

Unregulated Financial Markets and Products

Consultation Report



OICU-IOSCO

**TECHNICAL COMMITTEE
OF THE
INTERNATIONAL ORGANIZATION OF SECURITIES COMMISSIONS**

MAY 2009

This paper is for public consultation purposes only. It has not been approved for any other purpose by the IOSCO Technical Committee or any of its members.

Foreword

The IOSCO Technical Committee is publishing this report of its Task Force on Unregulated Financial Markets and Products (Consultation Report) for public comment. This Consultation Report examines ways to introduce greater transparency and oversight in unregulated financial markets and products and improve investor confidence in, and the quality of, these markets. This Consultation Report makes recommendations about regulatory approaches that may be implemented with respect to securitisation and credit default swap markets and then goes on to discuss the broader unregulated financial markets and related products. Comments are sought on the content of the Consultation Report including issues identified, the scope and relevancy of the recommendations and the discussion of unregulated financial markets and products.

The Consultation Report will be finalised after consideration of comments received from the public.

How to Submit Comments

Comments may be submitted by one of the three following methods **on or before 15 June 2009**. To help us process and review your comments more efficiently, please use only one method.

1. E-mail

- Send comments to Greg Tanzer, Secretary General, IOSCO at the following email address UMP@iosco.org.
- **The subject line of your message should indicate “Public Comment on Consultation Report on Unregulated Financial Markets and Products.”**
- Please do not submit any attachments as HTML, GIF, TIFF, PIF or EXE files.

OR

2. Facsimile Transmission

Send a fax for the attention of Greg Tanzer to + 34 (91) 555 93 68.

OR

3. Post

Send your comment letter to:

Greg Tanzer
Secretary General
IOSCO
C / Oquendo 12
28006 Madrid
Spain

Your comment letter should indicate prominently that it is a “Public Comment on Consultation Report on Unregulated Financial Markets and Products.”

Important: All comments will be made available publicly, unless anonymity is specifically requested. Comments will be converted to PDF format and posted on the IOSCO website. Personal identifying information will not be edited from submissions.

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1 Overview and timing

- 1 This is the Consultation Report of IOSCO's Technical Committee (TC) about the work that has been undertaken by its Task Force on Unregulated Financial Markets and Products (TFUMP) co-chaired by the Autorité des Marchés Financiers (AMF) of France and the Australian Securities and Investments Commission (ASIC) of Australia.¹
- 2 This Consultation Report is being published for public consultation with the consultation period closing on 15 June 2009. Progress of the consultation will be tabled at the TC at its meeting in June 2009.

What has the Technical Committee asked TFUMP to achieve?

- 3 The Group of Twenty (G20) has called for a review of the scope of financial regulation with "a special emphasis on institutions, instruments and markets that are currently unregulated, along with ensuring all systemically-important institutions are appropriately regulated".²
- 4 Consequently, IOSCO announced on 25 November 2008, in support of G20 aims, that:³
 - (i) the TC's program to address the continuing market turmoil would focus on strengthening financial markets and investor protections; and
 - (ii) TFUMP would examine ways to introduce greater transparency and oversight to unregulated market segments, such as over-the-counter (OTC) markets for derivatives and other structured financial products.

TFUMP's mandate

- 5 The TC has endorsed TFUMP's approach of encouraging industry initiatives and in addition, recommending regulatory action designed to improve confidence in currently unregulated financial markets and products by promoting fair, efficient and orderly global financial markets. These steps are important to the recovery of the international financial system.
- 6 While the term 'unregulated financial markets and products' describes different markets and products depending on the jurisdiction, TFUMP has focused on systemically important markets and products that have featured prominently in the current financial crisis and are relevant to the restoration of confidence in international financial markets.⁴

¹ Members of TFUMP include regulators from: Brazil, Germany, Hong Kong, Italy, Japan, Mexico, the Netherlands, Quebec, Spain, the United Kingdom and the United States of America.

² *Declaration on the Summit of Financial Markets and the World Economy*, G20 Communiqué, 15 November 2008, available at http://www.g20.org/Documents/g20_summit_declaration.pdf.

³ *IOSCO Technical Committee Launches Task Forces to Support G-20 Aims*, IOSCO Press Release, 25 November 2008, available at <https://www.iosco.org/news/pdf/IOSCONEWS134.pdf>.

⁴ These markets and products may already be regulated in some jurisdictions.

- 7 The overall objective of TFUMP is to recommend ways to redefine the perimeter of regulation and the scope of intervention by regulators. As the interim recommendations of this Consultation Report go beyond the traditional distinctions, such as wholesale/retail, further work is needed to identify the appropriate criteria to be used to redefine the border between what has traditionally been considered regulated and unregulated.
- 8 Additional work may explore the regulatory consequences of a redefinition of the perimeter of the regulation, namely in terms of eligibility of assets, different types of investors, accounting classifications in relation to the work undertaken by IASB on the use of fair value accounting and the criteria for classification of products between the banking book and the trading book.
- 9 The Consultation Report identifies in general terms possible areas for initial and immediate regulatory actions that could be undertaken within the context of the current market situation. The analysis does not expand on the broader systemic risks surrounding the unregulated financial markets and products sector and the means to mitigate any such risk.
- 10 In its work, TFUMP has had regard initially to two systemically important markets, securitisation and credit default swaps (CDS). The interim recommendations contained in this Consultation Report are intended to address issues of immediate concern with respect to (i) securitised products, including asset-backed securities (ABS), asset-backed commercial paper (ABCP) and structured credit products such as collateralised debt obligations (CDOs), synthetic CDOs, collateralised loan obligations (CLOs) and (ii) CDS, and are aimed at encouraging confident participation of investors in unregulated financial product and market sectors.
- 11 On the basis of the interim recommendations identified for these markets, the Consultation Report identifies the need for further consideration of the other unregulated financial markets and products before general recommendations can be developed. However, development of the general recommendations should not delay finalization and implementation of any recommendations relating to securitisation and CDS.

2 Executive summary

Complexity of issues, but need to recognise contribution regulation can play

- 12 The global financial crisis has not yet run its full course. Regardless, much has already been written about its causes with most analysts agreeing that the causes are complex, and are the culmination of years of economic and social policy choices. Cause and effect have not yet been fully dissected and given that the effects have spread beyond the financial economy to the real economy, further dislocations may transpire that have not yet been subject to analysis.
- 13 Acknowledging the complexity of the issues involved, this Consultation Report has identified some areas where regulation could play an important role in restoring confidence to international financial markets. The recommendations made are aimed at supporting investor confidence in these markets and at improving the functioning, integrity and oversight of unregulated financial markets and products.
- 14 The recommendations referred to in this Consultation Report were developed by initially examining the securitisation and CDS markets.
- 15 Why securitisation and CDS?
 - (a) These markets are critically important to the availability of credit and the restoration of international capital flows;
 - (b) These markets are international; and
 - (c) The examples illustrate different concerns. Securitisation issues relate to secondary market transparency, initial and ongoing disclosure, due diligence, conflicts of interests, incentives and investor suitability. CDS are bilateral contracts designed for credit hedging or speculative investment and issues relate to counterparty risk, operational risk and market transparency.
- 16 In proposing interim recommendations, TFUMP acknowledges and encourages industry initiatives to strengthen the operation of the securitisation and CDS markets outlined in this Consultation Report, but recognises that industry initiatives have limits. Participation is typically voluntary and the standards lack regulatory status and consistent implementation. Moreover, neither industry initiatives nor market discipline averted the deficiencies addressed in this Consultation Report. Accordingly, these initiatives should, where appropriate, be supplemented by regulation.
- 17 Given the focus of this Consultation Report and the need for immediate action, TFUMP has not considered the broader macro-economic policy issues surrounding the securitisation and CDS markets such as whether the ‘originate to distribute model’ and trading in OTC CDS have increased systemic risk and made the financial system more unstable and if so, whether more fundamental changes are required.

Recommended regulatory changes for securitisation and credit default swaps

- 18 Analysis of these markets has identified a number of potential improvements in regulatory oversight that would assist in restoring investor confidence and improve market quality. This analysis has been informed by the wealth of commentary and analysis on these sectors produced in other forums.⁵
- 19 A summary of the interim recommendations for securitisation is set out at the end of Chapter 4 of this Consultation Report. A summary of the interim recommendations for CDS is set out at the end of Chapter 5 of this Consultation Report.

Implementation of Recommendations

- 20 Giving due consideration to the roadmap of the G20 (including the G20 Working Group on Enhancing Sound Regulation and Strengthening Transparency) and the most recent communiqué from the G20 London Summit,⁶ IOSCO will consider which additional standards are necessary for the purpose of consistent implementation by national regulators of final recommendations.

Discussion of possible general recommendations that may be drawn

- 21 The analysis of the CDS markets can be used to inform general recommendations for other unregulated financial markets and products. The TC will give consideration to whether some general recommendations about adjustments to the perimeter of regulation relating to standardised and non-standardised OTC derivative products can be drawn from the study of CDS and public comment.
- 22 A discussion of standardised⁷ and non-standardised OTC derivative products can be found in Chapter 6.

What is not covered and why

- 23 This Consultation Report has focussed on measures that can be taken immediately to support confidence in, and promote the fairness, efficiency, and orderliness of, international financial markets, informed by recent experiences. We are aware that commentary suggests that other parameters also need review:

Issue	Reports
Prudential standards applicable to the issue of, or	FSF, Report of the Financial Stability Forum on Enhancing Market and Institutional Resilience, 7 April 2008

⁵ See *References* at the end of this Consultation Report.

⁶ A copy of the G20 communiqué from the London Summit may be obtained from http://www.g20.org/Documents/g20_communique_020409.pdf

⁷ Standardised to the extent they can be accepted by a central counterparty (CCP) (i.e., CCP-eligible).

Issue	Reports
investment in, unregulated financial markets and products	FSF, Report of the Financial Stability Forum on Enhancing Market and Institutional Resilience – Follow up on Implementation, 10 October 2008
	Group of Thirty, Financial reform: A Framework for Financial Stability, 15 January 2009
	IOSCO Technical Committee, <i>Report on the Subprime Crisis</i> , May 2008, pp16-19
Accounting treatment and accounting valuation of unregulated products	Bank for International Settlements, Fair value measurement and modelling: an assessment of challenges and lessons learned from the market stress, Basel Committee on Banking Supervision, June 2008
	Senior Supervisors Group, Observations on Risk Management Practices during the Recent Market Turbulence, 6 March 2008
	IOSCO Technical Committee, <i>Report on the Subprime Crisis</i> , May 2008, pp14-16
Conduct of hedge funds in unregulated financial markets and products	Bank for International Settlements, <i>Credit Risk Transfer: Developments from 2005 to 2007</i> , The Joint Forum, July 2008
	IOSCO Technical Committee, Hedge Funds Oversight Consultation Report, March 2009

- 24 There is a question of whether any regulatory changes should be made until these other issues have been resolved. Action on these TC recommendations will need to have regard to recommendations of these other reports and developments. Consideration should also be given to recommendations by other working groups such as the G20 working group on Enhancing Sound Regulation and Strengthening Transparency.

IOSCO's Technical Committee Standing Committees

- 25 Further, existing IOSCO Standing Committees⁸ and Task Force mandates cover aspects of issues that relate to unregulated financial markets and products. The interim recommendations made in this Consultation Report do not extend to issues being considered by the IOSCO Standing Committees. The Standing Committees have, however, reviewed and been consulted on this Consultation Report.

⁸ The TC Standing Committees are Multinational Disclosure and Accounting (TSC1), Regulation of Secondary Markets (TCSC2), Regulation of Market Intermediaries (TCSC3), Enforcement and Exchange of Information (TCSC4), and Investment Management (TCSC5).

26 The relevant IOSCO Standing Committees and Task Force mandates are:

Table 1: IOSCO’s Technical Committee Standing Committees and Task Force mandates

IOSCO Entity	Mandate
Technical Committee Standing Committee 1 on Multinational Disclosure and Accounting (TCSC1)	<p>Issuer Transparency and Investor Due Diligence</p> <ul style="list-style-type: none"> • Consult with market participants regarding typical structures and disclosure practices (including disclosure practices for the risks associated with underlying assets) for private placements of ABS; compare to disclosure requirements pertaining to public offerings and trading of ABS • Review IOSCO issuer disclosure standards and principles re applicability to public issuance of ABS • Develop principles regarding disclosure requirements for public offerings of ABS if existing standards and principles are inapplicable to such offerings • Review degree to which existing internal controls and due diligence documentation procedures regarding the ownership rights attached to the assets underlying publicly traded securitised products protect the interests of investors in these products <hr/> <p>Firm Risk Management and Prudential Supervision</p> <ul style="list-style-type: none"> • Consider whether additional guidance and disclosure relating to off-balance sheet entities would be valuable to investors; TCSC1 will provide input to IASB in conjunction with its work in this area during 2008-2009 <hr/> <p>Valuation</p> <ul style="list-style-type: none"> • Consider whether additional guidance and disclosure related to measurement at fair value would be valuable in meeting the needs of investors; TCSC1 will provide input to the IASB in conjunction with its work in this area during 2008-2009
Technical Committee Standing Committee 2 on Regulation of Secondary Markets (TCSC2)	<p>Post-Trade Transparency for Structured Finance Products</p> <ul style="list-style-type: none"> • With input from the financial service industry, examine the viability of a secondary market reporting system for different types of structured finance products, focusing on whether the nature of structured finance products lends itself to such reporting and the costs and benefits of such a system

IOSCO Entity	Mandate
Technical Committee Standing Committee 3 on Regulation of Market Intermediaries (TCSC3)	Firm Risk Management and Prudential Supervision <ul style="list-style-type: none"> • Review best practices developed by originators and sponsors re due diligence and risk management practices for assets originated for transfer off their balance sheets. Report to TC on TCSC3’s opinion of adequacy of these best practices • Monitor work and review any report of SSG on firm risk management and determine further work warranted by IOSCO • Survey members’ experience on liquidity risk management and liquidity standards to assist and supplement the work being undertaken jointly with the Basel Committee on Banking Supervision • Review capital charges for risks in the trading book
Technical Committee Standing Committee 3 on Regulation of Market Intermediaries (TCSC3) & Technical Committee Standing Committee 5 on Investment Management (TCSC5)	Firm Risk Management and Prudential Supervision <ul style="list-style-type: none"> • Undertake a study of the internal control systems of financial firms, including asset managers, in different IOSCO jurisdictions and develop principles to address any concerns identified <hr/> Valuation <ul style="list-style-type: none"> • Explore whether, as a matter of internal control, registered intermediaries and investment advisers avail themselves of practitioners who are skilled/trained enough to model fair valuation adequately in illiquid market conditions
Technical Committee Standing Committee 5 on Investment Management (TCSC5)	Issuer Transparency and Investor Due Diligence <ul style="list-style-type: none"> • Review: degree that investment managers who offer collective investment schemes to retail investors have invested in structured finance products; type of due diligence typically conducted when making these investments; degree to which these investment managers have been affected by the current market turmoil; and if and how investment managers have shielded retail investors from the effects of their exposure to losses from structured finance products and any broader market implications such activity may have
Task Force on Credit Rating Agencies (CRAs)	CRAs <ul style="list-style-type: none"> • Assess the implementation of the May 2008 IOSCO CRA Code and to present related recommendations on mechanisms for greater oversight cooperation and information sharing among regulators

IOSCO Entity	Mandate
IOSCO Task Force on Implementation of the IOSCO Objectives and Principles of Securities Regulation (ITF)	CPSS & IOSCO Recommendations for Central Counterparties • ITF has noted the need to review the CPSS & IOSCO <i>Recommendations for Central Counterparties</i> ⁹ in light of industry developments

27 TCSC1, TCSC2, TCSC3 and TCSC5 have provided input to TFUMP and their comments are reflected in this Consultation Report.

⁹ *Recommendations for Central Counterparties*, Joint Report of the Committee on Payment and Settlement Systems and the Technical Committee of IOSCO, November 2004, available at <https://www.iosco.org/library/pubdocs/pdf/IOSCOPD176.pdf>.

3 What happened?

Key causes of the crisis

What has happened in unregulated markets generally?

- 28 A combination of complex macroeconomic circumstances set the scene for the global financial crisis. As Claudio Borio of the Bank for International Settlements (BIS) has said, “the turmoil is best seen as a natural result of a prolonged period of generalised and aggressive risk-taking, which happened to have the sub-prime market at its epicentre... it represents the archetypal example of financial instability with potentially serious macroeconomic consequences that follows the build-up of financial imbalances in good times”.¹⁰
- 29 Most analysis points to the ultimate 'cause' of the global financial crisis being a coincidence of many years of strong, stable growth and low inflation; exchange rate and balance of payments imbalances that saw savings of many developing countries and energy exporters transferred to more sophisticated financial systems such as the US and UK for investment; demographic transition creating vast pools of retirement savings in some economies; and the inherent pro-cyclical tendencies in finance. This resulted in financial businesses and investors taking on more gearing, bidding up asset prices and reducing risk margins to make short-term profits. Eventually markets had gone too far, mispricing and taking on too much risk – sub-prime was just where the problems crystallised first.
- 30 Analyses of the failures and possible causes of the global financial crisis are continuing, for example by the IMF, the World Bank, the Financial Stability Forum, the US Senate Congressional Oversight Panel, the Group of Thirty (G30), the G20 and by national regulators. There are also industry and regulatory initiatives currently in progress but incomplete, for example:
- (a) Basel Committee capital adequacy amendments;
 - (b) CCP developments; and
 - (c) Aggregation of post-trade data initiatives.¹¹
- 31 Regulators are cognisant that the causes and consequences of the crisis are still unfolding, and it is perhaps too early to formulate a concrete agenda of global regulatory reform. Notwithstanding the benefits of securitisation and CDS, there are those who believe that the complexity, opaqueness and risks embedded into certain OTC structured credit derivatives and CDS have increased rather than decreased systemic risk in the market and that these concerns require a fundamental rethinking of how to structure and regulate those markets.¹²

¹⁰ Borio, Claudio, The financial turmoil of 2007-?: a preliminary assessment and some policy considerations, BIS Working Papers No. 251, March 2008.

¹¹ For example, one initiative is that The Depository Trust and Clearing Corporation (DTCC) has begun publishing aggregate CDS market data from its Trade Information Warehouse.

¹² Speech by Paul Volcker at the New York Economic Club, 8 April 2008, available at http://econclubny.org/files/Transcript_Volcker_April_2008.pdf; and Christopher Whalen, *What is to*

32 It is nevertheless worthwhile examining two key product areas – securitisation and CDS – with a view to making recommendations that regulators could implement to help promote transparency, market integrity and market quality. Such an analysis is then able to provide guidance for general recommendations regarding regulatory changes to other unregulated financial markets and products.

Why have we chosen securitisation and CDS as two examples of unregulated markets?

33 The primary reason is because of the great significance of securitisation and CDS to credit availability in the real economy and their contribution to the management of individual and systemic risks. A second reason is that both securitisation and CDS grew rapidly in the build up to the global financial crisis and featured prominently in the onset of the crisis.

34 Securitisation involves packaging receivables or other financial instruments and issuing securities linked to those receivables or instruments to investors. Securitisation allows banks to move assets and liabilities off-balance sheet and free up capital for lending and other activities. It creates competition in the lending market between banks and non-bank financiers resulting in reduced borrowing costs for consumers.

35 Securitisation may not be wholly unregulated in any jurisdiction and in some jurisdictions will be heavily regulated for some activities. For example, in the United States, disclosure requirements apply whenever an issuer makes a public offering, regardless of whether the securities are listed or traded and irrespective of the sophistication of the investor. In other jurisdictions, disclosure requirements may apply only when securities are listed on a regulated market or offered to retail or ‘unsophisticated’ investors. For the purposes of this Consultation Report, we will discuss the whole securitisation market. Where this Consultation Report makes a recommendation in relation to regulation of a product already regulated in a particular jurisdiction, that jurisdiction may wish to consider whether the aim of recommendation is met by their current regulatory settings.

36 The absence of a well-functioning securitisation market will impact consumers, banks, issuers and investors. The price of credit is likely to be higher for the consumer and the availability scarcer. Banks will no longer have a tool to reduce risk and diversify their financing sources.

37 More broadly, the current absence of an efficient and smoothly functioning securitisation market has substantial implications for continued economic growth. The Global Joint Initiative¹³ in its report (the *GJI Report*)¹⁴ estimates that banks

Be Done With Credit Default Swaps, Institutional Risk Analytics, at the American Enterprise Institute 23 February 2009, http://www.rcwhalen.com/pdf/cds_aei.pdf.

¹³ The Global Joint Initiative is comprised of the American Securitization Forum, Securities Industry and Financial Markets Association, Australian Securitisation Forum and European Securitisation Forum.

¹⁴ ASF, SIFMA, AuSF, ESF, Restoring Confidence in the Securitization Markets, 3 December 2008.

may fail to meet US\$2 trillion of demand for credit origination over the next three years in the absence of well-functioning securitisation markets.

- 38 Similarly, the CDS market allows CDS buyers and sellers, such as banks, institutional investors, hedge funds, sovereign entities and other market participants to adjust economic exposure to changes in the perceived credit risk of a referenced obligation and related interests, and to purchase protection against the risk of a reference entity becoming insolvent or defaulting on a payment obligation. The reference entity can be a single debt security or entity, including a country (single name reference entity) or the CDS can reference a number of entities (CDS index). Another important function of the CDS market is that it acts as a price-discovery mechanism for the creditworthiness of the reference entity, and can affect the price of related interests including debt and equity securities issued by the entity. Credit derivative spreads are also used as a benchmark for lending rates and for assessing the creditworthiness of an entity and it is therefore important that they accurately reflect the risks they are intended to reflect. However, as noted by the recent G30 report, in addition to CDS serving a “valuable risk transfer function, a large speculative element has emerged.”¹⁵
- 39 Enhancing transparency and liquidity will lead to more efficient markets and better price discovery thus reducing volatility and cost of credit protection. Concerns about market manipulation and insider trading have also been raised.¹⁶
- 40 Securitised products and CDS have different risk characteristics. CDS risks are linked to the swap counterparty and to the underlying reference entity(s), while the risks of securitised products are linked to the quality of the underlying receivables or financial instruments and the collateral which secures those obligations. Securitised products are also highly structured involving many participants in the chain from origination to issuance, while CDS are bilateral contracts which may be standardised to an extent where they can be exchange traded and centrally cleared. CDS also pose counterparty risk questions that securitised products generally do not. The risk profiles of securitised products and CDS may converge in cases where CDS are written on securitised products such as MBS¹⁷ and CDOs.
- 41 An examination of both products will assist the development of general recommendations for application across unregulated financial markets and products.

¹⁵ Group of Thirty, Financial reform: A Framework for Financial Stability, 15 January 2009, at p53.

¹⁶ Testimony of Erik Sirri, Director, Division of Trading and Markets, US SEC, before the House Committee on Agriculture, 20 November 2008; Testimony of Chairman Christopher Cox, US SEC, before the Committee on Banking, Housing and Urban Affairs, United States Senate, 23 September 2008; International Herald Tribune, *US examines possible insider trading in credit-default swaps*, Bloomberg News, 25 June 2007.

¹⁷ Mortgage-backed securities.

4 What are the issues with securitisation?

- 42 While we have adopted the three categories used by McKinsey¹⁸ to analyse the issues with securitisation, we have independently grouped certain issues under these categories and canvassed additional issues not referred to in their report. The three categories are:
- (a) Wrong incentives;
 - (b) Inadequate risk management practices; and
 - (c) Regulatory structure and oversight issues.
- 43 The discussion that follows identifies issues falling within these categories, discusses them briefly and proposes interim recommendations for regulatory responses designed to enhance confidence in securitisation markets.

Wrong incentives

- 44 The originate-to-distribute model whereby receivables were originated with the intention of being securitised posed significant risks that were not adequately controlled within the market and this has resulted in a loss of confidence in the securitisation process. One of the contributing factors to this loss of confidence was a financial rewards structure that is thought to have caused some participants to lower their underwriting standards with regard to the securitised assets (e.g., securitising sub-prime mortgages into a CDO and then structuring synthetic CDOs on those CDOs) in order to increase their inventory of securitised products.
- 45 One of the ways to correct flaws in the originate-to-distribute model is through a thorough reconsideration of the incentive structure in the securitisation value chain.
- 46 This chapter of the Consultation Report considers issues that have been identified as contributing to the lack of alignment of incentive structures in the securitisation value chain. By value chain we are referring to participants in the securitisation process including mortgage brokers, originators, sponsors, underwriters, issuers,¹⁹ distributors, sales brokers, managers, servicers of asset pools, experts²⁰ and rating agencies.
- 47 While the originate-to-distribute model when managed appropriately can facilitate credit intermediation and diversify risk, the global financial crisis has exposed a number of flaws in the model, including:
- (a) the erosion of credit underwriting standards;
 - (b) an over-reliance on the ratings of CRAs;

¹⁸ McKinsey & Company, *The Future of U.S. Financial Regulation and its Implication*, 15 December 2008.

¹⁹ An issuer is a person who offers its securitised products to investors.

²⁰ An expert is a person whose profession or reputation gives authority to a statement made by him or her.

- (c) concentrations of pipeline credit risk, based on assumptions regarding market liquidity and redistribution capabilities;
- (d) retention of what turned out to be badly structured and overrated tranches of structured products, in order to drive deal flow; and
- (e) barriers to, and a lack of, effective due diligence and risk analysis/management by investors, including those viewed, under existing regulation, as ‘sophisticated’.²¹

48 Different studies of the sector²² point to incentive structures that would support the conclusion that:

- (a) Originators, sponsors, issuers and underwriters may not have had sufficient incentives to perform appropriate levels of due diligence of underlying asset pools or to employ robust underwriting standards;²³
- (b) Servicers of asset pools may have had insufficient incentive to prudently perform their obligations under their servicing agreements and may have had different incentives from those of the investors;²⁴ and
- (c) Originators and mortgage brokers may have focussed on the origination of securitised products without due regard to longer-term performance of the products encouraged by short-term incentive remuneration structures.²⁵

49 These developments have contributed to sharp declines in asset quality in some securitisation markets that have quickly undermined confidence in global markets. As noted in the *GJI Report*:

“Deteriorating loan underwriting standards undermined underlying asset quality. For instance, \$47 billion in “covenant-lite” leveraged loan transactions took place in the US between January and May 2007 alone, more than twice the level of covenant-lite issuance in all of 2006.”²⁶

Industry initiatives that address wrong incentives

50 Industry initiatives which assist in addressing these wrong incentive issues include:

²¹ Group of Thirty, *Financial reform: A Framework for Financial Stability*, 15 January 2009, at p48; *Report on the Subprime Crisis - Final Report*, Report of the Technical Committee of IOSCO, May 2008, at p12, available at <https://www.iosco.org/library/pubdocs/pdf/IOSCOPD273.pdf>. Basel Committee on Banking Supervision Consultative Document *Proposed enhancements to the Basel II Framework*, January 2009, at p11.

²² See *References* listed at the conclusion of this Consultation Report for the source of these studies.

²³ IOSCO Technical Committee, *Report on the Subprime Crisis*, May 2008, at p6.

²⁴ Recommendation 4 of the *GJI Report*, at p60.

²⁵ IOSCO Technical Committee, *Report on the Subprime Crisis*, May 2008, at p6.

²⁶ *GJI Report*, at p4.

- (a) *Recommendation 2 of the GJI Report* - Establish core industry-wide market standards of due diligence disclosure and quality assurance practices for RMBS;²⁷
- (b) *Recommendation 3 of GJI Report* – Strengthen and standardise the representations and warranties as well as repurchase procedures for residential mortgage-backed securities (RMBS);²⁸
- (c) *Recommendation 4 of GJI Report* – Develop industry-wide standard norms for RMBS servicing duties and evaluating servicer performance;²⁹
- (d) *Recommendation 5 of GJI Report* – Expand and improve independent, third-party sources of valuations and improve the valuation infrastructure and contribution process for specified types of securitisation and structured products; and³⁰
- (e) *Recommendation 6 of GJI Report* – Restore market confidence in CRAs by enhancing transparency in the CRA process.³¹

51 Recommendation IV-12a of the CRMPG-III Report recommends that large integrated financial intermediaries review the systemic risk implications of incentives and take remedial actions as an integral component of each firm's risk management practices.³²

Possible regulatory initiatives that address wrong incentives

52 Given the magnitude of the crisis and the need to rebuild confidence, it is unlikely that industry initiatives alone will be sufficient to restore transparency, market integrity and market quality. A measured regulatory response will be also necessary to assist in restoring confidence.

53 Issues in the securitisation market could be addressed with regulatory responses either in addition to, or in support of current industry initiatives. The following possible regulatory responses are for illustrative purposes only and are not intended to be exhaustive.

- (a) CRAs – eliminate incentive to overstate the quality of products they rate:

²⁷ *GJI Report*, at p56. This recommendation is to ensure that information on securitised products issued into the market is sufficiently reliable to judge the quality of the underlying assets and origination practices, enhanced disclosure must be applied at two key pressure points in the path to securitising loans: (1) the point at which the loans are originated and (2) the pre-securitisation process.

²⁸ *GJI Report*, at p58. This recommendation states that the obligation on the part of an originator to repurchase an underperforming asset that breached a representation or warranty can be an effective mechanism for ensuring alignment of interests of the investor and originator.

²⁹ *GJI Report*, at p60.

³⁰ *GJI Report*, at p60.

³¹ *GJI Report*, at p63. This recommendation stems from interviews that highlighted how a combination of investor over-reliance on CRAs and a failure by the market to understand the limits of CRA ratings combined to aggravate participants' miscalculation of potential downside risk to the securitisation and structured credit market.

³² Counterparty Risk Management Policy Group III, *Containing Systemic Risk: The Road to Reform*, 6 August 2008 at pp 27 and 89-90.

- Require CRAs to comply with IOSCO's Code of Conduct Fundamentals for Credit Rating Agencies.³³
- (b) Originators – ensure appropriate levels of due diligence of underlying asset pools:
- Impose prospectus or disclosure obligations;
 - Impose minimum underlying asset eligibility criteria;
 - Mandate minimum due diligence or risk practices to be undertaken;
 - Enhance transparency through disclosure by issuers of all checks, assessments and duties that have been performed or risk practices that have been undertaken by the underwriter, sponsor, and/or originator;³⁴
or
 - Impose a ‘skin in the game’ requirement, for example, by way of acquisition of certain classes of securitised products or providing debt or equity to the structure;³⁵
- (c) Servicers or managers – ensure management services are performed efficiently:
- Mandate minimum standards for managing/servicing of a portfolio;
 - Mandate a continuing disclosure obligation requiring disclosure of risk management practices; or
 - Link remuneration to performance of service;
- (d) Sales and mortgage brokers – ensure quality of securitised product remains high:
- Link remuneration to the quality of the mortgage (for mortgage brokers) or quality of the asset pool (securitised product sales).

Technical Committee interim recommendation #1

- 54 In forming the interim recommendations below, TFUMP considered that originators should have an incentive to ensure that the quality and risks of the underlying asset pool are transparent to investors. Originators are also best placed

³³ The IOSCO Code of Conduct Fundamentals for Credit Rating Agencies has been revised and the Task Force on Credit Rating Agencies has developed recommendations on how to monitor the implementation of the revised Code of Conduct. See IOSCO Media Release 04/2009 of 12 March 2009 available at <https://www.iosco.org/news/pdf/IOSCONEWS138.pdf>.

³⁴ Where there is more than one originator, only the checks, assessments and duties that have been performed by the originators who originate a material or cumulatively material portion of the pool assets should be disclosed.

³⁵ On 1 October 2008, the European Commission proposed amendments to the European Capital Requirement Directive which would restrict regulated institutions from taking on an exposure to a securitised product unless originators or sponsors retain (or have issued an explicit commitment to the institution to maintain) a material net economic interest in the relevant transaction which must not be less than 5% of the positions having the same risk profile as the one that the investing institution is exposed to. This will apply to exposures incurred after 1 January 2011. Recommendation 13b of the G30 Report at p49 also provides that regulators should require regulated financial institutions to retain a meaningful portion of their credit risk they are packaging into securitized and other structured credit products.

to conduct all checks, assessments, including risk management, and necessary duties to investors on the underlying asset pool. The disclosure of such efforts may have the practical effect of requiring originators to conduct proper checks, assessments and perform the necessary duties as investors may be less likely to purchase securitised products where the disclosure indicates that inadequate duties and risk management efforts had been undertaken in respect of the relevant asset pool. Imposing an obligation on the issuer rather than directly on the originator could be more easily implemented by most current regulatory regimes.

TC interim recommendation #1:

IOSCO encourages industry responses in the securitisation market and recommends the following regulatory responses:

- 1. Consider requiring originators and/or sponsors to retain a long-term economic exposure to the securitisation;³⁶*
- 2. Enhance transparency through disclosure by issuers of all checks, assessments and duties that have been performed or risk practices that have been undertaken by the underwriter, sponsor, and/or originator;³⁷*
- 3. Require independence of experts³⁸ used by issuers; and*
- 4. Require experts to revisit and maintain reports over the life of the product.*

Inadequate risk management practices

55 The market for securitised products has been adversely impacted by concerns about the quality and extent of information provided to investors. The quality of the information may limit the ability of investors to accurately assess and price their investments. The *GJI Report* found that the highest priority issues for restoring confidence in the securitisation market included:

- (a) Improving disclosure of information on RMBS; and
- (b) Enhancing transparency with regard to underwriting and origination processes.³⁹

56 These recommendations reflect survey information that disclosed that, particularly in relation to non-prime RMBS, respondents had lower than moderate satisfaction with the quality of information on issue and throughout the life of the product.

57 The G30 also considered as a core recommendation that the disclosure and dissemination regime for asset backed and other structured fixed-income financial products should be enhanced.⁴⁰

³⁶ The economic exposure may be to the securities or some other risk exposure to the long-term viability of the product. This has been described as the ‘skin-in-the-game’ requirement.

³⁷ Where there is more than one originator, only the due diligence efforts of originators who originate a material or cumulatively material portion of the pool assets should be disclosed.

³⁸ Dependent on the asset class, an expert may include a valuer or property expert.

³⁹ *GJI Report*, at p42.

- 58 As noted by the Counterparty Risk Management Policy Group (CRPMGIII), even with disclosure in the underlying documents, the characteristics of certain securitised products and the risk of loss associated with them were not fully understood by many market participants. This lack of comprehension was even more pronounced when applied to CDOs, CDOs squared and related instruments which contained high levels of embedded leverage.⁴¹
- 59 The TC's *Report on the Subprime Crisis* also found that a number of firms permitted CRA ratings to serve as a substitute for their own risk modelling and internal controls – in essence ‘outsourcing’ their own internal risk management to the CRAs.⁴²
- 60 In this regard, improved information disclosure and dissemination to investors may not be effective if investors do not undertake, or do not have the capabilities to undertake, appropriate risk assessment and management of the securitised products they acquire.⁴³ The over-reliance on the ratings of CRAs can be seen as symptomatic of the failure by some investors to adequately assess and price risk (including the inadequacy of risk models).⁴⁴
- 61 Market participants’ ability to evaluate the risks of structured products was further complicated by the proprietary nature of originators’ models, which in certain cases depended on hypothetical inputs and correlations among products due to a lack of historical observed data. There is increased recognition that risk models have not been effective and need to be reconsidered and improved.⁴⁵
- 62 One way of mitigating inadequate risk management practices would be by imposing an obligation on distributors to ensure the product being sold is suitable for the financial requirements and risk profile of the investor. Additionally,

40 Recommendation 17 of Group of Thirty, *Financial reform: A Framework for Financial Stability*, 15 January 2009, at p55.

41 Counterparty Risk Management Policy Group III, *Containing Systemic Risk: The Road to Reform*, 6 August 2008 at p53.

42 IOSCO Technical Committee, *Report on the Subprime Crisis*, May 2008, at p13.

43 This point also applies in situations where investors purchase CDS protection on a securitised product.

44 IOSCO Technical Committee, *Report on the Subprime Crisis*, May 2008, at p12. See also the proposed amendments to the European Capital Requirements Directive which include increased risk management requirements for regulated institutions before they can invest in securitised products. Should an institution fail these requirements a risk weight of 1250% will be applied to these positions. The Basel Committee on Banking Supervision has also proposed enhancements to the Basel II framework which include the requirements for banks to meet specific operational criteria. See Bank for International Settlements, *Consultative Document, Proposed enhancements to the Basel II framework*, Basel Committee on Banking Supervision, January 2009, at p4.

45 See “models as a source of risk” in *The Financial Crisis and the Failure of Academic Economics*, Lux et al. (based on discussions at the 98th Dahlen Workshop 2008) available at http://www.debtdeflation.com/blogs/wp-content/uploads/papers/Dahlem_Report_EconCrisis021809.pdf; *The Collapse of Risk Management and Bailouts – Predicting Uncertainty is, well, not possible*, Taleeb (September 2008) available at <http://socialmode.com/2008/09/18/the-collapse-of-risk-management-and-bailouts-predicting-uncertainty-is-well-not-possible/>; and *The Gaussian Cupola – The Formula That Almost Killed Wall Street*, Simon available at http://www.wired.com/techbiz/it/magazine/17-03/wp_quant?currentPage=1.

consideration could be given to the re-evaluation of ‘sophisticated investor’ standards in order to better identify the investors who are effectively equipped to make an independent investment choice. In this regard, the CRMPG-III report recommended establishing standards of sophistication for all market participants in high-risk complex financial instruments that would capture the objective of ensuring that all participants should be capable of assessing and managing the risk of their positions.⁴⁶

Industry initiatives that address inadequate risk management practices

63 Industry organisations have recommended disclosure initiatives to increase and enhance initial and on-going pool information on RMBS into a more accessible and standardised format.⁴⁷ In particular, they recommend:

- (a) Standardised definitions and calculation methodologies for credit features;
- (b) Disclosures of defaults and foreclosures;
- (c) More qualitative information about the underlying asset pool;
- (d) Standard key product feature data tapes or other format accessible internationally to promote comparability;
- (e) Enhanced ongoing reporting of performance over the life of the product; and
- (f) Establishment of industry-wide market standards of due diligence disclosure and quality assurance practices for RMBS.

64 On 19 February 2009, the European Securitisation Forum released the voluntary RMBS Issuer Principles for Transparency and Disclosure (ESF Principles).⁴⁸ The ESF Principles will apply to disclosure of information by issuers to investors and other market participants both (a) pre-issuance, and (b) post-issuance, on a regular reporting and ongoing basis. The aim of the ESF Principles is to establish a standard of consistency, transparency and data accessibility to be expected by investors, and to enhance comparability of reporting across Europe.⁴⁹

65 It is unlikely that these disclosure initiatives alone will restore confidence in the securitisation market. As the *GJI Report* notes:

“Enhanced disclosure of information on underlying assets and origination practices will in the future serve to increase market participants’ ability to make good judgments around risks. Market perceptions of how much due diligence is required in order to effectively participate in the securitization and structured credit markets have changed markedly since the onset of the current

⁴⁶ Counterparty Risk Management Policy Group III, *Containing Systemic Risk: The Road to Reform*, 6 August 2008, at p58.

⁴⁷ Recommendation 1 of *GJI Report*, at p55. On 17 March the Japan Securities Dealers Association published the self regulatory organisation rules in relation to the disclosure format for securitised products which will take effect from 1 June.

⁴⁸ The Principles are living documents that will evolve to reflect market developments. It is expected that further improvements will be added in 2009.

⁴⁹ This work is part of the *Ten Industry Initiatives to Increase Transparency in the European Securitisation Markets* released by nine European and global trade associations. See also the ASF's Project RESTART, <http://www.americansecuritization.com/story.aspx?id=2657>.

crisis. Greater disclosure will also promote more efficient market-based decision making by allowing for more accurate differential pricing of structured credit. To be effective, these recommendations must target those products and asset classes where current market practices are most lacking. But their effectiveness also depends on the willingness of all to learn from the current crisis and implement the kind of measures that better, more accessible and reliable information will allow.”⁵⁰

Possible regulatory initiatives that address inadequate risk management practices

- 66 Given the magnitude of the crisis, it is unlikely that industry initiatives alone will be sufficient to restore market integrity and market quality. A measured regulatory response will also be necessary to assist in restoring confidence.
- 67 These issues could be addressed with regulatory responses either in addition to, or in support of current industry initiatives. The following possible regulatory responses are for illustrative purposes only and are not intended to be exhaustive.
- (a) Mandate minimum levels of inquiry or due diligence, stress testing and compliance checks by issuers, underwriters, sponsors and/or originators;
 - (b) Mandate disclosure of due diligence efforts, stress testing and compliance checks by issuers, underwriters, sponsors and/or originators;
 - (c) Mandate initial and ongoing disclosure by issuers of information about underlying asset pool performance;
 - (d) Mandate investor suitability requirements for more complex securitised products; and
 - (e) Encourage the development of alternative means for investors to perform their risk evaluations.
- 68 TCSC1 is currently developing disclosure principles for public offerings of asset-backed securities. TFUMP has had regard to that work in developing the interim recommendations in this Consultation Report.
- 69 In the TC’s *Report on the subprime crisis*, it was found that:⁵¹
- “... structured finance transactions often involve securities and investment vehicles that are unique products traded among a small number of institutional investors. Consequently, the price discovery mechanisms of these products are not always as developed as might be the case with securities and debt instruments traded on a public exchange or even on an over-the-counter market with public reporting requirements.”
- 70 It may be helpful to analyse whether structured products require post-trade transparency, which may assist for example with price formation, efficient functioning of markets and valuations. TFUMP notes that TCSC 2 is considering

⁵⁰ *GJI Report*, at p54.

⁵¹ IOSCO Technical Committee, *Report on the Subprime Crisis*, May 2008, at p10.

this issue. TFUMP also notes global commercial initiatives⁵² and encourages industry to consider valuation issues that arise.

TC interim recommendation #2

- 71 In forming the interim recommendations below, TFUMP considered the provision of quality disclosure as fundamental for investors to understand and properly manage the risks attached to securitised products.
- 72 There are indications that distributors have been recommending and selling securitised products which, given the opaque risks, were not suitable for the financial requirements or circumstances of the investor, for example, Norwegian pension funds, US school districts, Australian and Norwegian councils, and a number of not-for-profit organisations.⁵³
- 73 Investors and in particular those investing on the behalf of others (i.e., the 'buy-side'), should not lose sight of the need to make informed investment decisions. As a result of an over-reliance of third party valuations (such as CRA ratings), calls have been made for certain investors to reinforce their due diligence and risk evaluation processes. This is not meant to imply that they can no longer use third parties, but rather that they must first have regard for the need to have sufficient resources to evaluate the reliability and relevance of the information provided to them and to perhaps even to challenge it before investing.

TC interim recommendation #2:

IOSCO encourages industry responses in the securitisation market and recommends the following regulatory responses:

- 1. Mandate improvements in disclosure by issuers including initial and ongoing information about underlying asset pool performance and the review practices of underwriters, sponsors and/or originators including all checks, assessments and duties that have been performed or risk practices that have been undertaken. Disclosure should also include details of the creditworthiness of the person(s) with direct or indirect liability to the issuer.⁵⁴*
- 2. Strengthen investor suitability requirements as well as the definition of sophisticated investor in this market.*

⁵² For example, recommendation 7 of the *GJI report*, at p64 – Establish a Global Securitization Markets Group to report publicly on the state of the market and changes in market practices.

⁵³ See: *Public School Funds Hit by SIV Debts Hidden in Investment Pools*, Bloomberg, 15 November 2007, <http://www.bloomberg.com/apps/news?pid=20670001&refer=home&sid=aYE0AghQ5IUa>; *Lehman faces legal threat over CDO deals*, Financial Times, 16 December 2007, http://us.ft.com/ftgateway/superpage.ft?news_id=fto121620071724598726; and *Norway Global loses €4.9bn in Q2*, IPE, 26 August 2008, http://www.ipe.com/news/Norway_Global_loses_4_9bn_in_Q2_28967.php.

⁵⁴ Credit worthiness includes the ability of the person to meet their obligations in respect of representations and warranties made.

3. Encourage the development of alternative means to evaluate risk with the support of the 'buy-side'.

Regulatory structure and oversight issues

- 74 Much of the analysis of the securitisation market has noted that participants in the securitisation value chain either fall outside the regulatory regime or are relatively lightly regulated, as is the case for CRAs.
- 75 Securitisation operates in an environment heavily weighted toward sophisticated investors and disclosure obligations have not been consistently required.
- 76 The challenge for regulators is to help create conditions under which information-rich business is encouraged to resume, consistent with investor protection and to encourage globally coordinated solutions.
- 77 All of the interim recommendations in this chapter suggest some expansion to the current ambit of regulation. Each jurisdiction will need to assess the scope of existing regulatory parameters and expand that scope only to the extent necessary to take measures identified to restore confidence in the securitisation market.
- 78 Some regulatory regimes already mandate a certain level of disclosure.⁵⁵ The TC's *Report on the Subprime Crisis* found that structured finance securities that traded publicly under a regulatory regime mandating the disclosure of the types of information outlined in the report generally did not suffer a liquidity crisis that affected the private markets.⁵⁶ Where public offers of securitised products to retail investors are not covered, existing regulatory parameters (e.g., disclosure rules for retail investors) may need to be expanded.
- 79 In addition to regulatory initiatives, the TC will consider the need for a special committee to be established that will focus on industry developments as securitisation markets restart. TFUMP believes it would also be valuable for IOSCO to explore means for enhancing the exchange of data, information and views on the securitisation market and relevant emerging issues among IOSCO members. IOSCO should also consider undertaking further works to improve international supervisory practices in the field of securitisation.

TC interim recommendation #3

IOSCO recommends that jurisdictions should assess the scope of their regulatory reach and consider which enhancements to regulatory powers to support TC interim recommendation #1 and #2 in a manner promoting international coordination of regulation are needed.

⁵⁵ A summary of ABS disclosure regimes for select IOSCO jurisdictions can be found in Appendix A of the IOSCO Technical Committee, *Report on the Subprime Crisis*, May 2008.

⁵⁶ IOSCO Technical Committee, *Report on the Subprime Crisis*, May 2008, at p10.

Table 2: Summary of interim recommendations for securitisation

Type of regulation	Confidence will be assisted by national regulators introducing regulation to enhance:
Conduct	<p>Incentive structures: Incentive structures should be examined at each point in the securitisation value chain be examined and better aligned with quality product development by:</p> <ul style="list-style-type: none"> • Enhancing transparency through disclosure by issuers of all checks, assessments and duties that have been performed or risk practices that have been undertaken by the underwriter, sponsor and/or originator; and • Considering requiring originators and/or sponsors to retain a long-term economic exposure to the securitisation (i.e., ‘skin in the game’).⁵⁷
Conduct	Expert independence: Require independence of experts used by issuers. ⁵⁸
Conduct	Risk management: Encourage the development of alternative means to evaluate risk with the support of the ‘buy-side’.
Disclosure	On-going disclosure: Require experts to revisit and maintain reports over the life of the product.
Disclosure	Disclosure: Mandate improvements in disclosure including initial and ongoing information about underlying pool performance and the review practices of underwriters, sponsors and/or originators including all checks, assessments and duties that have been performed or risk practices that have been undertaken. Initial and ongoing disclosure of the creditworthiness of the person(s) with direct or indirect liability to the issuer.
Conduct	Investor suitability: Strengthen investor suitability requirements as well as the definition of sophisticated investor.
Oversight	Oversight: Jurisdictions assess the scope of their regulatory reach and consider which enhancements to regulatory powers are needed to support conduct and disclosure initiatives identified in this Consultation Report in a manner promoting international coordination of regulation.

⁵⁷ This should be subject to industry consultation and with regard to industry initiatives. Note, for example, the European approval of imposing ‘skin-in-the-game’ requirements on certain investors.

⁵⁸ Dependent on the asset class, an expert may include a valuer or property expert.

5 What are the issues with credit default swaps?

80 The issues in the CDS market differ from the issues relating to securitisation. Identified CDS issues include inadequate risk management practices and regulatory structure and oversight issues.

81 The discussion that follows identifies issues falling within these categories, discusses them briefly and proposes some general recommendations for regulatory responses designed to address these issues.

Inadequacies in the CDS market

82 There are a number of critical limitations in the current CDS market that can be separated into a discussion of [three] areas:

- Counterparty risk;
- Lack of transparency; and
- Operational risk.

Counterparty risk

83 The CDS market has experienced huge growth in recent years such that the value in outstanding CDS is now a multiple of the referenced bonds.⁵⁹ The size of the market, counterparty exposures and the interconnectedness of the market participants can be seen to present a systemic risk to financial market stability. Recent statistics place the notional value of CDS contracts outstanding to June 2008 at over US\$57 trillion.⁶⁰

84 The net mark-to-market exposure, however, (taking into account netting of multiple trades between two counterparties and collateralisation) of the CDS market is a fraction of this amount. The International Swaps and Derivatives Association (ISDA) estimates that (i) the total mark-to-market exposure of the CDS market (before netting) is around US\$3 trillion; and (ii) while the notional value of the total OTC derivatives market is around US\$600 trillion, the total mark-to-market value (taking into account netting) is approximately US\$4 trillion.⁶¹

85 Erik Sirri, Director, Division of Trading and Markets, US SEC stated in October 2008 that:

⁵⁹ Bank for International Settlements, *OTC derivatives market activity, first half 2008*, November 2008, p1; Bank for International Settlements, *Credit Risk Transfer: Developments from 2005 to 2007*, The Joint Forum, July 2008, at p22.

⁶⁰ BIS, *OTC derivatives market activity in the first half of 2008*, November 2008, at p9 – NB: This figure is not adjusted for inter-dealer double counting. Additionally, from January to October 2008, the notional value of CDS outstanding decreased by \$24.4 trillion through trade compression (Operations Management Group, Letter to Timothy Geithner (President of the New York Federal Reserve), 31 October 2008, Annex A).

⁶¹ ISDA submission to ASIC/AMF re IOSCO Task Force on Unregulated Financial Markets and Products, February 2009.

“Due to the lack of disclosure and reporting requirements for CDS, concern is widespread that: (i) CDS sellers may be insufficiently capitalised to meet their payment obligations; (ii) as a result banks have and will continue to freeze lending to one another thereby locking up the credit markets; and (iii) defaults in the CDS markets have and will continue to spill into the equity markets as CDS providers such as hedge funds may be forced to sell assets to raise cash to meet their CDS payment obligations”.⁶²

86 The perception of systemic risk in the CDS market at the time of the collapse of Lehman Brothers in September 2008, was considerably exacerbated by a lack of transparency preventing market participants and regulators from accurately assessing their CDS exposure to Lehman Brothers and Lehman Brothers' exposure to other counterparties.

87 Initiatives to establish CCPs in the United States and Europe are designed to address some transparency and operational infrastructure issues for those types of transactions which are standardised to the extent they can be cleared through a CCP. CCPs are an important step in mitigating the counterparty risk exposure of CDS market participants and enable central monitoring of counterparty risk, position limits, daily margin requirements, capital contributions by participants and entry requirements (such as licences and internal risk managements controls).

88 The benefits of centralised clearing of CDS have been described as follows:

- (a) Mitigation of counterparty risk by novating trades to the central clearing party, thereby substituting the collective credit of the clearinghouse and its members for that of a particular CDS counterparty;⁶³
- (b) Increasing liquidity by enabling CCP participants to offset positions against entities other than their original counterparty;
- (c) Establishing and enforcing uniform margining and risk control requirements over clearinghouse members;
- (d) Increasing price transparency by publishing trading and settlement prices each day for each product;
- (e) Facilitating more timely and accurate post-trade processing;
- (f) Decreasing the likelihood that large losses by a single trader could cause a contagion event by adopting standard clearinghouse functions such as intra-day margin calls, thereby preventing build-up of significant losses;

⁶² Testimony of Erik Sirri, Director, Division of Trading and Markets, US SEC, before the US House Committee on Agriculture, 15 October 2008, available at <http://www.sec.gov/news/testimony/2008/ts101508ers.htm>. See also *Credit Default Swaps: Regulatory Storm Clouds Brewing*, David Porteous and James Martignon, Securities Regulation & Law Report, Vol. 40, number 48, p2070-2071, 15 December 2008.

⁶³ Testimony of Ananda Radhakrishnan, Director of the Division of Clearing and Intermediary Oversight, US Commodity Futures Trading Commission, before the US Senate Committee on Agriculture, Nutrition and Forestry, 14 October 2008 available at http://www.cftc.gov/stellent/groups/public/@newsroom/documents/speechandtestimony/radhakrishnansenate_ag_cds1014.pdf.

- (g) Decreasing negative impacts of misinformation and rumours regarding particular counterparties that can occur, particularly during high-volume periods; and
- (h) Providing a source of records on CDS transactions that will assist regulators in understanding potential systemic risk and detecting and deterring market manipulation, fraud and other abuse.⁶⁴

89 Subscription trading and data services, for example Markit and DTCC, also facilitate the collection and warehousing of CDS data which assists in assessing counterparty risk.⁶⁵ Data warehouses hold not only primary information on prices and volumes (even before they are cleared) but can also improve regulators' ability to view the market as a whole and assess participants' exposures.

90 It is likely that CCPs and other information aggregators for CDS will be predominantly based in a select number of jurisdictions. Accordingly, it will be necessary to consider effective mechanisms to facilitate regulatory cooperation between IOSCO member supervisory bodies and other appropriate authorities in those jurisdictions in relation to CDS and CCP market information and regulation.

Lack of transparency

91 Because the vast majority of credit transfers are performed on the OTC market, there is limited centralised sharing/pooling of transaction information, although initiatives to address this are in progress. There have been calls to increase market transparency to improve the fairness, efficiency and competitiveness of the CDS market, all of which enhance investor confidence and participation.⁶⁶

92 In addition to the risks highlighted above under 'Counterparty Risk', there have also been concerns raised that the lack of transparency makes it difficult to detect and deter market misconduct. Market participants have agreed that insider trading in CDS and other credit derivative markets must be taken seriously.⁶⁷

93 The high level of interconnectivity between credit derivatives, the obligations of the underlying reference entities e.g., corporate bonds, equities and cash markets means market misconduct (manipulation and insider trading) and disruptions in one market can affect another. There is concern that manipulation of spreads in the CDS market has been affecting equity markets,⁶⁸ for example by creating a false perception of the credit risk of a reference entity via a thinly traded CDS

⁶⁴ *Credit Default Swaps: Regulatory Storm Clouds Brewing*, David Porteous and James Martignon, Securities Regulation & Law Report, Vol. 40, number 48, p2075, 15 December 2008.

⁶⁵ These data services include non-standardised CDS (not capable of being cleared through a CCP).

⁶⁶ Testimony of Erik Sirri, Director, Division of Trading and Markets, US SEC, before the US House Committee on Agriculture, 20 November 2008.

⁶⁷ Bank for International Settlements, *Credit Risk Transfer: Developments from 2005 to 2007*, The Joint Forum, July 2008, at p21.

⁶⁸ Testimony of Erik Sirri, Director, Division of Trading and Markets, US SEC, before the US House Committee on Agriculture, 20 November 2008; Testimony of Chairman Christopher Cox, US SEC, before the Committee on Banking, Housing and Urban Affairs, United States Senate, 23 September 2008; International Herald Tribune, *US examines possible insider trading in credit-default swaps*, Bloomberg News, 25 June 2007.

resulting in a sell-off or shorting of the shares or obligations of that reference entity. This may have also happened in relation to CDS over securitised products such as MBS.

- 94 Certain regulators are also examining insider trading in CDS since 2007 as there is evidence that trading in CDS has been occurring prior to announcements of pending leveraged buyouts as well as other news that could affect an issuer's credit quality and the value of its stock.
- 95 Increased transparency in the CDS market with respect to prices, trading volumes and aggregate open interest will enable market participants to more accurately assess conditions in the credit and cash equity markets. Moreover, information provided by CCPs, trading platforms and data warehouses, or market participants themselves, would also assist regulators to detect and deter market misconduct.

Operational risk

- 96 The CDS market has had long-standing problems of backlogs of unconfirmed or unprocessed trades, a problem made more acute during periods of market stress. In July and August 2007, a spike in credit derivatives trades resulted in substantial increases in backlogs of unconfirmed trades throughout the industry.⁶⁹ There also have been issues with the accuracy and timeliness of trade data submission and resolution of trade matching services, documentation and cash settlement.⁷⁰
- 97 Due to the rapid growth of trading in CDS in the past ten years, there is often a large shortfall of deliverable obligations for physical settlement in the market following a credit event. There is a risk of significant market disruptions if one or more major market participants elect physical rather than cash settlement in CDS when a credit event occurs. Of particular concern is the market impact such choices could have if several credit events were to occur simultaneously.⁷¹

Initiatives that address inadequacies in the CDS market

- 98 From this discussion of counterparty risk, lack of transparency, and operational risk, a number of themes emerge. To encourage strengthened risk management processes and increased confidence, consideration should be given to which measures are needed to increase transparency in the CDS market to:
- (a) Allow market participants to obtain more accurate and timely information to inform assessments of counterparty risk;
 - (b) Allow market participants to obtain more accurate and timely data regarding pricing, trading volumes and aggregate open interest; and
 - (c) Provide confidence that regulators can address market abuse and misconduct.

⁶⁹ Bank for International Settlements, *Credit Risk Transfer: Developments from 2005 to 2007*, The Joint Forum, July 2008, p22; The President's Working Group on Financial Markets [US], *Policy Statement on Financial Market Developments*, March 2008, at p19.

⁷⁰ The President's Working Group on Financial Markets [US], *Policy Statement on Financial Market Developments*, March 2008, at pp6 & 18.

⁷¹ Financial Stability Forum, Report of the Financial Stability Forum on Enhancing Market and Institutional Resilience, 7 April 2008, at p21; G20 Study Group, G20 Study Group on Global Credit Market Disruptions, 31 October 2008, at p48.

- 99 In addition, improvements in operational infrastructure could receive regulatory support to promote good risk management practices.
- 100 Industry initiatives which assist in addressing these inadequacies include:⁷²
- (a) Establishment of CCPs that clear standardised CDS;⁷³
 - (b) Increased use of electronic trading platforms;⁷⁴
 - (c) Increased use of central data aggregators;⁷⁵
 - (d) Portfolio compression initiatives;⁷⁶
 - (e) Collateral management enhancements;⁷⁷
 - (f) Auction-based mechanism for settlement of physical delivery contracts;⁷⁸ and
 - (g) Confirmation backlog reduction.⁷⁹

⁷² The Federal Reserve Bank of New York in conjunction with ISDA is managing a program of voluntary commitment to operational enhancements by market dealers that is now well advanced. Committees have been established by the Tokyo Stock Exchange group and the Tokyo Financial Exchange to study the clearing of interest rate swaps and credit default swaps.

⁷³ Liffe/LCH.Clearnet, CME/Citadel, ICE/TCC and Eurex Clearing are at various stages in establishing CCPs that clear CDS.

⁷⁴ Electronic trading platforms facilitate trading and connectivity to relevant third parties for electronic processing and legal confirmation of CDS index trades.

⁷⁵ On 4 November 2008, DTCC started publishing market data from its Trade Information Warehouse, the worldwide central trade registry it maintains on credit derivatives. DTCC publishes outstanding gross and net notional values and numbers of CDS contracts registered in the Warehouse for the top 1,000 underlying single-name reference entities, all indices and tranches. The outstanding notional values and contract numbers at a given point in time can be viewed as well as weekly net changes to this data. On 20 January 2009, DTCC also began publishing weekly trading activity in terms of gross notional values as well as numbers of contracts. The Operations Management Group supports the Warehouse as a single, centralised source of industry portfolio statistics to enhance the transparency of the market for participants and supervisors.

⁷⁶ Portfolio compression (or 'tear ups') reduce the total number of CDS contracts held at any one time by netting (or 'cancelling out') contracts that have essentially opposite positions over the same risk. Portfolio compression is particularly useful for non-cleared CDS contracts. Markit and Creditex in conjunction with ISDA have launched a portfolio compression initiative that reduced notional CDS values by US\$1.036 trillion in three months as of November 2008 with 26 compression runs involving single-name CDS over several sectors of reference entities. Fifteen major CDS dealers in the United States and Europe took part in the compression runs from August to November 2008.

⁷⁷ The ISDA Collateral Committee has commenced working with the derivatives industry on projects for improvements to collateral management for OTC derivatives, for example in relation to valuation methodologies for collateral exposure calculations, efficient timing of margin calls, margin dispute resolution practices and weekly portfolio reconciliation (aimed at netting multiple exposures between two counterparties for the purposes of collateral calculations).

⁷⁸ ISDA's initiative for auction-based cash settlement of physically settled CDS contracts and hardwiring this process into the 2003 ISDA Credit Derivative Definitions is another step towards restoring confidence in the CDS market. Since 2005, Markit and Creditex have co-administered cash settlement auctions that allow for settlement of CDS contracts following a corporate default or 'credit event'. This auction mechanism has been used for many major corporate credit events in the years leading up to and during 2008, including Lehman Brothers, Washington Mutual, Fannie Mae and Freddie Mac in 2008.

Possible regulatory initiatives that address inadequacies in the CDS market

- 101 Given the magnitude of the crisis and the need to rebuild confidence, it is unlikely that industry initiatives alone will be sufficient to promote a fair, orderly and efficient CDS market. A measured regulatory response will also be necessary to assist in restoring confidence.
- 102 These risk management issues could be addressed with regulatory responses either in addition to, or in support of current industry initiatives. The following possible regulatory responses are for illustrative purposes only and are not intended to be exhaustive.
- (a) Encourage the trading of CDS on electronic platforms or regulated exchanges;
 - (b) Encourage the clearing of standardised CDS through a CCP;⁸⁰
 - (c) Mandate timely disclosure to the market of data relating to pricing, trading volume and aggregate open interest;
 - (d) Mandate timely disclosure to market regulators of data relating to pricing, trading volume and open interest; or
 - (e) Mandate that all confirmations (at least for standardised CDS) be completed with a specified timeframe.

TC interim recommendation #4

- 103 In forming the interim recommendations below, TFUMP considered the establishment of CCPs for the clearing of standardised CDS as an important factor in addressing the issues of counterparty risk and transparency. For the CCPs to properly perform their function and to realise their maximum benefit, consideration should be given to their risk management practices, fair access and financial resources.
- 104 Many of the issues raised in the previous chapters can be addressed through greater transparency to the market and regulators. TFUMP has considered the different methods of achieving this, noting it may be that only a portion of CDS will be cleared through a CCP.

⁷⁹ This initiative is helping to reduce OTC trade confirmation backlogs by a voluntary program of commitment to specified timeframes, for example, aged CDS confirmations were not to exceed 1 business day of trading volume. By collective efforts since 2005 major dealers have reduced CDS confirm backlogs by 93% and increased the percentage of trades confirmed electronically from 53% to more than 90%. During this time CDS volumes have risen by more than 200%. 95% of inter-dealer trades are now processed on electronic platforms. See Operations Management Group, Letter to Timothy Geithner (President of the New York Federal Reserve), 31 October 2008.

⁸⁰ TFUMP observes that even where the clearing of 'all' standardized CDSs is encouraged, ultimately, the decision whether to accept any instrument for clearing must be made independently by the central counterparty on the basis of its assessment of its ability to model the instrument's risk and assess appropriate margin. It follows that in the event a CDS were to be rejected from CCP clearing, alternative collateral and margin measures should be considered by regulators to address counterparty risk issues.

105 TFUMP also considered the information sharing and coordination requirements where CCPs, data providers and data warehouses operate from a select number of jurisdictions.

TC interim recommendation #4:

IOSCO encourages industry responses in the CDS market and recommends the following regulatory responses:

1. Provide sufficient regulatory structure for the establishment of CCPs to clear standardised CDS, including requirements to ensure:

a) appropriate financial resources and risk management practices to minimise risk of CCP failure;⁸¹

b) CCPs make available transaction and market information that would inform the market and regulators; and

c) cooperation with regulators;

2. Encourage financial institutions and market participants to work on standardising CDS contracts to facilitate CCP clearing.

3. CPSS-IOSCO Recommendations for CCPs should take into account issues arising from the central clearing of CDS.⁸²

4. Facilitate appropriate and timely disclosure⁸³ of CDS data relating to price, volume and open-interest by market participants, electronic trading platforms, data providers and data warehouses;

5. Establish an appropriate framework to facilitate information sharing and regulatory cooperation between IOSCO members and other supervisory bodies in relation to CDS market information and regulation; and

6. Encourage market participants' engagement in industry initiatives for operational efficiencies.⁸⁴

⁸¹ See recommendation 5 of the CPSS-IOSCO *Recommendations for Central Counterparties*.

⁸² We note that an ESCB/CESR consultation paper proposing draft recommendations for central counterparty clearing is available for consultation until 17 April 2009. A copy can be found at http://www.cesr.eu/data/document/09_302.pdf.

⁸³ In particular, on the issue of disclosure to the market, in parallel to the present consultation report, IOSCO is working on and will be consulting on transparency of structured finance products in the secondary market.

⁸⁴ These initiatives include, for example, those coordinated by ISDA and the New York Federal Reserve in relation to electronic trade matching, confirmation backlog reduction, portfolio compression, collateral management and documentation of auction process for cash settlement of physically settled CDS.

Regulatory structure and oversight issues

- 106 Much of the analysis of the CDS market has noted that often participants fall outside the regulatory regime.
- 107 CDS operate in an environment heavily weighted toward sophisticated investors and in many jurisdictions have been subject to little or no regulation.
- 108 The challenge for regulators is to create conditions under which information-rich business is encouraged to continue and to promote international cooperation as necessary to address the risks relating to the CDS market.
- 109 All of the interim recommendations in this chapter suggest expansion to the current perimeters of regulation. Each jurisdiction will need to assess the scope of existing regulatory parameters and expand that scope only to the extent necessary to take measures identified to reduce risk in the CDS market.

TC interim recommendation #5:

IOSCO recommends that jurisdictions should assess the scope of their regulatory reach and consider which enhancements to regulatory powers are needed to support TC interim recommendation #4 in a manner promoting international coordination of regulation.

Table 3: Summary of interim recommendations for credit default swaps

Type of regulation	Confidence will be assisted by national regulators introducing regulation to enhance:
Conduct and oversight	Regulatory structure for CCPs: provide sufficient regulatory structure for the establishment of CCPs to clear standardised CDS, including requirements to ensure: <ul style="list-style-type: none"> a) appropriate financial resources and risk management practices to minimise risk of CCP failure; b) CCPs make available transaction and market information to inform the market and regulators; and c) cooperation with regulators.
Conduct	Encourage financial institutions and market participants to work on standardising CDS contracts to facilitate CCP clearing.
Oversight	CCP structure: update the CPSS-IOSCO Recommendations for CCPs.
Disclosure	Transparency: facilitate appropriate and timely disclosure of post-trade price, volume and open-interest data for CDS.

Type of regulation	Confidence will be assisted by national regulators introducing regulation to enhance:
Oversight	International cooperation: establish an appropriate framework to facilitate information sharing and regulatory cooperation between IOSCO members and other supervisory bodies in relation to CDS market information and regulation.
Conduct	Operational improvements: encourage market participants' engagement in industry initiatives for operational efficiencies. ⁸⁵
Oversight	Oversight: Jurisdictions should assess the scope of their regulatory reach and consider which enhancements to regulatory powers are needed to support conduct and disclosure initiatives identified in this Consultation Report in a manner promoting international coordination of regulation.

⁸⁵ These initiatives include those coordinated by ISDA and the New York Federal Reserve in relation to electronic trade matching, confirmation backlog reduction, portfolio compression, collateral management and documentation of auction process for cash settlement of physically settled CDS.

6 Can we develop general recommendations to apply more widely to unregulated financial markets and products?

Why we need to change the boundaries of regulation

- 110 It is generally accepted that some regulation (such as anti-fraud prohibitions, accounting standards and tax principles) attaches to both the securitisation and CDS markets. However both products:
- (a) Are often unregulated, suggesting low levels of disclosure and conduct regulation;
 - (b) May operate in regimes where non-bank professional issuers do not require licenses or registration and attendant risk management standards; and
 - (c) Often trade in a bilateral or OTC environment not currently subject to market transparency obligations.
- 111 Where we have identified a role for regulation in enhancing confidence, it may be necessary to change boundaries of current regulation.

Discussion of possible general recommendations that may be drawn

- 112 We believe that the experience of CDS can be used to inform general recommendations for other unregulated financial markets and products, in particular, standardised and non-standardised OTC derivative products.
- 113 These general recommendations, if expressed in a manner not specific to the CDS sector may be appropriate. For example, the IMF has noted recently that although credit derivatives represent only 10% of the overall OTC market, most of the recent discussion on OTC products has been limited to that segment. Interest rate derivatives continue to be the largest segment of the OTC market, comprising 66% of the market or approximately US\$458 trillion at the end of June 2008.⁸⁶ Examination of other markets important to global financial health may benefit from these recommendations being applied to their market.
- 114 The TC will give consideration to whether some general recommendations about adjustments to the perimeters of regulation relating to standardised and non-standardised OTC derivative products may be drawn from the study of CDS contained in this Consultation Report and public comments.

Standardised OTC derivative products

- 115 CDS differ from other types of standardised OTC derivatives because:
- (i) Risk of the product resides not only with the counterparty, but also with the underlying reference entity; and

⁸⁶ III. Statistical tables, Table 1 of Bank for International Settlements, *OTC derivatives market activity in the first half of 2008*, November 2008, p6, available at http://www.bis.org/publ/otc_hy0811.pdf.

- (ii) The CDS market is a relatively new OTC market compared to other standardised OTC products such as interest rate derivatives, cross currency swaps, foreign exchange derivatives and equity derivatives.

116 Other OTC derivatives account for a large percentage of the OTC market as illustrated in the following table.

Table 4: The global OTC derivatives market⁸⁷

OTC derivatives	Notional amounts outstanding as at June 2008⁸⁸
Grand total (including CDS)	683,725
A. Foreign exchange contracts	62,983
Outright forwards and forex swaps	31,966
Currency swaps	16,307
Options	14,710
Memo: Exchange-traded contracts ₂	367
B. Interest rate contracts	458,304
FRAs	39,370
Swaps	356,772
Options	62,162
Memo: Exchange-traded contracts	73,790
C. Equity-linked contracts	10,177
Forwards and swaps	2,657
Options	7,520
Memo: Exchange-traded contracts	10,130
D. Commodity contracts	13,229
Gold	649
Other	12,580
Forwards and swaps	7,561
Options	5,019

⁸⁷ III. Statistical tables, Table 1 of Bank for International Settlements, *OTC derivatives market activity in the first half of 2008*, November 2008.

⁸⁸ Amounts outstanding in billions of US dollars.

OTC derivatives	Notional amounts outstanding as at June 2008⁸⁸
E. Credit default swaps	57,325
Single-name instruments	33,334
Multi-name instruments	23,991
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F. Unallocated	81,708
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GROSS CREDIT EXPOSURE	84,287
Memo: Exchange-traded contracts ₂	
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117 In the interest rate and foreign exchange OTC derivatives markets, several initiatives such as LCH SwapClear, Markit Wire and CLS are already operating, providing automated post-trade infrastructure.

118 TFUMP believes the interim recommendations identified in this Consultation Report may be appropriate for OTC derivative markets other than credit derivatives and related CCP initiatives already in existence. To the extent that there is a gap in applicable regulation covering the non-CDS OTC market, international cooperation may be required to develop appropriate regulation for the broader standardised OTC market to address the risk management issues highlighted in this Consultation Report relating to CDS, such as counterparty risk, lack of transparency and operational risk. Market conduct regulation in these markets also may need to be addressed.

Non-standardised OTC derivative products

119 For non-standardised OTC derivative products, such as bespoke CDS or other highly tailored products, it may not be appropriate to apply all of the recommendations for standardised OTC derivative products. Efforts could be made to standardise OTC derivative products to the extent possible so that they may benefit from general recommendations to be made in relation to standardised OTC derivative products. Although non-standardised OTC derivative products may not be able to be efficiently cleared through CCPs, non-CCP related recommendations may however still be applicable.

120 Keeping in mind the preceding paragraph, care should be made not to advance recommendations that could unnecessarily discourage the tailoring of products for appropriate purposes such as hedging.

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