of credit derivatives should be consistency with other derivative instruments and moves to recognise prudent credit

³ We acknowledge that in some cases this may mean that an instrument would receive higher capital requirements because of inclusion in the trading book, especially if offsets are not recognised.

risk hedging strategies. This then raises the question of how this can be accommodated within the Basle capital adequacy framework.

As noted above, we believe that the OSFI should attempt to establish an approach to the treatment of credit derivatives which encourages and facilitates prudent risk management within the constraints of the existing regulatory framework. We would welcome the opportunity to discuss the means of implementing this approach once the OSFI has decided on its approach as a matter of principle.

In light of this overview of the policy issues, we now turn to the detailed capital adequacy issues raised in the banking book and trading book for baskets of issuers and the treatment of offsets.

2. Banking Book

Given the way that credit derivatives are managed by dealers, ISDA believes that they will often be held in the trading book and subject to the market risk treatment discussed below. There are, however, many banks which do not have active trading accounts, or which choose to manage credit derivatives as part of the banking book. ISDA believes it is important to make available to these institutions regulatory capital requirements that reflect the contributions of credit derivatives to prudent credit risk management.

In this respect, we believe that credit derivatives held in the banking book should be treated in a manner similar to those in the trading book. As a first step, treating credit derivatives like other derivatives in the banking book would mean only imposing a counterparty risk charge. Thus, the OSFI has discretion to be, in effect, *superequivalent* to the international regulation and impose trading book market risk charges with regard to the reference asset. However, it is important that this permits an offset between an underlying loan and the credit derivative in order to allow recognition of the hedge that has been put in place. We would strongly object to retaining additive loan and market risk capital charges, in addition to the counterparty risk charge, as this would in effect punish banks for hedging. In our view, the banking book regime should avoid such duplicative charges and should, instead, recognise offsets between credit derivatives and hedged loan positions (this issue is discussed further below). However, if there is not scope under the current international supervisory framework to permit this, then we accept that a guarantee treatment would, as an interim measure, be an acceptable alternative, as this would at least allow some recognition of the hedge provided. However, we believe that an interim guarantee treatment needs to avoid any inflexible maturity matching requirement.

Unless the OSFI adopts a pragmatic approach -- ideally permitting offsets under a trading book regime or if necessary allowing a guarantee treatment with flexible maturity rules -- then there is a danger that end-user banks will be discouraged from entering into credit derivative transactions, thereby limiting growth of the market in Canada and inhibiting good credit risk management practice.

3. Trading Book

As with other derivatives in the trading book, credit derivatives should be subject to capital charges under either the standardised approach or an internal models approach. For the internal models approach, the instruments would be subject to analysis by an approved value-at-risk (VAR) model subject to the Basle qualitative and quantitative models standards. Under the standardised approach, specific and general market risk charges normally apply. However, it is

important to note that for credit derivatives the general market risk requirement may well, in fact, be inapplicable. This is because for some instruments the structure of the product allows for interest rate risk to be immunised.

We believe that specific risk charges should apply as per normal rules, by looking through to the underlying reference asset and considering whether it is deemed qualifying. We feel that this should be the case even if the reference asset is a loan. As the current supervisory framework does not address this point, we would suggest that the qualifying nature of such an instrument should be determined by looking to analogous bond instruments of the same credit. Thus, any issuer that meets the qualifying criteria in the Basle rules for its bonds would also have any loans to it deemed qualifying. We recognise that an amendment to the Basle rules might be ideal to clarify this point, but do not feel that the OSFI should be deterred from adopting this approach in the meanwhile. We would note in this respect that the term "debt instrument" (which is used in the qualifying test) is not defined in the relevant international banking legislation and could therefore easily be interpreted to include loan instruments.

The treatment of offsets is particularly relevant to credit derivatives within the trading book and we discuss this issue in detail below.

4. Basket of reference assets

We read with particular interest the capital treatment that OSFI gives to baskets of reference assets. We agree that such basket products cannot be charged for the risk of default of every item that they contain. We therefore welcome the application of changes based on the single riskiest position in the basket.

5. Asset-to-Capital Multiple (Leveraged Capital)

OSFI has an additional capital standard beyond the Basle rules which simply requires a capital ratio to be maintained against gross assets (eg, without adjusting of risk weighting and netting). Although we do not intend to comment extensively on the leveraged ratio, we are concerned that CDs are treated appropriately within this regime as well. We think it is therefore important that the hedging benefits of credit derivatives are also recognised within the leveraged ratio context. This could be done through direct recognition of offsets or through adjustments to minimum ratios for those banks which have positions hedged.

6. Counterparty Exposure

ISDA believes that there is normally a fundamental difference in the counterparty risk exposure assumed by a seller of credit protection and the buyer of that protection. This then raises the question of how best to capture this risk for regulatory capital purposes. In this respect, we note that the regulatory standards for counterparty risk are deficient in a number of respects (e.g., the broad, basic add-on charges and crude recognition of PFE netting) and that a model-based approach provides a better means of capturing this risk accurately in general, and in relation to asymmetric credit protection counterparty risk in particular.

However, there is a need, as an interim matter, to accommodate credit derivatives in the current regime based on current mark-to-market exposure plus notional principal value multiplied by an add-on. In this context, the only variable in the current regulatory regime open for adjustment is the particular add-on to apply. We therefore think that, as a general rule of thumb, the

asymmetry of risk may be approximated by applying equity add-ons to protection buyers and interest rate add-ons to protection sellers. This is, however, a relatively blunt rule and it will be necessary to allow flexibility to modify charges in particular cases and depending on the exact structure involved. For example, in the case of a credit default option where all premia have already been received there is clearly no need for a charge, as would be the case with existing option products on other underlying instruments.

We would note that imposing add-ons for buyers at a level greater than that for equities would be deeply objectionable and a matter of great concern to our members. Indeed, equity is the most junior form of debt and therefore, as credit derivative referenced assets are of equal, if not usually greater, seniority, a higher add-on is not justified. Also, a higher add-on would have competitive implications for our members in Canada, due to the disadvantage they would face relative to other institutions.

III. CREDIT DERIVATIVES AND OFFSETS

The offsetting of long and short risk positions is a widely accepted feature of capital adequacy. Regulators have consistently acknowledged the great importance of acknowledging hedging in prudent risk management. Credit risk is, however, the only remaining area of regulation where recognition of offsetting has been unduly delayed.

From our contacts with national regulators, ISDA believes that there is a growing understanding amongst regulators of the need to permit offsetting. This is in large part a result of the growing awareness that not recognising credit risk hedging as a risk-reduction mechanism has very negative business and prudential implications. By not amending the current status quo in the regulatory capital regime, regulators may be inhibiting prudent risk management as well as providing a disincentive to hedge positions, as using a credit derivative to hedge a position may create an *additional* capital charge, rather than reducing the capital requirement to reflect the hedge.

This paper thus sets out proposals for recognising offsets in an attempt to correct the current regulatory imbalance and avoid serious market distortions. We see it necessary to reform the standard capital adequacy rules in this respect. More importantly we see it vital to acknowledge offsetting when sophisticated and reliable models are in place and properly managed. In the light of these arguments, which are developed further below and in our “Credit Risk and Regulatory Capital” paper (see Annex III), we would like to invite the OSFI to reconsider its position about offsets.

1. Standardised rules for offsets

To cater for the many banks that are not able to use models at this stage or indeed have decided to postpone switching to models, we think it is very important to design a set of standard rules that rewards them for offsetting and hence helps them to better manage their portfolios. Our proposals emphasise the need to draft simple and understandable rules. As an incentive to adopt the more precise and sophisticated models-approach to risk management, such rules are designed to produce slightly more conservative results than these other alternatives.

1.1. Maturity mismatches: “the sliding scale” principle

The salient virtue of a standard approach is its simplicity. A standard methodology is an approximation, however rough it may be, to establishing capital to cover risk. Such methodology should obviously recognise offsets in cases of maturity matches, because the hedge neutralises the risks of the underlying asset. But it should also acknowledge the hedge provided by a derivative instrument that very closely matches the underlying and dilutes most of the risk. Regulators can deal with the unhedged risk in a maturity mismatch by reducing the percentage of offset recognised. If a total hedge is equivalent to 100% offset, a “close-to-total hedge” could be, say a 95% offset, thus leaving a 5% of the underlying asset to be covered by capital.

This “sliding scale method” would do justice both to the efforts made by banks to manage their risks and to regulators’ concerns about outstanding residual risks in hedging operations. This proposal is further elaborated in part C of Annex III.

1.2. Instrument mismatches: the “seniority rule”

Instrument matches are clearly the ideal scenario from a regulatory point of view. They provide the maximum level of assurance regarding the coverage of a position by a credit derivative. But it is obvious that risks can be substantially and even totally mitigated in scenarios where instruments do not exactly match. For instance, in cases *where the seniority of short position is less than (or equal) to that of the underlying long position*, regulators should clearly recognise a total offset. In this situation the holder of the underlying instrument is completely covered from the risks arising from the underlying. In case of default, they will not only obtain a greater recovery rate on the more senior debt, but they will also receive a credit event payment amount equal to the full principal amount reduced by the lower recovery rate on the more junior debt.

This “seniority rule” can be applied to three very concrete cases:

- Where long and short credit risk positions (whether cash positions or credit derivatives) arise from bonds of the same issuer, but of different seniority.
- Where one leg of the transaction is a loan (or loan-referenced) credit derivative and the other is a bond (or bond referenced) credit derivative, where the loan recipient and bond issuer are the same entity.
- Where credit risk arises from a counterparty risk exposure being hedged by a credit derivative.

It should be noted that in all these cases we have focused on the question of payout levels when determining offsets. Of course, it is also important that the transaction is structured in such a manner that a default on the underlying also triggers a credit event payment on the hedge. We recognise that this test will not be met in all instances, but the approach to credit derivatives documentation (such as envisaged in ISDA’s newly published credit swap confirm) has been to ensure that as wide a range of triggers apply as possible so that there are few limits on the ability of a hedge to be effective.

Again, part C of Annex III elaborates on our proposed seniority rule.

2. A Models-based approach

As for market risk, models may be developed which can recognise, for instance, the correlation of payouts between different instruments. In addition, in a maturity mismatch, a model can be designed to identify the “backend” credit risk caused by the mismatch, expressed as a forward credit exposure (e.g., the net cost of extending the hedge when it expires).

The Basle Committee’s full recognition of specific risk models will allow significant scope to recognise offsets in the case of maturity and instrument mismatches. However, this does not alter the compelling case for more fundamental reforms of the credit risk capital regime to allow wider use of models. It is now up to local regulators, like OSFI, to recognise the benefits of a models-approach to offsets.

CONCLUSION

ISDA believes that the development of CDs as an important new tool of credit risk management will depend crucially on an appropriate capital adequacy regime being in place that treats these instruments consistently with other derivatives and recognises their hedging benefits. We therefore hope that the above comments prove useful to OSFI as it develops supervisory capital guidelines that apply to both the trading and banking books of Canadian financial institutions.

We believe that there is much that can be done within the confines of the current international capital framework in order to develop appropriate interim capital guidance for CDs. In particular, we would again emphasise the importance of recognising offsets between underlying risk exposures and credit derivative hedges. The 1988 Basle Accord's standards for credit risk capital more generally are, however, in urgent need of reform. These problems have been highlighted by the advent of credit derivatives, the emergence of credit risk modelling techniques and the supervisory debate on specific risk modelling.

ISDA has therefore launched an initiative calling for reform of the existing credit risk capital regime. We note the major failings of the current rules in terms of lack of recognition of credit rating and portfolio diversification, amongst other things. We therefore call on members of the Basle Committee on Banking Supervision to develop alternative proposals which permit the use of portfolio credit risk or more simplified credit risk models. We would strongly urge OSFI to support this initiative.

These proposals for an "evolutionary- models-based approach" are reproduced as Annex III of this paper. We would be happy to discuss both our credit derivatives comments and our broader credit risk capital proposals in greater depth with OSFI.

ANNEX I: ISDA MEMBERS

ISDA primary members

Abbey National Financial Products
ABN-AMRO Bank, N.V.
ABSA Bank Ltd.
AIG Financial Products Corp.
Allied Irish Banks, plc
Asahi Bank, Ltd.
ASLK-CGER Bank N.V. S.A.
Australia and New Zealand Banking Group, Ltd.
Bacob Bank s.c.
Baden-Wuerttembergische Bank AG
Banca Commerciale Italiana
Banca CRT- Cassa di Risparmio di Torino
Banca del Gottardo
Banca di Napoli
Banca di Roma S.p.A.
Banca Nazionale del Lavoro
Banco Bilbao Vizcaya, S.A.
Banco Central Hispanoamericano, S.A.
Banco de Negocios Argentaria, S.A.
Banco Espanol de Credito, S.A. (BANESTO)
Banco Espirito Santo e Comercial de Lisboa, S.A.
Banco Exterior de Espana, S.A.
Banco Santander
Bank Austria AG
Bank Brussels Lambert
Bank Labouchere N.V.
Bank of America
Bank of Boston
Bank of Ireland Group Treasury Limited
Bank of Montreal
Bank of New York
Bank of Nova Scotia
Bank of Scotland Treasury Services plc
Bank of Tokyo-Mitsubishi, Ltd.
Bankers Trust Company
Bankgesellschaft Berlin AG
Banque CPR
Banque Nationale de Paris
Banque Paribas
Barclays de Zoete Wedd Ltd.
Bayerische Hypotheken und Wechsel Bank AG
Bayerische Landesbank Girozentrale
Bayerische Vereinsbank AG
Bear, Stearns & Co. Inc.
BFG Bank, AG
BHF Bank (Berliner Handels-und Frankfurter)
Caisse Centrale des Banque Populaires
Caisse des Depots et Consignations
Caixa Geral de Depositos, SA.
Caja de Ahorros Y Monte de Piedad de Madrid
CARIPLO - Cassa di Risparmio delle Provincie
CEDEF Capital Services SA
CERA Bank C.V.
Charterhouse Bank
Chase Manhattan Bank
Christiania Bank
CIBC World Markets
Citibank, N.A.
Cofiri SIM S.p.A.
Commerzbank AG
Commonwealth Bank of Australia
Compagnie Financiere de CIC et de L'Union Europeene
Confederacion Espanola de Caja de Ahorros
Credit Agricole Indosuez
Credit Commercial de France
Credit Communal de Belgique
Credit Lyonnais
Credit Suisse Financial Products
Creditanstalt-Bankverein
Credito Italiano S.p.A.

Dai-Ichi Kangyo Bank, Ltd.	Joyo Bank, Ltd.
Daiwa Bank, Ltd.	Kredietbank N.V.
Daiwa Europe Bank Plc	Landesbank Hessen - Thueringen Girozentrale
Den Danske Bank	Landesbank Rheinland-Pfalz Girozentrale
Den Norske Bank ASA (DnB)	Landesbank Schleswig-Holstein Girozentrale
Deutsche Morgan Grenfell	Landesgirokasse offentliche Bank und Landessparkasse
DG Bank Deutsche Genossenschaftsbank	Lehman Brothers
Die Erste Osterreichische Spar-Casse Bank AG	Lloyds Bank Plc
DKB Financial Products, Inc.	Long-Term Credit Bank of Japan
Donaldson Lufkin & Jenrette	MeesPierson, N.V.
Dresdner Bank AG	Mellon Bank, N.A.
Elf Trading S.A.	Merita Bank Ltd
Enron Corporation	Merrill Lynch & Co., Inc.
Euro Brokers Capital Markets Inc.	Mitsubishi Trust and Banking Corp.
FINACOR	Mitsui Trust & Banking Co. Ltd.
First Marathon Bank GmbH	Morgan Stanley & Co. Inc.
First National Bank of Chicago	National Australia Bank Limited
First Union National Bank	National Bank of Canada
Fuji Bank Ltd.	National Bank of Greece
Fuji Capital Markets Corp.	Nationale Investeringsbank N.V.
General Re Financial Products Corp.	NationsBank
Generale Bank	NatWest Capital Markets Limited
GiroCredit Bank AG der Sparkassen	IBJ International Limited
Goldman Sachs & Co.	IKB Deutsche Industriebank AG
Halifax plc	IMI SIGECO Societe Intermed. Mobiliare S.p.A.
Hambros Bank Ltd.	Industrial Bank of Japan, Limited
Hamburgische Landesbank Girozentrale	ING Bank
HSBC Midland	ING Baring Financial Products
IBJ International Limited	Intercapital Brokers Ltd.
IKB Deutsche Industriebank AG	Investec Bank Limited
IMI SIGECO Societe Intermed. Mobiliare S.p.A.	Istituto Bancario San Paolo di Torino
Industrial Bank of Japan, Limited	J. Henry Schroder & Co. Limited
ING Bank	J.P. Morgan Securities Ltd.
ING Baring Financial Products	Joyo Bank, Ltd.
Intercapital Brokers Ltd.	Kredietbank N.V.
Investec Bank Limited	Landesbank Hessen - Thueringen Girozentrale
Istituto Bancario San Paolo di Torino	Landesbank Rheinland-Pfalz Girozentrale
J. Henry Schroder & Co. Limited	Landesbank Schleswig-Holstein Girozentrale
J.P. Morgan Securities Ltd.	

Landesgirokasse öffentliche Bank und
Landessparkasse
Lehman Brothers
Lloyds Bank Plc
Long-Term Credit Bank of Japan
MeesPierson, N.V.
Mellon Bank, N.A.
Merita Bank Ltd
Merrill Lynch & Co., Inc.
Mitsubishi Trust and Banking Corp.
Mitsui Trust & Banking Co. Ltd.
Morgan Stanley & Co. Inc.
National Australia Bank Limited
National Bank of Canada
National Bank of Greece
Nationale Investeringsbank N.V.
NationsBank
NatWest Capital Markets Limited
New Japan Securities Co., Ltd.
Nikko Securities Co., Ltd.
Nippon Credit Bank Ltd.
Nomura Capital Services Inc.
Nordbanken
Norddeutsche Landesbank Girozentrale
Norinchukin Bank
Polish Development Bank
Prebon Yamane USA Inc.
Prudential Global Funding Inc.
Rabobank Nederland
Raiffeisen Zentralbank Austria AG
Rand Merchant Bank Limited
Republic National Bank of New York
Robert Fleming & Co. Limited
Rossiysky Kredit Bank
Royal Bank of Canada
Royal Bank of Scotland plc
Sakura Bank Limited

Sakura Global Capital
Sal. Oppenheim jr. & Cie KGaA
Salomon Smith Barney Holdings Inc.
Sanwa Bank Limited
Sanwa Financial Products
Saudi International Bank
SBC Warburg Dillion Read
Shoko Chukin Bank
Skandinaviska Enskilda Banken
Societe Generale
Standard Chartered Bank
Standard Corporate and Merchant Bank
Sudwestdeutsche Genossenschafts-Zentralbank AG
(SGZ Ban
Sudwestdeutsche Landesbank
Sumitomo Bank Capital Markets, Inc.
Sumitomo Bank Ltd.
Sumitomo Trust and Banking Co., Ltd.
Suntrust Capital Markets, Inc.
Svenska Handelsbanken (Handelsbanken Markets)
SwedBank
Swiss Re Financial Products
Tokai Bank Ltd.
Tokyo-Mitsubishi International Plc
Toronto Dominion Bank
Toyo Trust and Banking Company, Limited
Tradition-Berisford LP
Trinkaus & Burkhardt KGaA
Unibank A/S
Union Bank of Switzerland
Westdeutsche Genossenschafts-Zentralbank eG
Westdeutsche Landesbank Girozentrale
Westpac Banking Corporation
Yamaichi Securities Co., Ltd.
Yasuda Trust & Banking Co., Ltd.
Zurich Capital Markets

Total primary members: 185

ISDA associate members

Allen & Overy
Arthur Andersen & Co.
Baker & McKenzie
Blake, Cassels/Lavery de Billy
Bloomberg Financial Markets
Brown & Wood
C-ATS Software Inc.
Cadwalader, Wickersham & Taft
Capital Market Risk Advisors, Inc.
Cedel
Chicago Mercantile Exchange
Cleary, Gottlieb, Steen & Hamilton
Clifford Chance
Coopers & Lybrand
Coudert Freres
Davis Polk & Wardwell
De Brauw Blackstone Westbroek
Debevoise & Plimpton
Deloitte & Touche
Dewey Ballantine
DIAGRAM
Documentum
EDS - Electronic Data Systems
Ernst & Young LLP
Euroclear
Exchange Clearing House Limited
Field Fisher Waterhouse
Finnish Bankers Association
FNX Limited
Freshfields
Fried, Frank, Harris, Shriver and Jacobson
Front Capital Systems AB
Gide Loyrette Nouel
GovPX
Hammond Suddards
Herbert Smith
Hughes Hubbard & Reed
IBM
Infinity International Financial Technology
Integral Development Corporation
International Clearing Systems, Inc.
ITS Trading Systems Limited
Jones, Day, Reavis & Pogue
KPMG Peat Marwick LLP
Latham & Watkins
Lee & Li
Liffe (London Int'l Fin. Futures & Options)
Linklaters & Paines
Login S.A.
Lombard Risk Systems Ltd.
London Clearing House Ltd.
Longview International
Lovell White Durrant
M A T I F
Mayer, Brown & Platt
McMillan Binch
Milbank, Tweed, Hadley & McCloy
Mitsui, Yasuda, Wani & Maeda
Monis Software
Moody's Investors Service, Inc.
Morgan, Lewis & Bockius
Nauta Dutilh
Norton Rose
Ogilvy Renault
Osler, Hoskin & Harcourt
Price Waterhouse
Principia Partners
Punder, Volhard, Weber & Axster
Renaissance Software, Inc.
Reuters
Richards & O'Neil
Rogers & Wells
Rolfe & Nolan
S.W.I.F.T. sc
Schiff Hardin & Waite
Shearman & Sterling

Sidley & Austin
Simmons & Simmons
Simpson Thacher & Bartlett
Skadden, Arps, Slate, Meagher & Flom
Slaughter and May
SNS Systems Inc.
Standard & Poor's
Stikeman, Elliott
Stroock & Stroock & Lavan
Sullivan & Cromwell
Summit Systems Inc.
SunGard Capital Markets Inc.
Telerate Systems Inc./Dow Jones
Tory Tory DesLauriers & Binnington
Watson, Farley & Williams
Weil Gotshal & Manges
White & Case
Wilde Sapte

Total associate: 94

ISDA subscriber members

A/S Eksportfinans
AB Svensk Exportkredit
ABB Capital B.V.
American Express Company
American Honda Finance Corporation
Arab-Malaysian Merchant Bank Berhad
B. Metzler seel Sohn & Co. KGaA
Banc One Funds Management Company
Bank Nederlandse Gemeenten, nv
British Petroleum Company p.l.c.
Caisse Centrale Desjardins
Caisse Centrale Du Credit Immobilier de France
Cargill Financial Services Corporation
Council of Europe Social Development Fund
DePfa Bank (Deutsche Pfandbrief-Hypotheken)
Deutsche Bau- und Bodenbank
Deutsche Girozentrale - Deutsche Kommunalbank
Dow Chemical Company
DSL Bank, Deutsche Siedlungs-und Landesrentenbank
El Paso Energy Marketing Company
Electricite de France
Eskom
EUROFIMA
European Bank for Reconstruction & Development
European Investment Bank
Federal Home Loan Bank of Atlanta
Federal Home Loan Bank of Chicago
Federal Home Loan Bank of Pittsburgh
Federal Home Loan Mortgage Corporation
Finnish Export Credit Ltd.
Ford Motor Credit Company
General Electric Capital Corporation
Hydro-Quebec
IBM International Treasury Services Company
Int'l Bank for Reconstruction (World Bank)
Intel Corporation
John Nuveen & Co. Incorporated

Kingdom of Denmark
Kingdom of Sweden
Kreditanstalt Fur Wiederaufbau
Landeskreditbank Baden-Wuerttemberg (L-Bank)
Landwirtschaftliche Rentenbank
McDonald's Corporation
Ministere des Finances (Quebec)
Mobil Oil Corporation
New Zealand Debt Management Office
Nordic Investment Bank
Ontario Financing Authority
Ontario Hydro
Oresundskonsortiet
S.A. IPPA N.V.
Scoular Company
Siemens Aktiengesellschaft
Stichting Pensioenfonds ABP
Student Loan Marketing Association
Swedish National Housing Finance Corp.
Tachyon Partners
Tiger Management Corporation
Tokio Marine and Fire Insurance Co., Ltd.
TOTAL
Transnet Limited
Vitol S.A., Inc.

Total subscribers: 62
Total ISDA members: 341

ANNEX II: CREDIT DERIVATIVES DOCUMENTATION

ISDA has expanded the scope of its project to develop standard documentation for the OTC derivatives community to encompass credit derivatives. In an attempt to address legal and documentation risk for these products, we have produced a form of confirmation for credit default products applicable to non-sovereign entities. This document is attached as Exhibit A to this Annex. ISDA is currently working on a form to cover sovereign entities. It is also envisaging to draft standard wordings for total rate return swaps and for credit spread transactions.

The Credit Default Swap Confirmation is intended to be used as a template for OTC credit default transactions. It has been developed for use in conjunction with the 1992 ISDA Master Agreement, on the basis that the netting provisions of the Master Agreement apply to credit derivative transactions as to any other derivative transaction.

We also attach, for your information, a copy of our most recent netting opinion for Canada, which notes the permissibility of netting credit derivatives.

ANNEX III: ISDA'S "CREDIT RISK AND REGULATORY CAPITAL"