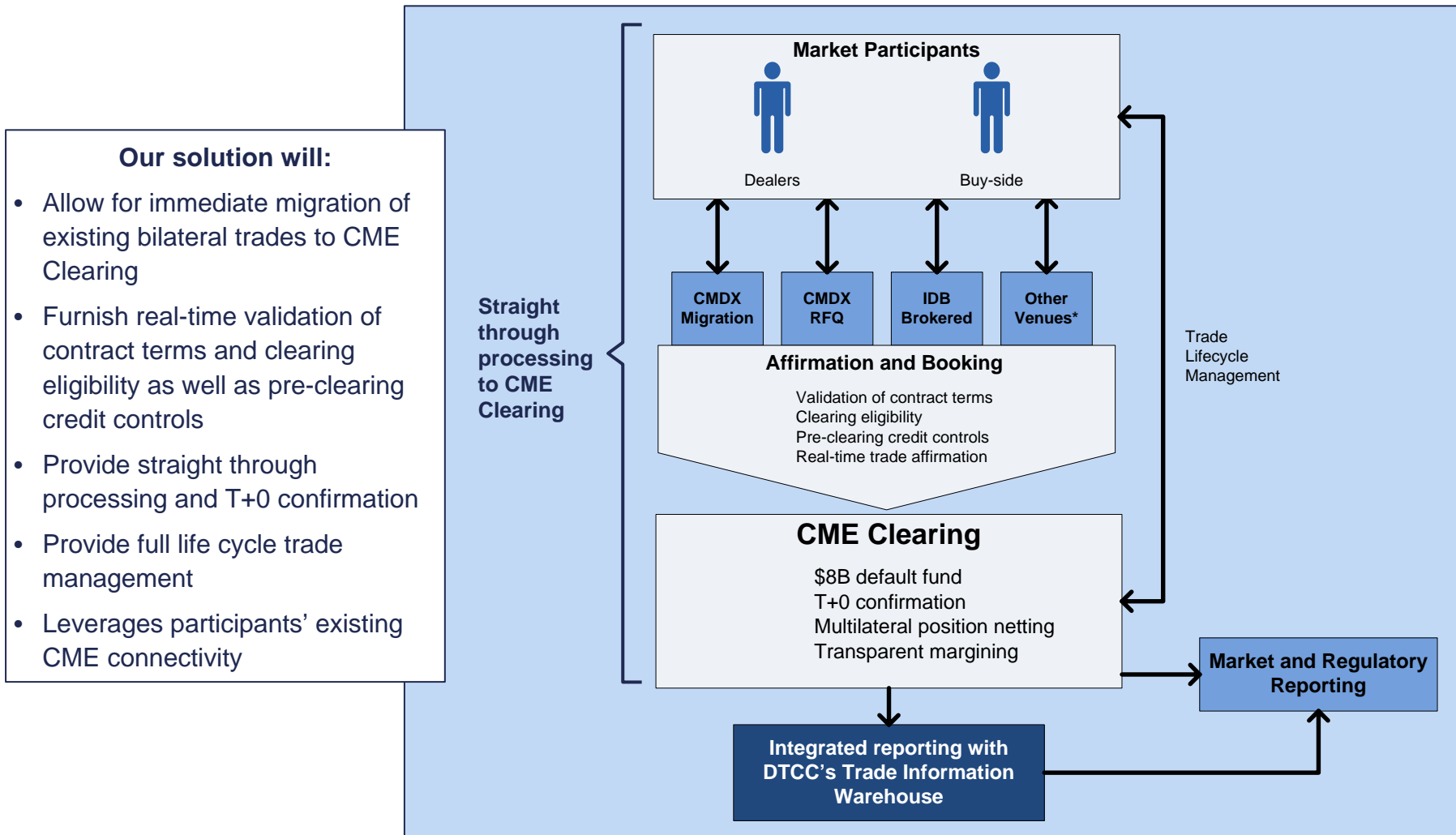


# Open Credit Default Swaps Clearing Solution

*Security, Neutrality, and Transparency*

February 24, 2009

# Open CDS Clearing Solution Offers Straight Through Processing Into CME Clearing From Multiple Venues



# Our CDS Open Clearing Solution Addresses the Needs of CDS Market Participants Now

## CME's industry-leading financial safeguards package

- Financial safeguards that have protected market participants over **CME's 110+ year history**
- **\$8B financial safeguards package** – the largest of any clearinghouse in the world
- CME's industry-leading financial safeguards package is being extended to CDS products
- **Protection of customer accounts** through time-tested regulatory framework

## CME's best in class clearing infrastructure

- Handles over **\$1.2 quadrillion** in notional value traded a year
- Manages **~\$100 billion** in collateral and **~\$50 trillion** in open interest
- Provides **full trade life cycle management**, and ability to integrate immediately with participant's front and back-office infrastructure as well as with existing CDS infrastructure

## CME's comprehensive CDS risk management

- **Multi-factor portfolio margining model** covering macro, sector, idiosyncratic, liquidity, and basis risks, that is **transparent and robust**
- Daily **mark to market** to cover price movements and optimize margin
- **Highly experienced** at managing the positions of a defaulting clearing member

## Standardized contracts

- Standardized contract terms that are **consistent with ISDA OTC templates**, adhere to the determinations made by ISDA, and ensure submission to the ISDA auction process
- Maximize CME Clearing's ability to multi-lateral net and close out positions

# CME Clearing is Collaborating with Regulatory Authorities and Industry Organizations

- Completed regulatory risk management reviews with the Federal Reserve Bank of New York, the Securities and Exchange Commission, and the Commodity Futures Trading Commission (CFTC)
- CME Risk Committee, CME Clearing's governance body comprised primarily of clearing member representatives, approved the inclusion of cleared CDS in the combined guaranty fund.
- Working with the SEC and FINRA to complete the SEC exemption process
- Actively engaged with the FSA regulatory review of CME Clearing's offering
- Seeking a CFTC 4d order that permits customer funds used to margin, secure or guarantee Credit Default Swaps ("CDSs") to be held in Section 4d segregated customer accounts
- Finalizing agreements with ISDA and Markit

# Day 1 Products Cover Over 75% of the Corporate CDS Market, the Most Comprehensive Product Offering in the Industry

## Day 1 Offering

CDX Index	
<b>Products</b>	IG, HVOL, HY, XO
<b>Tenors (years)</b>	3, 5, 7, 10
<b>Series</b>	Current + Previous 3

iTraxx Index		
<b>Products</b>	Europe, HVOL, XO	Financial Senior, Financial Subordinate
<b>Tenors (years)</b>	3, 5, 7, 10	5,10
<b>Series</b>	Current + Previous 3	

- Coupon rate, list currency, restructuring type, and reference obligation consistent with those published by Markit Group

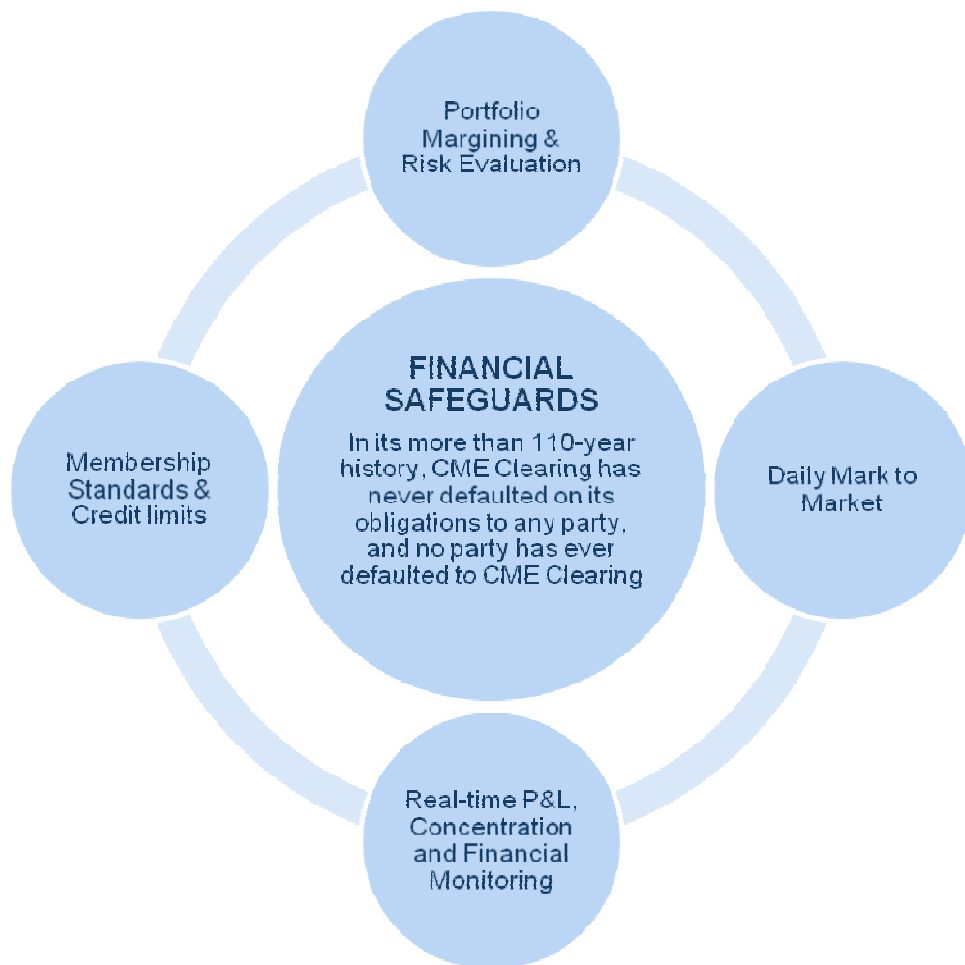
## Single Names

- All single name constituents in the CDX and iTraxx indices referenced above (**over 500 reference entities**)
- Tenors include 1 year to 10 years for any IMM date (Mar 20, Jun 20, Sep 20, Dec 20)
- Standardized fixed coupons of 100 bps and 500 bps so that the risk profiles of our contracts match those of existing OTC contracts
- Series include current and previous three off-the-run series

## CME Clearing's cleared CDS contracts serve to improve the overall market infrastructure

- Our standardized contract terms for the cleared CDS contracts are designed to mirror the bilateral OTC contracts, and are consistent with ISDA definitions, adhere to ISDA determinations, and are eligible for participation in ISDA auctions
- Existing single name trades will be converted to the new coupons, with each split into two new trades, one with a 100 bps coupon and one with a 500 bps coupon - the net notional and coupon remain the same
- New single name trades will trade at the fixed 100 and 500 bps coupons with an upfront payment to compensate for the difference between the fixed coupon and the fair spread
- Forthcoming product offerings (e.g. Tranches, additional Indexes, additional Single Names) will be based on recommendations of the CMDX Product Advisory Board

# Full Support of CME Financial Safeguards are Being Extended to CDS Products



## Portfolio Margining & Risk Evaluation

- Margin requirements based on the risk in a portfolio and defined by a series of scenarios and shocks (e.g., steepening/flattening, compression/decompression, industry concentration)
- Actual portfolio testing on 1,000 random portfolios provided >99.99% coverage for 1-day price moves from April to December 2008

## Daily Mark to Market

- Accurate, automated daily mark-to-market calculations for variation margin

## Real-time P&L, Concentration, and Financial Monitoring

- Consistent monitoring of financial strength of each clearing firm (including risk-based examinations, net capital requirements and segregation requirements)

## Membership Standards & Credit Limits

- Participant requirements will be consistent with CME's overall risk management framework and regulatory guidelines
- Credit and financial monitoring, and operational review of clearing members
- Customer account protection under CFTC Regulation 30.7 pending approval of petition for customer segregation protection under section 4(d) of the Commodity Exchange Act

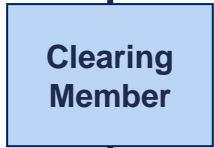
# Clearing Members Benefit from CME's Well-Established Process for Handling Clearing Member Default

**CME will facilitate an orderly liquidation and protect its clearing members in the event of a clearing member default**

## Pre-Default Position



- Provides transparent and consistent daily margining
- Daily Multi-lateral position netting
- Provides financial safeguards

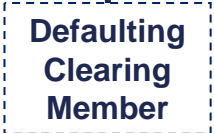


- Provides access to Clearing House
- Collects margin and processes mark to market from customers in accordance with CME policies & other applicable regulatory requirements
- Customer margin requirements held in segregated account



- Collateral protected through segregated accounts
- Positions protected under clearing member default
- Margins are calculated on a net portfolio basis

## Event of a Clearing Member Default



### Defaulting members positions

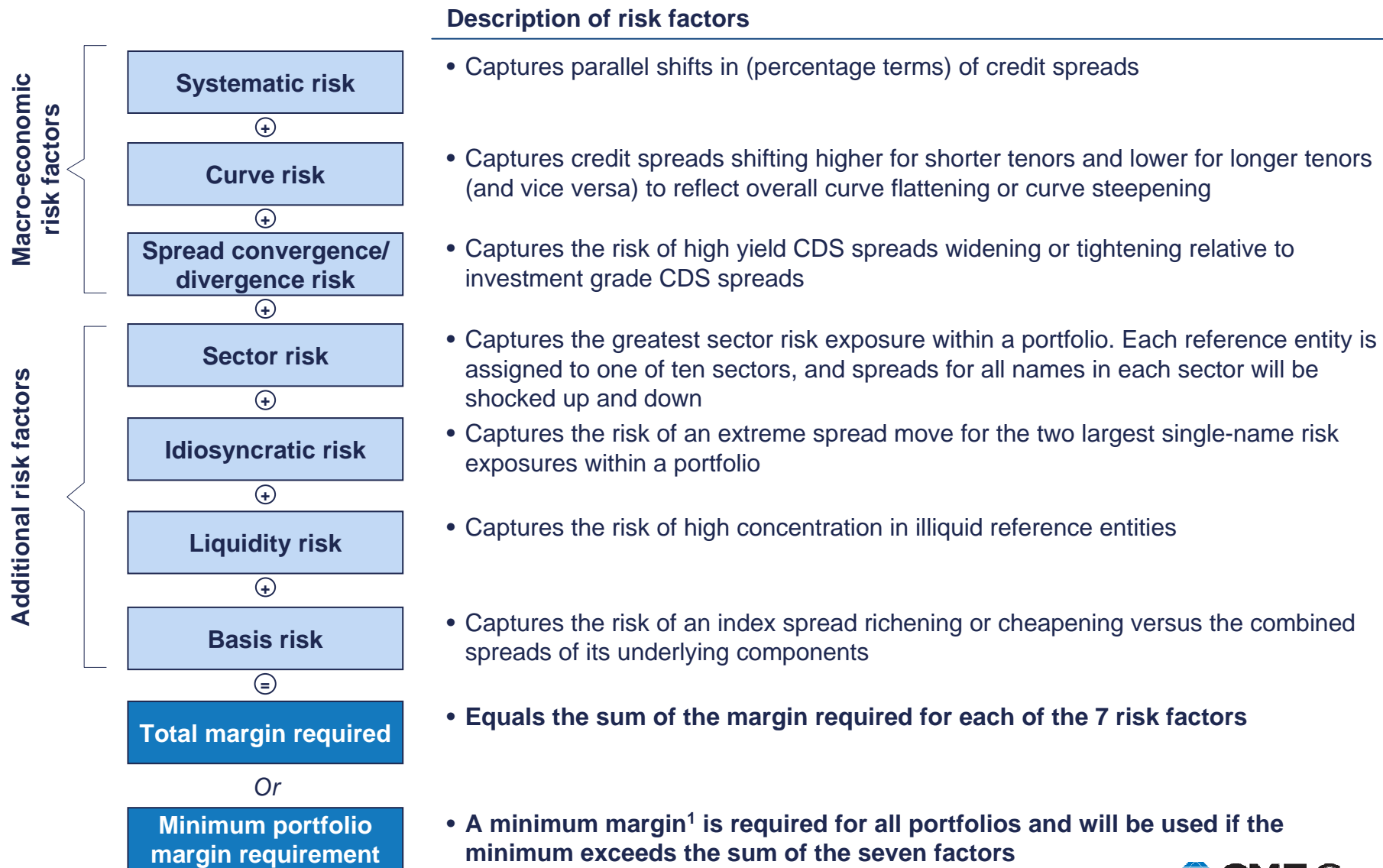
- Market access is restricted
- Collateral is captured
- Portfolios are smoothly liquidated, in part due to liquidity on the trading facility

### Customer protection

- Collateral is held in a segregated account
- Positions are maintained and moved to a new clearing member

For more information on Financial Safeguards, please visit <http://www.cmegroup.com/clearing/files/financialsafeguards.pdf>

# An Innovative Multi-Factor Risk Model is Used For Margin Calculation



<sup>1</sup> Minimum portfolio requirement is based on the following percentages of gross notional value: (i) 0.04% of IG index; (ii) 0.10% of HY index; (iii) 0.12% of IG single names; (iv) 0.50% of HY single names



# We Are Ready to Launch

## Risk management

- Multi-factor risk management and margin framework is fully integrated in CME's risk-based margining framework
- Margin framework has been tested on many sample portfolios:
  - Investment grade
  - High yield
  - Toxic (e.g., WaMu, Wachovia, AIG, LEH)
  - Complete active CDS portfolios at different points in time
  - Others
- The resulting margin is robust - coverage was >99.99% for 1-day price moves for 1,000 random portfolios tested from April to December 2008

## Migration facility

- Migration facility successfully tested on a range of actual and test CDS portfolios, including all of Citadel's portfolio
- Conducted multiple migration exercises for both sell-side and buy-side market participants
- Operationally ready to accept trade data from market participants to begin immediate migration of legacy bilateral trades into standard contracts cleared by CME

## Clearing operations

- Most comprehensive Day 1 product offering in the market – over 75% of corporate CDS notional value covered
- CME has incorporated the CDS product set into its clearing systems and conducted full end to end testing
- Actively working with clearing firms on connectivity and integration