



FPL Canadian Electronic Trading Conference 2009

*Toronto Hilton
June 1 and 2, 2009*

Global Clearing and Settlement in a Credit Challenged World

CDS



markit





Session Participants

Global Clearing and Settlement in a Credit Challenged World

- Jenny Tsouvalis, VP, Investment Operations & Applications, OMERS (Moderator)
- Nicola Von Schroeter, Managing Director, Global Head – Alliance Partners, Markit
- Mark Weseluck, Executive Director, Customer Service & Product Development, CDS
- Frank De Maria, Managing Director, Business Development, DTCC
- Keith Walsh, Director of Sales, Americas, Omgeo



Agenda

- Clearing and Settlement Events - Buyside Perspective
- Impact of Market Turmoil on Clearing and Settlement in Canada
- Trade Matching Initiatives in Canada and Globally
- Canadian and International Clearing and Settlement Initiatives
- Standardization of Credit Default Contracts
- Discussion and Q&A



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Clearing and Settlement Events Buyside Perspective



Buyside Perspective

- Clearing and settlement experiences
- Securities lending changes



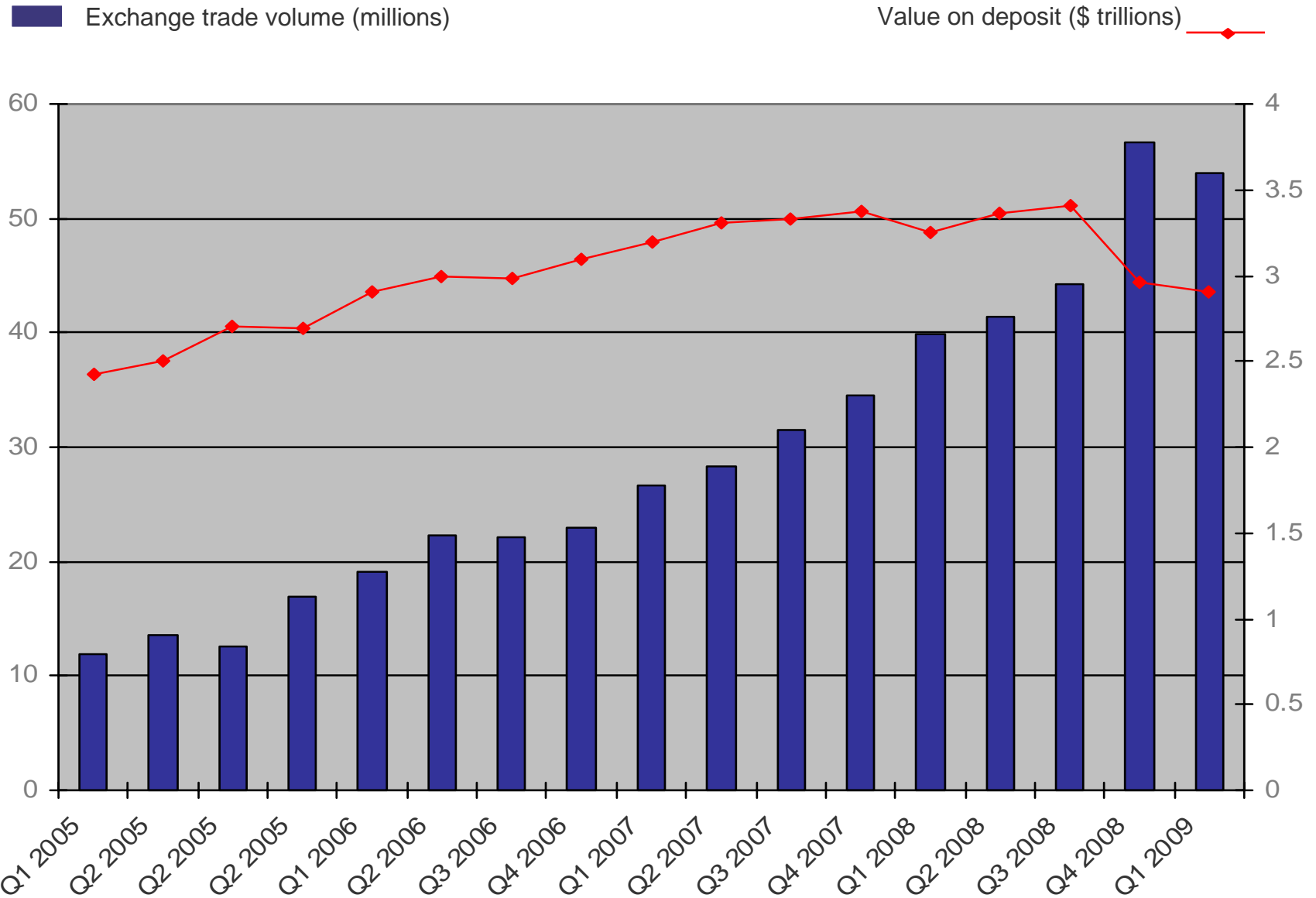
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Impact of Market Turmoil on Clearing and Settlement in Canada



Market Turmoil Impact on CDS Depository and Clearing Activity





Impact of Market Turmoil on CDS Operations

- No participant defaults
- Added stress scenarios based on market turmoil and more frequent stress tests
 - Stress testing continues to indicate exposures do not represent potential systemic impacts
- High clearing volumes successfully settled except for some slower processing on peak days (highest volume: almost 1.6 million exchange trades on one day)
 - Improved processing time and increased clearing capacity to 3.5 million exchange trades/day through application re-engineering and optimization efforts and disk storage upgrade



Thomas Murray Risk Assessment of CDS

- Confirmed overall AA rating for CDS for third straight year
 - Highest rating assigned to any central securities depository
- Following improvements noted since 2008 review:
 - Continued reduction of clearing fees
 - Introduction of the SWIFT MT568 message type to complement MT564 messaging for improved STP of corporate action notifications
 - Technology upgrades and further enhancements to the disaster recovery and business continuity plans
 - Implementation of FINet to replace DetNet
 - Pursuit of initiatives to reduce certificates and eliminate cheques for entitlement payments



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Trade Matching Initiatives in Canada and Globally



CDS Institutional Trade Processing Status Update

Institutional Trade Processing Industry Summary April 2009

Overall Entered	Entries	Percentage Entered	Overall Matched	Percentage Matched
T	439,480	72.00%	248,059	47.01%
T+1 AM	112,379	90.41%	203,383	85.56%
T+1 PM	20,587	93.78%	28,029	90.87%
T+2 AM	16,077	96.41%	18,300	94.34%
T+2 PM	5,629	97.33%	8,226	95.90%
T+3	11,345	99.19%	16,416	99.01%
>T+3	4,877	100.00%	5,232	100.00%
Total Trades	610,375		527,645	

- The current NI 24-101 matching rate target is 90% of trades matched by noon on T+1 am, effective until June 2010
 - Then, 70% of trades to be matched before 11:59 pm on T by January 1, 2011
- Current matching rate of 85.56% an improvement from April 2008 matching rate of 80.60%



Omgeo Central Trade Manager

April 2009 Affirmation Rates Stats

Affirmation Timings	%
Trade Date	93%
Trade Date + 1	98.6%
Trade Date + 2	98.7%

Regional Trade Date Match Rates	%
Americas	93.5%
EMEA	91.1%
Asia/Pac (including Japan)	96.7%



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**Canadian and International
Clearing and Settlement Initiatives**



Omgeo View of Clearing/Settlement Directions

Focus is on risk and manual effort reduction

- Extending automation further down the lifecycle of a trade
- E.G. – Industry support of Omgeo links to depositories (CDS, Jasdaq, EuroCCP initiatives)
- Utilizing matching utilities for expanded asset class coverage

Embracing and requiring greater adherence to industry standards

- Use of FIX and SWIFT messaging standards within matching utility
- Full compliance with SMPG local market practices (120+ settlement methods) for settlement instructions in ALERT database
- Support of ISDA FpML guidelines

Focus on Cost Effectiveness

- Leveraging technology investments to reduce operating costs
- Funding initiatives that have demonstrable cost-reduction benefits
- E.G. – Discounted CDS pricing for VMU matched trades; Omgeo inSite for elimination of paper disclosure delivery in U.S.
- E.G. – Industry support of Omgeo/EuroCCP initiative for risk and settlement fee reduction



Canadian Depository for Securities FINet

- New netting system that replaced DetNet
 - Government of Canada Bonds and T-bills and provincial bonds, T-bills and notes (by early June)
 - Canada Mortgage Bonds to be included soon
- CDS acts as central counterparty to netted trades
- Eligible trades will be netted regardless of their value dates
- Intraday netting process
- Partial settlement
- Netting/reporting at the client account level
- Vendor-supported mainframe platform offers greater robustness and greater ease of future development



Canadian Depository for Securities Dematerialization Initiatives

- New BEO Securities Services Agreement
 - Encourages uncertificated issuance of new securities
 - Possible conversion to uncertificated holdings with issuer's approval
 - Requires electronic payment of entitlements for new issues
- New rule requiring all issues held at CDS to have electronic entitlement payments by Nov. 1, 2011
- Alternative trust indenture allows uncertificated issuance of debt available on www.cds.ca
- Registrar and Paying Agent service offered through new subsidiary, CDS Securities Management Solutions Inc.
- Electronic closings using CDSX functionality



Canadian Depository for Securities Training Program

- CDS in-class training program to be launched in fall 2009
- Available to CDS participants and non-participants
- Provide a thorough understanding of depository, clearing and settlement activities conducted by CDS and vis-à-vis market participants
- Single/two day courses will cover:
 - Depository activities
 - Corporate actions and entitlements processing
 - Clearing and settlement
 - International services
 - Risk management - financial and operational risk



DTCC Deriv/SERV LLC Services

■ Electronic Confirmation/Matching

- Covers OTC credit, rate and equity derivatives
 - ✓ *Greater than 95% of credit derivative market worldwide (including all single name, index, index tranche, CDS on loans and loan indices, CDS on ABS, CMBS and RMBS and asset backed and commercial mortgage indices)*

■ Trade Information Warehouse (for credit derivatives)

- Central trade registry and public reporting of positions and turnover
 - ✓ *All electronically confirmed CDS are registered in Warehouse (2.3 million contracts; 28.2 trillion gross notional value in USD equivalent)*
- Central hub for life-cycle event processing and facilitation of other infrastructure providers (e.g., CCPs, trade compression providers, custodians, fund administrators, etc.)
- Central payment calculation, netting and settlement (through link with CLS Bank), including net cash settlements for credit events



DTCC Trade Information Warehouse (TIW)

■ Central Trade Registry

- We publish weekly positions and turnover for:
 - ✓ Top 1,000 single names (of 3,000 total names in Warehouse), both gross and net
 - ✓ All indices, both gross and net
 - ✓ Aggregates, on a gross basis
 - ✓ Introduced weekly gross trade and other position turnover data in 2009

- Data is available at <http://www.dtcc.com>



DTCC Trade Information Warehouse (TIW)

Central Processing Hub – Use to Date

- Working with all CCPs to support clearing efforts
- Supporting the two leading compression and tear-up providers
- 13 other service providers currently linked to the Warehouse
- Centrally processed 9 credit events last year, with 30 new credit since January 2009 on a concurrent basis - enabling TIW to calculate payments based on auction rates and settle through CLS where applicable
- Successor event processing in place, one event processed last year, with many more pending resolution by DC
- All maturities are automatically processed
- 4 bulk novations and mass terminations processed last year (including Lehman), with 3 currently pending



Trade Information Warehouse (TIW)

Central Settlement Processing

Includes regular fee and coupon payments as well as net cash settlement for credit events

- Currently all major global dealers centrally settle via TIW and CLS
 - ✓ All major currencies
 - ✓ Multi-lateral net funding of obligations
 - ✓ Creates settlement certainty
 - ✓ Eliminates *nostro* breaks

Example - *Lehman credit event had \$72 billion in gross obligations, which netted to \$5.2 billion in net funding obligations.*

- Efforts underway to on-board non-OMG banks and buy-side globally



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Standardization of Credit Default Contracts

Markit Group Perspective



Why a Standard CDS Contract Type ?

- To respond to US Law
 - Timothy Geithner's letter on May 5th, 2009 stating that the Commodities Exchange Act (CEA) and the securities laws be amended to require clearing of all OTC derivatives that are accepted for clearing by one or more fully regulated CCP's.

- To reduce counterparty and operational risk
 - Enhance portfolio compression rates
 - Prepare for T+0 processing
 - Prepare for central clearing

- Not a new concept – bonds, indices, credit event auctions



What Has Changed? The CDS Big Bang

- Global Contract Changes
 - ISDA Determination Committee
 - Hardwiring of the auction mechanism
 - Event Effective Date

- North American Corporate CDS Convention Changes
 - Fixed coupon of 100 and 500
 - Full coupon
 - Restructuring
 - No reference obligations for senior trades (TBD)

- Quoting conventions



Summary of Timelines

- Industry started trading the new contract type as of April 8th 2009

