

# **Unregulated Financial Markets and Products**

## **Final Report**



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

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## **Foreword**

The IOSCO Task Force on Unregulated Financial Markets and Products was formed in support of G-20 calls for a review of the scope of financial markets and in particular unregulated financial markets and products.

This Final 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 Final Report makes recommendations about regulatory approaches to be considered by financial market regulators and then implemented as appropriate with respect to securitisation and credit default swap markets and then goes on to discuss the broader unregulated financial markets.

# 1 Overview

## The Task Force on Unregulated Financial Markets and Products

- 1 This is the Final Report of IOSCO's Technical Committee (TC) in respect of the 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.<sup>1</sup>
- 2 This Final Report follows a consultation report published on 5 May 2009 and industry consultation.<sup>2</sup> TFUMP recognises the valuable input of industry participants to the finalisation of this Final Report.
- 3 IOSCO initiated TFUMP in support of The Group of Twenty (G-20) calls 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".<sup>3</sup>
- 4 Consequently, IOSCO announced on 25 November 2008, in support of these G-20 aims, that:<sup>4</sup>
  - (a) the TC's program to address the continuing market turmoil would focus on strengthening financial markets and investor protections; and
  - (b) 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.
- 5 The G-20 has subsequently reinforced the importance of the work of TFUMP, recommending that all systemically important financial markets and instruments should be subject to an appropriate degree of regulation and oversight, consistently applied and proportionate to their local and global significance.<sup>5</sup>

## TFUMP's mandate

- 6 TFUMP has approached its mandate by acknowledging 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 markets. These steps are important to the recovery of the international financial system.

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<sup>1</sup> 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.

<sup>2</sup> Consultation Report of the Task Force on Unregulated Financial Markets and Products, 5 May 2009, <http://www.iosco.org/library/pubdocs/pdf/IOSCOPD290.pdf>.

<sup>3</sup> *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](http://www.g20.org/Documents/g20_summit_declaration.pdf).

<sup>4</sup> *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>.

<sup>5</sup> Final Report of the G20 Working Group 1 *Enhancing Sound regulation and Strengthening Transparency*, 25 March 2009, Recommendation 5, pgs 6 to 10.

- 7 While the term ‘unregulated financial markets and products’ describes different markets and products depending on the particular jurisdiction in question, TFUMP has focused on systemically important markets and products that have featured prominently in the global financial crisis and are relevant to the restoration of confidence in international financial markets.<sup>6</sup>
- 8 The overall objective of TFUMP is, consistent with the aims of the G-20, to recommend ways to redefine the perimeter of regulation and the scope of intervention by regulators. As the recommendations of this Final Report go beyond the traditional remits of regulators, further work is required and indeed is being undertaken by IOSCO to identify the appropriate criteria to be used to redefine the border between what has traditionally been considered regulated and unregulated.
- 9 This Final 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 recommendations contained in this Final 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 and collateralised loan obligations (CLOs); and (ii) CDS, and are targeted at encouraging confident participation of investors in unregulated financial product and market sectors.
- 11 On the basis of the recommendations identified for these markets, this Final Report identifies the need for further consideration of other OTC derivatives markets. However, the potential development of recommendations regarding other segments of OTC derivatives markets should not delay the consideration, finalisation and implementation by financial market regulators of any recommendations relating to securitisation and CDS in this Final Report.

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<sup>6</sup> These markets and products may already be regulated in some jurisdictions.

## 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.
- 13 Acknowledging the complexity of the issues involved, this Final 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 Final 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,<sup>7</sup> 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 recommendations, TFUMP acknowledges and encourages industry initiatives to strengthen the operation of the securitisation and CDS markets, 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 that contributed to the global financial crisis. Accordingly, these initiatives should, where appropriate, be supplemented and supported by regulation.
- 17 Given the focus of this Final 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.

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<sup>7</sup> TFUMP notes that the use of "due diligence" in this context does not refer to any statutory defences in respect of inadequate disclosure that may be available in certain jurisdictions. For example, were the term "due diligence" is used in this Final Report this is not a reference to any due diligence defence available under the US Securities Act (1933). The availability and scope of such defences is not within the scope of this Final Report.

## **Recommended regulatory changes for securitisation and credit default swaps markets**

- 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.<sup>8</sup> It has also been assisted by the industry consultation in respect of the consultation report.
- 19 A summary of the recommendations for securitisation is set out at the end of Chapter 4 of this Final Report. A summary of the recommendations for CDS is set out at the end of Chapter 5 of this Final Report.

## **Implementation of Recommendations**

- 20 Giving due consideration to the roadmap of the G-20 (including the G-20 Working Group on Enhancing Sound Regulation and Strengthening Transparency) and the most recent communiqué from the G-20 London Summit,<sup>9</sup> IOSCO will continue to consider recommendations and further work for specific OTC markets to complement certain recommendations in this Report and in the interest of promoting greater regulatory convergence among its members. A number of the respondents to the consultation paper published in May 2009 were in favour of additional work being done by IOSCO to promote convergence and a level playing field between jurisdictions.
- 21 TFUMP acknowledges the work already done by international associations of market professionals in response to the crisis and to help restore the functioning of the market and will reflect on the appropriate manner to obtain input from industry going forward.
- 22 However, TFUMP recognises that financial market regulators may consider a number of different regulatory responses in seeking to implement the recommendations in their respective jurisdictions. These responses may include, working with industry bodies to encourage behavioural change, recommending compliance with industry codes of best practice, issuing regulatory guidance, formal rulemaking and recommending legislative action.

## **Discussion of possible general recommendations that may be drawn**

- 23 The analysis of the CDS markets may be used to inform further analysis by IOSCO in relation to other unregulated OTC derivatives markets.
- 24 A discussion of standardised<sup>10</sup> and non-standardised OTC derivative products can be found in Chapter 6.

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<sup>8</sup> See *References* at the end of this Final Report.

<sup>9</sup> A copy of the G20 communiqué from the London Summit may be obtained from [http://www.g20.org/Documents/g20\\_communique\\_020409.pdf](http://www.g20.org/Documents/g20_communique_020409.pdf)

<sup>10</sup> Standardised to the extent they can be accepted by a central counterparty (CCP) (i.e., CCP-eligible). A CCP is a clearing house that interposes itself between the counterparties to a transaction in order to assume their rights and obligations, acting as the buyer to every seller and the seller to every buyer.

## What is not covered and why

- 25 This Final Report has focused 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.
- 26 TFUMP is aware that commentary suggests that other parameters also need review:

**Table 1: Commentary on other issues not addressed in this Final Report**

Issue	Reports
Prudential standards applicable to the issue of, or investment in, unregulated financial markets and products	FSF, Report of the Financial Stability Forum on Enhancing Market and Institutional Resilience, 7 April 2008
	FSF, Report of the Financial Stability Forum on Enhancing Market and Institutional Resilience – Follow up on Implementation, 10 October 2008
	<i>FSF, Report of the Financial Stability Forum on Enhancing Market and Institutional Resilience – Update on Implementation, 2 April 2009</i>
	<i>FSF, Report of the Financial Stability Forum on Addressing Procyclicality in the Financial System, 2 April 2009</i>
	<i>Joint FSF-BCBS Working Group on Bank Capital Issues, Reducing procyclicality arising from the bank capital framework, March 2009</i>
	<i>Joint FSF-CGFS Working Group, The role of valuation and leverage in procyclicality, March 2009</i>
	Group of Thirty, Financial reform: A Framework for Financial Stability, 15 January 2009
	<i>IOSCO Technical Committee, Report on the Subprime Crisis, May 2008, pp16-19</i>
	<i>Bank for International Settlements, Guidelines for computing capital for incremental risk in the trading book – final version, Basel Committee on Banking Supervision, July 2009</i>
<i>Bank for International Settlements, Revisions to the Basel II market risk framework – final version, Basel Committee on Banking Supervision, July 2009</i>	

Issue	Reports
	Bank for International Settlements, <i>Enhancements to the Basel II framework</i> , Basel Committee on Banking Supervision, July 2009
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
	FSF, <i>Report of the FSF Working Group on Provisioning</i> , March 2009
	Joint FSF-CGFS Working Group, <i>The role of valuation and leverage in procyclicality</i> , March 2009
	Financial Crisis Advisory Group, <i>Report of the Financial Crisis Advisory Group</i> , 28 July 2009
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 Final Report, June 2009

- 27 Consideration should also be given to recommendations by other working groups such as the G-20 working group on Enhancing Sound Regulation and Strengthening Transparency.

### **IOSCO's Technical Committee Standing Committees**

- 28 Existing IOSCO Standing Committees<sup>11</sup> and Task Force mandates also cover aspects of issues that relate to unregulated financial markets and products. Generally, the recommendations made in this Final Report do not extend to issues being considered by the IOSCO Standing Committees.

<sup>11</sup> The TC Standing Committees are Multinational Disclosure and Accounting (TCSC1), Regulation of Secondary Markets (TCSC2), Regulation of Market Intermediaries (TCSC3), Enforcement and Exchange of Information (TCSC4), and Investment Management (TCSC5). In June 2009, IOSCO converted the Task Force on CRAs into Standing Committee 6 on CRAs (TCSC6).

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

**Table 2: IOSCO’s Technical Committee Standing Committees and Task Force mandates**

IOSCO Entity	Mandate
<p>Technical Committee Standing Committee 1 on Multinational Disclosure and Accounting (TCSC1)</p>	<p>Issuer Transparency and Investor Due Diligence</p> <ul style="list-style-type: none"> <li>• 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</li> <li>• Review IOSCO issuer disclosure standards and principles re applicability to public issuance of ABS</li> <li>• Develop principles regarding disclosure requirements for public offerings of ABS if existing standards and principles are inapplicable to such offerings</li> <li>• 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</li> </ul> <hr/> <p>Firm Risk Management and Prudential Supervision</p> <ul style="list-style-type: none"> <li>• 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</li> </ul> <hr/> <p>Valuation</p> <ul style="list-style-type: none"> <li>• 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</li> </ul>
<p>Technical Committee Standing Committee 2 on Regulation of Secondary Markets (TCSC2)</p>	<p>Post-Trade Transparency for Structured Finance Products</p> <ul style="list-style-type: none"> <li>• 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</li> </ul>

IOSCO Entity	Mandate
Technical Committee Standing Committee 3 on Regulation of Market Intermediaries (TCSC3)	<p>Firm Risk Management and Prudential Supervision</p> <ul style="list-style-type: none"> <li>• 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</li> <li>• Monitor work and review any report of the Senior Supervisors Group on firm risk management and determine further work warranted by IOSCO</li> <li>• 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</li> <li>• Review capital charges for risks in the trading book</li> </ul> <p>Investor Suitability</p> <ul style="list-style-type: none"> <li>• Investor suitability issues relating to intermediaries’ distribution to investors of complex financial products</li> </ul>
Technical Committee Standing Committee 3 on Regulation of Market Intermediaries (TCSC3) & Technical Committee Standing Committee 5 on Investment Management (TCSC5)	<p>Firm Risk Management and Prudential Supervision</p> <ul style="list-style-type: none"> <li>• 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</li> </ul> <hr/> <p>Valuation</p> <ul style="list-style-type: none"> <li>• 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</li> </ul>
Technical Committee Standing Committee 5 on Investment Management (TCSC5)	<p>Issuer Transparency and Investor Due Diligence</p> <ul style="list-style-type: none"> <li>• 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</li> </ul>

IOSCO Entity	Mandate
Technical Committee Standing Committee 6 on Credit Rating Agencies (CRAs)	CRAs <ul style="list-style-type: none"> <li>• 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</li> </ul>
IOSCO Task Force on Implementation of the IOSCO Objectives and Principles of Securities Regulation (ITF)	CPSS & IOSCO Recommendations for Central Counterparties <ul style="list-style-type: none"> <li>• ITF has noted the need to review the CPSS &amp; IOSCO <i>Recommendations for Central Counterparties</i><sup>12</sup> in light of industry developments</li> </ul>

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

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<sup>12</sup> *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 global financial crisis

##### What has happened in unregulated markets generally?

- 31 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”.<sup>13</sup>
- 32 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.
- 33 Analyses of the failures and possible causes of the global financial crisis are numerous. For example, reports have been produced by the IMF, the World Bank, the Financial Stability Forum, the US Senate Congressional Oversight Panel, the Group of Thirty (G30), the G-20 and various national and financial market regulators.
- 34 There are also a variety of regulatory and industry initiatives currently in progress but incomplete, for example:
- (a) Basel Committee capital adequacy amendments;
  - (b) Developments relating to the OTC derivatives market, including the establishment and use of CCPs; and
  - (c) Aggregation of post-trade data initiatives.<sup>14</sup>
- 35 In respect of the role played by OTC structured products, such as securitised products and CDS, in the global financial crisis, some believe that the complexity, opaqueness and risks embedded into certain securitised products and CDS have increased rather than decreased systemic risk in the international financial markets and that these concerns require a fundamental rethinking of how to structure and

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<sup>13</sup> Borio, Claudio, The financial turmoil of 2007-?: a preliminary assessment and some policy considerations, BIS Working Papers No. 251, March 2008.

<sup>14</sup> 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.

regulate those markets.<sup>15</sup> Balanced against this is the view expressed by industry participants that, while certain types of securitised products and CDS were central to aspects of the global financial crisis, in general, these instruments have many benefits for the financial markets and the real economy.

- 36 It is nevertheless worthwhile examining two key product areas – securitisation and CDS – with a view to making recommendations that regulators may implement to help promote transparency, market integrity and market quality.
- 37 Such an analysis may assist in developing recommendations regarding regulatory changes to other OTC derivatives markets.

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

- 38 The primary reason that TFUMP has focused on securitisation and CDS is because of the great significance of these markets and products 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 global financial crisis.
- 39 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.
- 40 Securitisation may not be wholly unregulated in any jurisdiction and in some jurisdictions will be heavily regulated in some respects. For example, in the United States, disclosure requirements apply whenever an issuer makes a public offering, regardless of whether the securities are exchange-listed 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 Final Report, we will discuss the whole securitisation market. Where this Final Report makes a recommendation regarding 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.
- 41 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.
- 42 More broadly, the current absence of an efficient and smoothly functioning securitisation market has substantial implications for continued economic growth.

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<sup>15</sup> Speech by Paul Volcker at the New York Economic Club, 8 April 2008, available at [http://econclubny.org/files/Transcript\\_Volcker\\_April\\_2008.pdf](http://econclubny.org/files/Transcript_Volcker_April_2008.pdf); and Christopher Whalen, *What is to 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](http://www.rcwhalen.com/pdf/cds_aei.pdf).

The Global Joint Initiative<sup>16</sup> in its report (the *GJI Report*)<sup>17</sup> estimated that banks may fail to meet US\$2 trillion of demand for credit origination in the absence of well-functioning securitisation markets.

- 43 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 can act 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.”<sup>18</sup> Concerns about market manipulation and insider trading have also been raised.<sup>19</sup>
- 44 Compared against each other, 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 risks 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 MBS<sup>20</sup> and CDOs.

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<sup>16</sup> The Global Joint Initiative is comprised of the American Securitization Forum (ASF), Securities Industry and Financial Markets Association (SIFMA), Australian Securitisation Forum (AuSF) and European Securitisation Forum (ESF).

<sup>17</sup> ASF, SIFMA, AuSF, ESF, *Restoring Confidence in the Securitization Markets*, 3 December 2008.

<sup>18</sup> Group of Thirty, *Financial reform: A Framework for Financial Stability*, 15 January 2009, at p53.

<sup>19</sup> 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.

<sup>20</sup> Mortgage-backed securities.

## 4 What are the issues with securitisation?

45 While TFUMP has adopted the three categories used by McKinsey<sup>21</sup> to analyse the issues with securitisation, TFUMP has independently grouped certain issues under these categories and canvassed additional issues not referred to in the McKinsey report.

46 The three categories are:

- (a) Wrong incentives;
- (b) Inadequate risk management practices; and
- (c) Regulatory structure and oversight issues.

47 The discussion that follows identifies issues falling within these categories, discusses them briefly and sets out recommendations for regulatory responses designed to enhance confidence and promote improvements in securitisation markets.

### Wrong incentives

48 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.

49 One of the ways to correct the perceived flaws in the originate-to-distribute model is through a thorough reconsideration of the incentive structure in the securitisation value chain.

50 This chapter of the Final 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 TFUMP is referring to all participants in the securitisation process including mortgage brokers, originators, sponsors, underwriters, issuers,<sup>22</sup> distributors, sales brokers, managers, servicers of asset pools, experts<sup>23</sup> and credit rating agencies (CRAs).

51 While TFUMP recognises that the originate-to-distribute model when managed appropriately can facilitate credit intermediation and diversify risk, the global financial crisis has exposed various practices and consequences in the securitisation process that have focused attention on certain limitations to the "originate-to-distribute" model in a number of jurisdictions. These include:

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<sup>21</sup> McKinsey & Company, *The Future of U.S. Financial Regulation and its Implication*, 15 December 2008.

<sup>22</sup> An issuer is a person who offers its securitised products to investors.

<sup>23</sup> An expert is a person whose profession or reputation gives authority to a statement made by him or her.

- (a) the erosion of credit underwriting standards;
  - (b) an over-reliance by investors on the ratings of CRAs;
  - (c) concentrations of pipeline credit risk, based on assumptions regarding market liquidity and redistribution capabilities; and
  - (d) barriers to, and a lack of, effective due diligence and risk analysis/management by investors viewed under existing regulation as ‘sophisticated’.<sup>24</sup>
- 52 Different studies of the sector<sup>25</sup> 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;<sup>26</sup>
  - (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;<sup>27</sup> 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.<sup>28</sup>
- 53 These developments have contributed to sharp declines in asset quality in some securitisation markets that have quickly undermined confidence in global markets.<sup>29</sup>

### **Industry initiatives that address wrong incentives**

- 54 Industry initiatives which assist in addressing these wrong incentive issues include:
- (a) *Recommendation 2 of the GJI Report* - Establish core industry-wide market standards of due diligence disclosure and quality assurance practices for RMBS;<sup>30</sup>

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<sup>24</sup> 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.

<sup>25</sup> See *References* listed at the conclusion of this Final Report for the source of these studies.

<sup>26</sup> IOSCO Technical Committee, *Report on the Subprime Crisis*, May 2008, at p6.

<sup>27</sup> Recommendation 4 of the *GJI Report*, at p60.

<sup>28</sup> IOSCO Technical Committee, *Report on the Subprime Crisis*, May 2008, at p6.

<sup>29</sup> *GJI Report*, at p4.

<sup>30</sup> *GJI Report*, at p56. This recommendation is designed 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. The GJI Report argues that 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.

- (b) *Recommendation 3 of GJI Report* – Strengthen and standardise the representations and warranties as well as repurchase procedures for residential mortgage-backed securities (RMBS);<sup>31</sup>
- (c) *Recommendation 4 of GJI Report* – Develop industry-wide norms for RMBS servicing duties and evaluating servicer performance;<sup>32</sup>
- (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 securitised products;<sup>33</sup> and
- (e) *Recommendation 6 of GJI Report* – Restore market confidence in CRAs by enhancing transparency in the CRA process.<sup>34</sup>

55 Recommendation IV-12a of the Counterparty Risk Management Policy Group-III (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.<sup>35</sup>

### **TC recommendation #1**

56 Given the magnitude of the crisis and the need to rebuild confidence in the securitisation market, it is unlikely that industry initiatives alone will be sufficient to restore transparency, market integrity and market quality. A measured regulatory response will also be necessary to assist in restoring confidence. These regulatory responses may be in addition to, or in support of, current industry initiatives.

57 In forming the recommendations below, TFUMP considered three broad themes in respect of the realignment of interest in the securitisation value chain:

- (a) The retention by originators and/or sponsors of a long-term economic exposure to the securitisation;
- (b) Enhancement of disclosure to ensure that quality and risks of the underlying asset pool and of the securitisation structure are transparent to investors; and
- (c) The role of participants in the securitisation, which provide key services and opinions, that may influence an investor's decision whether to invest in a securitised product.

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<sup>31</sup> *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.

<sup>32</sup> *GJI Report*, at p60.

<sup>33</sup> *GJI Report*, at p60.

<sup>34</sup> *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 in the securitisation market.

<sup>35</sup> Counterparty Risk Management Policy Group III, *Containing Systemic Risk: The Road to Reform*, 6 August 2008 at pp 27 and 89-90.

## Retention of a long term economic exposure

- 58 TFUMP considered the principle that an originator and/or sponsor should be required to retain a long-term economic exposure to a securitisation. This is consistent with the regulatory developments in the European Union and the United States.
- 59 In the European Union, on 6 May 2009 the European Parliament amended the Capital Requirements Directive to restrict regulated credit institutions from taking on an exposure to a securitised product unless originators, sponsors or the original lender has explicitly disclosed to the entity that it will retain, on an ongoing basis, a material net economic interest not less than 5%.<sup>36</sup>
- 60 In the United States, on 7 May 2009, the US House of Representatives passed *The Mortgage Reform and Anti-Predatory Lending Act*. The Act would require any creditor that originates a residential mortgage loan (that is not a qualified mortgage loan) to retain an economic interest in a material portion of the credit risk for any such loan that the creditor transfers, sells or conveys to a third party. The material portion of the credit risk must be at least 5%.<sup>37</sup> On 17 June 2009, the US Treasury released its plan for regulatory reforms, including measures addressing the securitisation markets.<sup>38</sup> The plan advocates that the US federal banking agencies should promulgate regulations that require originators or sponsors to retain 5% of the credit risk of securitised credit exposures. It also states that the US federal banking agencies should have authority to specify the permissible forms of required risk retention and to raise or lower the 5% threshold in certain cases.
- 61 TFUMP considers that the introduction of a retention requirement needs to be carefully tailored to appropriately align interests in the securitisation value chain. Financial market regulators need to consider the importance of the introduction of a retention requirement and the specifics of that requirement in light of the characteristics of the securitisation market in their jurisdiction. For example, any retention requirement should be considered alongside the other recommendations as to enhanced disclosure, transparency and investor suitability. Additionally, financial market regulators may wish to consider the nature of the economic exposure, the required percentage level of the exposure to be retained in any retention requirement and whether a more risk-sensitive approach, such as between asset quality and asset classes, is appropriate.
- 62 In light of this and the submission of industry participants on the consultation report, TFUMP has developed a number of principles that may assist financial

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<sup>36</sup> See <http://www.europarl.europa.eu/sides/getDoc.do?type=TA&reference=P6-TA-2009-0367&language=EN&ring=A6-2009-0139> for the detail of the amendments to the Capital Requirements Directive.

<sup>37</sup> See [http://www.house.gov/apps/list/press/financialsvcs\\_dem/pr050709.shtml](http://www.house.gov/apps/list/press/financialsvcs_dem/pr050709.shtml) for a summary of *The Mortgage Reform and Anti-Predatory Lending Act*. The Act has been introduced into the Senate and has been referred to the Committee on Banking, Housing and Urban Affairs.

<sup>38</sup> *Financial Regulatory Reform, A New Foundation: Rebuilding Financial Supervision and Regulation*, Department of Treasury, 17 June 2009. See [http://www.financialstability.gov/docs/regs/FinalReport\\_web.pdf](http://www.financialstability.gov/docs/regs/FinalReport_web.pdf).

market regulators in considering a retention requirement approach for their jurisdiction.

- 63 Any retention requirement should, at minimum:
- (a) Be considered by financial market regulators in light of economic and regulatory features of the domestic securitisation market and include appropriate transitional provisions;
  - (b) Be risk sensitive and have regard to the underlying quality of the collateral backing a securitisation; and
  - (c) Consider the broad function of securitisation and the impact of increased capital charges, accounting de-recognition treatment and legal true sale issues in the relevant jurisdiction.

### **Enhancement of disclosure**

- 64 TFUMP considers that originators should have an incentive to ensure that the quality and risks of the underlying asset pool are transparent to investors.
- 65 Originators are also best placed to conduct, and engage service providers to conduct verification and risk assurance practices in respect of the underlying asset pool, such as pool audits. The disclosure of such efforts may have the practical effect of requiring originators to conduct more detailed due diligence and risk assessment as investors may be less likely to purchase securitised products where the disclosure indicates that inadequate due diligence, verification and risk assurance practices had been undertaken.
- 66 In developing this recommendation, TFUMP recognised the mandate of the ASF Project RESTART<sup>39</sup> in respect of establishing core industry-wide market standards of due diligence disclosure and quality assurance practices for RMBS and the development of the Japan Securities Dealers Association (JSDA) in respect of rules for distributors and standardised formats of disclosure to enhance transparency of securitised products. TFUMP acknowledges initiatives that attempt to establish core industry standards such as those by the ASF and JSDA. TFUMP also acknowledges the work of other industry bodies, such as the ESF and the AuSF to develop similar industry standards.
- 67 TFUMP recommends that industry bodies should ensure that these standards or codes are developed on an internationally consistent basis and considers that IOSCO should develop further work in that field to develop recommendations in relation to the duties to be performed at the various stages in the securitisation chain. In this connection, IOSCO should consider calling for the identification of the participant in the securitisation value chain responsible for the contents and accuracy of the prospectus.
- 68 TFUMP notes that TCSC1 has addressed in its Consultation Report the disclosure principles for listings and public offerings of ABS. The recommendations as to disclosure in this Final Report are supplementary to the IOSCO disclosure principles for ABS and the specific disclosure regimes in jurisdictions for listed and publicly offered ABS, and are intended to set out best practice for issuers in

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<sup>39</sup> See the ASF's Project RESTART, <http://www.americansecuritization.com/story.aspx?id=2657>.

respect of all other types of securitisation offerings (including wholesale offerings and private placements).

### **Provision of key services and opinions.**

- 69 TFUMP has also focused on the role of participants in a securitisation who provide key services and opinions to the issuer of a securitised product for the benefit of investors.
- 70 These service providers would typically provide an opinion as to an aspect of a securitised transaction, such as accountants in respect of the accounts of the issuer and the verification and risk assurance practices undertaken on the underlying asset pool and valuers in respect of any underlying assets.<sup>40</sup>
- 71 TFUMP considers that these service providers should be independent of the issuer and be required to maintain the currency of any report provided by them, as appropriate, over the life of the securitised product. Service providers as used in this report would exclude CRAs and auditors in respect of audited financial statements. Issues relating to these service providers are appropriately addressed through other work of IOSCO, namely the IOSCO Code of Conduct Fundamentals for Credit Rating Agencies, the International Accounting Standards Board (IASB), and national laws and regulations. Indeed, in respect of CRAs, TFUMP considers that financial market regulators should implement appropriate measures for formal oversight based firmly on the IOSCO Code of Conduct Fundamentals for Credit Rating Agencies to create an internationally consistent approach to the regulation of these firms.
- 72 An additional issue which has been identified by TFUMP is the role of trustees in securitisation transactions and their duties towards the beneficiaries and secured creditors of the trust. TFUMP recognises that the nature of the role played by trustees in a securitisation in large part depends on the legal framework which regulates the establishment and function of the trust and the terms of the transaction documents for the securitisation. Further, in respect of the provision of default notices to investors for debt instruments held in a clearing system, TFUMP encourages industry bodies such as International Capital Market Services Association, to develop best practice guides for investor communications.

#### ***TC recommendation #1:***

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

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<sup>40</sup> Some entities may also be considered as service providers (such as lawyers, sponsors, arrangers, underwriters and dealers and other advisers to an originator or sponsor), TFUMP does not intend for these service providers to come within the scope of this discussion.

1. Consider requiring originators and/or sponsors to retain a long-term economic exposure to the securitisation in order to appropriately align interests in the securitisation value chain;<sup>41</sup>
2. Require<sup>42</sup> enhanced transparency through disclosure by issuers to investors of all verification and risk assurance practices that have been performed or undertaken by the underwriter, sponsor, and/or originator;
3. Require independence of service providers<sup>43</sup> engaged by, or on behalf of, an issuer, where an opinion or service provided by a service provider may influence an investor's decision to acquire a securitised product; and
4. Require service providers to issuers<sup>44</sup> to maintain the currency of reports, where appropriate, over the life of the securitised product.

### **Inadequate risk management practices**

- 73 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.<sup>45</sup>
- 74 These recommendations reflect survey information that disclosed that, particularly in relation to sub-prime RMBS, respondents had lower than moderate satisfaction with the quality of information about the issue and throughout the life of the product.
- 75 The G30 also considered as a core recommendation that the disclosure and dissemination regime for asset-backed and other structured fixed-income products should be enhanced.<sup>46</sup>
- 76 As noted by the CRPMG-III Report, even with disclosure in the underlying documents, the characteristics of certain securitised products and the risk of loss

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<sup>41</sup> The economic exposure may be to the securities or some other risk exposure to the long-term viability of the securitised product. This has been described in the market as the 'skin-in-the-game' requirement.

<sup>42</sup> A number of different regulatory responses could be taken to enhance transparency, depending on the particular characteristics of the jurisdiction of the regulator. Such measures could include recommending compliance with industry codes of best practice, issuing regulatory guidance or amending legislation and regulation.

<sup>43</sup> Please see paragraphs 69-71 for the scope of the term 'service providers'.

<sup>44</sup> Please see paragraphs 69-71 for the scope of the term 'service providers'.

<sup>45</sup> *GJI Report*, at p42.

<sup>46</sup> Recommendation 17 of Group of Thirty, *Financial reform: A Framework for Financial Stability*, 15 January 2009, at p55.

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.<sup>47</sup>

- 77 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.<sup>48</sup>
- 78 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.<sup>49</sup> 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).<sup>50</sup>
- 79 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.<sup>51</sup>
- 80 One way of mitigating inadequate risk management practices would be by imposing an obligation on distributors of securitised products to ensure the product being sold is suitable for the financial requirements and risk profile of the investor. Additionally, 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.<sup>52</sup>

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

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

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

50 IOSCO Technical Committee, *Report on the Subprime Crisis*, May 2008, at p12.

51 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 98<sup>th</sup> Dahlen Workshop 2008) available at [http://www.debtdeflation.com/blogs/wp-content/uploads/papers/Dahlem\\_Report\\_EconCrisis021809.pdf](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](http://www.wired.com/techbiz/it/magazine/17-03/wp_quant?currentPage=1).

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

## Industry initiatives that address inadequate risk management practices

- 81 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.<sup>53</sup> 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) Standardising key product features or otherwise providing information about the asset pool in a standardised format 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.
- 82 On 19 February 2009, the ESF released the voluntary RMBS Issuer Principles for Transparency and Disclosure (ESF Principles).<sup>54</sup> 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.<sup>55</sup>
- 83 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 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.”<sup>56</sup>

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<sup>53</sup> Recommendation 1 of *GJI Report*, at p55. On 17 March 2009, the Japan Securities Dealers Association published the self regulatory organisation rules in relation to the disclosure format for securitised products which took effect from 1 June 2009.

<sup>54</sup> The ESF Principles are intended to evolve to reflect market developments. It is expected that further improvements will be added in 2009.

<sup>55</sup> 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>.

<sup>56</sup> *GJI Report*, at p54.

## TC recommendation #2

- 84 Once again, given the magnitude of the global financial 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 in the securitisation markets. These regulatory responses may be in addition to, or in support of, current industry initiatives.
- 85 In forming the recommendations below, TFUMP considers the provision of quality disclosure as fundamental for investors to understand and properly manage the risks attached to securitised products and encourages the industry initiatives in this area.
- 86 Additionally, TFUMP considers that there should be improved disclosure of relevant information on counterparty risk to the issuer of a securitised product, particularly in respect of the representations and warranties given to the issuer to ensure, for example, obligations to buy-back the underlying assets are sufficiently robust and actionable.
- 87 TFUMP is also aware that 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.<sup>57</sup>
- 88 TFUMP acknowledges that financial innovation will always be the hallmark of a vibrant financial system. The growing complexity of financial products and financial innovation may make the associated investment risks less apparent to investors. Some of these products may also have unique features that may not be well understood. TFUMP is also mindful that with the rebuilding of the securitisation markets, distributors may seek to expand the sale of securitised products into non-traditional investor classes. It is for the investors who do not possess the adequate skill sets of some institutional investors that a suitability assessment becomes particularly relevant and indeed for the restoration of confidence in the securitisation markets as a whole.
- 89 TFUMP notes that industry participants have expressed the view that given some of the most sophisticated investors did not understand the complexity of the securitised products they were acquiring, and lost significant amounts, an investor suitability test would not have addressed these major losses.
- 90 However, TFUMP considers that the fact that the most sophisticated investors in the market place did not comprehensively understand and manage the risk associated with the securitised products they acquired is a reason why financial market regulators should review investor suitability standards within their jurisdiction to determine if there needs to be a strengthening of these standards,

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<sup>57</sup> 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=aYE0AghQ5IUUA>; *Lehman faces legal threat over CDO deals*, Financial Times, 16 December 2007, [http://us.ft.com/ftgateway/superpage.ft?news\\_id=fto121620071724598726](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](http://www.ipe.com/news/Norway_Global_loses_4_9bn_in_Q2_28967.php).

particularly for those investors who do not possess the adequate skill sets of some institutional investors.

- 91 In support of this, IOSCO announced at its June 2009 Tel Aviv meeting that the Technical Committee had mandated TCSC3 to review the suitability obligations that relate to the intermediaries' distribution to investors of complex financial products.
- 92 TFUMP recognises that the enhancement of disclosure and transparency and the consideration of investor suitability is only one side of the regulatory equation and it is also important for investors and in particular those investing on the behalf of others (i.e., the 'buy-side'), to not lose sight of the need to make informed investment decisions.
- 93 As a result of an over-reliance of third party valuations (such as CRA ratings), calls have been made for 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 perhaps even to challenge it before investing.
- 94 TFUMP encourages relevant investors to put in place adequate internal processes in order to comprehensively understand, assess and select the securitised products they acquire. These processes could include formal policies and procedures for analysing information in respect of the relevant positions, including the risk characteristics, the loss experience, the due diligence performed on the underlying assets and the valuation methodology used.<sup>58</sup>
- 95 IOSCO has recently published a report, *Good practices in relation to Investment Managers' Due Diligence when investing in Structured Financial Instruments* that sets out eight key practices for investment managers investing in structured products. The securitisation industry as a whole could also focus on:
- (a) training and education in securitisation on an ongoing basis on both the buy and sell sides;
  - (b) the development of valuation techniques by the buy-side; and
  - (c) the development of independent third parties that evaluate risks in securitised products (for example, other than CRAs). These independent parties could evaluate and monitor the ratings methodologies of the CRAs and the ratings assigned to securitised products.

***TC recommendation #2:***

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

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<sup>58</sup> TFUMP notes the amendments to the European Capital Requirements Directive which include increased risk management requirements for regulated institutions before they can invest in securitised products. The Basel Committee on Banking Supervision on 13 July 2009 has also finalised enhancements to the Basel II framework which include the requirements for banks to meet specific operational criteria. See <http://www.bis.org/press/p090713.htm>.

1. *Provide regulatory support for improvements in disclosure by issuers to investors including initial and ongoing information about underlying asset pool performance. Disclosure should also include details of the creditworthiness of the person(s) with direct or indirect liability to the issuer.*<sup>59</sup>
2. *Review investor suitability requirements as well as the definition of sophisticated investor in the relevant market and strengthen these requirements, as appropriate, in the context of the relevant market.*
3. *Encourage the development of tools by investors to assist in understanding complex financial products.*

## **Regulatory structure and oversight issues**

- 96 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.
- 97 Securitisation operates in an environment heavily weighted toward sophisticated investors and disclosure obligations have not been consistently required.
- 98 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 - for industry and regulators to work together to appreciate and evaluate the risks inherent in complex financial transactions.
- 99 All of the recommendations in this chapter of the Final Report suggest some expansion to the current ambit of regulation. Each jurisdiction should assess the scope of existing regulatory parameters and may need to expand that scope only to the extent necessary to take measures identified to restore confidence in the securitisation market.
- 100 Some regulatory regimes already mandate a certain level of disclosure.<sup>60</sup> 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.<sup>61</sup>
- 101 In addition to the additional work mentioned previously and following the view of industry participants, IOSCO should take a lead role in ensuring that financial market regulators are able to cooperate to develop consistent and appropriate regulatory standards.
- 102 TFUMP recommends that IOSCO, at the earliest available time, consider the most appropriate manner in which to monitor the impact of industry developments as

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<sup>59</sup> Credit worthiness includes the ability of the person to meet their obligations in respect of representations and warranties made.

<sup>60</sup> 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.

<sup>61</sup> IOSCO Technical Committee, *Report on the Subprime Crisis*, May 2008, at p10.

securitisation markets restart. This could include taking into consideration the findings of the Standing Committees which impact on the securitisation markets and seeking to establish an ongoing dialogue with industry and other regulatory bodies such as the Joint Forum, the Basel Committee on Banking Supervision and the IASB to ensure that the recommendations in this Final Report are appropriately considered by those bodies and that the regulation and oversight of securitisation is based on a comprehensive and coordinated international response.

***TC recommendation #3***

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

**Table 3: Summary of recommendations for securitisation**

Type of regulation	Confidence will be assisted by financial market regulators introducing regulation to enhance:
Conduct	<p>Incentive structures: Incentive structures at each point in the securitisation value chain should be examined and better aligned with quality product development by:</p> <ul style="list-style-type: none"> <li>• Considering requiring originators and/or sponsors to retain a long-term economic exposure to the securitisation in order to appropriately align interests in the securitisation value chain; and</li> <li>• Requiring enhanced transparency through disclosure by issuers to investors of all verification and risk assurance practices that have been performed or undertaken by the underwriter, sponsor, and/or originator.</li> </ul>
Conduct	<p>Provision of key services and opinions: Require independence of service providers engaged by, or on behalf of, an issuer, where an opinion or service provided by a service provider may influence an investor's decision to acquire a securitised product.<sup>62</sup></p>
Conduct	<p>Risk management: Encourage the development of tools by investors to assist in understanding complex financial products.</p>
Disclosure	<p>On-going disclosure: Require service providers to issuers to maintain the currency of reports, where appropriate, over the life of the securitised product.</p>

<sup>62</sup> Dependent on the asset class, an expert may include a valuer or property expert.

<b>Type of regulation</b>	<b>Confidence will be assisted by financial market regulators introducing regulation to enhance:</b>
Disclosure	Disclosure: Provide regulatory support for improvements in disclosure including initial and ongoing information about underlying pool performance. Initial and ongoing disclosure of the creditworthiness of the person(s) with direct or indirect liability to the issuer.
Conduct	Investor suitability: The review of investor suitability requirements as well as the definition of sophisticated investor and the strengthening of these requirements, as appropriate, in the context of the relevant market.
Oversight	Oversight: Jurisdictions assess the scope of their regulatory reach and consider which enhancements are needed to regulatory powers to support TC Recommendations #1 and #2 in a manner promoting international coordination of regulation.

## 5 What are the issues with credit default swaps?

- 103 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.
- 104 This chapter of the Final Report identifies issues falling within these categories, discusses them briefly and proposes recommendations for regulatory responses designed to address these issues.

### Inadequacies in the CDS market

- 105 There are a number of critical limitations in the current CDS market that can be separated into a discussion of three areas:
- (a) Counterparty risk;
  - (b) Lack of transparency; and
  - (c) Operational risk.

### Counterparty risk

- 106 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.<sup>63</sup> 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 as of December 2008 at over US\$41 trillion.<sup>64</sup>
- 107 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.<sup>65</sup>
- 108 Erik Sirri, Director, Division of Trading and Markets, US SEC stated in October 2008 that:

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<sup>63</sup> 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.

<sup>64</sup> BIS, *Quarterly Review Statistical Annex*, June 2009, at pA10 – NB: This figure is not adjusted for inter-dealer double counting. As of 26 June 2009, the DTCC Trade Information Warehouse indicated for CDS total outstandings of \$26.54 trillion with interdealer trades accounting for \$21.62 trillion.

<sup>65</sup> 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”.<sup>66</sup>

109 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.

110 Despite this uncertainty and the market turmoil that followed the collapse of Lehman Brothers, the CCP 12 has noted that central counterparties (CCPs):

"unwound, hedged, liquidated, and transferred millions of positions and client accounts worth trillions of dollars largely without loss, providing increased stability".<sup>67</sup>

111 A CCP assumes responsibility for the obligations associated with the CDS by becoming the buyer to every seller, and the seller to every buyer. A CCP mitigates the counterparty risk exposure of CDS market participants and enables 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).

112 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;<sup>68</sup>
- (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;

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<sup>66</sup> 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.

<sup>67</sup> CCP 12 – The Global Association of Central Counterparties Central Counterparty Default Management and the Collapse of Lehman Brothers, April 2009.

<sup>68</sup> 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](http://www.cftc.gov/stellent/groups/public/@newsroom/documents/speechandtestimony/radhakrishnansenate_ag_cds1014.pdf).

- (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;
- (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.<sup>69</sup>

113 Subscription trading and data services also facilitate the collection and warehousing of CDS data which assists in assessing counterparty risk.<sup>70</sup> Data warehouses not only hold primary information on prices and volumes on CDS (irrespective of whether the CDS are centrally cleared) but can also improve regulators' ability to view the market as a whole and assess participants' exposures.

### **Lack of transparency**

114 Because the vast majority of credit transfers are performed on the OTC market, there has been limited centralised sharing and pooling of transaction information.

115 In addition to the risks highlighted above under “Counterparty Risk”, there have also been concerns raised that this 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.<sup>71</sup>

116 The high level of interconnectivity between credit derivatives and the obligations of the underlying reference entities e.g. corporate bonds, equities and cash market instruments means that 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,<sup>72</sup> for example by creating a false perception of the credit risk of a reference entity via a thinly traded CDS resulting in a sell-off of the shares or obligations of that reference entity.

117 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

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<sup>69</sup> *Credit Default Swaps: Regulatory Storm Clouds Brewing*, David Porteous and James Martignon, Securities Regulation & Law Report, Vol. 40, number 48, p2075, 15 December 2008.

<sup>70</sup> These data services include non-standardised CDS (i.e., CDS that are not capable of being cleared through a CCP).

<sup>71</sup> Bank for International Settlements, *Credit Risk Transfer: Developments from 2005 to 2007*, The Joint Forum, July 2008, at p21.

<sup>72</sup> 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.

pending leveraged buyouts as well as other news that could affect an issuer's credit quality and the value of its stock.

- 118 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.
- 119 Increased transparency will lead to improvements in the fairness, efficiency and competitiveness of the CDS market, all of which can enhance investor confidence and participation. In general terms, more efficient markets and better price discovery have scope to reduce volatility and the cost of credit protection.

### **Operational risk**

- 120 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.<sup>73</sup> There also have been issues with the accuracy and timeliness of trade data submission and resolution of trade matching services, documentation and cash settlement.<sup>74</sup>
- 121 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.<sup>75</sup>

### **Initiatives that address inadequacies in the CDS market**

- 122 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 make informed 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) Enhance the ability of regulators to address market abuse and misconduct.

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<sup>73</sup> 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.

<sup>74</sup> The President's Working Group on Financial Markets [US], *Policy Statement on Financial Market Developments*, March 2008, at pp6 & 18.

<sup>75</sup> 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.

- 123 In addition, improvements in operational infrastructure could receive regulatory support to promote good risk management practices.
- 124 Industry initiatives which assist in addressing these inadequacies include:<sup>76</sup>
- (a) Establishment of CCPs that clear standardised CDS;<sup>77</sup>
  - (b) Increased use of electronic trading platforms;<sup>78</sup>
  - (c) Increased use of central data aggregators;<sup>79</sup>
  - (d) Portfolio compression initiatives;<sup>80</sup>
  - (e) Collateral management enhancements;<sup>81</sup>

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<sup>76</sup> 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.

<sup>77</sup> ICE Trust (US) began clearing CDS on CDX indices in March 2009 and pending regulatory approval, is expected to commence North American single-name CDS clearing in Q3 2009. CME has the necessary regulatory approvals from the US SEC and US CFTC to clear CDS and is waiting for regulatory approval from the UK FSA. Eurex Clearing has been operational since 30 July 2009 for European iTRAXX and certain single-name CDS clearing. ICE Clear Europe began clearing European iTRAXX in July 2009 after receiving conditional regulatory approval from the FSA and is seeking regulatory approval to clear single-name CDS.

<sup>78</sup> Electronic trading platforms facilitate trading and connectivity to relevant third parties for electronic processing and legal confirmation of CDS index trades. A significant proportion of CDS trading in Europe is executed on multilateral trading facilities.

<sup>79</sup> 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 Trade Information 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 (OMG) supports the Trade Information Warehouse as a single, centralised source of industry portfolio statistics to enhance the transparency of the market for participants and supervisors and dealers have committed to universal reporting of all credit derivatives to the Trade Information Warehouse which will include bespoke transactions that were previously not included and is intended to provide regulators with a single source of information for the majority of credit derivative trades.

<sup>80</sup> 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\$2.3 trillion in six months as of February 2009 with 40 compression runs involving single-name CDS over several sectors of reference entities. TriOptima also operate a portfolio compression initiative which has reduced notional CDS values by US\$9 trillion in the first half of 2009. Major CDS dealers have committed to continuing aggressive compression of inter-dealer portfolios and have begun compression cycles of 15-20 reference entities per week in the US and Europe, and monthly cycles of index trade compressions.

<sup>81</sup> 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). On 2

- (f) Auction-based mechanism for settlement of physical delivery contracts;<sup>82</sup>  
and
- (g) Confirmation backlog reduction.<sup>83</sup>

125 Initiatives to establish CCPs in the United States and Europe are designed to address the transparency and operational infrastructure issues for those types of transactions and products which are standardised to the extent they can be cleared through a CCP.

126 In June 2009, on the back of OTC proposals by the US Treasury (which are discussed below) major market participants outlined their commitment towards strengthening the resilience and robustness of OTC infrastructure through the reduction of systemic risk. Their commitment included a commitment to the clearing of OTC standardised derivative products and implementing data repositories for non-cleared transactions to ensure appropriate transparency and disclosure and to assist global regulators with oversight and surveillance activities.<sup>84</sup>

#### **TC recommendation #4**

127 Given the magnitude of the global financial 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

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June 2009, commitments were made by major dealers to execute daily collateralised portfolio reconciliations for collateralised portfolios in excess of 500 trades between OMG dealers, implement revised reporting thresholds comprised of a fixed USD amount supplemented with risk-based deviation for portfolio reconciliations between OMG dealer firms and publish a feasibility study on market-wide portfolio reconciliation that will set out how the discipline of regular portfolio reconciliations can be practically extended beyond the current OMG dealers to include smaller banks, buy-side participants, and derivative end-users.

<sup>82</sup> 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. On 8 April 2009, the Big Bang Protocol and Auction Supplement introduced three major changes: the creation of Determination Committee which will make market-wide binding decisions with respect to Credit Events and Succession Events; the requirement for participants to use the Auction settlement methodology for Bankruptcy and Failure to Pay; and the creating of a rolling 'look-back period' for both Credit Events and Succession Events.

<sup>83</sup> 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%. Approximately 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.

<sup>84</sup> Letter from participants to the Federal Reserve Bank of New York and other national regulators, 2 June 2009. See <http://www.ny.frb.org/newsevents/news/markets/2009/ma090602.html>.

response will also be necessary to assist in restoring confidence and promoting transparency, market integrity and market quality.

- 128 In forming the 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. However, TFUMP also recognises that the establishment of CCPs necessarily involves the centralisation of risk in the CCPs. For the CCPs to properly perform their function and to realise their maximum benefits, it is essential to ensure that the CCPs' risk management practices and financial resources are robust while balancing this against the cost of the CCPs' robustness and the impact this could have on the efficient functioning of the market.
- 129 Following the release of the consultation report, IOSCO and the Committee on Payment and Settlement Systems of the Bank for International Settlements (CPSS) established a joint working group<sup>85</sup> to discuss the key issues that arise when a CCP provides clearing services for OTC derivatives, provide guidance on how CCPs for OTC derivatives may meet the CPSS-IOSCO Recommendations for Central Counterparties (RCCP), and identify areas, if any, where the coverage of the RCCP should be expanded to encompass significant risks associated with the central clearing of OTC derivatives.
- 130 TFUMP recognises that for certain jurisdictions there may be challenges in developing CCP infrastructure. In particular, across products, the scale of the CDS market in question may not justify a purely domestic service and these jurisdictions may need to rely on expansion of the products or participation coverage of existing or emerging international offerings. It follows that where access to a CCP is limited in a particular jurisdiction, alternative measures to address counterparty risk issues should be considered by financial market regulators appropriate to their jurisdictions. These measures could include the encouragement of current industry initiatives (such as portfolio compression and reconciliation) or collateral and margin measures. In considering these measures financial market regulators should also be mindful of collateral management processes in their respective jurisdictions to ensure that these processes allow for the promotion of market stability.
- 131 TFUMP takes note of the OTC derivatives recommendations of the US Treasury released on 13 May 2009 which set out a framework for reform of the OTC derivatives markets.<sup>86</sup>
- 132 The US Treasury's recommendations included, among other things:
- (a) Amending the US commodities and securities laws to require the clearing of all standardised OTC derivatives through regulated CCPs. Regulators will need to take steps to ensure that CCPs impose robust margin requirements and other necessary risk controls;

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<sup>85</sup> IOSCO-CPSS, *CPSS-IOSCO Working Group on the Review of the Recommendations for Central Counterparties*, 20 July 2009, <http://www.iosco.org/news/pdf/IOSCONEWS161.pdf>.

<sup>86</sup> These proposals have been reflected in the US Treasury's report *Financial Regulatory Reform, A New Foundation: Rebuilding Financial Supervision and Regulation* of 17 June 2009.

- (b) Requiring all OTC derivatives dealers and all other firms whose activities in those markets create large exposures to counterparties to be subject to a robust regime of prudential supervision and regulation (e.g. capital standards, business conduct standards, reporting requirements, and margin requirements);
- (c) Amending the US commodities and securities laws to authorise the CFTC and the SEC, consistent with their respective missions, to impose recordkeeping and reporting requirements (including an audit trail) on all OTC derivatives;
- (d) Requiring all trades not cleared on CCPs to be reported to a regulated trade repository;
- (e) Requiring CCPs and trade repositories, among other things, to make aggregate data on open positions and volumes available to the public and to make data on any individual counterparty's trades and positions available on a confidential basis to regulators;
- (f) Moving the standardised part of the OTC derivatives markets onto regulated exchanges and regulated transparent electronic trade execution systems, and requiring the development of a system for the timely reporting of trades and prompt dissemination of prices and other trade information; and
- (g) Calling upon the US CFTC and SEC to review the participation limits in current law to recommend how the US futures and securities laws should be amended to tighten the limits or to impose additional disclosure requirements or standards of care with respect to the marketing of derivatives to less sophisticated counterparties such as small municipalities.

133 On 3 July 2009, the European Commission published a Communication on ensuring safe, efficient and sound derivatives markets.<sup>87</sup> This text analyses the role played by derivatives in the financial crisis and the benefits and risks of derivatives markets, then goes on to assess how risks associated with these instruments can be reduced. Taking into consideration the full scope of derivative instruments and markets, the Communication presents the following means that the European Commission believes can be used to mitigate the risks present in these markets:

- (a) Standardisation: intended as an enhancement to increase operational efficiency and to reduce operational risks.
- (b) Central data repositories: the goal would be to collect data on, for example, the number of transactions and size of outstanding positions.
- (c) CCP clearing: in view of the benefits of CCPs as demonstrated during the financial crisis, the European Commission has worked with industry since October 2008 to ensure that clearing of CDS takes place on European CCPs. The goal of these efforts is to ensure that clearing of CDS will be available within a European CCP by 31 July 2009. If industry is unable to deliver on this commitment, the Commission will have to consider other ways to incentivise the use of CCP clearing.

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[http://ec.europa.eu/internal\\_market/financial-markets/docs/derivatives/communication\\_en.pdf](http://ec.europa.eu/internal_market/financial-markets/docs/derivatives/communication_en.pdf)

- (d) Trade execution on public trading venues: the European Commission raises the question whether the trading of these contracts should take place on an organised trading venue where prices and other trade-related information are publicly displayed (e.g. a regulated market).
- 134 The Communication is accompanied by two Commission Staff working documents: the first is a working document which analyses OTC derivatives markets while the second is a consultation document on possible initiatives to enhance the resilience of OTC Derivatives Markets. The consultation period is open until 31 August 2009. The European Commission will hold a public conference on 25 September 2009 in Brussels, and will publish the conclusions of this work before the end of its current mandate and present appropriate initiatives, including legislative proposals as justified. The objective of these proposals is to increase transparency and ensure financial stability.
- 135 TFUMP encourages efforts to standardise OTC derivative products to the extent possible as standardisation will facilitate clearing by CCPs to reduce risk through multilateral netting and streamlined operational processes. Even where the clearing of standardised CDS is encouraged, ultimately, the decision whether to accept any instrument for clearing must be made independently by the CCP on the basis of its assessment of its ability to model the instrument's risk and assess appropriate margin. As discussed above, in the event a CDS were not eligible for CCP clearing, alternative measures should be considered by regulators to address counterparty risk issues.
- 136 Further, what may be determined to be a standardised product for one CCP may not be standardised for another. TFUMP considers that further work may be necessary to identify those features of OTC products that would make such products suitable for clearing by CCPs. Any broad concept of standardisation would need to be flexible enough to allow for financial innovation going forward while providing sufficient clarity for market participants.
- 137 In recommending that there be appropriate and timely disclosure of CDS data by market participants, electronic trading platforms, data providers and data warehouses, TFUMP is aware that financial market regulators will also need to consider what level of information is to be provided to regulators and separately to the market. To the extent that information is provided to financial market regulators, TFUMP encourages the establishment of appropriate frameworks to facilitate information sharing and regulatory cooperation between IOSCO members and other supervisory bodies in relation to CDS market information. TFUMP recognises that regulatory cooperation amongst financial market regulators is essential in order to minimise regulatory arbitrage across jurisdictions.

**TC recommendation #4:**

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

*1. Provide sufficient regulatory structure, where relevant, 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;<sup>88</sup>*

*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. The CPSS-IOSCO Recommendations for Central Counterparties should be updated and take into account issues arising from the central clearing of CDS;*

*4. Facilitate appropriate and timely disclosure<sup>89</sup> of CDS data relating to price, volume and open-interest by market participants, electronic trading platforms, data providers and data warehouses;*

*5. Support efforts to facilitate information sharing and regulatory cooperation between IOSCO members and other supervisory bodies in relation to CDS market information and regulation;<sup>90</sup> and*

*6. Encourage market participants' engagement in industry initiatives for operational efficiencies.<sup>91</sup>*

## **Regulatory structure and oversight issues**

138 Much of the analysis of the CDS market has noted that often participants fall outside the regulatory regime.

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<sup>88</sup> See recommendation 5 of the CPSS-IOSCO *Recommendations for Central Counterparties*, <http://www.iosco.org/library/pubdocs/pdf/IOSCOPD176.pdf>.

<sup>89</sup> In particular, on the issue of disclosure to the market, in parallel to this Final Report, IOSCO is expected to publish shortly a consultation report on transparency of structured finance products in the secondary market.

<sup>90</sup> TFUMP notes the establishment of the CDS CCP Regulators' Group, consisting of regulators in multiple jurisdictions that have a CCP under their jurisdiction and other financial regulators, such as central banks, whose currencies may be settled in significant values, that may need information regarding the development and on-going operations of global CDS CCPs and the Trade Information Warehouse to carry out their responsibilities.

<sup>91</sup> 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.

- 139 CDS operate in an environment heavily weighted toward sophisticated investors and in many jurisdictions have been subject to little or no regulation.
- 140 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 - for industry and regulators to work together to appreciate and evaluate the risks inherent in complex financial transactions.
- 141 All of the recommendations in this chapter suggest expansion to the current perimeters of regulation. Each jurisdiction should assess the scope of existing regulatory parameters and may need to expand that scope only to the extent necessary to take measures identified to reduce risks in the CDS market.
- 142 TFUMP acknowledges that due to a number of reasons, including scale and other operational efficiencies, it is likely that CCPs and other information aggregators for CDS will be predominantly based in a select number of jurisdictions.
- 143 Accordingly, TFUMP considers that it will be necessary for IOSCO 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.

**TC 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 Recommendation #4 in a manner promoting international coordination of regulation.*

**Table 4: Summary of recommendations for credit default swaps**

<b>Type of regulation</b>	<b>Confidence will be assisted by financial market regulators introducing regulation to enhance:</b>
Conduct and oversight	Regulatory structure for CCPs: provide sufficient regulatory structure, where appropriate, for the establishment of CCPs to clear standardised CDS, including requirements to ensure: <ul style="list-style-type: none"> <li>a) appropriate financial resources and risk management practices to minimise risk of CCP failure;</li> <li>b) CCPs make available transaction and market information to inform the market and regulators; and</li> <li>c) cooperation with regulators.</li> </ul>
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.

<b>Type of regulation</b>	<b>Confidence will be assisted by financial market regulators introducing regulation to enhance:</b>
Disclosure	Transparency: facilitate appropriate and timely disclosure of post-trade price, volume and open-interest data for CDS.
Oversight	International cooperation: Support efforts 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. <sup>92</sup>
Oversight	Oversight: Jurisdictions should assess the scope of their regulatory reach and consider which enhancements to regulatory powers are needed to support TC Recommendation #4 in a manner promoting international coordination of regulation.

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<sup>92</sup> 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?**

### **Discussion of possible general recommendations that may be drawn**

- 144 TFUMP believes that the experience of CDS might be used to inform general recommendations for other unregulated financial markets and products, in particular, standardised and non-standardised OTC derivative products where such products may pose systemic risks to international finance markets or could contribute to the objective of restoring investor confidence.
- 145 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 71% of the market or approximately US\$418 trillion at the end of December 2008.<sup>93</sup> An examination of other markets important to global financial health may therefore be useful. When examining other segments of the OTC derivatives markets, consideration should be given to whether some general recommendations about adjustments to the perimeters of regulation particularly relating to standardised OTC derivative products may be drawn from the study of CDS contained in this Final Report. Such further analysis may also reveal that other recommendations may be more appropriate with respect to other OTC derivatives market segments.

### **Standardised OTC derivative products**

- 146 CDS differ from other types of standardised OTC derivatives because:
- (a) Risk of the product resides not only with the counterparty, but may also reside with the underlying reference entity; and
  - (b) 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.
- 147 Other OTC derivatives account for a large percentage of the OTC market as illustrated in the following table.

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<sup>93</sup> Table 4 of BIS, Quarterly Review Statistical Annex, June 2009, at pA10.

**Table 5: The global OTC derivatives market<sup>94</sup>**

<b>OTC derivatives</b>	<b>Notional amounts outstanding as at December 2008<sup>95</sup></b>
Grand total (including CDS)	591,963
Foreign exchange contracts	49,753
Interest rate contracts	418,678
Equity-linked contracts	6,494
Commodity contracts	4,427
Credit default swaps	41,868
Unallocated	70,742

148 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.

149 TFUMP believes that it may be helpful to analyse the recommendations identified in this Final Report regarding their appropriateness 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 derivatives market, international cooperation may be required to develop appropriate regulation for the broader standardised OTC market to address, where necessary and appropriate, risk management issues similar to those highlighted in this Final 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. TFUMP considers that further work in this regard may be necessary.

### **Non-standardised OTC derivative products**

150 However, for certain non-standardised OTC derivative products, such as bespoke CDS or other highly tailored products, the recommendations for standardised

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<sup>94</sup> Table 4 of BIS, Quarterly Review Statistical Annex, June 2009, at pA10.

<sup>95</sup> Amounts outstanding in billions of US dollars.

OTC derivative products may not be appropriate. TFUMP acknowledges that bespoke OTC products can offer important hedging and risk mitigation benefits for market. Thus, any future analysis should also consider which other recommendations in this Final Report might be appropriately tailored to the relevant segments of non-standardised OTC derivatives. TFUMP notes there is a risk of creating an incentive to customise products that could be standardised solely for the purpose of avoiding regulation applicable to standardised OTC derivative products. It is therefore important for recommendations regarding both standardised and non-standardised derivative products to be considered in a coherent manner.

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## **Annex 1**

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