

A Mischievous Kind of Gaming

Sphex Club Meeting

February 2, 2017

Kevin G. Smith

Killer grannies



Golay

Rutterschmidt

In June 2006, two elderly Los Angeles women, who became known as the Killer Grannies, were arrested, indicted and convicted for insurance fraud. They befriended homeless men, took out life insurance policies on them and then killed them in auto crashes staged to look like hit-and-run accidents.

“Dead Peasants”



Walmart insured low level employees in a corporate-owned life insurance program that internal corporate e-mails referred to “dead peasant insurance.” WalMart named itself the beneficiary, never told the insured or their families.

Joseph Caramadre



Sentenced to 6 years for an investment scheme involving the terminally ill as the measuring life for variable annuities. Contract mechanics let his investors bankroll annuity purchases that guaranteed their principal while giving them risk free stock market upside. Many of the contracts had “ratchet” provisions that reset quarterly the guaranteed principal to market gains (that could not be lowered).

Death Bonds



Stranger Owned Life Insurance (“STOLI”)

Wall Street Investors, looking for “non-correlated” risks manufactured pools of life insurance policies by “borrowing” insurable interests.

- Elderly (and probably ill) insureds apply for insurance owned by a trust with the trust as a beneficiary with no insurable interest.
- Alternatively, the policy is flipped and intended to be flipped to the investors from the very inception of the policy.

Insurable Interest – A Substantial Interest in Continued Life (as Contrasted with Early Death)

- What we take as a given was not always the case several centuries ago
 - Relatively small and aristocratic market where life insurance was taken out on the lives of perfect strangers. In one gentleman's club, more than 25% of the bets were on the death of a 3rd party compared to 2.5% for horse races.¹
 - Speculative life insurance flourished.² One commentator of the time stated, “[I]n London, people take the liberty to make insurances on anyone's life without exception; and insurers seldom enquire much if there are good or bad reasons for such an insurance.”³
 - Whether George II would be killed in battle when he took the field at the Battle of Dettingen in 1743.
 - Bets on Palatine refugees – how many would be alive on certain days in certain camps.
 - Celebrities and heads of states.
 - Ships and cargo (often with no interest even in what was on the ship).
 - Even whether an admiral would be court marshalled and executed.

John Byng – “when Bravery and Loyalty are Insufficient Securities...”.



Byng – A political victim whose execution made many rich

Executed in 1757 for “failing to do his utmost.”

Admiral in the 7 year’s war – Battle of Minorca

Huge amounts of life insurance policies were issued (and paid off “handsomely”) with premiums actually going up or down depending on the testimony of a particular day.

Notables started speaking out

As the gaming got grimmer, and stories of the gentlemen’s clubs came to light, social approbation of this type of gambling arrived in social consciousness.

White & Brooks Club created a scandal when one of their members collapsing at the door, took bets on whether he was alive or dead, and those betting on death intervened to prevent a doctor from “bleeding” him.⁴

Dans ce pays-ci, il est bon de tuer de temps en temps un amiral pour encourager les autres.

King George III – the Life Assurance Act of 1774

Purpose of the Act was to stamp out gambling hidden by a notional insurance.⁵

Life Assurance Act 1774 - 1774 CHAPTER 48 14 Geo 3

An Act for regulating Insurances upon Lives, and for prohibiting all such Insurances except in cases where the Persons insuring shall have an Interest in the Life or Death of the Persons insured.

Preamble: *Whereas it hath been found by experience that the making insurances on lives or other events wherein the assured shall have no interest hath introduced a mischievous kind of gaming:*

1. No Insurance to be made on the lives of persons having no interest from and after the passing of this Act no insurance shall be made by any person or persons, bodies politick or corporate, on the life or lives of any person, or persons, or on any other event or events whatsoever, wherein the person or persons for whose use, benefit, or on whose account such policy or policies shall be made, shall have no interest, or by way of gaming or wagering; and every assurance made contrary to the true intent and meaning hereof shall be null and void to all intents and purposes whatsoever.
2. No policies on lives without inserting the persons names, and it shall not be lawful to make any policy or policies on the life or lives of any person or persons, or other event or events, without inserting in such policy or policies the person or persons name or names interested therein, or for whose use, benefit, or on whose account such policy is so made or underwrote.
3. How much may be recovered where the insured hath interest in lives, and in all cases where the insured hath interest in such life or lives, event or events, no greater sum shall be recovered or received from the insurer or insurers than the amount of value of the interest of the insured in such life or lives, or other event or events.
4. Not to extend to insurances on ships, goods, provided always, that nothing herein contained shall extend or be construed to extend to insurances bona fide made by any person or persons on ships, goods, or merchandises, but every such insurance shall be as valid and effectual in the law as if this Act had not been made.

Post Life Assurance Act of 1774

After 1774, it was only legal to collect on an insurance policy if an person (typically a wife or child) relied on the insured for income or was a creditor who stood to lose if the insured died before repaying the loan.

Issues, Curiousities and a Change in Markets

- Can you keep the insurance as a creditor once the debt has been repaid/partially repaid?

Godsall v. Boldero (1807) – Involved a debt owed by William Pitt and insurance on his life to pay the same. His debt had been paid by parliament, but the creditor kept the policy. The court held that the policy, while legal, was one of indemnity and the creditor could get no more than his loss.

- Does the insurable interest need to exist for the life of the policy?

Dalby v. India and London Life Assurance Company (1854) – Company attempted to deny a claim on the grounds a director purchased and maintained the policy and that he did not have an insurable interest. The court held that, “if there is an interest at the time of the policy, it is not a wagering policy...”.

- By mid-19th century, the insurance industry in America and elsewhere had moved from a matter of the upper classes to providing coverage for factory workers (primarily providing burial costs for the victims of the “appalling violence of America’s factories and shop floors”).

Modern Insurable Interest Statutes

Virginia Statute Section 38.2-301

- A. Any individual of lawful age may take out an insurance contract upon himself for the benefit of any person. No person shall knowingly procure or cause to be procured any insurance contract upon another individual unless the benefits under the contract are payable to (i) the insured or his personal representative or (ii) a person having an insurable interest in the insured at the time when the contract was made.

B. As used in this section ..., "insurable interest" means:

1. In the case of individuals related closely by blood or by law, a substantial interest engendered by love and affection;
2. In the case of other persons, a lawful and substantial economic interest in the life, health, and bodily safety of the insured. "Insurable interest" shall not include an interest which arises only or is enhanced by the death, disability or injury of the insured;...

(The Case against) Credit Default Swaps

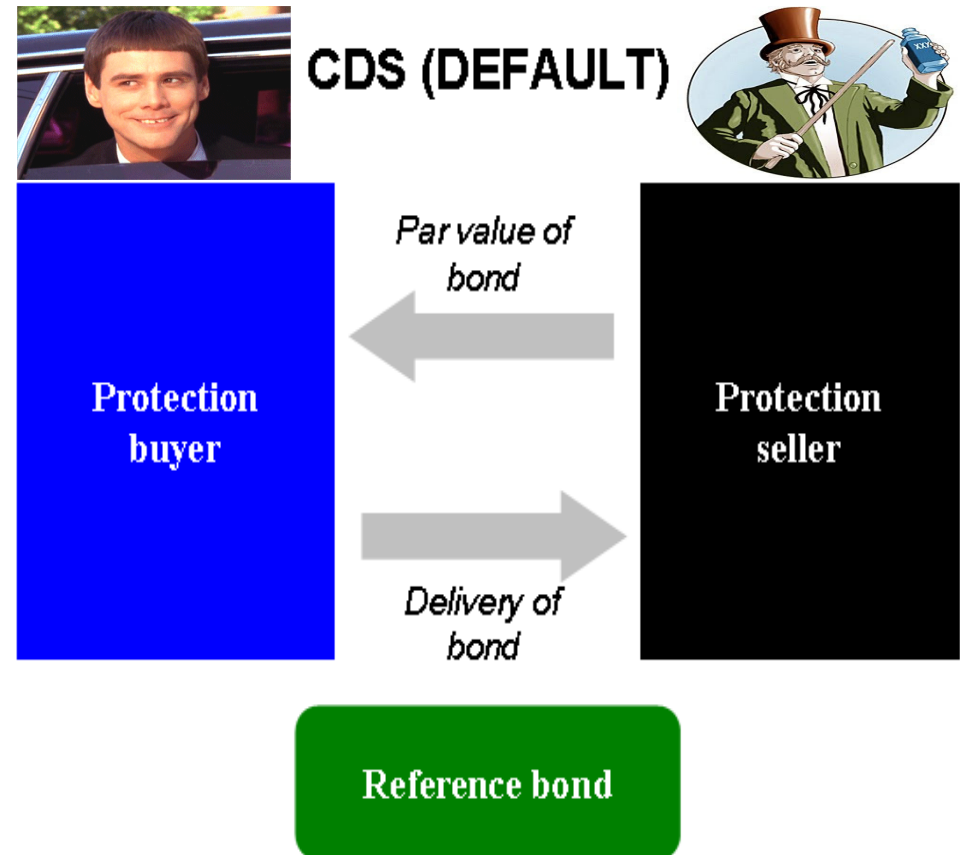
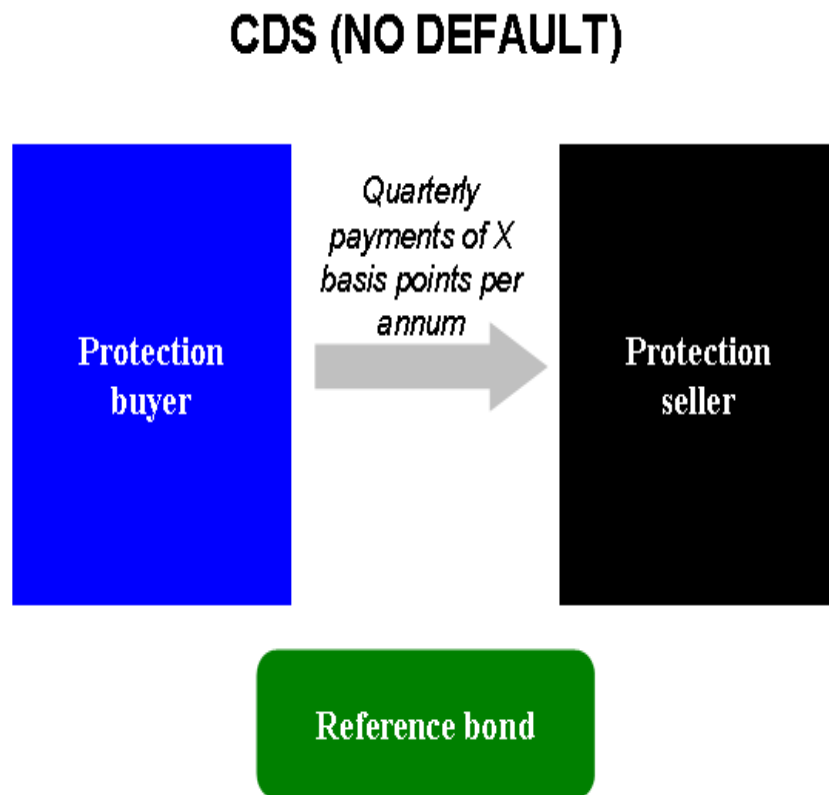
What is a Credit Default Swap (“CDS”) and how does it work?

A CDS is promise by the “protection seller” to make a lump-sum payment to the “protection buyer” upon the occurrence of a credit event (such as bankruptcy, reorganization, payment default or credit rating downgrade). The CDS buyer makes period payments to the protection seller and the “reference entity” is normally a corporation.

- Economically, the CDS functions like an insurance policy, with the CDS buyer paying the premium to protect against loss from a defined credit event.
- The Protection buyer pays so called default swap premium, usually expressed in basis points.
- There are generally two ways to effect payment upon the occurrence of the credit event. 1. The defaulted asset is delivered to the Protection Seller in exchange for cash for the par value. 2. Cash settlement – generally par value minus auction of defaulted assets.
- The language of insurance is deliberately avoided and replaced by terms such as “reference instrument” or “reference obligation.”

(The Case against) Credit Default Swaps

What is a Credit Default Swap and how does it work?



(The Case against) Credit Default Swaps

Credit Default Swaps

How do you calculate the premium?

CDS spreads

Definition: CDS spread = Premium paid by protection buyer to the seller

Quotation: In basis points per annum of the contract's notional amount

Payment: Quarterly

Example: A CDS spread of 593 bps for five-year Greek debt means that default insurance for a notional amount of \$1 MM costs \$59,300 per year, or \$14,825 per quarter.

Note: Concept of CDS spread (insurance premium in % of notional outstanding debt)

What happens on default?

Example, 100 Greek bond, actual price = 20 at time of default (or credit event defined in the CDS)

Physical settlement: **Protection buyer delivers reference security, protection seller has to pay 100**

Cash settlement: **Protection buyer receives $100 - 20 = 80$ from protection seller and keeps security**

(The Case against) Credit Default Swaps

Origins of the Market and its Growth

The market for CDS' started in the early 1990's at J.P. Morgan as a way to protect the bank against potential default. ⁶

- By 1996, estimated that the notional amount of all CDS' in existence was \$180 billion.
- The transactions were strictly over the counter (OTC).
- The purveyors of CDS', the largest investment banks, developed a trade association, the International Swaps and Derivatives Association ("ISDA") which, among other things, introduced standardized contract forms, lobbied government entities for favorable treatment of CDS' related to capital requirements, and even got a court opinion regarding the "non-insurance" status of CDS'.
- At the end of 2008, the Gross World Product was estimated to be about \$50 – \$60 trillion, with \$10 - \$15 trillion of that contributed by the United States alone.⁷
- At the same time, the total notional value of outstanding CDS contracts was almost \$62 trillion.
- The participants changed as well – moving from primarily banks and investment banks to hedge funds.

2003 – Warren Buffet refers to them as “weapons of mass destruction” while in 2004 Alan Greenspan refers to them as “efficient vehicles of credit risk transfer.”⁸

Isn't a CDS an Insurance Policy?

Definition of Insurance

A contract whereby one party promises, in return for a money consideration, to pay to the other party a sum of money or provide some corresponding benefit upon the occurrence of one or more specified events affecting the person or property insured.

Isn't a CDS an Insurance Policy?

Definition of a CDS

A contract whereby *[a protection seller]* promises, in return for a money consideration, to pay to the *[protection buyer]* a sum of money or provide some corresponding benefit upon the occurrence of one or more *[credit]* events affecting the *[reference entity]*.

Isn't a CDS an Insurance Policy?

Definition of Insurance

A contract whereby ***one party*** promises, in return for a money consideration, to pay to the ***other party*** a sum of money or provide some corresponding benefit upon the occurrence of one or more specified events affecting the ***person or property insured***.

Definition of a CDS

A contract whereby ***[a protection seller]*** promises, in return for a money consideration, to pay to the ***[protection buyer]*** a sum of money or provide some corresponding benefit upon the occurrence of one or more ***[credit]*** events affecting the ***[reference entity]***.

Is this a distinction without a difference?

Isn't a CDS an Insurance Policy?



How did this happen and why can banks sell insurance?

The Potts Opinion:

- 1997 the ISDA asks Robin Potts, Queen's Counsel, to opine on whether CDS are insurance, and he issues the Potts Opinion.
 - The opinion states that CDS should not be characterized as insurance contracts because they are structured to pay out on the occurrence of a default or other credit event, **irrespective of whether the buyer suffers a loss**.
 - Insurable interest is not required because a CDS is not insurance.
 - He also recommended that ISDA documentation include a clause that the parties do not intend to enter an insurance contract.

Criticism:

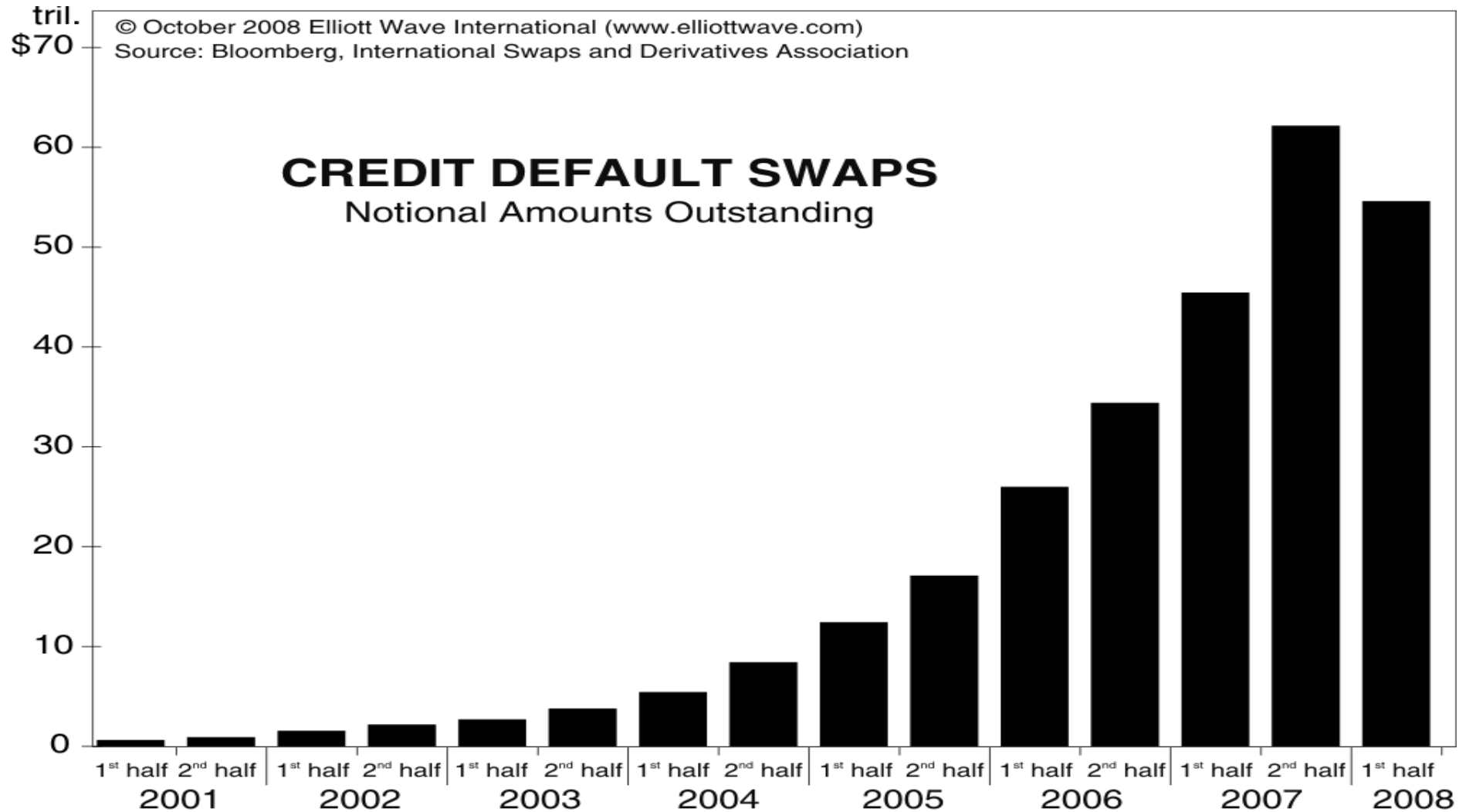
- Exalts form over substance.
- Completely ignores the definition of insurance which is a contract whereby one party promises in return for a money consideration to pay to the other party a sum of money or provide some corresponding benefit upon the occurrence of one or more specified events.
- Insurance does not require an indemnifiable quantifiable loss – think of life insurance.
- Insurable interest is imposed by law – not the intent of the parties. Further, if a protection buyer has no insurable interest, the contract does not thereby become non-insurance – it is an invalid/illegal insurance contract.

Consequences:

- Became market consensus, London became the heart of the CDS market, allowed companies to take credit on their balance sheet for CDS'

Without the Potts Option there would have been no market at all because a bank cannot sell insurance ⁹

(The Case against) Credit Default Swaps



Role in the Global Financial Crisis?

AIG and the Others “Issuing” the Insurance

AIG Financial Products Corporation, and AIG subsidiary that was not even an insurance company.

It's principal place of business was London, but it was really not regulated by the FSA because it was a U.S. company with “equivalent” regulation under the OTS.

By 2007, this subsidiary had written CDS' on more than \$500 Billion of assets, including a significant amount CDO's. It neither hedged nor reserved for capital calls on downgrades of AIG.

This subsidiary effectively bet more than 2x the market value of AIG on CDS', and when it was downgraded, it simply did not have the money to post the collateral necessary under the CDS' it wrote. The CDS' it wrote were rated AAA due to AIG's overall credit rating. The downgrades precipitated the need for collateral from AIG, which AIGFPC simply did not have ...and never had.

CDO's and Bond Issues – The Moral Hazard of Betting Against Really Bad Deals (You Create)

Collateralized Debt Obligations (“CDO's”) have at their heart a special purpose entity that promises to pay investors in a prescribed sequence based on the cash flow that the CDO collects from its assets.

There simply was too much capital chasing too few assets, which led to synthetic CDO's and ever finer repackaging with ever less emphasis on loan quality. Interestingly, the writers of the CDS' on these CDO's may not have realized what they were insuring until too late (as was the case with AIGFPC).

Companies assembling the CDO's actually bet against them, knowing that they would fail. In other words, “time bombs” were issued and “sure” bets on failure were made.

The moral hazard of financing bonds and other credit risks with little or no monitoring had arrived because they had bought protection against “default”

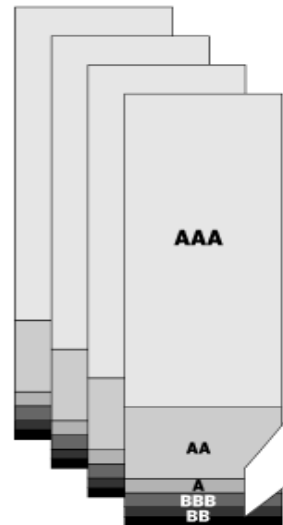
Role in the Global Financial Crisis?

Collateralized Debt Obligations

Collateralized debt obligations (CDOs) are structured financial instruments that purchase and pool financial assets such as the riskier tranches of various mortgage-backed securities.

1. Purchase

The CDO manager and securities firm select and purchase assets, such as some of the lower-rated tranches of mortgage-backed securities.



New pool of RMBS and other securities

2. Pool

The CDO manager and securities firm pool various assets in an attempt to get diversification benefits.

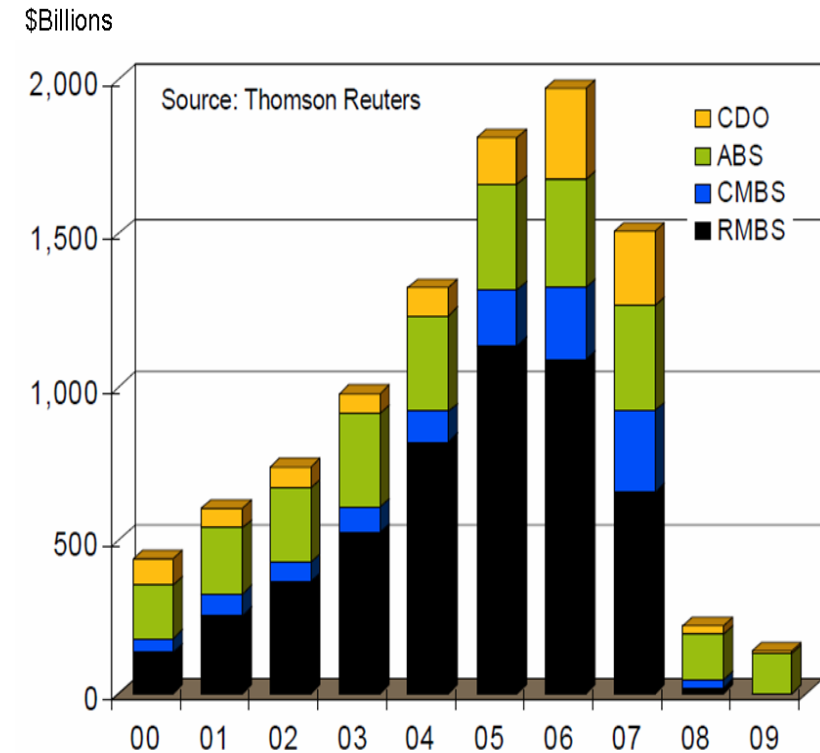
First claim to cash flow from principal & interest payments...

3. CDO tranches

Similar to mortgage-backed securities, the CDO issues securities in tranches that vary based on their place in the cash flow waterfall.



Securitization Market Activity



Role in the Global Financial Crisis?

The Moral Hazards of CDS's and the Way Debt was Packaged

Possible Outcomes:

- Creditors might prefer to force bankruptcy or foreclosure rather than negotiate
- Reduced incentives to monitor the credit and what they are doing – the “empty creditor” problem
- Interested in companies early death rather than prolonged life
- Reduced incentives to underwrite the risk

Some Actual Outcomes:

- In 2014, RadioShack experienced financial stress and received emergency loans from 3 investment funds (all 3 of which had previously sold CDS against RadioShack's default).¹⁰
- Goldman Sachs to Paid Record \$550 Million to Settle SEC Charges Related to Subprime Mortgage CDO that was assembled by a hedge fund who had taken short positions against the CDO, knowing that it would fail.
 - At least one commentator has defined the moral hazard of “creating lemons” as the real problem with CDS' – addressing insurable interest is merely a symptom.¹¹

What would have happened if CDS's were Regulated as Insurance?

Insurable Interest Requirements Would Have Made the “Casino” Smaller

- Capital relief would have been whole lot smaller
- There would have to be an insurable interest in the debt insured

Policies without Insurable Interest Void Ab Initio and Premiums Returned

- CDS' would have been regulated as insurance and governed by insurance law
- State regulators would have been responsible for their administration and capital requirements

Reserves: Present Value of Future Benefits = Present Value of Future Premiums

- Companies issuing the CDS' would have had to put reserves sufficient to cover possible losses

Where were the U.S. Regulators?

New York – London’s competitor for global financial products

- Initially said that naked CDS’ were not insurance but NY Insurance Commissioner, Eric Dinallo, sought to revisit that position
- Governor David Paterson said that he would start regulating CDS’ as insurance in 2009, Eric Dinallo sought to rescind CDS’ as illegal insurance contracts. (These positions were delayed indefinitely pending Federal action).

National Conference of Insurance Legislators (NCOIL) Proposed Model Legislation

- Covered CDS’ (those where the buyers have a material interest in the reference entity) would be regulated as credit default insurance and subject to state insurance regulators
- Naked CDS’ would have been banned entirely.

CFTC and SEC Expressed Interest

- Their interest was not about whether these products were insurance. Rather their interest was in forcing all CDS to be traded on an exchange or cleared through regulated parties.

The Dodd-Frank Act Settled the Insurance Issue

- The Wall Street Reform and Consumer Protection Act 2010 (the Dodd-Frank Act) expressly states that CDS’ shall not be considered insurance and may not be regulated as insurance state insurance laws. Section 722(b) and Section 767.
- Section 716 of Dodd-Frank, which would have required commercial banks to trade uncleared CDS’ through a separate subsidiary with higher capital requirements, was repealed in 2014
- ***These provisions, not surprisingly, were the result of some very effective lobbying efforts by the investment banks.***

Why Did Regulators Not Void CDS' as Illegal Insurance?

CDS' Had Become Part of the Capital Structure of European Banks

- Basel II formally recognized CDS' for the risk-weighted assets of bank capital requirements.¹²
- AIG's 2007 Form 10-K disclosed that 72% of CDS it sold were for capital relief.¹³ In other words, banks were using CDS' for regulatory capital purposes.
- Result is that banks had more credit to extend and they did extend it with riskier and riskier borrowers.

It Was Not Just the European Banks, However

- Wachovia Bank, the 4th largest bank holding company in the U.S., relied heavily on CDS' and failed in the Fall of 2008.

Don't Tip Over the Dominos – Contagion

- Note from the Federal Reserve Bank of New York to Tim Geitner said that, “[If] AIG...fails to perform on balance sheet CDO swaps, which provide reg. capital relief to European banks, failure would lead to increase in European bank capital requirements. Swaps allow banks to hold 1.6% of regulatory capital as opposed to the required 8%.”¹⁴
- CDS has made swiss cheese of bank balance sheets, and to unwind them and return premiums would have left them insolvent from a regulatory perspective.
- A conversation with a managing partner (January 2009) and with Eric Dinallo (October 2015).

So Where are we Now?

Amount of CDS' in Effect

The steady reduction in the size of the global credit derivatives market, which started in 2007, continued in the first half of 2015. The notional amount of outstanding credit derivatives contracts fell from \$16 trillion at end-December 2014 to \$15 trillion at end-June 2015. ¹⁵

Regulatory Swirl

Basel III increased banks' capital requirements for exposures to other financial firms, presumably to reduce interconnectedness. But regulatory capital relief is still allowed for banks that obtain credit protection through CDS, total return swaps, and eligible guarantees.¹⁶

...and the Games are Still Being Played

- The “London Whale” cost J.P. Morgan billions in 2012
- Basel III reformed in 2013 to require that banks book the full cost of the “premium” upfront.

Punishment, Anyone...anyone?

Savings and Loan Crisis:

- The Resolution Trust Corporation (“RTC”) closed 747 failed institutions nationwide with the total cost of the crisis amounting to approximately \$130 billion
- Overall about 1,043 S&L’s out of 3,200 nationwide failed.
- Regulators made over 30,000 criminal referrals to prosecutors
- The justice department obtained over 1,000 felony convictions.¹⁷
- The conviction rate for cases brought was 90%.

Appendix – Footnotes

1. “A License to Bet,” Connecticut Insurance Law Journal,
2. “Have Insurance Companies Forgotten the Meaning of Insurance?,” The Atlantic, May 7, 2012
3. Betting on Lives: The Culture of Life Insurance in England from 1695 – 1775, Geoffrey Clark, Manchester University Press (1999). Page 49
4. “Gambling by Insurance – A Study of the Life Assurance Act 1774,” Anglo-American Law Review, R. Merkin
5. Betting on Lives, p. 51
6. “Musings on Market,” aswathdamodaran.blogspot/2010/02/credit-default-swp-cds-market; February 12, 2010.
7. www.multpl.com/world-gdp/table/by-year; https://en.Wikipedia.org/wiki/World_economy; www.ggdc.net/maddison/historical_statistics/horizontal-file_02-2010.xls
8. “Credit Default Swaps and the Global Financial Crisis: Reframing Credit Default Swaps as Qausi-insurance,” Global Economy and Finance Journal, Shenuka Senarath and Richard Copp, Vol. 8 No. 1, March 2015, p. 140. (Thus, we argue that the existing literature on regulating CDS’s is more or less addressing the symptoms but not the root cause behind it. In order to prevent a similar crisis, it is important to make sure that no “time bombs” are created).
9. I. Huault and H. Rainelli-le Montagner, “Market Shaping as an Answer to Ambiguities: The Case of Credit Derivatives,” (2009) 30 Organization Studies, 549 – 575, at 560.
10. “Credit Default Swaps: Past Present and Future,” Patirck Augustin, Marti G. Subrahmanyam, Dragon Tan, and Sara Q. Wang, Annual Rev. Financ. Econ., 2016 10.1 – 10.22 at page. 10.11.
11. See 8 above at p. 10.2.
12. “The Effect of CDS on Bank Capital, Lending, Risk and Return,” Susan Shan, Dragon Tang, and Hong Yan, April 10, 2014
13. Id.
14. “More Transparency Needed for Bank Capital Relief Trades,” Jill Cetina, Mohn McDonough and Sriram Rajan, Office of Financial Research, Vol. 15-04, Page 8 June 11, 2015
15. “OTC Derivatives Statistics at the end of June 2015,” Bank for International Settlements, June 2015
16. TBD – Supply footnote for proposition that Basel III still allows capital relief for CDS’
17. “Hundreds of Wall Street Executives Went to Prison During the Last Fraud Fueled Bank Crisis,” Joshua Holland, Moyers & Company, September 17, 2013