

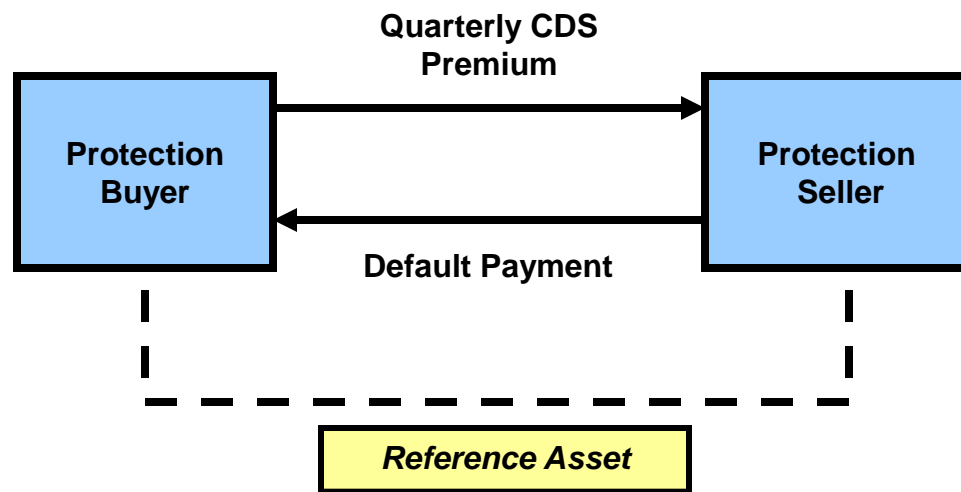
Credit Derivatives

Tonic or Toxin?

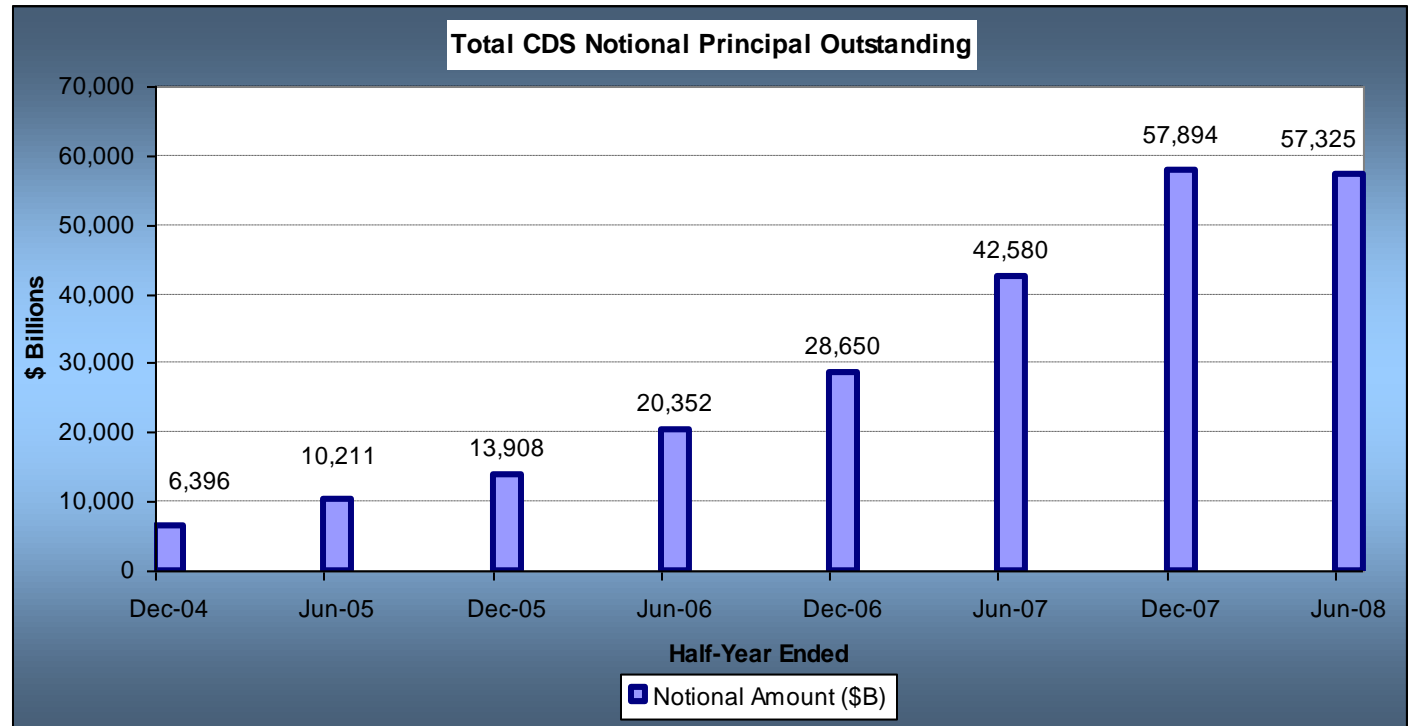


STONEMONT
FINANCIAL GROUP

Mark Brown
December 10, 2008

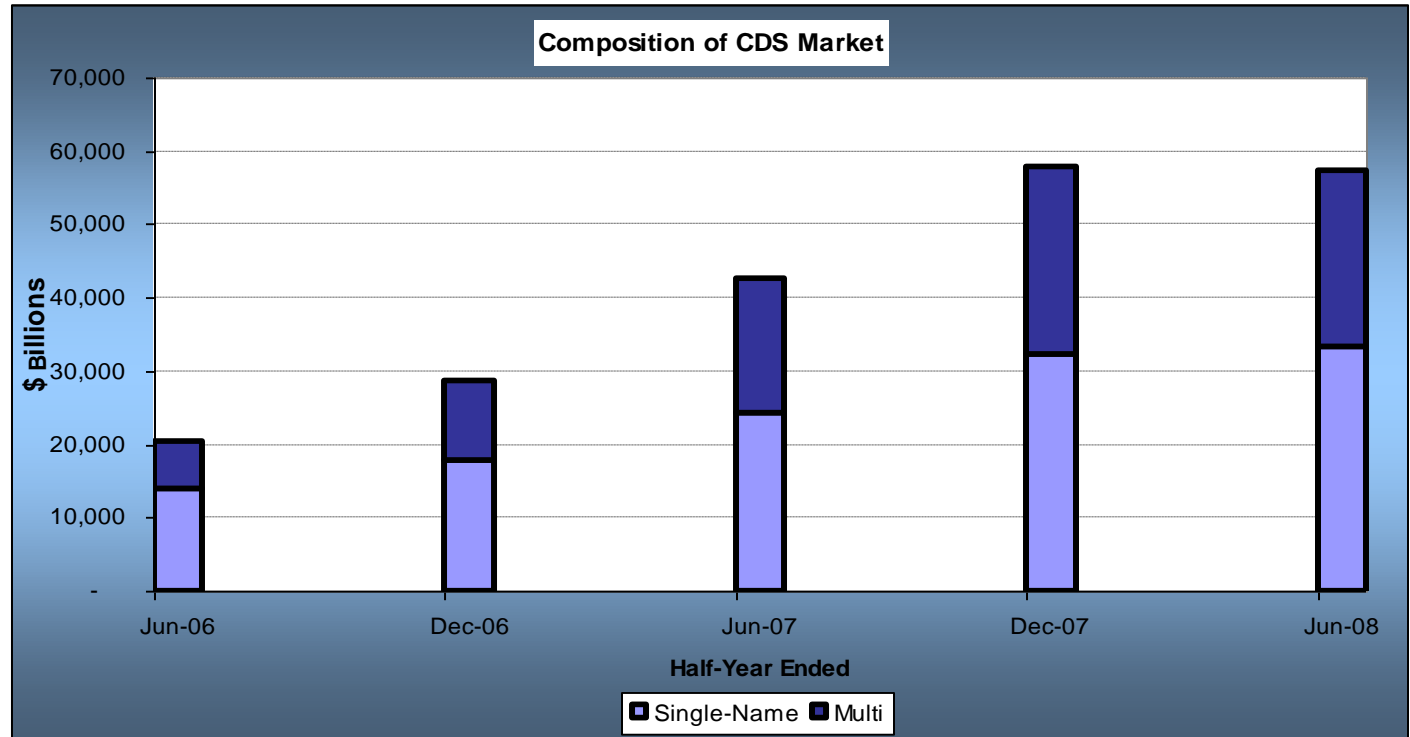
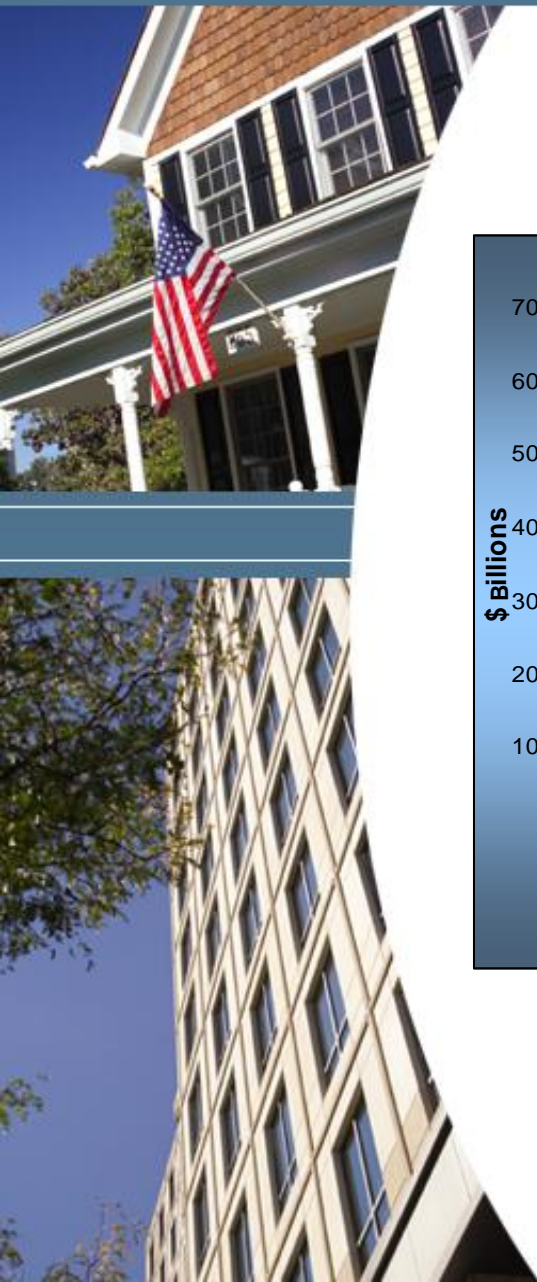


- Effective mechanism to get long or short credit risk, hedge risk exposures, diversify, and generate returns.
- Privately negotiated instrument (“over the counter”).
- No principal payment as in a bond (source of leverage).
- The Reference Asset is usually a publicly traded bond, loan, basket or index.
- The CDS premium is in effect a credit spread representing the market’s view of default probability and recovery rates.



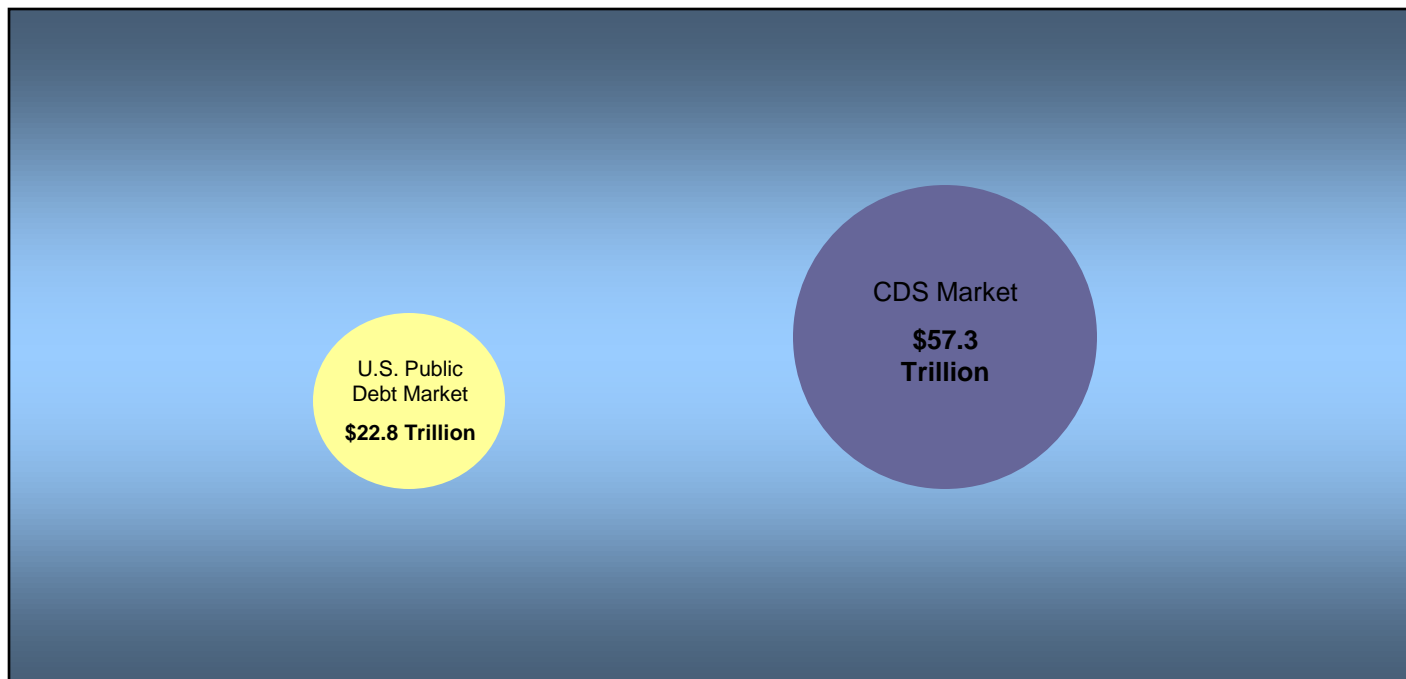
Source: Bank for International Settlements

Market Size – Composition of CDS Market



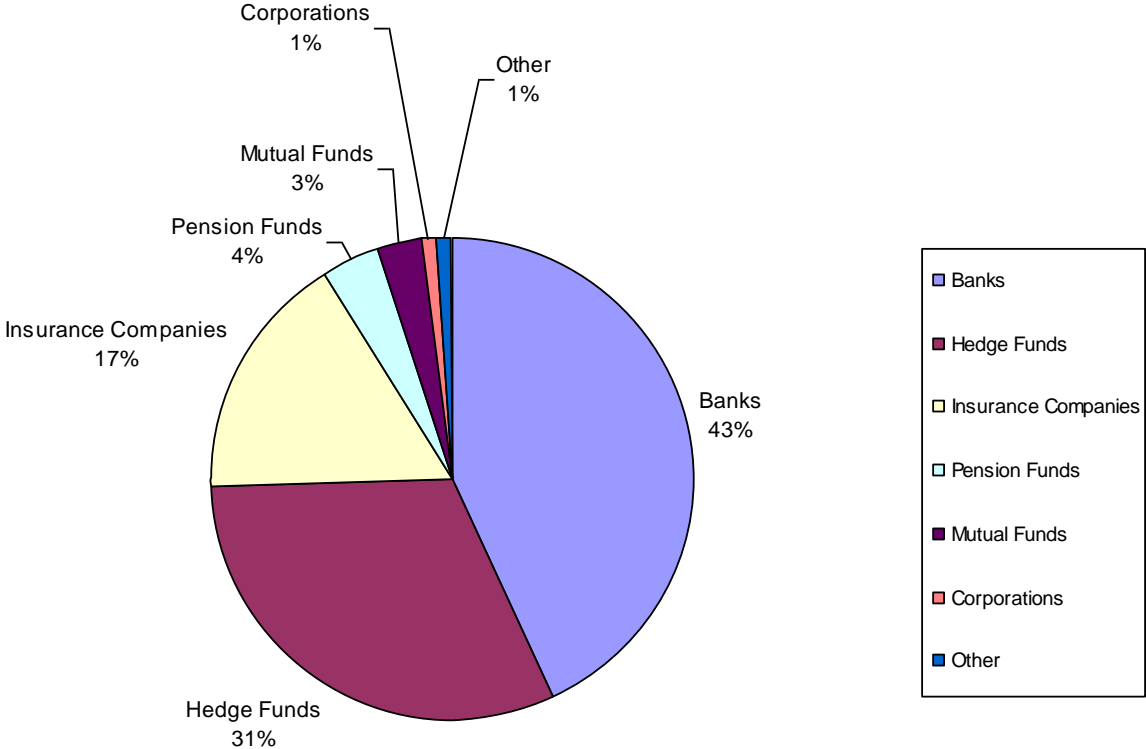
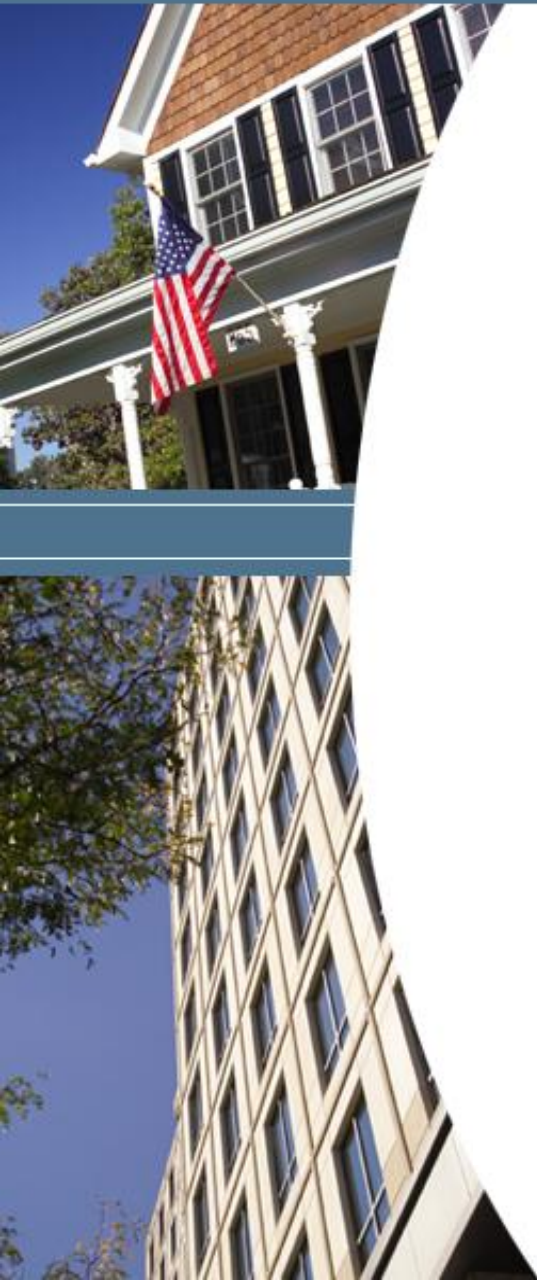
Source: Bank for International Settlements

Market Size – Debt Market vs. CDS Market



Note: The CDS market also encompasses foreign and sovereign debt.

Market Size – Breakdown by Participants



Source: CreditSights



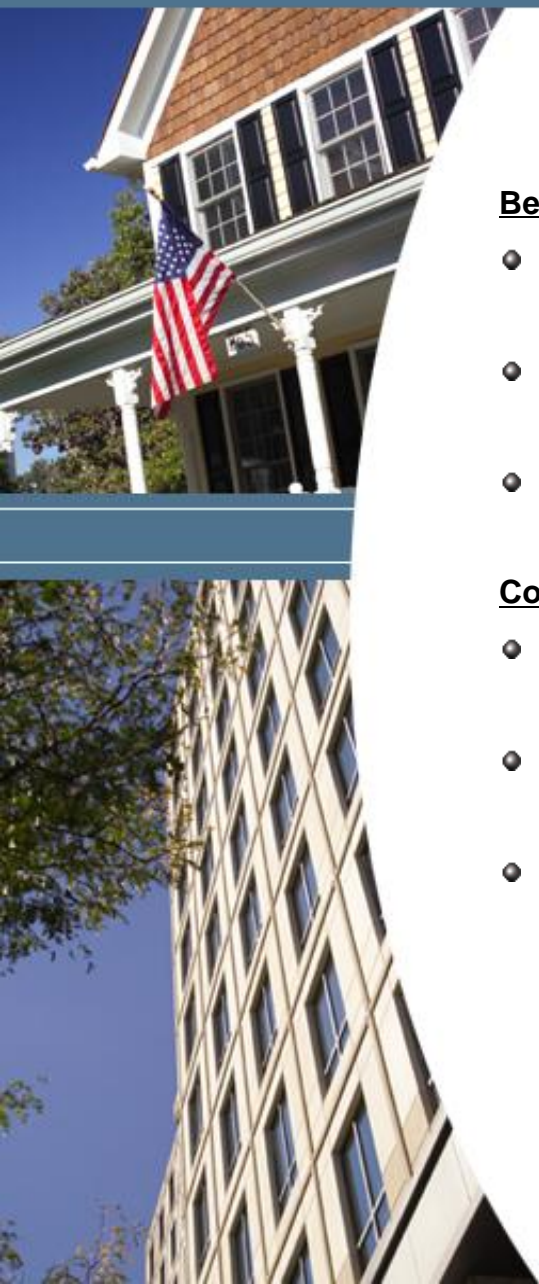
Benefits

- Enables investors to take a credit position well in excess of their cash on hand. Actual cash usage is determined by collateral postings.
- Market participants are not restricted by the amount of underlying debt. For example when Delphi declared bankruptcy it had \$3 billion of bonds outstanding yet credit default swaps outstanding on their name totaled \$29 billion.

Complications

- Can exacerbate volatility. For example, there is no regulatory restriction against “naked” short selling of credit.
- Leverage has contributed to magnified market losses, increased collateral postings and in some cases insolvency.
- Physical settlement of trades can be extremely difficult making cash settlement a necessity.





Benefits

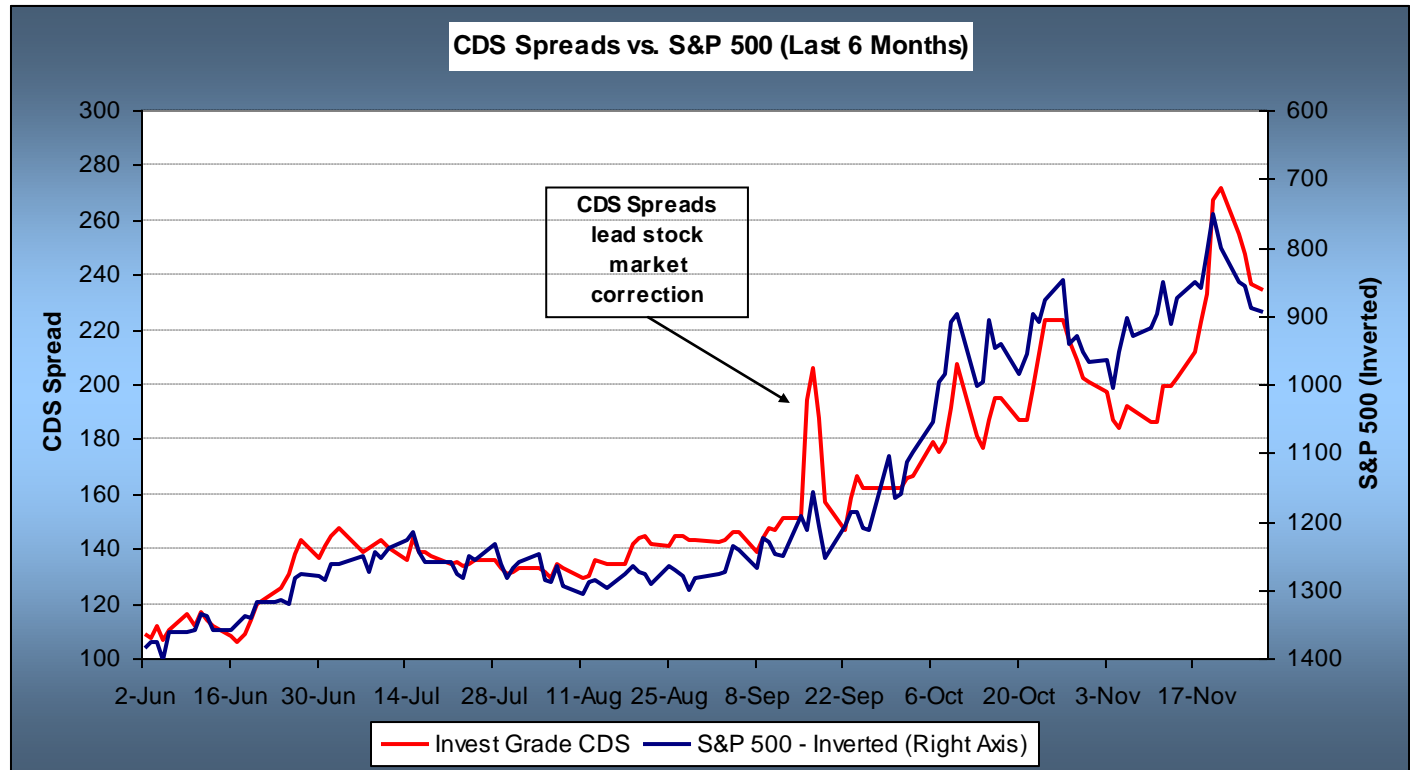
- Market consensus achieved on pricing of credit.
- Signs of credit-specific trouble is clearly visible and tradeable.
- Credit markets tend to lead equity markets.

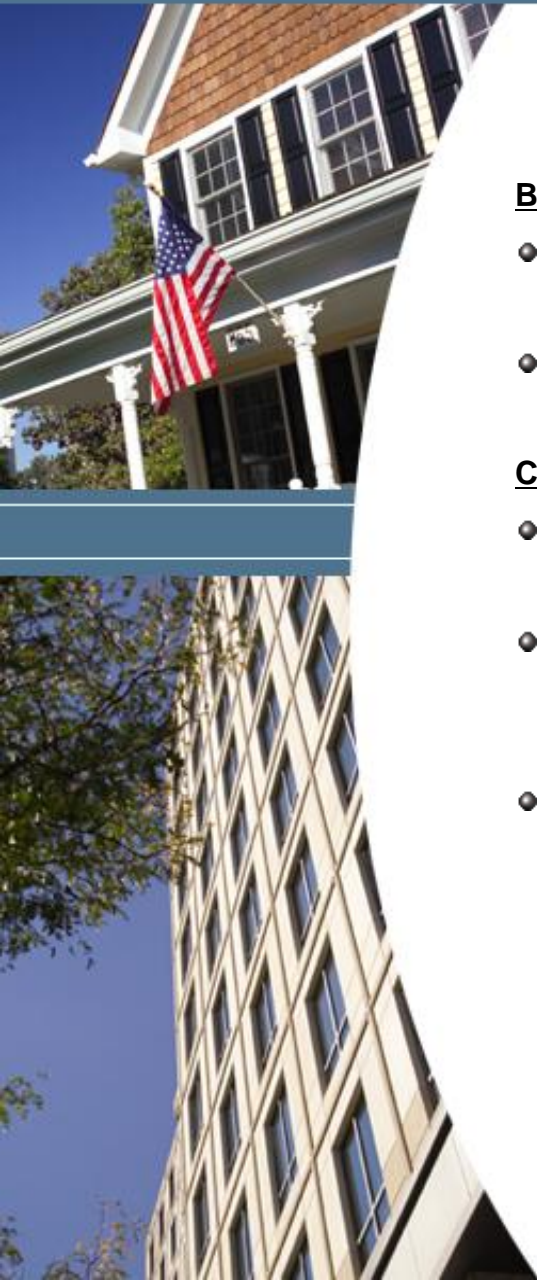
Complications

- Increased market volatility.
- Outlet for short sellers to “attack” out of favor credits.
- Speculative short selling can hinder a borrower’s ability to raise capital at cost effective levels.

CDS as a Leading Indicator

- CDS spreads are often a leading indicator of broader market movements.



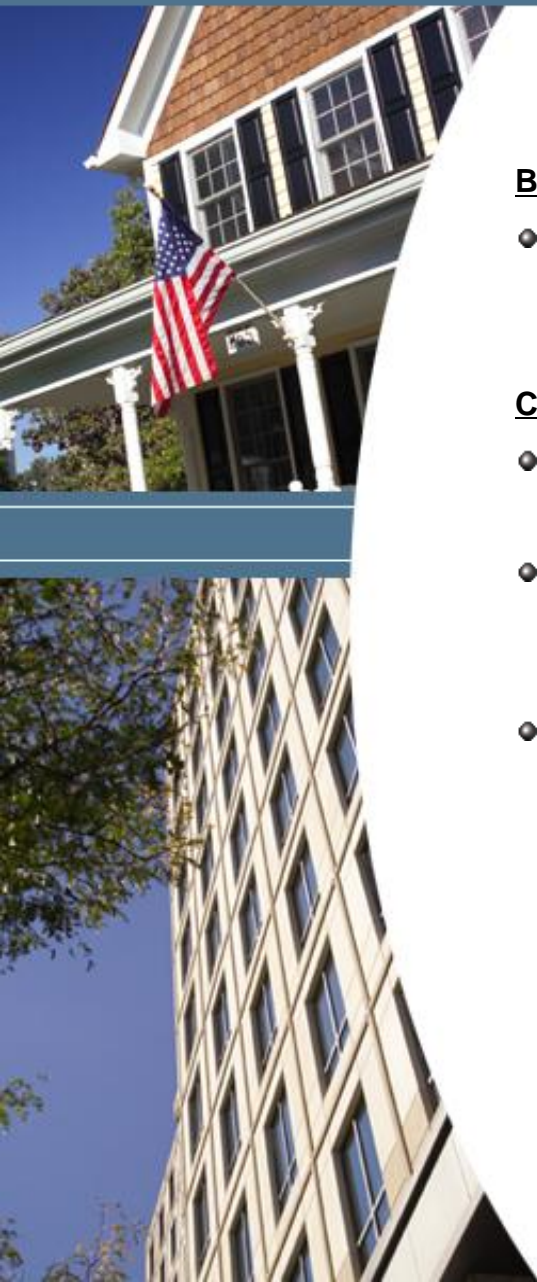


Benefits

- Highly customizable contract terms.
- Limited reporting requirements.

Complications

- Limited reporting requirements
- Lack of standard settlement terms, valuation inconsistencies, inefficient trade novation (assignment) capabilities.
- Documentation backlogs due to lack of standardized terms (partially addressed through the ISDA Novation Protocol adopted in 2005).



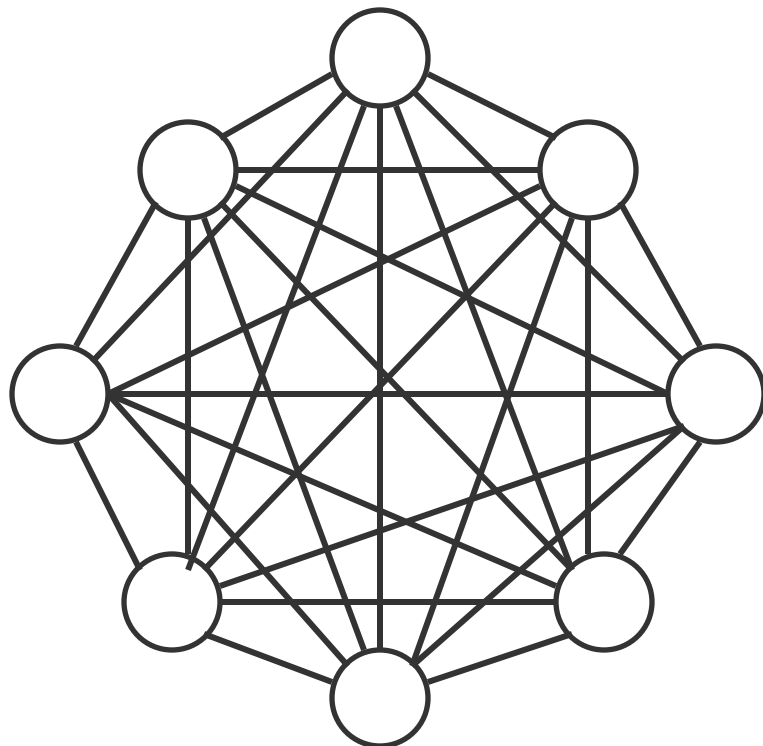
Benefits

- An active inter-dealer market promotes price efficiency.

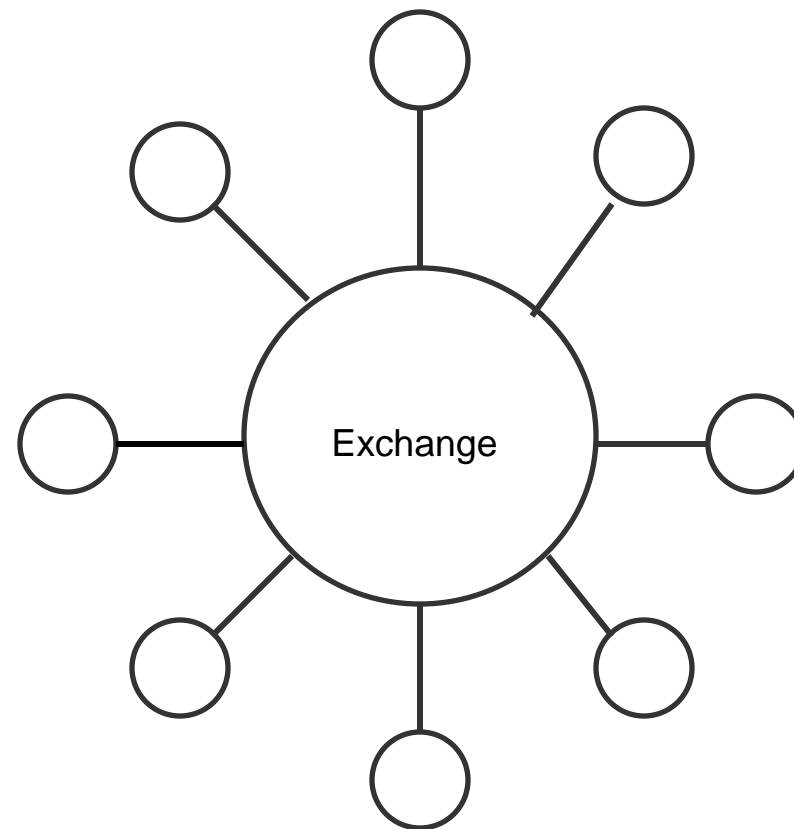
Complications

- The relatively small number of market makers increases systemic risk.
- The lack of a centralized clearinghouse creates a large number of redundant or duplicate trades.
- Redundant trades create capital inefficiencies.

Current Approach



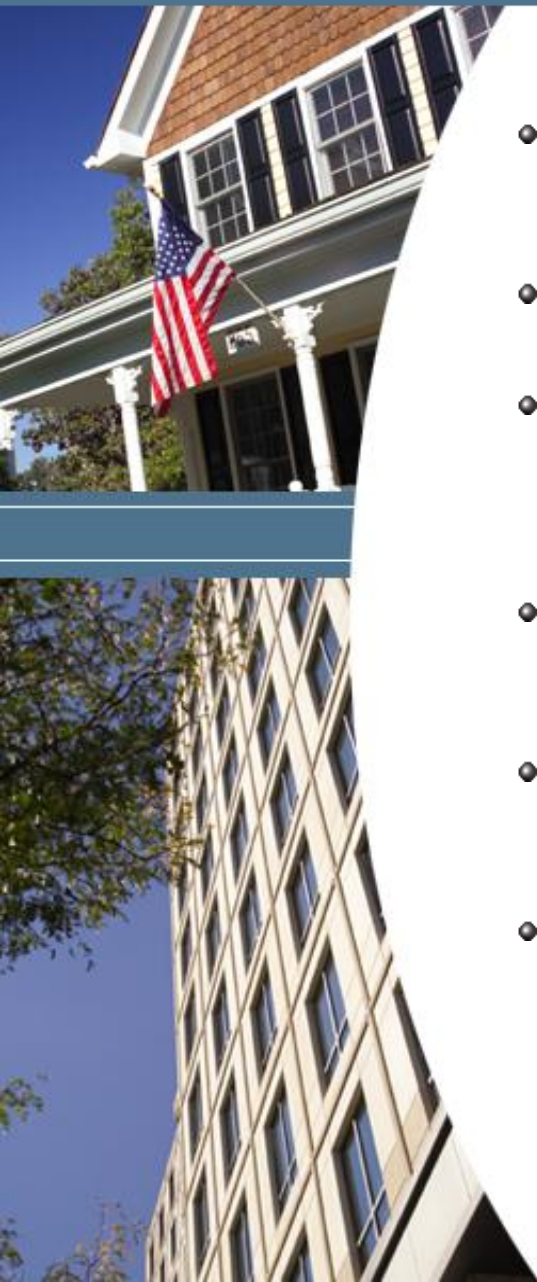
Proposed Approach



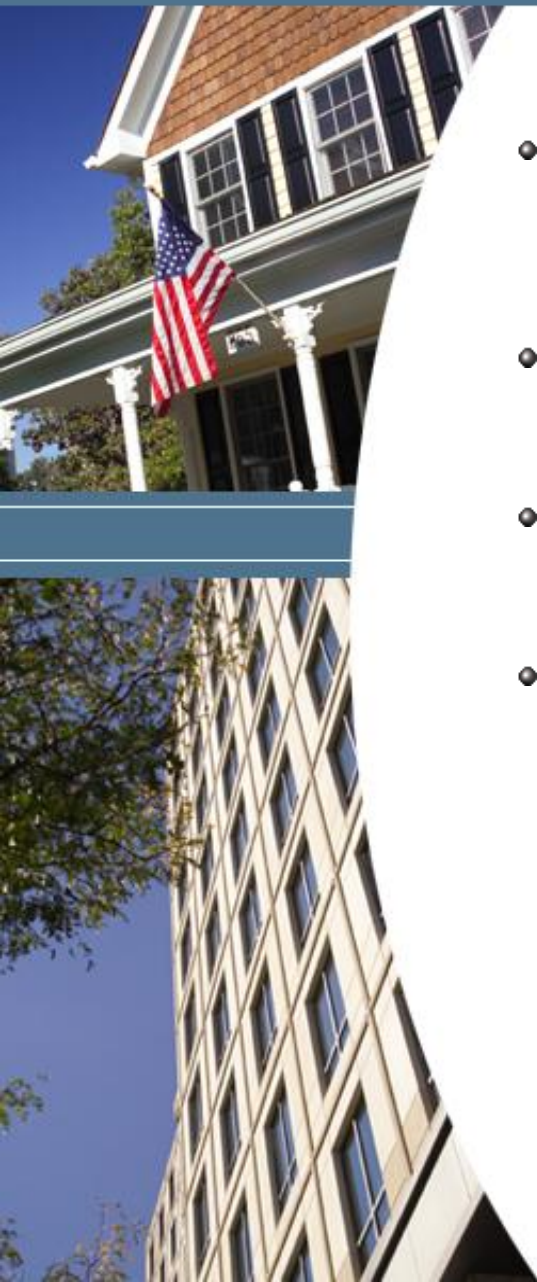
Exchange will need to be very well capitalized and have robust risk controls.

Regulatory Response: Where Do We Go From Here?

- President's Working Group on Financial Markets announced its member agencies (Treasury, Fed, SEC and CFTC) have agreed on a memorandum of understanding to share information and coordinate regulatory responsibilities to speed the development of a central clearinghouse.
- CME Group, Intercontinental Exchange, NYSE Euronext, and Eurex are proposing to run clearinghouses and the Fed is expected to make a decision by year end.
- Index trades are expected to be the first to be exchange traded due to the higher degree of standardization. Single name trades expected to follow.
- Choices will have to be made on which obligations will be covered and which credit events will trigger payments to achieve the level of standardization necessary.
- Fed's year end target will be difficult to meet unless it is initially limited in applicability.



- It has been estimated that AIG had sold protection on approximately \$440 billion of credit default swaps.
- As a AAA rated counterparty it was required to post relatively little collateral.
- The dramatic widening of credit spreads in 2008 required that protection sellers (e.g. AIG) post more collateral against the increasing MTM. The size of AIG's portfolio and the magnitude of the credit spread widening resulted in huge collateral calls.
- The collateral postings created a huge cash drain for AIG. The cash drain led to rating agency downgrades which triggered additional collateral calls.
- The negative cycle of collateral calls leading to cash requirements leading to ratings downgrades leading to more collateral calls ultimately forced the Treasury bailout.
- The majority of the initial \$85 billion in government funds was used to cover collateral calls associated with the credit derivatives portfolio. The cash drain ultimately resulted in the structuring of a larger bailout package.



- While a centralized clearinghouse will reduce counterparty risk and capital usage it does not address the problem of leverage. Speculators will still be able to make leveraged credit bets albeit at a lower leverage level than before.
- A clearinghouse will significantly reduce dealer profit in credit derivatives adding to the revenue challenges already being experienced in this space.
- There will always be a certain volume of over the counter credit derivatives transactions that do not lend themselves to standardization.
- Despite unprecedented market turmoil the credit derivatives markets have functioned smoothly as evidenced by the orderly auctions in the wake of the Lehman and WaMu bankruptcies.