

Federal Reserve Bank of Atlanta  
Conference on Credit Derivatives  
Sea Island, GA  
May 16, 2007

# DANGERS OF OUTSOURCING DUE DILIGENCE IN CREDIT TRANSFERS

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# Mechanisms for Credit Transfer

Definition: A Credit Derivative is any contract that shifts around the risks embedded in a loan or bond contract.

Structured Credit Derivatives are by no means new (deposit insurance and other guarantees). What is new is the creation of instruments that let counterparties trade finely divided categories of risk separately in a (usually) highly liquid market.

Credit transfers create new ways for financial institutions to lose as well as to generate net worth. [Irony: Dispersing other risks simultaneously funnels and concentrates liquidity risks on to a handful of core dealer institutions.]

# NEED FOR DUE DILIGENCE

Every Lender Employs Multiple Technologies of Lending: Deal Formats Must Adapt to the **Informational and Regulatory Environments** in Which Lender and the Borrower Operate

Three Mutually Reinforcing Components Define the **Due-Diligence Technology** Used in a Particular "Lending Chain:"

1. Screening Mechanisms
2. Contract Structure (e.g., covenants, collateral rights, enhancements, amortization schedule, reporting requirements)
3. Monitoring Strategy

Historically, lending was **holistic**. **Modern Lending Deconstructs** the Steps Traversed in Making a Loan and Shifts Much of the Responsibility for **Measuring and Pricing Risk** to Inside or Outside “Quants.”

Allows FSFs either to **specialize in-house** or to “**outsource**” the subset of risks and skills needed at each particular stage.

1. Applications Generation
2. Processing
3. Underwriting
4. Closing
5. Servicing/Collection

Origination

- [6. Insuring risk of shortfalls in payments due]
7. Funding (temporary vs. permanent risk support)
8. Postloan monitoring and risk support or transfer

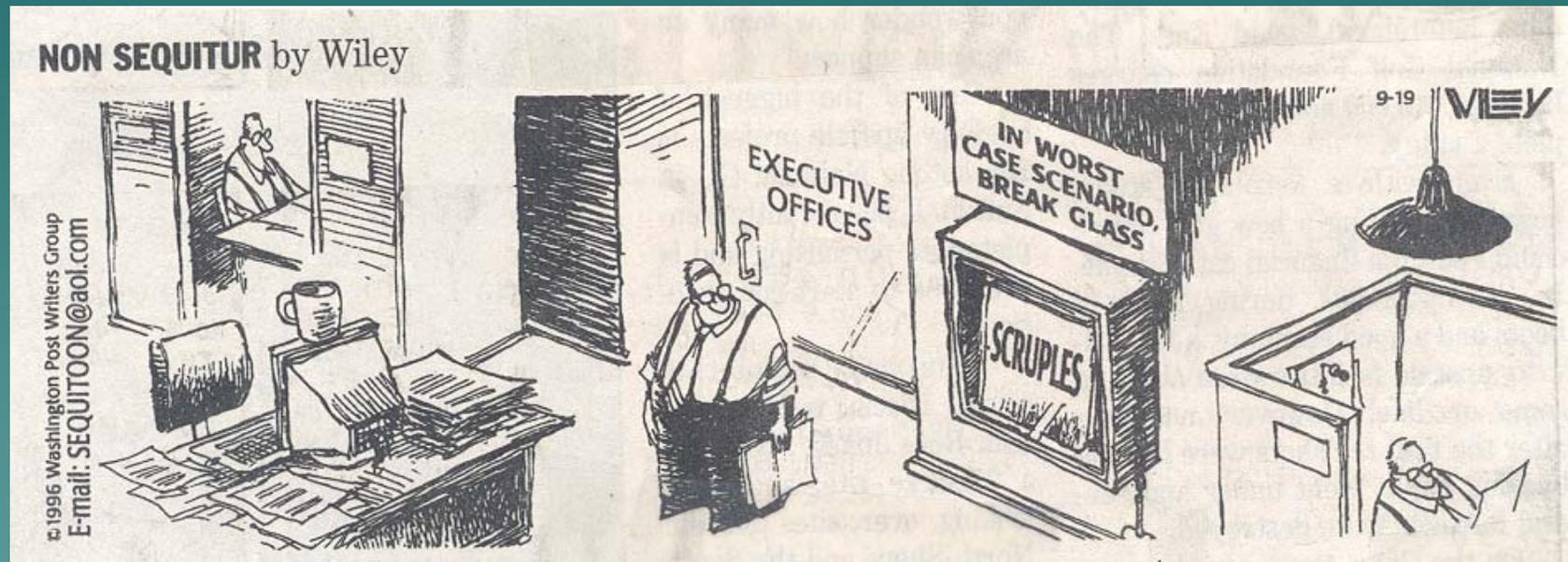
# “Division of Labor is Determined by the Extent of the Market:” **Unbundled** Parts of Lending Technology are **Automating, Digitizing, and Globalizing**

- ◆ Many Social Benefits Re Information Generation, but Two Negatives: Outsourcing relocates important decisions and intensifies the difficulties in shaping one’s ability to assess “Ethical Risk”: the problem of **assuring that “due diligence”** is performed in all individual functions
  - with **holistic loan-officer model**, a continuous **double-checking** role is played by high-level committees who are subject to legal penalties for negligence and malfeasance. [Good judgment comes from experience. Experience comes from exercising poor judgment” = error-learning about the extent of one’s susceptibility to “disaster myopia.”]
  - with outsourcing model, loan committee must rely on **reputations, bonding agreements, and fraud & negligence laws**, but internal controls that support this reliance at the outsourcer break down when the outsourcer becomes insolvent. I call the threat of such a breakdown the risk of **exogenous “transfer reversal.”**

# Computer or Credit-Agency Scoring of Borrowers Obscures the Character of Due-Diligence and Pricing Activity

- ◆ **Point scores classify customers** in line with the probability of engaging in a targeted form of behavior.
- ◆ Model Risk: Usefulness of scores depends on size of underlying sample and representativeness of its relevant subsample cells. Also, on **reliability** of input data and **sincerity** with which the outsourcers acquit their tasks.
- ◆ **Scoring is driving automation of all links in the lending chain: shapes the collection & verification of databases**
- ◆ Credit scores and ratings can be fed directly through an implicit and explicit loan pricing matrix. But when loan officers "doctor" data, GIGO holds.

# Brief Putback Periods and Volume-Related Compensation Structures Tempt Employees at Originating Lenders that Plan to Transfer Risks to Devise Ways to Paper Over Defects in Credit Quality and to Re-Age Returned Loans



A firm institutionalizes a **temptation** to do wrong when its incentive system offers employees an **unabated** opportunity to pursue personal benefits or short-run profits at the expense of unknowing or unwilling others.

# To Manage or Supervise the Risk of Transfer Reversals, One Must Recognize How Risk of Due-Diligence Breakdowns at Outsourcers Intensifies Perennial Threats to an Institution's Brand/Reputation

1. Lapses in Controls Against Abusive Dealmaking
2. Lapses in Controls Against Fraud
2. Lapses in Access & Data-Protection Controls

# Changing Financial Environment Expands the Range of Hedging Vehicles, But Encourages “Disaster Myopia” Regarding Their Outsourcer Effectiveness.

## 1. Traditional Sources of Bank Losses

- a. Sour or Corrupt Loans
- b. Adverse Movements in Interest Rates or Currency Values
- c. Endgame Gambles for Resurrection: Funding Riskier Loans; Expanding Duration and Currency Imbalances

## 2. Nontraditional Sources of Bank Losses

- a. Finiteness of Residual Obligations Imbedded in Securitized Loan Pools.
- b. Basis Risk in Derivatives Hedges
- c. Counterparty Risk Concentrations and Embedded Leverage From Multiple Hypothecation of Collateral, Cross-Margining, and Loss-Exposure in Speculative (i.e., nonhedging) derivatives positions
- d. Legal Risk: Lawsuits Alleging Violations of Legal Responsibilities. Courts and ISDA end up redefining disputed “credit events.”

# Authorities Don't Know How to Supervise Basis Risk in Credit Derivatives?

- ◆ “Basis Risk” refers to the chance that returns on the **reference** security or index and the **hedgeable item** will not move in lockstep. Credit derivatives improve market completeness, but gaps remain.
- ◆ Why? Easy-to-Overlook Imperfections in **Hedges for Reputation Risk** and Various **Correlation** issues
  1. **Default events** for the security and hedgeable item are **imperfectly** correlated as are their post-default returns.
  2. Dangers of Double Default: When credit transfers rely primarily on counterparty guarantees, counterparty **insolvency and issuer default** can easily prove **positively correlated**.

# Hard to Assess the Net Benefits of a CDS: Affected by Nine **Contractable Elements**

1. Premium (e.g., spread over LIBOR)
2. Reference obligation (usually several bonds or an index)
3. Notional amount
4. Notional Price (need not be par)
5. Tenor of swap
6. Definition of default events
7. Type of settlement (physical or cash)
8. Verifiability of Signatory Counterparty's Authority to Obligate its Organization
9. Adequacy of Collateral Support

# Example: Experience Teaches That The “Residual” Tranche in Any Securitized Asset Pool Is An Opaque Credit Derivative.

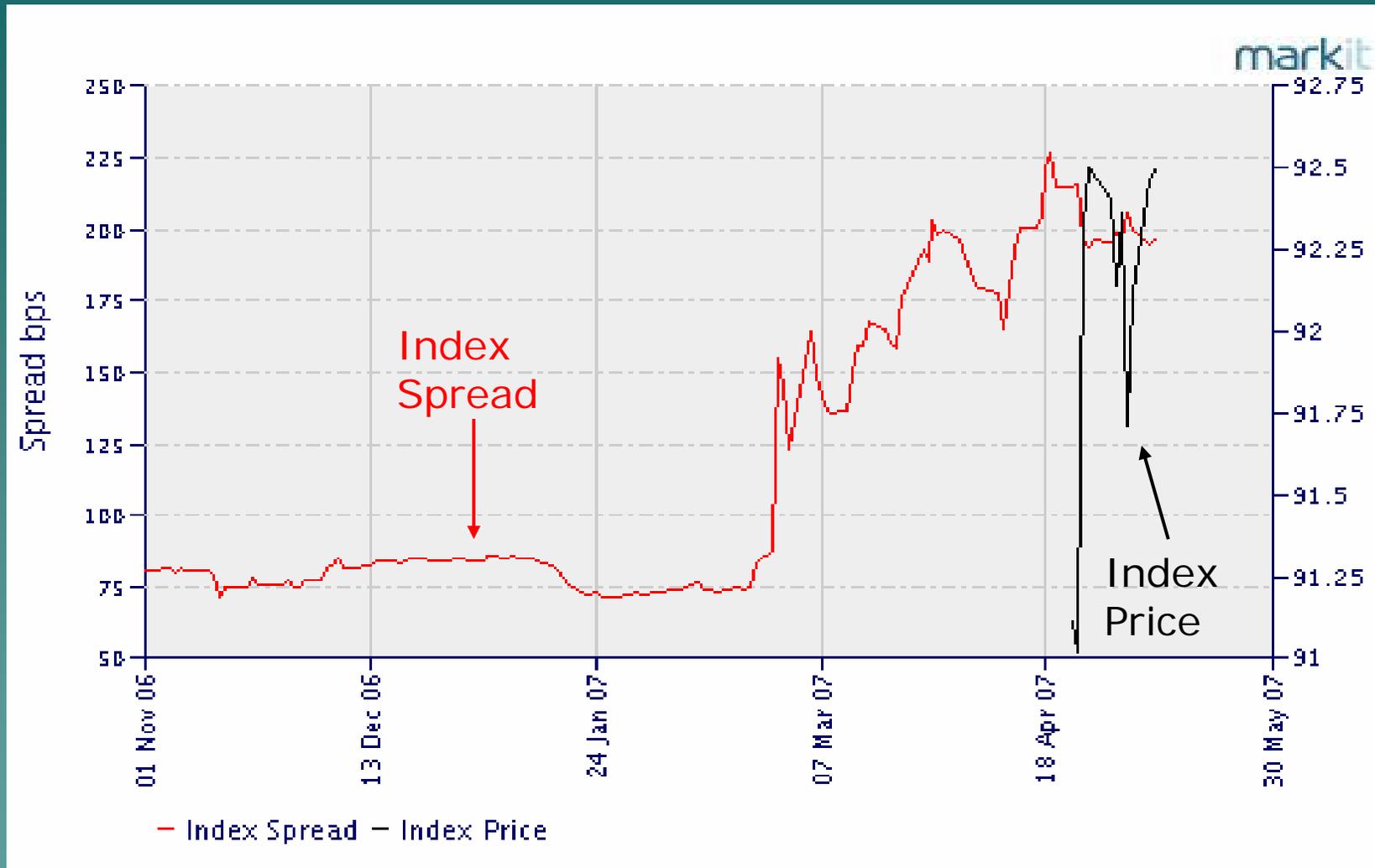
- ◆ **Residuals are “retained interests”** that an institution keeps after selling and securitizing a loan pool. They are called the “Z tranche.” **They pay no “positive” principal or interest until all other tranches are retired.**
- ◆ Z’s are credit-enhancements in that they put holder in a first-loss position if cash flows cannot service the securities. Losses may require **outpayments** to meet shortfalls in cash flows available to pay other tranches.
- ◆ Residuals are highly volatile and, if recourse is entailed, their value may turn negative. Residuals have generated deep losses for the FDIC in several recent failures: e.g., First National Bank of Keystone, WV.

# Why is This a Good Example of a Securitization Residual?



ANS: Because the value of the other tranches crashed when the residual did.

# EXAMPLE OF JUMP RISK IN A MARKET BBB INDEX DERIVATIVE



Source: <http://www.markit.com/cache/curves/02c06a3e71aae49c2087589805d.png>

## Appendix: Slide #1

A “**credit default swap**” resembles a **casualty insurance** policy written against the occurrence of a default event during the life of a swap. A counterparty **buys protection** against default on a **type** of loan or receivable from a dealer by paying a **per-period fee**.

- ◆ Payout is triggered by specified and observable “default events” on publicly traded securities of a particular issuer (or one of a “basket” of issuers) stipulated in the contract.
- ◆ Promised payments offered are **indexed to returns** observed on a stipulated **reference security**: often some **index** of corporate loans, corporate bonds, or emerging market sovereign bonds.

## Appendix Slide #2

1. Casualty Insurance requires the “protection-buying party” to have an “**insurable interest**” (i.e., a *long position* in the underlying asset). A CDS may simply place a “bet.” Risk seller in a CDS may not own any of the risk it is buying protection against.
2. CDS payoffs are based on formulas. Payoffs on Casualty Insurance are based on “**proof of loss,**” employing subjective (and often weaselly) estimates prepared by professional appraisers and loss adjusters.

## Appendix Slide #3

**All forms of dealmaking have to be funded in part by an appropriate allocation of FSF capital. Due Diligence requires that top management be able to Answer Four Questions About Every Deal.**

1. What are the risks?
2. What are the costs of capital and loss reserves that must be allocated to cover the portfolio risks the loan entails.
3. What explicit and implicit returns does the proposed contract offer the firm for bearing the costs of supporting these risks?
4. Allowing for differences in risk, how does this deal's **risk-adjusted return** line up with other deals that we are or might be making?