Reducing the risks of over-thecounter derivatives in South Africa

27 March 2012

Preface

The effects of the global financial crisis prompted the Group of 20 (G-20) leaders and their international coordinating body, the Financial Stability Board, to review global financial markets to enhance their stability and integrity, and to provide necessary protections to financial market participants.

As a member of the G-20, South Africa is committed to compliance with G-20 and Financial Stability Board agreements. In the 2010 Medium Term Budget Speech the Minister of Finance acknowledged the need for institutional change to extend the scope of regulation to the over-the-counter (OTC) derivatives market.

In 2010, an OTC Derivatives Regulation Working Group was commissioned by the Financial Services Board of South Africa to investigate the structure, operation, functionality and risks of the existing South African OTC derivatives market. National Treasury and the Financial Services Board have broadly accepted the group's recommendations as central to strengthening regulatory oversight of the OTC derivatives market.* The Financial Markets Bill currently being tabled in Parliament provides the new legislative framework for these reforms.

In the interest of consulting fully with relevant stakeholders, this paper aims to encourage discussion on the regulatory and legislative reforms for the South African OTC derivatives market. Interested stakeholders are invited to respond to an electronic survey which covers all the questions contained in this document. For access to the survey, please email **Lusanda Fani** at:

Email: lusanda.fani@treasury.gov.za

Written comments can be emailed to the same address.

The National Treasury requests that all comments and feedback be submitted by 25 May 2012.

^{*} Financial Services Board Report, "An Examination of the South African OTC Derivatives Markets to Recommend Measures for Strengthening their Regulatory Oversight". This report was released as Annexure C with the current paper and is publicly available on the National Treasury website.

Contents

Preface	. ii
Contents	. iii
List of abbreviations	. iv
Background	. 1
United States	3
European Union	4
Brazil	4
Singapore	5
The South African regulatory framework	6
The south Anican regulatory framework	
Extending the scope of South African regulation	
	/
Phased implementation of regulatory reforms	. 8
Code of conduct	
Registration of market participants	9
Central reporting	10
Regulatory framework	11
Defining the trade repository's role and responsibilities	12
Structure and financing of the trade repository	14
Fulfilling the trade repository's policy objectives	15
Further reporting requirements	18
Conclusion	. 24
Glossary	. 25

List of abbreviations

ССР	Central counterparty
Cetip	Brazil's central securities depository
EU	European Union
G-20	Group of 20 Finance Ministers and Central Bank Governors
IOSCO	International Organisation of Securities Commissions
JSE	Johannesburg Stock Exchange Limited
OTC	Over-the-counter
Strate	South Africa's central securities depository
US	United States

Background

In the interest of consulting fully with relevant financial market stakeholders, this paper aims to encourage discussion on possible regulatory and legislative reforms for the South African over-the-counter (OTC) derivatives market.

Derivatives are financial contracts that derive their value from the value of an underlying asset, or the financial instruments in the underlying market. Such financial instruments may include equities, interest rates, commodities, or exchange rates.

Derivatives provide many advantages to the financial system and to the broader economy, primarily by assisting in financing and price discovery,¹ increasing liquidity and allowing market players to hedge risk,². Derivatives are an important and integral part of the modern financial system.

The effects of the global financial crisis prompted G-20 leaders and their international coordinating body, the Financial Stability Board, to review global financial markets to enhance their stability and integrity, and to provide necessary protection to financial market participants.³ The G-20, of which South Africa is a member, recognised certain features of the OTC derivatives markets as having the potential to amplify systemic risk in financial market.⁴ Systemic risk can be assessed by three main criteria: size, substitutability and interconnectedness, or by the aggregate exposures of all counterparties in terms of specific asset classes, products or currencies.

In relation to OTC derivatives, the G-20 agreed in Pittsburgh in September 2009 that:

¹ Price discovery is the process whereby the price of a security, asset or commodity is determined in the marketplace through the interactions of buyers and sellers (through bids and offers).

Derivatives are financial contracts that increase liquidity, allow market players to hedge risk and assist in financing and price discovery

The G-20 recognised certain features of the OTC derivatives market as having the potential to amplify systemic risk in financial markets

² An example is a farmer expecting to harvest the wheat crop in four months' time hedging against the wheat price dropping below its current level.

³ Financial Stability Board, "OTC Derivatives Market Reforms: Progress report on Implementation", 11 October 2011. Pages 47 – 63.

⁴ A systemic crisis is characterised either by the failure of a chain of markets or institutions, or by a chain of significant losses to financial institutions.

The G-20 agreed that, where appropriate, standardised OTC derivatives should be traded on exchanges and cleared through a CCP

Non-centrally cleared contracts should be subject to higher capital requirements All OTC derivatives should be reported to a trade repository "All standardised OTC derivatives should be traded on exchanges or electronic trading platforms, where appropriate, and cleared through central counterparties by end-2012 at the latest. OTC derivatives contracts should be reported to trade repositories.⁵ Non-centrally cleared contracts should be subject to higher capital requirements."⁶ (our emphasis)

The International Organisation of Securities Commissions (IOSCO) reiterated calls by the G-20 and the Financial Stability Board for regulatory intervention in the structural and operational functioning of OTC derivatives markets. The eight main themes from the IOSCO recommendations are summarised in Box 1 below.⁷

Box 1 IOSCO recommendations for OTC derivatives regulation in emerging markets

Market entry – Players should have the necessary resources, especially minimum regulatory capital, to minimise the risk resulting from transactions.

Investor protection – Disclosure standards and suitability tests of unsophisticated OTC investors can reduce the risk they face.

Standardisation – This can enhance data quality and reporting standards, but the balance between standardisation and market efficiency and liquidity must be taken into account.

Clearing/central counterparty (CCP) clearing – For cost reasons, central clearing of standardised contracts makes more sense for large OTC markets.

Transparency – Central counterparties or trade repositories can improve transparency. Regulatory standards and arrangements should be established for them.

Providing data and reporting – Reporting should cover at least the size of positions and be accessible to regulators and supervisors. The standards of reporting should be set out.

Collateralisation and risk management – For transactions that are not centrally cleared, the standards for bilateral collateralisation should be set and appropriate capital charges should be arranged for the relevant risks.

Valuation – OTC derivatives should be valued realistically. Market value should be applied as much as possible. Where market value is not available, fair value should be used.

Implementation of the G-20 commitments across countries is varied with some smaller countries adopting a wait-and-see approach As a member of the G-20, South Africa is committed to compliance with G-20 and Financial Stability Board agreements. Implementation of the commitments in other G-20 countries has so far been varied reflecting the complexities involved.⁸ In some of the largest most developed markets, that is the United States (US), European Union (EU) and Japan, legislation has been enacted and implementing regulation is proceeding according to firm timetables. Other countries like Mexico, Australia and India are in the

⁵ IOSCO defines a trade repository as "a centralised registry that maintains an electronic database of the records of open OTC derivatives transactions". In this sense reporting at the trade repository can be considered the official legal record.

⁶ G-20 Leaders' Statement: The Pittsburgh Summit: 24-25 September 2009, <u>www.G20.org</u> /Documents.

⁷ Emerging Markets Committee of IOSCO "OTC Markets and Derivatives Trading in Emerging Markets Final Report" July 2010.

⁸ Financial Stability Board, "OTC Derivatives Market Reforms: Progress report on Implementation", 11 October 2011.

process of assessing their derivatives markets with the aim of deciding future regulatory initiatives. The Indian central bank has developed the Clearing Corporation of India Limited with the intention to eventually clear all derivatives transactions through the CCP. The Singapore exchange already offers central clearing for OTC commodity derivatives. Recognising the importance of consistency of OTC derivatives market reforms across jurisdictions, many smaller countries are waiting for US and EU regulatory frameworks to be finalised before acting.

United States

In the US, promulgation of the Dodd-Frank Wall Street Reform and Consumer Protection Act introduced stringent and comprehensive regulation of the OTC derivatives market. Essentially, the US regulation requires the following:

- Registrations of swap dealers, major swap participants and securitybased swap dealers.⁹
- Regulation of the business conduct of swap dealers and major swap participants including *know-your-client* procedures,¹⁰ counterparty eligibility, fair dealing, disclosure of risks and conflicts of interest.
- Capital requirements for non-bank swap dealers and major swap participants.
- Margin requirements for uncleared swaps and security-based swaps.
- Central counterparty clearing and trade execution requirements on standardised derivative products, except where one of the counterparties to a swap is not a financial entity, or is using swaps to hedge or mitigate commercial risk and notifies the commission of how it generally meets its financial obligations associated with entering into non-cleared swaps.
- Real-time public reporting requirements for all swap transactions and participants to make swap transaction and pricing data available to the public to enhance price discovery.

The proposed regulations have however been subject to much opposition and their implementation has been delayed subject to further consultation.

- Equity variance or dividend swaps referencing a single security or narrow-based index of securities
- Single-name credit default swap

The US has promulgated stringent and comprehensive regulation of the OTC derivatives market, but implementation has been delayed

⁹ Title VII of Dodd-Frank includes in its definition of "security-based swap", subject to SEC regulation, the following products:

[•] Total return swaps referencing a single security or loan

[•] Total return swaps referencing a narrow-based index of securities

[•] OTC options for the purchase or sale of a single loan, including any interest therein or based on the value thereof

[•] Credit default swaps referencing a narrow-based index of securities.

¹⁰ The activities that regulated institutions must perform to identify their clients and ascertain relevant information pertinent to doing financial business with them, with the aim of preventing fraud, identity theft or other illegal activities.

European Union

The proposed EU regulation does not mandate trading as the US regulation does

The proposed EU regulation is largely in line with the stringent regulation proposed by its US counterpart, except that it does not as yet mandate trading of eligible OTC derivatives on trade execution facilities.¹¹ The EU proposed regulation provides for:

- A "top-down" and "bottom-up" approach to clearing. The bottom-up approach refers to a process through which contracts that a central counterparty proposes to clear are made subject to a mandatory clearing requirement by the relevant regulator. The top-down approach means that the relevant regulator has the authority to identify OTC derivatives contracts that may be required to be cleared, irrespective of whether a central counterparty has yet proposed to clear them.
- Central counterparties are recognised as systemically important and are therefore subject to financial, governance and conduct of business requirements.
- Reporting of OTC derivatives transactions by financial counterparties to a trade repository no later than the working day following the execution, clearing or modification of the contract.
- Reporting of positions by non-financial counterparties in OTC derivative transactions that exceed a threshold, still to be determined by the European Commission. This includes details of any OTC derivatives transactions in line with the obligations imposed above on financial counterparties.

Brazil

Brazil, like South Africa, is an emerging market that fared reasonably well during the financial crisis and is arguably the most advanced in terms of the extent to which OTC derivative transactions are already regulated. Indeed Brazil's regulatory reforms pre-date G-20 commitments.

It is estimated that about 90 per cent of all derivative contracts in Brazil are standardised, exchange traded and centrally cleared.¹² Since 1994, all OTC derivatives transactions have been required to be registered with a centralised system approved by the Brazilian Securities Commission and the Central Bank of Brazil. Currently OTC derivatives are registered either with Cetip, the Central Securities Depository, or with BM&F BOVESPA, the main stock exchange in Brazil. According to Cetip, they hold around 80% of the market share of OTC derivatives in Brazil. In notional amounts, this is equal to around US\$316 billion outstanding (end of February 2012).

The role of Brazil's central securities depository, Cetip, goes beyond just mandatory registration, but also includes the pre-approval of transactions and the execution of financial settlement at the maturity of the contracts. It

In Brazil, it is estimated that 90 per cent of all derivatives are standardised, exchange traded and centrally cleared

¹¹ European Commission: Regulation of the European Parliament and Parliament and of the Council on OTC Derivatives, central counterparties and trade repositories, Brussels, 15 September 2010/0250 (COD).

¹² Financial Stability Board, "OTC Derivatives Market Reforms: Progress report on implementation", 15 April 2011.

is worth noting that non-financial institutions are also required to register and must report to the trade repository.

Singapore

The Monetary Authority of Singapore (MAS) approach to meet G-20 recommendations takes into consideration on-going international developments. MAS's policy position on OTC reform is to encourage standardisation of eligible products, weigh the costs and benefits of trading platforms and mandate reporting to regulated trade repositories. The extent of the reforms include so far:

- Expanding the scope of the Securities and Futures Act (SFA) to incorporate OTC derivatives regulation, including a new class of "derivative contracts¹³" in the SFA.
- Three levels of central clearing, namely (i) a "bottom up" and "topdown" approach for determining product eligibility; (ii) local presence for at least one counterparty to the contract, and (iii) the inclusion of all financial and non-financial entities with exposures above a certain threshold.
- A phased approach to the implementation of reporting requirements, taking cognisance of the nature and type of asset classes/products, the jurisdictions of the contract and the reporting threshold of entities. MAS are also reviewing possible procedures for one-sided reporting, exemptions for certain public bodies, data reporting and aggregation requirements, and whether or not to require reporting to local TRs only.

¹³ To allow MAS to bring the vast majority of the derivatives market within the ambit of the SFA, this new class of derivatives currently traded OTC constitutes the underlying in five major asset classes – equities, interest rates, credit, commodities, and foreign exchange.

The South African regulatory framework

OTC regulation does exist in South Africa, but it is heavily fragmented and there are gaps

In South Africa, derivatives are not explicitly regulated under the Banks Act or under the Financial Advisory and Intermediary Services Act

The current regulatory framework

The South African OTC derivatives market is only partly regulated. The Securities Services Act (No. 36 of 2004) does not provide for the proactive regulation, monitoring and surveillance of the South African OTC derivatives market.

The Financial Advisory and Intermediary Services Act (No. 37 of 2002) regulates the conduct of financial advisers and intermediaries operating in the OTC derivatives market but does not extend to bilateral counterparties acting in principal capacities (where the intermediary acts on its own behalf and not for a client).

Derivatives are also not explicitly regulated under the Banks Act because they do not fall within the definition of "authorised activities" of a depository institution. Instead, banks are only regulated in terms of general prudential and conduct of business rules. Regulatory capital requirements are imposed, however, on credit, market and operational risk emanating from derivative activities. This follows South Africa subscribing to the Basel Core Principles for Effective Banking Supervision.¹⁴

The Johannesburg Stock Exchange (JSE) also imposes rules on members. The following excerpt from an IOSCO assessment¹⁵ describes how the exchange calculates equities members' net risk position:

¹⁴ Financial Services Board report, "An Examination of the South African OTC Derivatives Markets to Recommend Measures for Strengthening their Regulatory Oversight".

¹⁵ IMF, South Africa: Detailed Assessment of Implementation on IOSCO Principles – Securities Markets.

"JSE members' listed derivative positions feed automatically into the JSE's capital adequacy system from the derivatives clearing system. The members separately report their OTC derivative positions to the JSE via an electronic reporting system. The JSE's capital adequacy system calculates the member's risk by netting the cash equity positions against the cash equivalent of their listed and OTC derivative positions to determine the member's market exposure for each equity instrument."

Extending the scope of South African regulation

In recognition of the need to strengthen systemic risk management and improve investor protection, the Minister of Finance, in the 2010 Medium Term Budget Speech, acknowledged the need for institutional change to extend the scope of regulation to the OTC derivatives market. This represented South Africa's firm commitment to implement the G-20 and Financial Stability Board recommendations, while addressing the regulatory gap created by the limited scope and the exemptions referred to above. It also coincided with the review of the South African securities legislation in response to domestic developments and best international standards (specifically IOSCO principles on the regular review of regulation).

In response, National Treasury and the Financial Services Board expanded their joint legislative review. In 2010, an OTC Derivatives Regulation Working Group was commissioned by the Financial Services Board of South Africa to investigate the structure, operation, functionality and risks of the existing South African OTC derivatives market. Chaired by Peter Skerrit, an expert consultant in derivatives trading and training, this work group comprised representatives from the Financial Services Board, the Reserve Bank, National Treasury, the JSE, Strate, the Association for Savings and Investment South Africa and the Banking Association (representing the buy- and sell-sides of the market). Its main task was to recommend to the Financial Services Board measures to strengthen regulation of the OTC derivatives market.

National Treasury and the Financial Services Board have broadly accepted the Working Group recommendations for strengthening regulatory oversight of the OTC derivatives market in South Africa.¹⁶

The Financial Markets Bill currently being tabled in Parliament in 2012 provides the new legislative framework for these reforms. Clause 77 of the bill authorises the Registrar of Securities Services, in accordance with the regulation stipulated by the Minister, to prescribe requirements, conditions and standards to regulate the OTC derivatives market. The bill further provides for an independent clearing house/central counterparty and trade repository to be set up to expedite central clearing and reporting of OTC derivatives transactions. It is expected that the central reporting of transactions will promote transparency of individual entities' positions, volumes, and pricing to the regulator and similarly, but on an aggregate level, to the public.

In 2010, an OTC Derivatives Regulation Working Group was commissioned to report on the structure, operation, functionality and risks of the existing OTC derivatives market

 $^{^{16}}$ For a thorough discussion of each recommendation, refer to pages 56 – 60 of the Financial Services Board document, "An Examination of the South African OTC Derivatives Markets to Recommend Measures for Strengthening their Regulatory Oversight" which is available on the National Treasury website.

Phased implementation of regulatory reforms

A phased implementation for OTC regulation in South Africa will be adopted, based on full consultation with relevant stakeholders Rather than a big-bang approach, the National Treasury visualises a phased implementation for OTC derivatives regulation in South Africa. A thorough and rigorous consultation process will take place on possible reforms for each phase. This will allow stakeholders to comment on each phase, enabling authorities to identify and iron out any problems with the proposed approach. The phases are depicted in the diagram below.



There may be some overlap across the phases. For example, much of the requirements under Phase 2 are already being developed under Basel III processes. For Phase 3, there will most likely only be standardisation of some products, appropriate central clearing arrangements and potentially central trading. (Given the complexity of many instruments, it may not be desirable for all OTC contracts to be standardised or centrally cleared and centrally traded).

At the beginning of each phase, National Treasury will release a consultation document detailing the possible regulatory reforms, and inviting comment from stakeholders in the form of responses to specific questions. Once comments have been received specific policy proposals may be developed with the help of a working group that has broad representation by industry, government and regulators.

This document represents the start of Phase 1, introducing regulatory reform covering registration, code of conduct and central reporting. It is envisioned that policy decisions on this phase will be announced in the second half of the year. Discussion documents on the subsequent phases will be released in due course and will be informed by the responses received to the Phase 1 document.

Phase 1 will consider regulatory reform covering a code of conduct, registration of market participants and central reporting to a trade repository

Code of conduct

At present, the conduct of participants, particularly professional participants in relation to a non-professional retail counterparty, is not regulated, except where the activity falls under the Financial Advisory and Intermediary Services Act.¹⁷ National Treasury and the Financial Services Board propose that participants be subject to a code of conduct and that suitability requirements be imposed on those market participants not covered by the Financial Advisory and Intermediary Services Act.

Proposed regulation and questions

The rationale behind this proposal is protecting participants in the OTC derivatives market, particularly non-professionals, or retail users. A code of conduct is recommended that should provide for minimum standards of transparency and suitability criteria, which are especially important for retail users of these contracts. Given that, interested stakeholders are invited to respond to the following questions:

- 1. Which participants in the OTC derivatives market should be subject to the code of conduct?
- 2. Should foreign participants be subject to the code of conduct?
- 3. Which of these provisions should the code of conduct include?
 - Criteria for assessing the suitability of products for non-professional counterparties.
 - Full disclosure of all material risks in terms appropriate for nonprofessionals.
 - Appropriately worded health warnings, especially for retail users.
 - Commitment to help with valuation and accounting issues.
 - Early termination issues, including secondary market liquidity of structured products.
 - Key terms of legal agreements.
 - Valuation methodologies.
 - · Collateralisation procedures.
 - Issues around market conduct, including confidentiality and practices such as front-running.
 - Advertising and soliciting business.
 - Dispute resolution procedures.
 - Due diligence and know-your-customer procedures.

Registration of market participants

Although the G-20 and Financial Stability Board did not mandate registration of counterparties to OTC derivatives transactions, this has

¹⁷ "Professional participants" is yet to be adequately defined within the proposed regulatory framework. In later sections, we invite comments from stakeholders on which participants should be subject to licensing, codes of conduct and other requirements.

been implemented in other markets, for example, the US. South African authorities are considering this option for the South African market.

In South Africa, both financial intermediaries that operate in an agency capacity and financial advisers operating in the OTC derivatives market are subject to licencing requirements under the Financial Advisory and Intermediary Services Act. However, neither professional participants acting in a principal capacity (on their own behalf) nor participants who are not financial intermediaries (corporates) are subject to regulation in the OTC derivatives market. As a result, there is neither assessment of their fitness and propriety and the adequacy of their financial resources nor of their governance and internal controls.

In September 2008, Dealstream Securities (Pty) Ltd collapsed due to operations in unregulated contracts for difference¹⁸ and misappropriating the funds of its clients. If these transactions and relationships had been subject to regulatory oversight, it would probably have identified such conduct at an earlier stage, and may even have prevented it.

Proposed regulation and questions

One of the recommendations of the Working Group is the registration of professional participants. The recommendation aims to ensure that professional participants possess sufficient resources and governance structures to conduct their activities appropriately, as well as to provide the necessary safeguards for consumer protection and prevention of market abuse.

It is proposed that registration requirements should include adequate capital and infrastructure support; fit and proper requirements; appropriate risk management; and corporate governance policies. In view of the above, market participants are invited to respond to the following questions:

- 4. Which participants should qualify as professional participants in the OTC derivatives market?
- 5. Which participants in the OTC derivatives market should be subject to registration requirements?
- 6. Should additional registration requirements be imposed on professional participants? If yes, which requirements?
- 7. Should foreign participants be subject to registration requirements? If so, who?
- 8. How should the category of professional participant, however defined, be policed?

Central reporting

The G-20 has recommended central reporting of all OTC derivative transactions to trade repositories. The Financial Stability Board has listed the following policy objectives underlying such mandatory reporting:

• Assessment of systemic risk and financial stability

¹⁸ A contract for difference is a forward where the parties agree to exchange, periodically until maturity of the contract, the difference between the opening price and closing price of the underlying for each period.

- Market surveillance and enforcement
- Market supervision.¹⁹

Endorsing this recommendation, IOSCO and the Committee on Payment and Settlement Systems recently released a consultation paper citing trade repositories, among others, as sources of transparency for regulators, market participants and the public.²⁰

Specifically, public, transparent and aggregated information builds greater confidence in and understanding of the markets, and informs and builds support for public policy objectives. Moreover, transparency supports investor protection and market discipline.

Given these benefits, the South African government supports establishing a trade repository. However, this requires regulatory oversight of the trade repository to promote its efficiency and effectiveness, and to safeguard confidential data reported to it. This leaves open questions of ownership and operational and risk management requirements. At least four matters need to be addressed:

- 1. How should the regulatory framework provide for establishing a trade repository? To what kind of oversight should it be subject? Who will exercise that oversight?
- 2. What should be the trade repository's role and responsibilities and how should its function be defined?
- 3. What should be the trade repository's structure and financing?
- 4. How will the trade repository fulfil the policy objectives underlying such mandatory reporting, namely the assessment of systemic risk and financial stability, market surveillance and enforcement and market supervision?

Each of these is discussed in more detail below.

Regulatory framework

The Financial Markets Bill provides for a trade repository to be set up, in terms of which any person may apply for a trade repository licence. However, the bill is not prescriptive about a repository's structure and ownership.

¹⁹ Financial Stability Board, "Implementing OTC Derivatives Market Reform", 25 October 2010.

²⁰ Principles for Financial Markets Infrastructure: CPSS/IOSCO Technical Committee, March 2011.

Proposed regulation and questions

The Financial Markets Bill allows for a trade repository to be established and licenced. The licencing requirements also include the accessibility, safeguarding and reliability of data reported to the repository. Repositories are required to have processes to ensure that confidential information is preserved. As in the US, repositories will be required to maintain an adequate business continuity policy and disaster recovery plan, and to establish back-up facilities.

In addition, they will be required to ensure the confidentiality, integrity and protection of reported information. They will need to calculate the positions by class of derivatives and by reporting entity, based on the details of the derivatives contracts. Trade repositories will be obliged to allow parties access to correct contract information to prevent any misuse of data and confidential information by the trade repository or any of its subsidiaries.

Market participants are invited to respond to the following questions:

- 9. What should be the minimum regulatory requirements to operate a repository? In this regard, are the license requirements in the Financial Markets Bill appropriate and sufficient?
- 10. Should regulation allow for a foreign trade repository, and if so, why?²¹ What should be the minimum regulatory requirements in this instance?

Defining the trade repository's role and responsibilities

Rather than simply being a central database for derivatives contracts entered into by South African financial market participants, a repository must also have the required resources to be able to accept all the data submitted by reporting parties, and sort it in a way that is useful to the regulator in terms of the policy objectives discussed above.

The trade repository should:²²

- Make data available to relevant authorities in line with their respective information needs.
- Have objective and publicly disclosed access and participation criteria that permit fair and open access and participation by market participants, market infrastructures and other service providers that seek to join or link with it.
- Promptly record the trade information received from participants and use timely and efficient record keeping to document changes to recorded trade information resulting from subsequent post-trade events.
- Cost-effectively meet the requirements of users and establish interoperability with other repositories or interconnectivity with other market infrastructures and service providers, while maintaining safe and secure operations.
- Provide market participants with sufficient information on its services to allow them to identify and evaluate accurately the risks and costs associated with using the services.

²¹ For example, *TriOptima* is an already well-established trade repository headquartered in Stockholm. It collects data from the G-14 banks on all outstanding OTC interest rate derivatives, with weekly reports available to the public.

²² Indira Gandhi Institute of Development Research Technical Report "Trade Repositories and their role in the financial marketplace" Singh *et al*, TR-2011-7-29.

Safety, access, security, reliability, and confidentiality of reported data

The Financial Services Board has emphasised the need to develop standards governing the quality and reliability of trade repository data. Owing to their importance, repositories should be operationally reliable, safeguard data and be readily available to the regulator and the public.

In the US, the Commodity Futures Trading Commission requires swap data repositories to provide it with direct electronic access to the swap data; to establish automated systems for monitoring, screening and analysing data; and to maintain the privacy or confidentiality of any swap data that a swap data repository receives.²³ A swap data repository is obliged to adopt and implement system safeguards, including business continuity and disaster recovery plans. In addition, it is compelled to establish sufficient policies and procedures to prevent a valid swap from being invalidated, altered or modified through confirmation or recording processes of the swap data repository. These repositories are also required to confirm the accuracy of the data that was submitted with both parties to the swap.

In the EU, trade repositories are instructed to develop appropriate, reliable and secure systems with adequate capacity to handle the information reported to them.

In Brazil, participants can access their own data only in an appropriate logical access environment. Data is reported to the regulator who can access information in the system on an *ad-hoc* basis. For business continuity planning and disaster recovery, secured/encrypted file transfer protocols and front-ends are used in the case of the trade repository.

²³ Proposed Rules: Swap Data Repositories: CFTC Vol. 75, 23 December 2010, p. 80903.

Proposed regulation and questions

The role and function of the trade repository must be clearly and adequately defined for it to be useful to the regulator and to reduce the costs and risks to market participants associated with reporting to it. Given that, market participants are invited to respond to the following questions:

- 11. In terms of the reported data, what should the trade repository's responsibilities be?
- 12. For what duties should the trade repository not be held responsible?
- 13. How should the trade repository provide the regulator access to the reported data?
- 14. What should fair and open access and participation criteria look like for market participants?
- 15. Should the trade information be captured in real-time?
- 16. What services, other than data collection and storage, should the trade repository provide?
- 17. What information must the trade repository provide to reduce costs and risks associated with reporting to it?
- 18. To what extent and how should interests of market participants be protected in levels of disclosure both in terms of financial technology used as well as confidential terms to a transaction?
- 19. Should confidential information reported to the repository at transactional level, for instance, be shared with local or foreign regulatory bodies on request?
- 20. Should data reported by market participants be regarded as market participants' data or be owned by the repository? If the former, should reporting entities and counterparties be charged a fee for accessing their own data?
- 21. To ensure accuracy of data, should repositories be required to confirm trades to a counterparty or counterparties who have reported the trades?

Structure and financing of the trade repository

In some jurisdictions, more than one trade repository is allowed to operate, which gives rise to debate about ownership structures. Typically, contention centres on whether repositories should be utilities owned by end users with a no-profit motive or be for-profit entities with the main objective being maximising return on investment for shareholders.

Proposed regulation and questions

The Financial Markets Bill is not prescriptive about a repository's structure and ownership. In this regard, market participants are invited to respond to the following questions:

- 22. Should South Africa licence only one trade repository or should multiple repositories be allowed to operate?
- 23. Should a South African trade repository be licenced as a state utility, as a utility owned by market participants and operated on a non-profit basis or should the licenced repository be allowed to operate as a for-profit entity?
- 24. How should the trade repository be financed and what should be its sources of revenue (for example, membership or transaction fees)?
- 25. If the trade repository is funded via membership and transaction fees, should smaller participants who report to the trade repository be exempt from paying fees?

Fulfilling the trade repository's policy objectives

Trade repositories can play a key role in identifying systemic risk

Any repository should provide adequate detail to improve the transparency of the OTC derivatives market and contribute to systemic risk assessment. This would also assist securities regulators in complying with the new IOSCO principle on systemic risk.

Regulators worldwide have endorsed the use of trade repositories to monitor systemic risk. The EU proposal places a responsibility on a repository to publish aggregate positions by class of derivatives on the contracts reported to it. This information should be made available to the European Securities and Markets Authority, competent authorities, and the relevant central banks of the European Central Bank.

Systemic risk is as much an issue for South Africa as for other jurisdictions. Currently, there is no centralised reporting architecture to provide the Financial Services Board and Reserve Bank with gross and net positions in the South African OTC derivatives market. Where it exists, reporting tends to be fragmented and used mainly for prudential regulation or financial disclosure. The correct estimation of the size of the South African OTC derivatives market is uncertain, as is whether transactions are priced correctly to reflect potential or embedded risks, or both. In its assessment report, the Financial Sector Assessment Programme found that there is no accurate information on the size of the South African OTC derivatives market. Thus, regulations do not exist on the extension of credit to customers, firm concentration or size of trading with a single counterparty. Furthermore, the programme found that a combination of factors creates the potential for systemic risk if a counterparty transacting substantial positions with more than one member firm defaults. Such factors include limited transparency, no regulation on the extension of credit, no limits on counterparty concentration and no control on counterparty default risk.

The Reserve Bank's mandate has been extended to assess the build-up of systemic risk

Until 2010, the Reserve Bank was mandated to formulate and carry out monetary policy, with only an implicit responsibility to contribute to financial stability. The Bank's mandate has only recently been extended explicitly to include ensuring financial stability. National Treasury underlined this in announcing that South Africa will move to a "twin peaks" regulatory framework in which responsibility for micro- and macro-prudential supervision across the financial sector will be assigned to the Reserve Bank. Currently, for prudential regulation, the Reserve Bank requires banks to report the volume and value of their South African OTC derivatives transactions. The trade repository could assist by providing the Bank with information relevant to assess the build-up of systemic risks.

From the non-banking side, prudential regulation similarly has tended to focus on promoting the solvency of institutions rather than the stability of the system. An example is authorised users reporting OTC derivatives positions to the JSE for prudential regulation purposes. In addition, as an IOSCO member, the Financial Services Board is required to contribute to identifying, monitoring and mitigating systemic risk.

In response to their expanded mandates, the Financial Services Board and the Reserve Bank set up an inter-agency body, the Supervisory Colleges Working Group, to proactively assess the systemic importance of financial institutions operating in insurance, pension funds, banking and capital markets. The Supervisory Colleges Working Group proactively monitors systemic risk that could be posed by financial conglomerates.

Although such surveillance provides coordination and the exchange of relevant information between the regulators, without a centralised reporting of off balance sheet and OTC transactions, systemic risk monitoring remains a big challenge. This is particularly so in the case of non-bank financial counterparties, for which no specific OTC derivatives reporting requirement is imposed. Although banks and certain non-bank financial institutions report these transactions as part of their disclosure, financial reporting or in line with their investment limits, the reporting falls short of the standard envisaged by the G-20, Financial Stability Board and IOSCO.

A trade repository would provide the Financial Services Board, the Reserve Bank and other relevant regulators with the requisite information to identify and monitor systemic risk. Such information could be used to decide the measures to put in place to manage and mitigate systemic risk.

Proposed regulation and questions

In view of the above, mandatory reporting of all OTC derivatives transactions to a trade repository is proposed. Among others, this would enable the prudential regulators to assess and monitor systemic risk and to enhance the overall stability of the South African financial system. In the short term South Africa could potentially have parallel reporting systems (trade repository and BA reports) until a uniform reporting framework was developed.

In this regard, market participants are invited to respond to the listed questions below.

- 26. What information should be reported to the trade repository to assist the regulator in its monitoring of systemic risk and to determine current exposures?
- 27. What information should be reported to the trade repository to assess the size, interconnectedness and substitutability of financial markets, instruments and market participants?
- 28. Should the trade repository disclose information to the public to enhance the public's understanding of the OTC derivatives market? If yes, what information should the trade repository disclose to the public?
- 29. Should trade repositories be responsible for disseminating information to market participants? If so, to which market participants and at what level of disclosure?
- 30. What other function(s) should a trade repository fulfil, if any, in support of mitigating systemic risk?
- 31. Assuming all OTC derivatives are required to be reported, to what extent will market participants be able to circumvent regulation by embedding OTC derivatives in vanilla (standard), non-OTC products, transacting out of other jurisdictions, or transacting through non-regulated entities? How can such risks be mitigated?

Market surveillance

The Financial Stability Board embraces trade repositories as capable providers of information or data necessary for the surveillance of the OTC derivatives markets. The Board requires regulators to implement measures to enforce the regulation and to deal with any regulatory contraventions or, specifically, market abuse practices in the OTC derivatives market. The enforcement measures should enhance the market's integrity, fairness and efficiency.²⁴ Accordingly, regulators the US and the EU have endorsed this objective and incorporated it in their regulations or proposed regulations.

Increased market surveillance of the OTC derivatives market

The South African OTC derivatives market is currently self-regulated through International Swaps and Derivatives Association agreements. To a limited extent it is subject to the reporting and prudential requirements of the Reserve Bank and JSE. Nonetheless, the need for increased market surveillance to monitor the conduct of major participants in the OTC derivatives market cannot be over-emphasised. The Financial Sector Assessment Programme also recommended that South Africa should develop greater OTC surveillance capacity. A more transparent and fair South African derivatives market would undoubtedly equip the Financial Services Board with the requisite tools to effectively monitor any restrictive or prohibited practices in the South African OTC derivatives space.

Proposed regulation and questions

The Financial Services Board believes that reporting OTC derivatives transactions to the trade repository would materially support surveillance of this market. Market participants are invited to comment on this proposal by responding to the following questions:

- 32. What level of detail should be reported to the trade repository for purposes of assessing the integrity, fairness and transparency of the OTC derivatives market?
- 33. What level of detail should be reported to enable the Financial Services Board to monitor potential market abuses in the OTC derivatives market?
- 34. What level of detail should be reported to the repository to measure investor confidence in the OTC derivatives market?

Market supervision

Trade repositories are responsible for providing regulators with data or information (or both) relevant for the general supervision of the OTC derivatives markets. Thus, repositories may be used to identify OTC derivatives to be mandated for clearing through a central counterparty or to identify areas where further regulation is required to limit systemic risks or market abuse. The IOSCO regulatory objectives relating to market efficiency, fairness and transparency would be greatly enhanced by the OTC derivatives market being effectively regulated.

A well-supervised OTC derivatives market will have risk management processes, internal controls, record-keeping measures, and adequate disclosure

In South Africa, the Securities Services Act, Financial Advisory and Intermediary Services Act and others do not give the Financial Services Board proactive supervisory authority over the OTC derivatives market except where transactions are concluded through intermediaries or financial advisers regulated by the Financial Advisory and Intermediary

²⁴ Financial Stability Board, "Implementing Derivatives Market Reforms", 25 October 2010, p. 44.

Services Act. Although the listed derivatives market is subject to stringent and robust regulation, the OTC derivatives market is not regulated and remains largely unsupervised. Risk management processes, internal controls, record-keeping measures, and adequate disclosure are among the necessary ingredients for a properly regulated and supervised South African OTC derivatives market.

Proposed regulation and questions

Mandatory reporting to trade repositories will materially enhance supervision of this market, and stakeholders are invited to respond to the following questions:

- 35. Should supervision requirements be imposed on the OTC derivatives markets that are equivalent to those currently applied in the regulated market?
- 36. Which market participants should be subjected to supervision?
- 37. What should be the extent of market supervision?
- 38. What information should be reported to the trade repository to achieve the market supervision objectives?

Further reporting requirements

Nature and type of information to be reported

Both IOSCO and the Financial Stability Board acknowledge that the type and nature of information to be reported to the trade repository will differ depending on the intended recipient. In IOSCO's view, detailed and ongoing reporting of OTC derivative transactions will allow regulators to monitor aggregated market data and cumulative exposure of market participants.²⁵ Each individual transaction may be aggregated to enable the regulator to monitor the state of the OTC derivatives market on micro and macro level. At a minimum, IOSCO requires that a repository should provide aggregate data on open positions, transaction volumes and values, as well as categorised data to the public. For example, aggregated breakdowns of trading counterparties, reference entities, or currency breakdowns of products should be provided.²⁶

The OTC Derivatives Implementation Working Group feels that the regulator should coordinate information with other regulators to get the most benefit out of the trade repository. The repository should also be able to "plug into" other repositories if need be so that information can be consolidated easily.

In the EU, the European Commission requires the reporting of parties to the contract and, where different, beneficiaries of the rights and obligations; and the main characteristics of the contract, including the type, underlying, maturity and notional value. A threshold is set in the EU, exempting non-financial counterparties below a certain minimum threshold (still to be determined) from reporting their OTC derivatives to a trade repository.

²⁵ CSA Consultation Paper 91-402 – Derivatives: Trade Repositories, 23 July 2011, pp. 28–29.

²⁶ Principles of Financial Market Infrastructures, CPSS/IOSCO p. 99.

Required OTC derivatives reporting is not aligned in South Africa

In South Africa, there is no central reporting of OTC derivatives transactions, and where the reporting obligation exists, such as to the Reserve Bank and the JSE, there is no alignment with regard to the type of information reported. The JSE requires its members to report their OTC derivative positions separately from their listed derivatives positions. The Reserve Bank BA350²⁷ requires banks to disclose gross notional amounts of all outstanding derivative contracts that are matured, gross notional amounts of all outstanding derivatives at the end of the reporting month and net fair value of all outstanding derivative contracts at the end of the reporting month. Pension fund collective investment schemes and insurance industries are allowed to invest in OTC derivatives subject to stringent investment limits and derivative transaction values form part of their overall financial reporting (balance sheet). In addition, there are no reporting obligations placed on non-financial institutions (except where these institutions transact with banks and the reporting is made by a bank to the Reserve Bank in terms of the BA350).

Proposed regulation and questions

It is proposed that all OTC derivative transactions should be reported to a trade repository. Data to be reported should include reporting on transactional data, that is type, underlying, maturity and notional value, and counterparties' disclosure, as well as position, valuation and aggregated data. Furthermore, a non-financial counterparty should be required to report all its OTC derivative transactions to the repository. This is in line with the broader regulatory objectives of a trade repository, which include surveillance and supervision of the OTC derivatives market. Such an approach aims to achieve market integrity and efficiency, and also to ensure investor protection. While valuation and transactional position data will be disclosed exclusively to the regulator, aggregate data will be disclosed to the public.

In view of the above, market participants are invited to respond to the following questions:

- 39. Should all OTC derivative transactions be reported to a trade repository? If not, which OTC derivative transactions should be exempted from being reported and why?
- 40. Should non-financial institutions that hold derivatives positions be required to report those transactions to the repository?
- 41. Should foreign counterparties be required to report their OTC derivative transactions to the South African trade repository?
- 42. What level of transactional data should be reported to the repository?
- 43. What level of valuation data should be reported to the repository?
- 44. What level of aggregate data should be reported to the repository?
- 45. What data should be reported to the repository for purposes of disclosure to the regulators to achieve the regulatory objectives mentioned above?
- 46. What data should be reported to the trade repository for purposes of assisting the public in understanding the OTC derivatives market?
- 47. What data should be disclosed to market participants, taking into account those who are parties to a transaction and those who are not?
- 48. Should OTC derivatives prices be made available to both the regulators and the public?
- 49. Should the reporting obligation be based on broad functional categories, for example, operational data, product information, economics of a transaction, valuation data, counterparty information, the underlying information and event data, or should unique data fields be developed for different OTC derivatives?

²⁷ Form BA350: SARB Regulations to the Banks Act, 2008.

Reporting party

The main participants in OTC derivative transactions are banks, non-bank financial institutions and corporates. These entities tend to diversify their portfolios by transacting with counterparties of different structural characteristics. The Financial Stability Board and IOSCO require counterparties to agree on which counterparty will assume reporting responsibility to trade repositories.

The integrity and accuracy of trade repositories depends on clearly defined duties between counterparties to transactions

Under the Dodd-Frank Act in the US the parties must agree on a counterparty to fulfil the reporting obligation. However, where the counterparty is a US citizen, the act specifies that the US-based counterparty will bear reporting responsibility.

In the EU, the European Commission has proposed regulation that will require financial counterparties, and non-financial counterparties that hold positions in derivatives in excess of a certain threshold, to report those transactions to the trade repository. The counterparties must agree on a counterparty that will assume the reporting obligation.

In South Africa, JSE derivative members are each required to report their transactions in listed derivatives, as well as OTC derivatives, to the JSE Nutron trading system. Similarly, banks are required to supply the Reserve Bank with monthly summaries of derivative activities in accordance with form BA350.²⁸

²⁸ Form BA350: SARB Regulations to the Banks Act, 2008.

Proposed regulation and questions

It is proposed that both counterparties to a transaction be obliged to separately report its OTC derivative transactions to the trade repository to smooth market surveillance and monitoring of timely or real-time reporting. However, to ensure that the JSE and Reserve Bank continue to fulfil their prudential regulation function, JSE members and banks will still be required to report the OTC derivative transactions to the JSE and Reserve Bank. Furthermore, where a transaction is between a local and a foreign counterparty, either party may report to the repository provided reporting is made to a locally licenced repository and the foreign counterparty is able to meet the reporting timeline.

Given this, market participants are invited to respond to the following questions:

- 50. Should both counterparties assume the reporting obligations of OTC derivative transactions to the trade repository? If not, which counterparty should be obliged to report to the repository?
- 51. Where a transaction is concluded between a financial counterparty and a non-financial counterparty or corporate, which counterparty should be instructed to report to the trade repository?
- 52. Should a dual reporting responsibility be imposed on banks and JSE members? That is, reporting to both the repository as well as to the JSE and Reserve Bank?
- 53. Should foreign counterparties be required to report transactions with local parties or should the reporting obligation be imposed solely on the local counterparty?
- 54. What are the potential risks associated with reporting by the foreign counterparties?

Timing of reporting

Both IOSCO and the Committee on Payment and Settlement Systems recommend timely reporting of transactions to the trade repository, capturing data on the original terms of the transaction, and any subsequent changes over the life cycle of the trade.²⁹ In the EU, the proposal is for counterparties to report OTC derivative transactions to the EU trade repository no later than the working day following the execution, clearing or modification of the contract.³⁰

The US imposes real-time reporting of transactions, pricing data, and public data.³¹ It allows a relaxation in the reporting timeline of block trades – a 15-minute reporting timeline of all block transactions for the Commodity Futures Trading Commission and a delay of between eight and 26 hours in disclosing notional amounts of block trades on the Securities and Exchange Commission.

In Brazil, participants send intra-day batch files to Cetip. There is no realtime reporting to the regulator; instead there is end-of-day reporting on open positions.

For the monitoring of systemic risk, there may be a need for real-time reporting where there is a rapid and regular change in valuations in the OTC derivatives market. In essence this means that institutions' exposures should be "live" on the database. This leaves certain challenges, for example, for bespoke OTC derivatives that are valued only periodically.

²⁹ Principles for Financial Market Infrastructures: IOSCO/CPSS 2011.

³⁰ Regulation of the European Parliament and the Council on OTC Derivatives, central counterparties and trade repositories, 2010/0250.

³¹ Proposed Rules: Real-time reporting of swap transaction data: Vol. 75 No. 234, 7 December 2010.

As no market prices exist, customised valuations need to be made, but often bilateral parties may not immediately agree on the valuation base.

The timing of reporting of OTC derivative trades in South Africa varies considerably depending on the reporting entity and type of derivative

In South Africa, the Reserve Bank requires monthly reports of the gross notional amounts of OTC derivative transactions, which gives an indication of market activity. The Bank's research department also receives regular information about turnover in the foreign exchange swaps and forward market. The JSE requires its equity members to make daily reports of OTC derivative transactions. For listed derivatives, the identity of counterparties as well as pricing of reported trades are not disclosed to the public. All reported trades are subject to a 10-minute reporting timeline. There is no timely reporting obligation placed on other financial institutions such as pension funds, insurance companies and collective investment schemes. Although a daily or monthly reporting timeline may be adequate for systemic risk monitoring, real-time monitoring is crucial for market surveillance and supervision. However, even for the monitoring of systemic risk, there may be a need for real-time reporting where there is a rapid and regular change in valuations in the OTC derivatives market.

Often challenges arise in cases that take time for matching to take place after a trade is done. One option is for reporting parties to give the trade repository indicative data on the same day and then be obliged to provide matched data within a specified period.

Proposed regulation and questions

Real-time reporting of OTC derivative transactions to the trade repository is proposed. In line with the JSE's reporting timeline, it is suggested that all trades reported within 10 minutes of conclusion qualify as real-time reporting. This is aimed at avoiding regulatory arbitrage between listed and OTC derivatives. In this regard, market participants are invited to respond to the following questions:

- 55. Should a 10-minute reporting time be imposed for all OTC derivatives transactions, or should a longer period be given, perhaps in the form of two or three windows per day during which reporting must take place?
- 56. Should any market participants or OTC derivative transactions be exempt from real-time reporting? If so, which market participants or transactions? What should be the timeline for delayed reporting of exempted transactions and market participants?
- 57. Should changes in valuation for all OTC derivative transactions be reported on a daily basis? If not, how often should valuation changes be reported??
- 58. What should be the timeline for reporting of transactions for systemic risk monitoring?
- 59. What should be the timeline for reporting of transactions for purposes of OTC derivatives market surveillance and supervision?
- 60. Should different timelines apply to different contracts, and data reported, for example transaction data, valuation data and confirmation data?
- 61. What sanction, if any, should be imposed for non-compliance?

Legal entity identifier

The trade repository should be structured to contain records at beneficial ownership level and not at nominee (for example, a trustee) level. There

should also be some management of the lifecycle of derivatives contracts to cater, for example, for corporate actions such as name changes.

A legal entity identifier could help the aggregation of OTC derivatives data. The Financial Stability Board, IOSCO and the Committee on Payment and Settlement Systems are investigating the establishment of a unique legal entity identifier for financial instruments and legal entities participating in financial markets. IOSCO and the Committee on Payment and Settlement Systems have released a consultative report supporting the development of such a legal entity identifier.

The identifier would be a tool to achieve minimum data reporting requirements, standardise formats for derivative contracts, as well as to promote the methodology and mechanism for aggregating derivatives data on a global basis. Such an identifier will enable firms and regulatory authorities to aggregate exposures more effectively across different instruments and markets.

In the US, the Office of Financial Research has issued a policy statement promoting the development of a global legal entity identifier system. It is intended that the global identifiers be implemented during 2012. Most market participants, however, believe that it will take five years or more to implement the standard. Nonetheless, South Africa supports the initiative and awaits further guidance from international organisations.

Conclusion

The proposals in this paper, when combined with robust consultation, can bring South Africa in line with international best practice in OTC derivatives regulation Rather than a big-bang approach, a phased implementation for OTC derivatives regulation will be adopted:

Phase 1: Code of conduct, registration of market participants and central reporting.

Phase 2: Regulatory requirements for non-centrally cleared derivatives.

Phase 3: standardisation of some products, appropriate central clearing arrangements and potentially central trading. (It may not be desirable for all OTC contracts to be standardised or centrally cleared and centrally traded).

This document represents the start of Phase 1. It is envisioned that final policy decisions on Phase 1 will be announced in the second half of the year. In the interest of full consultation, we invite interested stakeholders to respond to an electronic survey which covers all the questions contained in this document. For access to the survey, please email **Lusanda Fani** at:

Email: lusanda.fani@treasury.gov.za

Written comments can be emailed to the same address.

The National Treasury requests that all comments and feedback be submitted by **25 May 2012**.

Discussion documents on the subsequent phases will be released in due course and will be informed by the responses received to the Phase 1 document.

Glossary

Arbitrage – A strategy to take advantage of profitable opportunities in different markets arising from differential price anomalies.

Collateral – An acceptable asset posted to/by a counterparty used as a form of credit protection.

Confirmation – A written or electronic agreement between two counterparties setting out the terms of an individual OTC transaction.

Commodity derivative – A derivative contract where the value of the contract is derived from an underlying commodity (metals, agricultural goods, energy) or commodity index. Commodity derivatives can be physically or cash settled.

Commodity futures – A bilateral contract to pay for a commodity at a set price at an agreed time in the future. Commodity futures are exchange traded.

Contract for difference – A cash settled total return swap or forward where the parties agree to exchange periodically until maturity of the contract the difference between the opening price and closing price of the underlying over each period.

Credit default swap – A contract designed to transfer the credit exposure of debt obligation between parties. The buyer of a credit swap receives credit protection, whereas the seller guarantees the creditworthiness of the underlying security. In a credit default swap, the risk of default is transferred from the holder of the security to the seller of the swap. Most credit derivatives take the form of credit default swaps.

Default – The failure of a counterparty to perform its obligations under a derivative contract.

Delivery – The physical movement from seller to buyer of the underlying asset on which the derivative is based.

Derivative – A financial instrument that transfers risk from one party to the other. It derives its value from the price or rate of some other underlying assets such as bonds, loans, equities, currencies, commodities, indices, published rates or combinations of those assets.

Equity derivative – An OTC contract whose value is derived from one or more equity linked underlyings, for example shares or an equity index.

Foreign exchange derivative – A derivative contract where the underlying is a currency or basket of currencies.

Forward – A contract involving the sale by one party and the purchase by another party of a predefined amount of an underlying instrument, at a predefined price and a predefined date in the future.

Futures – An exchange-traded agreement to take or make delivery of an asset (buy or sell) at a specific time in the future for a specific price agreed today.

Hedging – A trading strategy that is designed to reduce or mitigate risk. A second transaction is entered into to offset the risk of the first.

Initial margin – An additional collateral that is requested over and above the mark-to-market of a trade or portfolio of trades to cover any fluctuations in the value of the collateralised portfolio, which may occur between review periods.

Interest rate derivative – A derivative product that involves the exchange of cash flows calculated on a notional amount using specified interest rates.

Interest rate futures – A futures contract for securities and deposits whose prices are determined by interest rates.

Interest rate swap – An agreement to exchange interest rate cash flows, based on a specified notional amount from a fixed rate to a floating rate (or vice versa) or from one floating rate to another. Such swaps are commonly used for both hedging and speculating.

Leverage – The magnification of gains and losses by only paying for part of the underlying value of the instrument or asset.

Margin – The sum of money that must be deposited, and maintained, to provide protection against default by a counterparty to a trade.

Market maker – A dealer who is prepared to make a market by quoting simultaneous bid and offer prices.

Notional amount – The amount of principal underlying the derivative contract, to which interest rates are applied to calculate periodic payment obligations.

Option – The right, but not the obligation, to buy (call) or sell (put) a financial instrument at an agreed-upon price during a certain period of time (American), on a specific date (European) or on a number of specific dates in the exercise period (Bermudan).

Over-the-counter (OTC) transaction – A derivative transaction between two counterparties where the terms are freely negotiated (as distinct from an exchange-traded transaction where the terms are prescribed by the rules of the relevant exchange).

Physical settlement – The meeting of a settlement obligation under a derivative contract through the receipt or delivery of the actual underlying instead of through cash settlement. For example, in a physically settled credit default swap, the buyer of protection must deliver the deliverable

obligations it has specified in the notice of physical settlement to the seller of protection.

Settlement – The process whereby obligations arising under a derivative transaction are discharged through payment or delivery or both.

Swap - A derivative where two counterparties exchange streams of cashflows with each other. These streams are known as the legs of the swap and are calculated by reference to a notional amount.

Underlying – An asset, basket of assets, index or rate upon the basis of which the value and cash flows or deliverables under a derivative transaction are calculated.

Volatility – The variability of movements in a security or underlying instrument's price. It is a measure of the amount by which an asset's price is expected to fluctuate over a given period of time. It is normally measured by the annual standard deviation of daily price changes.