The Jumbled Alphabet Soup of the Collapsed Home Mortgage Market: ABCP, CDO, CDS and RMBS

Georgette Chapman Phillips[1]

Publication Forthcoming University of Miami Business Law Review:
Do not cite without permission of author

Derivatives are not inherently toxic. One senior Wall Streeter compares them to fertilizer: It can help your garden grow or can be made into bombs.[2]

It all started so simply. Consumers needed access to loans to purchase a home and weave themselves into the American Dream. Lenders were constrained when capital was tied up in long term mortgages. The Government saw the opportunity to alleviate both problems by buying and bundling the home mortgages and using them as collateral (along with an implicit guarantee) for publicly traded investments on the secondary market. But it came to be so complex. The market whirled out of control as investments, derivatives, became more and more distant from the ultimate source of repayment—the underlying mortgages. The policy of governmental manipulation of capital markets through implicit guarantees has a logarithmic effect by not only prompting consumer behavior while contemporaneously controlling access to capital in the housing finance arena. Add lax regulation, mismatched incentives and outright greed into the brew and the result is total market failure as we have recently endured.

The primary mortgage market is a credit market. Etymologically "credit" means "to trust, to believe".[3] Lenders trusted the borrowers to pay and based the assessed risk (and price) on this basis. Taking this notion up one step into the secondary market investors view risk (and price) through the lens of the likelihood of borrowers repaying their mortgages in a timely fashion. Government intervention enhances the deal by interjecting an implicit governmental guarantee of repayment into the Residential Mortgage Backed Securities (RMBS) market. This guarantee serves not only to placate investors but also to insure that funds are available for mortgage based lending.[4] In this fashion it fuses the twin desires of first lubricating the capital markets and secondly insuring the flow of funds to prospective home

---

[1] David B. Ford Professor of Real Estate, Wharton School. Professor of Law University of Pennsylvania Law School. Research grant from Zell Lurie Real Estate Center. Research assistance of Jennifer Panichelli Barzeski, Andrew Hohns and Erik Vogt. Helpful comments on previous drafts from Jonathan Shils, Peter Linneman and Joe Gyourko.

[2] Business Week, May 23, 2005 (found at http://www.businessweek.com/magazine/content/05_21/b3934099_mz020.htm).

[3] http://www.etymonline.com/index.php?term=credit. See also, Joseph Philip Forte, *Disruption in the Capital Markets: What Happened?*, 22 OCT Prob. & Prop 8 (2008).

.

[4] In 1992, Congress passed the Federal Housing Enterprises Safety and Soundness Act which amended the statutory charters of Fannie Mae and Freddie Mac and established several broad public policy purposes for the two GSEs. Specifically, the charters designate the GSEs to provide stability in the secondary mortgage market, increase the liquidity of mortgage investments, improve the spatial distribution of investment capital available for residential mortgage financing, and provide assistance to residential mortgages on housing for low- and moderate-income families.

purchasers. From this fusion an entire secondary market in structured mortgage finance has grown to dominate the residential mortgage lending market.[5] However, over time the derivative financial ornaments[6] hung on the RMBS offerings have become more and more sophisticated, less understandable and less subject to easy regulation.[7] The residential mortgage market at one time benefitted greatly from the infusion of capital supplied by an increasingly sophisticated secondary (and tertiary) market.[8] In the course of recent events, though, this array of ancillary products has eroded both on trust and belief in the fundamental mortgage market.[9]

Inherent in this discussion are the policy decisions of a deregulated financial system running alongside of the push toward expansion of homeownership. Standing alone both policies may have some intrinsic qualities. However, when pursued together they ignited the worst financial crisis in centuries. As we begin to sort through the financial corpses littering the structured finance landscape it would be naïve to assume that whole loan lending will be the sole survivor. Alternatives to securitizing home mortgages must recognize both the need for consumer protection and investor yield appetite. Aiming most regulatory efforts solely at the primary lending market falls short. Regulatory and oversight is needed more urgently overseeing the derivative investment vehicles that interact with primary lending markets.

The goal of this comment rests with an analysis of the role of three investment vehicles in particular—Asset Backed Commercial Paper (ABCP), Collateralized Debt Obligations (CDOs) and Credit Default Swaps (CDSs)-- in transforming a somewhat stodgy, heavily regulated market segment into the financial equivalent of the lawless wild west of buy first, ask questions later. Though different in their structure and investment horizon, all of these derivative products have the similarity of promoting investing severed from understanding the underlying risk. Real estate risk was masked by painting over a layer of fixed income structured finance. However, just as a top layer of paint does not cover without primer, the layer of structured finance was applied without the primer of mutual understanding between real estate market and the bond market. As the real estate risk bubbled through the derivative structures peeled off and the market spiraled into disarray. The essential question is this: should something as fundamental as home finance be the financial playground for esoteric investments. To state the problem another way: is housing policy so important as to cordon off this financial market to all but the safest investment vehicles?

---

[5] See, Jesse M. Keenan, *America's Trillion-Dollar Housing Mistake: The Political Economy of Housing*, 16 J. AFFORDABLE HOUSING & COMMUNITY DEV. L. 107 (2007) "Today's markets benefit from outside capital by way of an increasingly sophisticated secondary market."

[6] A derivative is any kind of financial instrument whose value is based on the value of another financial instrument. See http://money.cnn.com for glossary of terms.

[7] See Michael Simkovic, *Secret Liens and the Financial Crisis of 2008*, 83 AM. BANKR. L.J. 253, 254 (2009) (discussing how "new and complex" financial instruments surround "relatively old and simple" cause of the financial crisis: hidden leverage).

[8] For a fuller discussion see, Jesse M. Keenan, *America's Trillion-Dollar Housing Mistake: The Political Economy Of Housing*, 16- J. AFFORDABLE HOUSING & COMMUNITY DEV. L. 107 (2007).

[9] The clearest example of this erosion of trust is the abusive lending practices that facilitated the underwriting of predatory loans. See, Steven L. Schwarcz *Systemic Risk,* 97 GEO. L. J. 193 (2008)

First the evolution of the RMBS market will be sketched out. Next the impact of the ABC paper market, the CDO market and the CDS market will be explained. These investment vehicles worked within (or perhaps along side of) a regulatory environment that failed to capture the risk. I will highlight some holes in the fabric that facilitated market meltdown. This will lead into a broader analysis of policy, regulation and legislation with conclusions and recommendations.

I. Evolution of the RMBS Market

The securitization of mortgages involves the structuring of transactions with a particular goal in mind. Most often that goal is to create a security with a specific credit rating sufficient to satisfy the guiding principles of the various credit rating agencies.[10] Instruments with a higher rating, of AAA, for example, may be more appealing to investors. To that end, issuers (alter egos of investment banks) can, through a careful consideration of risks and a balancing of "pooling and tranching," create securities with their target rating.[11] Drawing from a larger loan base allows issuers of securities to work with a more varied and larger pool of loans, which in turn allows for a higher percentage of the pool that can be sliced into more desirable credit ratings.[12]

With that said, the vast residential mortgage backed securities market did not suddenly appear on the financial horizon. Rather, its emergence was a series of shifts and steps that eventually led to the market as we know it today. The following section provides a brief overview of the key players in the development of the secondary mortgage market.

A. Brief History of the RMBS Market

The movement towards securitization began with the sale by mortgage lenders of loans they had originated.[13] Eventually, multiple residential (and later, commercial) mortgage loans were "pooled" or grouped together and sold as securitized instruments, ultimately growing into the type of securitization that we know today.[14] These securitized instruments evolved into residential mortgage backed securities ("RMBS"). Residential mortgage backed securities are pass-through securities whose funds are generated from a pool of mortgage loans.[15]

---

[10] JOSHUA D. COVAL, JAKUB JUREK, ERIK STAFFORD, THE ECONOMICS OF STRUCTURED FINANCE 5 (Harvard Business School Working Paper No. 09-060, 2008).

[11] JOSHUA D. COVAL, JAKUB JUREK, ERIK STAFFORD, THE ECONOMICS OF STRUCTURED FINANCE 6 (Harvard Business School Working Paper No. 09-060, 2008).

[12] JOSHUA D. COVAL, JAKUB JUREK, ERIK STAFFORD, THE ECONOMICS OF STRUCTURED FINANCE 7 (Harvard Business School Working Paper No. 09-060, 2008). "Using a larger number of securities in the underlying pool, a progressively larger fraction of the issued tranches can end up with higher credit ratings than the average rating of the underlying pool of assets."

[13] Andrew Berman, *Once a Mortgage, Always a Mortgage – The Use (and Misuse of) Mezzanine Loans and Preferred Equity Investments*, 11 STAN. J.L. BUS. & FIN. 76, 91 (2005).

[14] Andrew Berman, *Once a Mortgage, Always a Mortgage – The Use (and Misuse of) Mezzanine Loans and Preferred Equity Investments*, 11 STAN. J.L. BUS. & FIN. 76, 77 (2005). See also CHARLES AUSTIN STONE AND ANNE ZISSU, STRUCTURES AND DYNAMICS OF MORTGAGE - AND ASSET - BACKED SECURITIES (2005).

[15] For a definition of RMBS, see http://www.sec.gov/answers/mortgagesecurities.htm.

Ironically, as the market in recent days has nearly stood at a standstill, the RMBS market has its origins in another slow time for the market - the economic depression of the 1930's. In an effort to jumpstart the economy and revitalize the residential mortgage loan marketplace, Congress formed several quasi-governmental entities in addition to instating various incentive programs.[16] The first of the government-backed initiatives was the formation of the Federal Home Loan Bank System (the "FHLBS") in 1932. The FHLBS consists of twelve regional wholesale banks which provide liquidity in the form of advances to an extensive network of financial institutions across the country.[17]

The next entity, created in 1934, was the Federal Housing Administration ("FHA"), which helps match buyers with lenders who can provide appropriate funding. In addition, the FHA also provides private mortgage loan insurance.[18] The VA, or Veterans Administration, came into being after the FHA in 1944 and provides similar mortgage insurance coverage to veterans.[19] The insurance programs offered by FHA and VA alongside the favorable lending terms they promote have helped to bring fundamental changes to the mortgage industry.[20] Together, they allow for greater accessibility to mortgage funding, which in turn leads to widespread homeownership, benefiting both lenders and individuals.[21]

The third government initiative was the creation of several Government Sponsored Entities (GSEs). A GSE is usually created to fill a gap when the private factor fails to provide important services.[22] A GSE is a "federally chartered, privately owned, privately managed financial institution which has special lending and guarantee powers and is viewed by investors to be implicitly backed by the U.S. government."[23] This implicit guarantee enables a GSE to borrow at lower interest rates and operate with higher leverage

---

[16] Adam A. Ashcraft, Morten L. Bech, W. Scott Frame, *The Federal Home Loan Bank System: The Lender of Next –to Last Resort* 10 (Federal Reserve Bank of New York Staff Reports, Staff Report No. 357 November 2008). *See also* Andrew Berman, *Once a Mortgage, Always a Mortgage – The Use (and Misuse of) Mezzanine Loans and Preferred Equity Investments*, 11 STAN. J.L. BUS. & FIN. 91 (2005); Alan Kronovet, *Note & Comment: IV. Securities: An Overview of Commercial Mortgage Backed Securitization: The Devil is in the Details*, 1 N.C. BANKING INST. 288 (1997).

[17] Adam A. Ashcraft, Morten L. Bech, W. Scott Frame, *The Federal Home Loan Bank System: The Lender of Next –to Last Resort* 2-3 (Federal Reserve Bank of New York Staff Reports, Staff Report No. 357 November 2008).

[18] Andrew Berman, *Once a Mortgage, Always a Mortgage – The Use (and Misuse of) Mezzanine Loans and Preferred Equity Investments*, 11 STAN. J.L. BUS. & FIN. 76, 91 (2005), 91. *See* www.fha.com for more detailed information on the FHA.

[19] Alan Kronovet, *Note & Comment: IV. Securities: An Overview of Commercial Mortgage Backed Securitization: The Devil is in the Details*, 1 N.C. BANKING INST. 288, 290 (1997).

[20] Alan Kronovet, *Note & Comment: IV. Securities: An Overview of Commercial Mortgage Backed Securitization: The Devil is in the Details*, 1 N.C. BANKING INST. 288, 291 (1997).

[21] Alan Kronovet, *Note & Comment: IV. Securities: An Overview of Commercial Mortgage Backed Securitization: The Devil is in the Details*, 1 N.C. BANKING INST. 288, 291 (1997).

[22] A. Michael Froomkin, *Reinventing the Government Corporation*, 1995 U. ILL. L. REV. 543, 602 (1996).

[23] Richard Scott Carnell, *Handling the Failure of a Government-Sponsored Enterprise*, 80 WASH. L. REV. 565, 570 (2005).

than similar private sector firms.[24] Without such implicit guarantee, the average GSE would be smaller and less leveraged (and, since it is not linked, pose less danger to the U.S. financial system).[25]

In the early 1930's, credit availability and loan terms varied drastically across the nation.[26] In 1938, the Federal National Mortgage Association ("Fannie Mae") was created for the purpose of helping individuals with marginal credit obtain mortgages by increasing available capital and boosting market liquidity.[27] Fannie Mae increased the availability of mortgages by purchasing mortgages from lenders backed by the FHA.[28] Fannie Mae's stated mission "is to provide liquidity and stability to the U.S. housing and mortgage markets,"[29] with a focus on helping individuals with marginal credit obtain mortgage financing by creating a venue for the purchase of FHA loans.[30] By providing a conduit for the sale of FHA loans, FNMA gives lenders the added confidence they may need to provide more funding.

In 1968, Congress divided FNMA into two distinct entities. One of these entities was "Ginnie Mae," the Government National Mortgage Association or GNMA, an agency of the Department of Housing and Urban Development.[31] Ginnie Mae focuses primarily on providing "affordable housing" to low and moderate income households by allowing "mortgage lenders to obtain a better price for their mortgage loans in the secondary market."[32] Ginnie Mae accomplishes this by guaranteeing investors "the timely payment of principal and interest on MBS backed by federally insured or guaranteed loans."[33] The second entity became a private corporation under the same name, Fannie Mae, with the same goals as the original agency.[34]

A shortage in capital in the housing market pushed the Government even more into the securitization market.[35] In 1971 "Freddie Mac," the Federal Home Loan Mortgage Corporation, was

---

[24] Richard Scott Carnell, *Handling the Failure of a Government-Sponsored Enterprise*, 80 WASH. L. REV. 565, 572 (2005)
.

[25] Richard Scott Carnell, *Handling the Failure of a Government-Sponsored Enterprise*, 80 WASH. L. REV. 565, 572 (2005).

[26] Richard Mize, *Meet Fannie Mae, Freddie Mac in the Recovery Room*, THE OKLAHOMAN, Aug. 2, 2008, at 2B.
[27] Randall Dodd, *Subprime: Tentacles of a Crisis*, 44 issue 4 FINANCE & DEVELOPMENT 15 (2007).
[28] See http://www.fanniemae.com/aboutfm/charter.jhtml?p=About+Fannie+Mae.
[29] www.fanniemae.com. See also Andrew Berman, *Once a Mortgage, Always a Mortgage – The Use (and Misuse of) Mezzanine Loans and Preferred Equity Investments*, 11 STAN. J.L. BUS. & FIN. 76, 91 (2005), 91.
[30] Alan Kronovet, *Note & Comment: IV. Securities: An Overview of Commercial Mortgage Backed Securitization: The Devil is in the Details*, 1 N.C. BANKING INST. 288, 291 (1997).
[31] Alan Kronovet, *Note & Comment: IV. Securities: An Overview of Commercial Mortgage Backed Securitization: The Devil is in the Details*, 1 N.C. BANKING INST. 288, 291 (1997).
[32] For more information about Ginnie Mae, seewww.ginniemae.gov.
[33] See www.ginniemae.gov.
[34] Alan Kronovet, Note & Comment: *IV. Securities: An Overview of Commercial Mortgage Backed Securitization: The Devil is in the Details*, 1 N.C. BANKING INST. 288, 291 (1997).
[35] David J. Matthews, *Ruined In A Conventional Way: Responses To Credit Ratings' Role In Credit Crises* 29 NW. J. INT'L L. & BUS. 245, 249 (2009).

created for the purpose of purchasing government backed mortgages and conventional loans. [36] Freddie Mac has been active in the current financial crisis, particularly in buying "jumbo loans" in an effort to create more liquidity in the market and to keep mortgage rates affordable.[37]

These GSEs were instrumental in developing the residential securities market during the formative years of the 1970's through the 1980's through the issuance of various certificates and programs.[38] Ginnie Mae was the first to offer publicly traded RMBS in 1970 in the form of pass through certificates backed by FHA and VA insured mortgages.[39] Fannie Mae and Freddie Mac followed close behind. These entities continue to encourage homeownership today. Along with private sector securitizations by the mid 1990s over 60% of the home loans were securitized.[40] GSEs remain key players in the RMBS market, more than a quarter century after their inception. Indeed, without the GSEs and the implicit—now explicit—guarantee of the securities issued into the RMBS market residential lending and the resultant economic landscape would look starkly different.

B. The Ins and Outs of Securitization - A Brief Explanation of What it is and How it Works

As described above, residential mortgage backed securities evolved over the later decades of the twentieth century, bringing many beneficial changes to the industry. Investment banks (often in concert with rating agencies) use a two step process of "pooling and tranching" to manufacture RMBS with the desired level of investment risk.[41] In the first step, a group of loans, or assets, with varying credit risks are pooled together and packaged into a mortgage backed security. The security instrument is then sliced and divided into a hierarchical structure with different tranches, or classes. The junior tranches are the last paid and, therefore, are the most likely to default and indeed are the first to suffer losses while the senior tranches only absorb losses once the junior tranches have been used up.[42] In this way, the senior tranches, or claims, are able to achieve higher credit ratings than the more junior claims. The

[36] See www.freddiemac.com. One of Freddie Mac's stated objectives on its website is "to provide a continuous and low cost source of credit to finance America's housing." See also Alan Kronovet, Note & Comment: *IV. Securities: An Overview of Commercial Mortgage Backed Securitization: The Devil is in the Details*, 1 N.C. BANKING INST. 288, 292 (1997).

[37] See Freddie Mac's Vital Role in the Mortgage Market on their website at http://www.freddiemac.com/corporate/company_profile/actions_mortgage_crisis.html.

[38] See John C. Cody, *The Dysfunctional "Family Resemblance" Test*: *After Reves v. Ernst & Young, When are Mortgage Notes "Securities"?,* 42 BUFF. L. REV. 761, (1994).

[39] Alan Kronovet, *Note & Comment: IV. Securities: An Overview of Commercial Mortgage Backed Securitization: The Devil is in the Details*, 1 N.C. BANKING INST. 288, 292 (1997). Andrew Berman, *Once a Mortgage, Always a Mortgage – The Use (and Misuse of) Mezzanine Loans and Preferred Equity Investments*, 11 STAN. J.L. BUS. & FIN. 76, 92 (2005).

[40] David J. Matthews, *Ruined In A Conventional Way: Responses To Credit Ratings' Role In Credit Crises* 29 NW. J. INT'L L. & BUS. 245, 249 (2009). At the same time the S&L crisis wiped out most home mortgage lenders creating an even greater need for capital infusion.

[41] JOSHUA D. COVAL, JAKUB JUREK, ERIK STAFFORD, THE ECONOMICS OF STRUCTURED FINANCE 5 (Harvard Business School Working Paper No. 09-060, 2008).

[42] JOSHUA D. COVAL, JAKUB JUREK, ERIK STAFFORD, THE ECONOMICS OF STRUCTURED FINANCE 6 (Harvard Business School Working Paper No. 09-060, 2008).

higher the tranche, the lower the yield on the investment while the lower the tranche, the higher the yield.[43]

This process proved advantageous to many players in the industry. As securitization grew, it greatly expanded the reach of the mortgage investment business, allowing access to a venue once reserved for a select group both interested and able to purchase whole loans. In fact, the opening of a secondary market opened the gates to a wide range of untapped national and international investors. [44] The securitization process made investments more accessible to a wider group of consumers and introduced a steady stream of new funding sources in the real estate market. In addition to a wider pool of funding sources, securitized products from the secondary market also brought "lower interest rates, availability of non-recourse financing, and higher loan to value ratios," as well as lower investor risk.[45] By providing a venue for the transfer or sale of these secured assets, the securitization process creates a marketable, liquid commodity, one that is easily moved across markets.[46]

C. Market Size

Since its inception in the late 1970's, the RMBS market has grown significantly. What started as a $700 million industry in 1978 has increased over the years to an astounding billion dollar industry.[47] The early to mid 2000's saw record numbers, with each year showing an increase over the previous year's issuance. [48] In 2004, there were $864.2 billion issued in private-label RMBS.[49] In 2006, that number

[43] Indeed this is the "special sauce" of why the securitization industry can be so lucrative. The greater the percent of the pool that is rated higher (i.e. lower yield) the more excess interest that can be stripped off into the interest only (IO) piece of the offering.

[44] JOSHUA D. COVAL, JAKUB JUREK, ERIK STAFFORD, THE ECONOMICS OF STRUCTURED FINANCE 3 (Harvard Business School Working Paper No. 09-060, 2008).

[45] Georgette C. Poindexter, *Subordinated Rolling Equity: analyzing Real Estate Loan Default in the Era of Securitization*, 50 EMORY L. J. 519, 529 (2001).

[46] Georgette C. Poindexter, *Subordinated Rolling Equity: analyzing Real Estate Loan Default in the Era of Securitization*, 50 EMORY L. J. 519, 522-523 (2001).

[47] Robert P. Pollsen, Ernestine Warner, Thomas Warrack and Erkan Erturk, *Rating Transitions 2004: U.S. RMBS Stellar Performance Continues to Set Records* (visited 2/20/2009), http://www2.standardandpoors.com/spf/pdf/fixedincome/RMBSRatingsTransitions2004.pdf.

[48] Robert P. Pollsen, Ernestine Warner, Thomas Warrack and Erkan Erturk, *Rating Transitions 2004: U.S. RMBS Stellar Performance Continues to Set Records* (visited 2/20/2009), available at http://www2.standardandpoors.com/spf/pdf/fixedincome/RMBSRatingsTransitions2004.pdf.

[49] Robert P. Pollsen, Ernestine Warner, Thomas Warrack and Erkan Erturk, *Rating Transitions 2004: U.S. RMBS Stellar Performance Continues to Set Records* (visited 2/20/2009), http://www2.standardandpoors.com/spf/pdf/fixedincome/RMBSRatingsTransitions2004.pdf.

climbed to a record high of $1.2 trillion.[50] 2008 saw a steep decline with only $48.6 billion issued in RMBS.[51] Despite the sharp drop from previous years, the amount of RMBS issued was still formidable.

In September 2008 Fannie Mae and Freddie Mac were put into conservatorship. The Federal Housing Agency now controls and directs all operations. [52] The implicit guarantee of the federal government was made explicit when, in exchange for capital investment, the two GSEs issued to US Treasury senior preferred stock and common stock warrants representing an ownership stake of 79.9%.[53]

The anticipated outlook for 2009 is not particularly promising as the market continues to flounder, however the industry is looking to initiatives from the new administration to revitalize the residential housing market.[54]

II. Derivatives and the RMBS market

The two decade economic period immediately prior to the recent crash has been dubbed the "Great Moderation" due to its relatively sleepy, even tempered lull.[55] The system of structured finance efficiently allocated capital supply with credit demand. However, the creeping but steady entry of noxious assets, whose potential to undermine the trust that bound these delicate financial inter-relationships was either over-looked, underestimated, or misunderstood.[56] The volatility in the residential financial market arose in large part to the effects of derivatives.[57] Several instruments in particular were at the center of the hurricane: ABC paper, CDOs and CDS. With strong investor demand for highly-rated securities reducing credit costs, the market stepped up to create more and more structured vehicles, reliant on the presumption of an efficient and fungible rating system, and reinforced through a regulatory environment that put more value on the accumulation of highly rated portfolios in

---

[50] Thomas Warrack and Ernestine Warner, U.S. RMBS Market Still Robust, But Risks Are Increasing And Growth Drivers Are Softening (visited 2/20/2009), http://www2.standardandpoors.com/spf/pdf/media/subprime_rmbs_robust_011906.pdf.

[51] See Fundamentals of Structured Finance – RMBS: 2008 Year in Review and Outlook for 2009 http://www.dbrs.com/research/226423.

[52] See N. Eric Weiss, *Fannie Mae's and Freddie Mac's Financial Problems: Frequently Asked Questions*, CRS Report for Congress, Sept. 12, 2008 at. 4, available at http://fpc.state.gov/documents/organization/110096.pdf for specific information about the conservatorship. See also Courtney Hunter, *Developments in Banking and Financial Law XI. Financial Stabilization Measures*, 28 REV. BANKING & FIN. L. 490, 494 (2009).

[53] Courtney Hunter, *Developments in Banking and Financial Law XI. Financial Stabilization Measures*, 28 Rev. Banking & Fin. L. 490, 495 (2009).

[54] See Fundamentals of Structured Finance – RMBS: 2008 Year in Review and Outlook for 2009 http://www.dbrs.com/research/226423.

[55] See Steven J. Davis and James A. Kahn, *Interpreting the Great Moderation: Changes in the Volatility of Economic Activity at the Macro and Micro Levels*, (Federal Reserve Bank of New York Staff Reports, no. 334, July 2008), available at http://ssrn.com/abstract=1166556.

[56] W. Scott Frame and Lawrence J. White, *Fussing and Fuming over Fannie and Freddie*, How Much Smoke, How Much Fire?, 19 Issue 2 JOURNAL OF ECON. PERSPECTIVES 159 (2005).

.

[57] A derivative is a financial instrument which derives its value from the value of some other financial instrument or variable.

place of a more rigorous and issuer-idiosyncratic processes of fundamental credit underwriting.[58] The result of increasing piling on of derivatives re-positioned the economic engine of the residential market. Whereas the whole loan market was based on stable investment income, this new market was based on fee generation. Relying on a constant stream of fee income produces different incentives than pursuing long term capital investment.

A. ABC Paper

As explained previously the first step toward amassing a pool with an eye towards securitization is to warehouse enough loans to fill the pool. The warehouse is filled when loan originators, who can range from traditional lenders such as thrifts/mortgage banks to the non-traditional such as mortgage brokers sell (often instantaneously)the mortgages to an Special Purpose Entity (SPE) after closing with the loan with the borrowers. As in any securitization the goal is two pronged: off load non-payment risk (credit risk) and free up capital. The SPE will issue short term commercial paper to fund the acquisition from the originators. Since it is a short term investment (usually less than 120 days) the issuance avoids registration under the Securities Act of 1933.[59]

As a side event to the sale of the mortgages the originators sign a Mortgage Purchase Agreement with the SPE. This Purchase Agreement contains representations and warranties for each mortgage loan. Hence there is the residual obligatory liability for originator to buy back the loan. In this document the originators usually agreed to repurchase the mortgages if they went into default within the 120 day period of warehousing. In reality though, when the market was humming at full speed originators acted as if they had no risk at all. Poor underwriting standards, now the stuff of legend, resulted because the originators behaved as if they were working in a risk free environment.

Underlying this transaction is a swap agreement between the SPE and a financial institution (for sake of reference here, a Bank). In exchange for a guarantee of principal and interest repayment to holders of the ABC paper (the swap) the Bank receives the spread (the difference between the average interest rate on the mortgages and the coupon on the paper. The ABC paper is rated[60] based on the strength on the credit worthiness of the Bank. The swap is a "liquidity enhancer" because the Bank, as the swap partner with the SPE, has the ultimate payment responsibility if there are defaults in the underlying mortgages. ABC paper was considered a less risky investment and generally paid just above Treasury. As this is a trillion dollar market the spread did not have to be significant before it turns into a very lucrative business. In addition to this spread, a fundamental profit driver on the ABC paper was the fee income the Bank generates for issuing this liquidity enhancer.

---

[58] W. Scott Frame and Lawrence J. White,, *Charter Value, Risk-Taking Incentives, and Emerging Competition for Fannie Mae and Freddie Mac*, JOUR. OF MONEY, CREDIT & BANKING, 83, 86 (2007), p. 86.

[59] Registration is only required if the term is longer than 270 days.

[60] See Standard and Poor's website, www.standardandpoor.com, for details on structured finance ratings. Standard and Poor's bases its creditworthiness on the "likelihood of default, and includes (i) payment priority, (ii) recovery and (iii) credit stability."
http://www2.standardandpoors.com/portal/site/sp/en/us/page.category/ratings/2,1,1,0,0,0,0,0,0,0,0,0,0,0,0,0.html?lid=us_fo_overview_ratings. See, also Moody's website, www.moodys.com, for more information on structured finance ratings. Html.

At the end of the warehouse period the mortgages are sold into the RMBS market (e.g. Fannie, Freddie or other securitization). At the close of the transaction the purchasers of the paper would be looking for return of both interest and principal. This is paid when the loans leave the warehouse facility and are purchased into the RMBS vehicle.

This market works well as long as several financial engines continue to run smoothly. First of all the underlying mortgages cannot go into default. Early period (i.e. within 120 days of origination) defaults were previously rare bordering on unheard of. Furthermore, there must be an exit strategy for disposing of the warehoused mortgages so that the ABC paper could be retired after the 120 day investment period. At first it worked very well. In 2005 approximately $765 billion was invested in ABC paper. By 2007 (before the crash) it soared 48% to $1.13 trillion due in large part to growth in this type of conduit lending.[61] As long as there was an RMBS market to offload the mortgages as the paper became due the pipeline flowed.

However, as we know all too well soaring defaults in the home mortgage market brought this market to a halt. The current crisis introduced the moniker "juvenile delinquents" to the lending lexicon. These loans were 90 days or more in default during the first year after origination.[62] The juvenile delinquents clogged the pipelines of the securitization model. Although the Purchase Agreements contained buy back provisions they were of little or no use.[63] Originators who had assumed they had had no risk were suddenly faced with mounting liability and many, such as American Home Mortgage and New Century, declared bankruptcy (with Countrywide narrowly escaping with a rescue by Bank of America).[64]

Defaults in previously securitized loans clogged up the exit strategy. As will be analyzed in the CDO discussion this market virtually shut down and closed off the pipe line. As the crisis worsened past the 90-120 paper expiration dates default rates blew up.[65] The birds of short term lending came home to roost in the nest of long term liabilities. Investment bank balance sheets were (in the instant immediately prior to that disappearance of investor interest) so built out that they were unable to sustain demand for the next round of securities that were coming off the warehouse lines of the

---

[61] Randall Smith, *New Villain in Market Drama: Commercial Paper*, WALL STREET JOURNAL, August 17, 2007; See also Hortense Leon, *Locked Up*, MORTGAGE BANKING, Vol. 68, Issue 10 (7/1/08).

[62] Andrew Haughwout, Richard Peach & Joseph Tracy, *Juvenile Delinquent Mortgages: Bad Credit or Bad Economy?*, 64 Iss. 2 JOUR. OF URBAN ECON. 246 at 247 (2008). In fact many participants in the industry were surprised by the degree of early defaults. (Haughwout at 256). See also, Gene Amromin and Anna L. Paulson, *Comparing Patterns of Default Among Prime and Subprime Mortgages*, 33 No. 2 Econ. Perspectives 18, 19 (2009).

[63] The enforceability of the Repurchase Agreement was determined to turn on the language of the agreement not underlying economic responsibilities. See, Calyon New York Branch v. American Home Mortgage Corp., 379 B.R. 503 (Bankr.D.Del. 2008).

[64] Elaine Korry, *Bank of America Acquires Countrywide for $4 Billion* (1/11/2008), available at http://www.npr.org/templates/story/story.php?storyId=18028482. For details about American Home Mortgage and New Century, see Steven Church and Bradley Keoun, *American Home Files for Bankruptcy After Shutdown* (8/6/2007), available at http://www.bloomberg.com/apps/news?pid=20601087&sid=aFEWS0C5lPKc&refer=home.

[65] David Messerschmitt, *Overview of the Subprime Mortgage Market*, 27 REV. BANKING & FIN. L. 3 at 7(2007).

mortgage originators. A link in the system had been broken, resulting in debilitating convulsions to previously stable funding sources. Capital essentially seized up with outlets at full capacity.[66]

B. CDOs

CDOs have benignly been defined as investment-grade security[ies] backed by a pool of bonds, loans and other assets.[67] In today's press they are most described as "toxic assets" or "the garbage disposal of securitized lending."[68] This perceptual metamorphosis has more to do with how CDOs were injected into the RMBS landscape than their economic function. They present a classic example of how an existing, almost mundane, investment vehicle can be turned into a powerful (and woefully misunderstood) market driver. They originated in the 1970s but began to grow in the 1980s.[69] 2006 annual issuance was $520.6 billion.[70] Overall quarterly of mortgage backed CDO issuance peaked in the second quarter of 2007 with the quarterly issuance of $178.6 billion. 2007 annual issuance dropped 8% to $481 billion and the entire market evaporated in the credit crisis. 2008 annual issuance dipped to $56 billion. A more telling signal of death in this market was the quarter four 2008 struggled to achieve a paltry $5 billion.[71]

Indeed this type of cash flow CDO is structured finance: an SPE holds a pool of debt contracts. The capital structure is sliced and tranched based on differences in credit quality.[72] The key to

[66] As volume of flow fell below capacity, the actual costs of per unit production skyrocketed, such that dramatically fewer underlying borrowers have had practical access to credit relative to the amount of loans that were being made in 2005 and 2006.

[67] Sally Pittman, *Arms, But No Legs To Stand On: "Subprime" Solutions Plague The Subprime Mortgage Crisis* 40 TEX. TECH. L. REV. 1089 (2008). See also, John C. Kelly, *An Introduction to Commercial Real Estate CDOS (Part 1*), 21-DEC PROB. & PROP. 38 (2007) ("In a CDO, a special purpose vehicle is organized to hold a diversified portfolio of assets that is financed through the vehicle's issuance of securities.").

[68] "'It is believed that many of these subprime loans were "invented so that hedge funds would have high-yield debt to buy.'" Paul M. Jonna, *In Search of Market Discipline: The Case for Indirect Hedge Fund Regulation*, 45 SAN DIEGO L. REV. 989 at 1002. The author writes that Wall Street advanced the proliferation of these risky loans to questionable borrowers. In a Practicing Law Institute handbook, the drive for these instruments was described as "a gluttonous appetite for financial instruments of incomprehensible risk like Collateralized Mortgage Obligations, Credit Default Swaps, Auction Rate Securities, Derivatives and a host of arcane concoctions that generated enormous profits from the leakage off the financial trash heap, alchemy of disaster." Frederick W. Rosenberg, *Securities Arbitration in the Market Meltdown Era: Achieving Fairness in Perception and Reality The Madoff Distraction*,1754 PLI/Corp 75, at 80-81 (2009).

[69] Richard E. Mendales, *Intensive Care For The Public Corporation: Securities Law, Corporate Governance, And The Reorganization Process*, 91 MARQ. L. R. 979 (2008).

[70] David J. Matthews, *Ruined In A Conventional Way: Responses To Credit Ratings' Role In Credit Crises* 29 NW. J. INT'L L. & BUS. 245, 255 (2009) ("Of $1.5 trillion in outstanding CDO value worldwide, between $500 billion and $600 billion is backed by some type of mortgage-backed security.").

[71] Securities Industry and Financial Markets Association, *Global CDO Market Issuance Data, Q4 2008, available at http://www.sifma.org/research/pdf/CDO_Data2008-Q4.pdf.*

[72] Frank Partnoy, David A. Skeel, Jr., *The Promise and Perils of Credit Derivatives* 75 U. CIN. L. REV. 1019 (2007). A "synthetic" CDO follows the same pooling and tranching procedure. The difference is that the SPE does not actually purchase the debt contracts but rather credit default swaps. These swaps (rather

understanding the role that CDOs played in the financial crisis is to acknowledge the lack of credit quality in pool of debt contracts and why this dearth of quality existed. It is antithecal to a Lender's nature to make a loan to a borrower that that Lender knows has a low probability of repayment. The ability to sell the loan immediately into the secondary market erases this risk.[73] In a "normal" RMBS scenario the pooling and tranching of the primary pool would have kept these types of loans out of the pool.[74] However, insatiable investor appetite for higher yielding investment smoothed the path of securitization of low quality loans. One method simply pooled the low credit quality loans into a CDO offering.[75] Another, more sophisticated method entailed spinning the lower rated tranches of an RMBS securitization into a separate CDO.[76] Using either method Lenders the CDO issuance will contain a AAA tranche based on less than AAA cash flow. Indeed, subprime RMBS comprised the "largest collateral asset class in [CDOs] since the inception of the product in 1999."[77]

The ability to immediately divest themselves of loans with no thought to repayment scenarios, explains why lenders made loans that were now lumped under the heading of "sub-prime." These loans then formed the backbone of the income stream that underwrote the resulting CDOs. In this fashion Americans chasing the dream of homeownership collide with investors chasing yield. The collision occurred because the common language of credit ratings was carelessly (some might say maliciously[78]) warped by derivatively spinning off the risk. As explained above, in a CDO offering the issuer could bundle the BBB tranche of an RMBS issuance. Already they have picked off a decidedly riskier piece of the RMBS vehicle. This BBB tranche would be pooled and blended with other BBB tranches, repackaged, resized and retrenched. One argument is that if the rating agencies fixed the formula for rating the CDO, the issuer could find assets that would generate a CDO where the tranches are more valuable than

---

than the debt contracts) are the basis of valuing the synthetic pool. Partnoy and Skeel. In this fashion the credit risks are similar to those discussed above in the ABC paper.

[73] Subject to any repurchase agreement. This is known as the "originate-to-distribute-model." See Gene Amromin and Anna L. Paulson, *Comparing Patterns of Default Among Prime and Subprime Mortgages*, 33 No. 2 Econ. Perspectives 18, 19 (2009).

[74] See, Joseph Philip Forte, *Disruption in the Capital Markets: What Happened?*, 22 OCT Prob. & Prop 8 (2008). ("…there were loans that, if originated, would never be eligible for deposit into a residential MBS issuance. These were loans to the so-called subprime borrowers whose credit (or underwriting) made them perfect candidates (in the asset seller's estimate) to be included with other unrelated, often non-real estate assets into CDOs.") This is because the higher the average quality loans in the pool the more likely the issuance will tranched with lower subordination levels. In other words, the higher the quality of the underlying mortgages the greater the likelihood that a greater proportion of the issuance will reside in the AAA tranche thus increasing the spread.

[75] See, Michael Malloy, *The Subprime Mortgage Crisis and Bank Regulation* 27 No. 3 Banking & Fin. Services Pol'y Rep. 1 (March 2008).

[76] See, Joseph P. Forte, *Disruption in the Capital Markets*, 22 OCT Prob. & Prop 8 (2008).

[77] Kathleen C Engle, Patricia A. McCoy, *Turning A Blind Eye: Wall Street Finance Of Predatory Lending* 75 FORDHAM L. REV. 2039 , 2067 (2007).

[78] Jeffrey Manns, *Rating Risk After The Subprime Mortgage Crisis: A User Fee Approach For Rating Agency Accountability* 87 N.C. L. REV. 1011 (2009).

the underlying assets.[79] In fact a very large share of the total value of the securities issued was rated AA or AAA by the credit rating agencies.[80]

However, the resulting AAA piece would nonetheless represent nothing more than the best of the mediocre. As the market would eventually expose, the rating criteria failed to reflect the risks of the subprime mortgages in the pool. Instead, the rating agencies relied on mathematical models built on historical data.[81] These structured AAA rated securities grew explosively just prior to the crash. One commentator estimates that as of March 2007 there were over 14,000 AAA rated structured securities (comprised of RMBS and CDO) as compared to fewer than 500 "natural" AAA rated US corporations, foreign sovereigns and US municipals.[82] Paradoxically, the very institutions that were claiming to transfer credit risk off their balance sheets and into the capital markets were, themselves, doubling back and re-engaging this very risk. At the inception of the financial melt down, financial firms held 48% of the AAA rated CDOs on non-prime mortgages.[83]

Along side of this increased supply arose what some might term an insatiable growth in demand. For example, of the 1,185 regulatory changes that occurred in the world's major industrialized financial economies, between 1991 and 2000, 1,121 of these changes had the express purpose of liberalizing capital flow for direct investment. These changes resulted in an intense demand chasing a limited amount of blue chip assets.[84] Paradoxically because these structured securities would still command the prized AAA rating they were available for purchase by investors who were bound (for legal reasons) to purchase AAA securities.[85] These investors misperceived the risk of otherwise risky investment because the rating agencies rated the CDOs using the same rating structure used in the RMBS market.[86] In addition many global investors did not undertake their own independent credit analysis before investing in these CDOs. Instead they relied upon the rating in making investment decisions or signaling

---

[79] Frank Partnoy, David A. Skeel, Jr., *The Promise and Perils of Credit Derivatives* 75 U. CIN. L. REV. 1019 (2007).
[80] Policy Statement on Financial Market Developments: The President's Working Group On Financial Markets, 14 L. & BUS. REV. AM. 447 (2008).
[81] Jeffrey Manns, *Rating Risk After The Subprime Mortgage Crisis: A User Fee Approach For Rating Agency Accountability*, 87 N.C. L. REV. 1011, 1044 (2009).
[82] Gretchen Morgenson, *Summer School for Investors is in Session*, NY TIMES, Jul. 29, 2007.
[83] Aaron Unterman, *Perverse Incentives: Risk Taking and Reform*, 28 NO. 6 BANKING & FIN. SERVICES POL'Y REP. 11, 12 (2009).
[84] K.F. Gotham, *The Secondary Circuit of Capital Reconsidered: Globalization and the U.S. Real Estate* Sector, Amer. J. of Sociology , 112, 231-275 (2006).
[85] For regulatory reasons some large investors such as pension funds are limited in the quality of investments they can make. See, e.g., Employer Retirement Income Security Act of 1974 (ERISA), § 404(a)(1)(B), 29 U.S.C. § 1104(a)(1)(B) (1988). See also, Jeffrey Manns, *Rating Risk After The Subprime Mortgage Crisis: A User Fee Approach For Rating Agency Accountability* 87 N.C. L. REV. 1011, 1042 (2009); David J. Matthews, *Ruined In A Conventional Way: Responses To Credit Ratings' Role In Credit Crises* 29 NW. J. INT'L L. & BUS. 245, 253 (2009).
[86] For more discussion about rating agencies see, Claire A. Hill, *Regulating the Rating Agencies*, 82 Wash. U. L.Q. 43 (2004); Frank Partnoy, *The Siskel and Ebert of Financial Markets?: Two Thumbs Down for the Credit Rating Agencies*, 77 WASH. U. L.Q. 619 (1999); Steven L. Schwarcz, *Private Ordering of Public Markets: The Rating Agency Paradox*, 2002U. ILL. L. REV. 1 (2002).

risk profiles. [87] Home buyers with poor credit scores financed investors demanding low risk investments. A recipe for disaster was created.

However flawed the model may be, though, the risk misperception was at least tied to a complex risk modeling scheme to determine the break points of tranches. Pricing was not nearly as precise. [88] Pricing of the securities was more art than science. Limited information, rumor and innuendo ruled over mathematical rigor. Bonds are not traded like stock.[89] Trading in CDOs lacked the structure of a dedicated exchange or a similar rules-set trading reporting requirement that is in force in other large and interconnected markets. Putting this together-- buyers, newly liberated from regulatory strictures, invested heavily in complex, misunderstood securities that were rated on a less than transparent rating scheme for a price not determined by an open market.

The false sense of security lent by artificially inflated assets coupled with the insatiable "quest for yield"[90] met up with insufficient regulation and sketchy pricing. While separate and apart, perhaps these symptoms may not have been so destructive. Together, however, they wrecked havoc on the shaky foundations of the securities market. An often posed query is how much of a role hedge funds played in the financial meltdown. There is no question that these high yield investments fueled the fires in both igniting and satisfying this desire for yield. Investors demanded high yield debt and hedge funds more than provided for that need.[91]

When this delicate balance became unhinged, large funds collapsed under the weight of subprime CDOs.[92] This was further compounded by the fact that hedge fund participation, once reserved for those with a specific net worth and sophistication, now extended to the average investor, who may not

[87] Policy Statement on Financial Market Developments: The President's Working Group on Financial Markets 14 L. & BUS. REV. AM. 447 (2008). See, also, Joseph Philip Forte, *Disruption in the Capital Markets: What Happened?*, 22 OCT Prob. & Prop 8 (2008). This problem was especially acute for foreign investors who may have blindly relied on the published credit ratings without understanding the collateral for the CDO. See also, Frank Partnoy, Historical Perspectives On The Financial Crisis: Ivar Kreuger, *The Credit-Rating Agencies, And Two Theories About The Function, And Dysfunction, Of Markets*, 26 YALE J. ON REG. 431, 442 (2009) (" Financial innovation dovetailed with overdependence on ratings to generate trillions of dollars of highly-rated tranches of CDOs and SIVs that appeared safe, but were not.").

[88] Antonia Bernardo and Bradford Cornell, *The Valuation of Complex Derivatives by Major Investment Firms: Empirical Evidence*, 52 Vol. 2 JOUR. OF FIN., 785 at 797 (1997).

[89] Antonia Bernardo and Bradford Cornell, *The Valuation of Complex Derivatives by Major Investment Firms: Empirical Evidence*, 52 ,Vol. 2, JOUR. OF FIN. 785 at 797 (1997).

[90] Sean O'Grady and Stephen Foley, *The Year it Went Crunch*, INDEPENDENT NEWS AND MEDIA LIMITED, August 7, 2008, p.5.

[91] Paul M. Jonna*, In Search of Market Discipline: The Case for Indirect Hedge Fund Regulation*, 45 SAN DIEGO L. REV. 989 at 1002.

[92] Paul M. Jonna, *In Search of Market Discipline: The Case for Indirect Hedge Fund Regulation*, 45 SAN DIEGO L. REV. 989 at 1003. The author discusses the fall of two of giant Bear Stearns funds.

have been as investment savvy as more seasoned investors.[93] As the crisis progressed, concerned investors withdrew monies from previously lucrative hedge funds in an effort to avoid greater losses.[94] There was less and less capital to lubricate the market. Riskier funds were particularly affected. Fearing the volatility of the market, investors were no longer willing to assume such risk. [95]

The role of hedge funds in causing (or at least exacerbating) the financial crisis remains open to debate. On the one hand, the profitability and resultant popularity of hedge funds has driven creditors to ignore or change margins. Furthermore sheer volume of these complicated transactions calls into doubt whether the risk of exposure can be accurately assessed.[96] On the other hand, hedge funds have their admirers citing the many positive attributes and benefits they bring to the economy, including the proliferation of liquidity in the market. [97]

The bottom line is that hedge fund Investment in CDOs played some part in the crisis. They were not the key factor, perhaps they played a small part, but it was just that interplay of small parts that caused everything to come crashing down. The issue is where to go from here? Specific reform ideas must address the lack of transparency the funds. Some have suggested more restrictions and more stringent regulation of hedge funds.[98] This approach is not without its critics (including former Fed Chairman Alan Greenspan) who fear increased economic instability and the push of these funds to locales out of the reach of regulation. [99]

---

[93] Paul M. Jonna, *In Search of Market Discipline: The Case for Indirect Hedge Fund Regulation*, 45 SAN DIEGO L. REV. 989 at 1007. The author explores the 'retailization' of hedge funds in which they have become more readily available to the general public, as opposed to a select, financially stable few.

[94] Andrew Clark, *End of the Hedge Fund Era as Credit Crunch Prompts $525bn Exodus*, THE GUARDIAN, January 22, 2009, available at http://www.guardian.co.uk/money/2009/jan/22/us-economy-hedge-funds. According to The Guardian's estimates, $525 billion was withdrawn from Hedge funds in the second half of 2008.

[95] Times online, June 20, 2008, Miles Costello, Force of credit crunch made plain as 170 hedge funds crash in three months, available at http://business.timesonline.co.uk/tol/business/industry_sectors/banking_and_finance/article4175616.ece.

[96] Paul M. Jonna, *In Search of Market Discipline: The Case for Indirect Hedge Fund Regulation*, 45 SAN DIEGO L. REV. 989 at 1027, quoting Bernanke speech from May 2006 Ben Bernanke, Chairman, Fed. Reserve, Speech at the Fed. Res. Bank of Atlanta's 2006 Financial Markets Conference, Sea Island, Georgia: Hedge Funds and Systemic Risk (May 16, 2006) http://www.federalreserve.gov/newsevents/speech/bernanke20060516a.htm.

[97] Houman B. Shadab, *Hedge Funds and the Financial Market* (Working Paper11/13/2008) available at http://ssrn.com/abstract=1302705. ("hedge funds did not cause the financial crisis and are in fact helping to mitigate its damage and save taxpayers money…. in fact hedge funds have historically made markets more stable and helped their investors conserve wealth in times of economic stress.").

[98] Currently, there are two bills currently circulating around Congress, both aiming to reform section 203(b) of the Investment Advisers Act of 1940 - The Hedge Fund Adviser Registration Act and the Hedge Fund Transparency Act. Senator Grassley of Iowa introduced these bills as a means to return authority to the SEC. See http://www.hedgefundlawblog.com/hedge-fund-transparency-act-text.html and http://www.hedgefundlawblog.com/hedge-fund-adviser-registration-act-of-2009.html for more information.

[99] Paul M. Jonna, *In Search of Market Discipline: The Case for Indirect Hedge Fund Regulation*, 45 SAN DIEGO L. REV. 989 at 1010, quoting See Hedge Fund Operations: Hearing Before the H. Comm. on Banking and Financial Servs., 105th Cong. 160-61 (1998) (statement of Alan Greenspan, Chairman, Federal Reserve System Board of Governors),

C. CDS

Some commentators have analogized credit default swaps (CDS)to insurance.[100] Like health, home or auto insurance there is risk exposure for defined acts (loan default versus sickness, fire, accidents). In the case of health insurance an insurer bets that its insured clients do not get sick. The person buying the insurance wagers that she will get sick. However, the analogy between CDS and traditional insurance ultimately breaks down because we are really talking more about risk **shifting** than risk **taking.** In a swap the risk rests with a party outside the swap transaction (the borrower on the underlying loan). There is no third party in a traditional insurance arrangement. In a swap transaction a creditor lends money upon the assumption that the borrower will pay back in full and on time with interest. However, a creditor is able to shift that risk, i.e. hedge the bet, by entering into a credit default swap with a counterparty. Now the lender is, in fact, betting that the borrower will experience a "credit event" (as defined in the swap agreement[101]) and is willing to pay a fee to the counterparty to shift that risk. The counterparty is betting that no credit event will occur and they will collect their fee and will never have to pay the lender the principal and interest on the underlying loan.

Credit default swaps were once the dreary backbone to municipal finance issuances.[102] However, like other derivatives discussed here their involvement in the RMBS market transformed an "obscure instrument" into an "intrinsic part of the credit vocabulary."[103] They were viewed as relatively inexpensive insurance policies but they hid explosive exposure. Strapping a swap transaction on the back of a home loan magnifies the risk exposure in the case of default on the loan. The CDS market grew very quickly. In 2001 there were $631 Billion in CDS outstanding. By 2007 the market peaked at $662.2 *Trillion*.[104]

As with the other derivatives described herein, CDS are traded over the counter and not subject to securities regulation.[105] In fact, they were so close in nature to another failed investment scheme—the bucket shop—there was considerable concern that they violated the law that makes bucket shops illegal. In response to these concerns The Commodity Futures Modernization Act of 2000 explicitly

---

available at http://www.federalreserve.gov/boarddocs/testimony/1998/19981001.htm.See, also Houman B. Shadab, *Hedge Funds and the Financial Market* (Working Paper 11/13/2008) available at http://ssrn.com/abstract=1302705.

[100] See, David Anderson, Sarah Hodges, *Credit Crisis Litigation: An Overview Of Issues And Outcomes*, 6 BANKING & FIN. SERVICES POL'Y REP. 1, 5 (2009).

[101] Usually default on the underlying loan. See, Aaron Unterman, *Perverse Incentives: Risk Taking and Reform*, 6 BANKING & FIN. SERVICES POL'Y REP. 11,16 (2009). Other credit events include debt restructuring and bankruptcy of the borrower. See, Michael Simkovic, *Secret Liens And The Financial Crisis Of 2008,* 83 AM. BANKR. L.J. 253, 271 (2009).

[102] Aaron Unterman, *Perverse Incentives: Risk Taking and Reform*, 28 NO. 6 BANKING & FIN. SERVICES POL'Y REP. 11, 16 (2009).

[103] Aaron Unterman, *Perverse Incentives: Risk Taking and Reform*, 28 NO. 6 BANKING & FIN. SERVICES POL'Y REP. 11, 16 (2009).

[104] International Swaps and Derivatives Association, Inc. Market Survey. See also, Aaron Unterman, *Perverse Incentives: Risk Taking and Reform*, 28 NO. 6 BANKING & FIN. SERVICES POL'Y REP. 1, 16 (2009).

[105] Aaron Unterman, *Perverse Incentives: Risk Taking and Reform*, 28 NO. 6 BANKING & FIN. SERVICES POL'Y REP. 11, 15 (2009).

exempted credit default swaps from the bucket shop laws. The same act also exempted CDS from regulation by the Commodities and Futures Trading Commission and the SEC. [106]

The problems with lack of transparency and inability to intelligently asses risk are magnified logarithmically in a CDS transaction. Not only is basic financial information hard to come by—it is actively shielded. Market participants are often unaware of counterparty identities and the leading industry group, the International Swaps and Derivatives Association, resists attempts at mandatory disclosure. [107] Issuers of these securities failed to correctly identify the true risk—if the borrowers on the underlying transaction failed to pay the insured party (the lender) will look to the issuer not for the interest lost but rather for the entire loan principal.

As if the lack of transparency and complex risk structure where not enough, these CDS were precariously poised on top of CDOs. Investment banks sought to shield themselves from CDO losses by purchasing CDS. To even further complicate the economic volatility posed by these derivatives the market was extraordinarily concentrated. In 2007 the 10 largest participants accounted for 90% of the market.[108] The poster child for these investments was AIG. AIG sold approximately $440 Billion in CDS on CDOs.[109] In the now all too familiar story AIG's derivative trading subsidiary, AIG Financial Products, lost over $18 Billion on it CDS portfolio in late 2007 and early 2008. AIG, guarantor of AIG Financial Products obligations, was bailed out by the Federal Reserve with a loan of $85 Billion.[110]

III. The Regulatory Environment

The tentacles of regulation barely touched many aspects of these derivative markets. There was an imperfect fit between existing regulation and such creative financing. Financial innovation tests the boundaries of existing regulatory strictures. Not only are innovations such as ABCP CDOs and CDS complex and different to comprehend, they do not fit well in the established rule based (as opposed to

---

[106] 7 U.S.C. § 1 (2000). See 7 U.S.C. § 27e. For a complete explanation of bucket shops see, David Hochfelder, *Where the Commom People Could Speculate, The Ticker, Bucket Shops and the Origins of Popular Participatin in Financial Markets*, , 93, No. 2 THE JOURNAL OF AMERICAN HISTORY 1180-1920 (2006). See also, Eric Dinallo, *We Modernised Ourselves into this Ice Age*, NAKED CAPITALISM March 31, 2009. http://www.nakedcapitalism.com/2009/03/eric-dinallo-we-modernised-ourselves.himl.

[107] Michael Simkovic, *Secret Liens And The Financial Crisis Of 2008*, 83 AM. BANKR. L.J. 253, 274 (2009)

[108] Aaron Unterman, *Perverse Incentives: Risk Taking and Reform*, 28 NO. 6 BANKING & FIN. SERVICES POL'Y REP. 11, 17 (2009).

[109] See Testimony Concerning the Role of Federal Regulators: Lessons from the Credit Crisis for the Future of Regulation by Chairman Christopher Cox U.S. Securities and Exchange Commission Before the Committee on Oversight and Government Reform, United States House of Representatives, 10/23/2008 at 5., available at http://oversight.house.gov/documents/20081023100525.pdf. See also http://www.bloomberg.com/apps/news?pid=20601087&sid=aTzTYtlNHSG8.
See also, Michael Simkovic, *Secret Liens And The Financial Crisis Of 2008*, 83 AM. BANKR. L.J. 253, 284 (2009).

[110] See http://www.federalreserve.gov/newsevents/press/other/20080916a.htm. See also, Michael Simkovic, *Secret Liens And The Financial Crisis Of 2008*, 83 AM. BANKR. L.J. 253, 277 (2009).

principle based) regulatory environment.[111] In addition to rating agencies (which is not, strictly speaking a regulatory function as it is private versus public) several sectors of regulatory oversight are implicated: Banking regulation, SEC regulation and GSE regulation. All of these work together in an alchemy of regulatory arbitrage. Using the complexity of the sophisticated securities, investors take advantage of the regulatory advantages (such as net capital requirements, limitations on ratings, etc.) and hold the highly rated structured finance tranches instead of direct investment in the underlying cash flow.[112]

Bank regulation

Reliance on ratings as a proxy of safety extended the reach of derivative risks across industry sectors. As bank managers participated more and more in the derivative market their exposure to loss grew. As discussed above, the meaning of "AAA" warped in response to market demand with the resultant apparent effect of moderated risk.[113] Furthermore, international banking regulations were reformed by such accords as Basel II.[114] These modifications operationalized the role of ratings from the ratings agencies and transformed them into just another tool for managing balance sheet risk. As such the ratings game gave Bank managers incentives to substitute subtle differences between AAA, Aa, A and Baa as a 21st century lexicon for risk management. [115]

Armed with the requisite rating to give regulatory and legal cover Banks and other financial service firms fed their liquidity levels with investment in CDOs. Banks sponsored off shore entities called SIVs (Structured Investment Vehicles) that borrowed money in the short term commercial paper market in order to make long term investments in CDOs that were often populated with sub-prime loans.[116] In March 2008 members of the Senate Banking Committee spotted the failure of federal regulators to recognize the risks in the CDO market. However this chastising fell on deaf ears as the Bush Administration and the regulators seemed loath to acknowledge that regulatory failure played a part in the burgeoning economic crisis.[117]

The Obama Administration, in contrast, acknowledges the role regulation, of the lack thereof, has played in the crisis and has publicized plans for the reform of certain banking regulations as part of the overall plan for economic reform. Included in President Obama's plans are proposals for a Financial Services Oversight Council to oversee potential risks and improve interagency collaboration, instituting a Consumer Financial Protection Agency to protect individuals at the consumer level and enacting

---

111 Steven M. Davidoff, *Paradigm Shift: Federal Securities Regulation In the New Millenium* 2 BROOK. J. CORP. FIN. & COM. L. 339 (2008).

112 For a more complete discussion of regulatory arbitrage see, Frank Partnoy, David A. Skeel, Jr., *The Promise And Perils Of Credit Derivatives*, 75 U. CIN. L. REV. 1019 (2007).

113 Michael Malloy, *The Subprime Mortgage Crisis and Bank Regulation,* 27 No. 3 BANKING & FIN. SERVICES POL'Y REP. 1 (March 2008).

114 Basel II: International Convergence of Capital Measurement and Capital Standards: a Revised Framework, full text available at http://www.bis.org/publ/bcbs107.htm, last viewed ___.

115 Rolf Weber & Aline Darbellay, *The Regulatory Use of Credit Ratings in Bank Capital Requirement Regulations*, 10 Issue 1 JOURNAL OF BANKING AND REGULATION 1 (2008).

116 Joseph Philip Forte, *Disruption in the Capital Markets: What Happened?*, 22 OCT Prob. & Prop 8 (2008).

117 Michael Malloy, *The Subprime Mortgage Crisis And Bank Regulation* 27 No. 3 BANKING & FIN. SERVICES POL'Y REP. 1 (March 2008).

regulations increasing capital requirements and transparency while reducing the significance of ratings by the credit agencies .[118]

SEC regulation

It is no surprise that regulation (or rather lack thereof) plays a role in the growth of these derivative markets as well as the hedge funds that were the significant buyers of derivatives such as CDOs , ABCP and CDS. Unlike other investments that are regulated under the watchful eye of the Securities and Exchange Commission these derivatives were deregulated and flourished under a self-regulated market.[119] Although investors include hedge funds, pension plans and insurance firms that are not the typical investor that needs the protection afforded by SEC registration and disclosure regulations, this lack of over sight and the complexity of the investments without oversight led to disaster. Self regulation stands at complete odds with market discipline when the same parties that reaped huge economic benefit from the unregulated environment are charged with policing the industry. The fact is that hedge funds were significant buyers of the riskier equity and subordinated tranches of CDOs and of asset-backed securities, including securities backed by nonconforming residential mortgages.[120] This problem is further exacerbated by the fact that most SEC enforcement and regulatory attention is in equity not debt. [121] The SEC did not open an investigation until June 2007--after Bear Stearns collapsed.

In response to the cries for regulation of the derivatives market, the US Treasury Department issued a "Blueprint for a Modernized Financial Regulatory Structure."[122] The significant problem in regulating these securities lies in the conundrum that if left to their mundane, unsophisticated use there would be no burning need for these derivatives. But just as pharmaceuticals approved for one use explode into problems when put to another use[123], the "off label" use of derivatives caused the problems we are now sorting through. Whether the regulatory scheme is based on "rules" or on "principles",[124] innovation will leap over regulation. It makes more sense to regulate the players in the market than the investments themselves. To that end one area ripe for regulation is hedge funds.

---

[118] See http://online.wsj.com/public/resources/documents/reform.pdf for a detailed account of proposed presidential reforms on banking regulations.

[119] See, John C. Coffee, Jr., Hillary A. Sale, *Redesigning The Sec: Does The Treasury Have A Better Idea?*, 95 VA. L. REV. 707, 731 (2009) ("Arguably, the deeper origins of the 2008 financial meltdown may lie in deregulatory measures, taken both by Congress and the SEC, which placed some categories of derivatives and some firms beyond effective regulation.") The self regulating body is the International Swaps and Derivatives Association (ISDA). See, Aaron Unterman, *Perverse Incentives: Risk Taking and Reform*, 28 NO. 6 BANKING & FIN. SERVICES POL'Y REP. 11, 20 (2009).

[120] Dale A. Oesterle, *Regulating Hedge Funds*, 1 ENTREPRENEURIAL BUS. L.J. 1,3 (2006).

[121] http://www.nakedcapitalism.com/2007/06/how-successful-will-sec-investigations.html.

[122] U.S. Department of the Treasury,A Blueprint for a Modernized Financial Regulatory Structure, (March 2008), *available at* http://www.treas.gov/press/releases/reports/Blueprint.pdf. See also, See, See, John C. Coffee, Jr., Hillary A. Sale, *Redesigning The Sec: Does The Treasury Have A Better Idea?,* 95 VA. L. REV. 707, 715 (2009).

[123] For example, Propafol is safely used during routine surgery as anesthesia. However, when used as a sedative for sleep it has lethal consequences as Michael Jackson's death unfortunately illustrated.

[124] See, John C. Coffee, Jr., Hillary A. Sale, *Redesigning The Sec: Does The Treasury Have A Better Idea?,* 95 VA. L. REV. 707 (2009).

Unlike other investment companies, hedge funds are not subject to the Investment Company Act of 1940.[125] A new approach is needed, one that will strike a balance between "decreased regulation to attract hedge funds and increased regulation to protect investors and the domestic market."[126] Chairman of the Federal Reserve Ben Bernanke called for hedge funds to be held to greater disclosure of their "strategies and risk profile," thereby creating more transparency.[127] Currently there are several avenues of regulation under consideration that would close the gap on hedge fund regulation. Both bills before Congress aim to reform section 203(b) of the 1940 Act. The Hedge Fund Transparency Act is more of an overhaul of the system and would redesign the regulation of hedge funds and the while The Hedge Fund Adviser Registration Act would close a loophole in the Investment Act.

The Hedge Fund Adviser Registration Act repeals the exception to the registration requirement provided by section 203(b)(3) of the Investment Advisers Act of 1940. Under this exception, advisers with fewer than 15 clients and who do not hold themselves out to the public as investment advisers were not required to register with the SEC. Under the Registration Act, all hedge fund managers would have to register as investment advisors. The Hedge Fund Adviser Registration Act was originally introduced in 2007 by Senator Grassley. The present version of this Act was referred to the House Committee on 1/27/09 and has since been referred to the House Committee on Financial Services. It has not been passed yet.

The Hedge Fund Transparency Act of 2009 which, while also requiring hedge funds managers to register with the SEC, would require hedge funds to submit certain information to the SEC. Hedge fund advisers were concerned about disclosing information about their investors but Grassley and Levin, the senators who introduced the bill "have since clarified that their bill does not require disclosure of hedge fund clients who merely invest in the fund." Senator Grassley, one of the authors of the bill, hopes to give the SEC back its authority with this bill.

An indirect route, regulating the creditors and the participants, rather than the funds themselves, may also be a prudent avenue. This could be implemented by amending ERISA to include provision permitting private pension funds to invest only in a hedge fund that has disclosed certain "material information and is registered with the SEC"[128] and for the creditors of hedge funds to lend only to hedge funds that have released the requested information."[129]

---

[125] Section 3(c)(1) or Section 3(c)(7) of the Investment Company Act of 1940 provide exemptions from the Act's registration requirement for funds held by less than 100 owners and for funds held by "qualified purchasers." See Section 3(c) of the Investment Advisers Act of 1940.

[126] Laszlo Ladi*, Hedge Funds: The Case Against Increased Global Regulation in Light of the Subprime Mortgage Crisis*, 5 B.Y.U. INT'L L. & MGMT. REV. 99 at 100-101.

[127] P. 1027 quoting Bernanke speech from May 2006 Ben Bernanke, Chairman, Fed. Reserve, Speech at the Fed. Res. Bank of Atlanta's 2006 Financial Markets Conference, Sea Island, Georgia: Hedge Funds and Systemic Risk (May 16, 2006) http://www.federalreserve.gov/newsevents/speech/bernanke20060516a.htm .

[128] Paul M. Jonna, *In Search of Market Discipline: The Case for Indirect Hedge Fund Regulation*, 45 SAN DIEGO L. REV. 989 at 1016.

[129] Paul M. Jonna, *In Search of Market Discipline: The Case for Indirect Hedge Fund Regulation*, 45 SAN DIEGO L. REV. 989 at 1025.

GSE regulation

Fannie Mae and Freddie Mac are subject to numerous approvals, reviews and regulations of the government. First, Fannie Mae and Freddie Mac are required to obtain the approval of the U.S. Treasury before issuing debt.[130] However, such requests have historically been a mere formality because the Treasury has never denied any request by the companies to issue debt.[131] Second, any proposed programs by the companies are reviewed by HUD to ensure that affordable housing standards are met.[132] Third, The Federal Housing Enterprises Safety and Soundness Act of 1992 established the Office of Federal Housing Enterprise Oversight (OFHEO). OFHEO has the power to regulate both Freddie and Fannie. OFHEO establishes capital standards, conducts financial examinations and determines appropriate capital levels for the companies.[133] Finally, the President of the United States has the power to appoint five members of the board of directors for each company and may remove any appointed member for good cause.[134]

In July 2008 Congress attempted to contain the economic conflagration raging from GSE based RMBS. The Housing and Economic Recovery Act ("HERA") expanded and solidified federal authority over the GSEs. [135] Under HERA, the U.S. government put Fannie Mae and Freddie Mac into conservatorship in an effort to keep the companies solvent and established the Federal Housing Financing Agency (FHFA) to control and oversee the companies. Under the plan, Fannie Mae and Freddie Mac are permitted to slightly increase their mortgage and MBS portfolios through the end of 2009. [136] However, beginning in 2010, Fannie Mae and Freddie Mac will be required to annually reduce their size by 10%.[137]

---

[130] 12 USC 1719(b) (Fannie Mae) ("the corporation is authorized to issue, upon the approval of the Secretary of the Treasury… obligations"); 12 USC 1455(j) (Freddie Mac) (Any notes...of the Corporation evidencing money borrowed…shall be issued upon the approval of the Secretary of the Treasury"_).

[131] DAVID REISS, THE FEDERAL GOVERNMENT'S IMPLIED GUARANTEE OF FANNIE MAE AND FREDDIE MAC'S OBLIGATIONS: UNCLE SAM WILL PICK UP THE TAB 2 (Brooklyn Law School Legal Studies Research Papers Working Paper Series, Research Paper No. 83, August 2007).

[132] 12 USC 4541; 12 USC 4561-4567.

133 12 USC 4513; DAVID REISS, THE FEDERAL GOVERNMENT'S IMPLIED GUARANTEE OF FANNIE MAE AND FREDDIE MAC'S OBLIGATIONS: UNCLE SAM WILL PICK UP THE TAB 13 (Brooklyn Law School Legal Studies Research Papers Working Paper Series, Research Paper No. 83, August 2007)..

134 12 USC 1452 (Fannie Mae); DAVID REISS, THE FEDERAL GOVERNMENT'S IMPLIED GUARANTEE OF FANNIE MAE AND FREDDIE MAC'S OBLIGATIONS: UNCLE SAM WILL PICK UP THE TAB 30 (Brooklyn Law School Legal Studies Research Papers Working Paper Series, Research Paper No. 83, August 2007).; Ann Burkhart, *Symposium: A Festschrift in Honor of Dale A. Whitman: Real Estate Practice in the Twenty-First Century*, 72 MO. L. REV. 1031, 1044 (Fall 2007).

135 Housing and Economic Recovery Act of 2008 Pub. L. No. 110-289, 122 Stat. 2654 (2008). See also David Schmudde*, Responding To The Subprime Mess: The New Regulatory Landscape*, 14 FORDHAM J. CORP. & FIN. L. 709, 765. (2009).

136 See N. Eric Weiss, *Fannie Mae's and Freddie Mac's Financial Problems: Frequently Asked Questions*, CRS Report for Congress, Sept. 12, 2008 at. 4, available at http://fpc.state.gov/documents/organization/110096.pdf for

The government's plan was to inject capital, guarantee home loans, and purchase up to $5 billion in mortgages in an attempt to stabilize the companies.[138] Fannie Mae and Freddie Mac may also receive up to $100 billion in capital from the Treasury to cover losses on mortgage defaults in exchange for $1 billion in senior preferred stock with warrants to purchase almost 80% of each company's stock.[139] The plan involves the use of warrants to avoid the inherent problem resulting from the fact that the government is only authorized to purchase shares of the companies through the end of 2009.[140] This plan allows the Treasury to inject capital into the companies in order to keep them solvent simply by asking the firms to increase the value of their shares rather than purchasing additional shares.[141]

The goal of the government's takeover plan is to increase liquidity and certainty in the mortgage markets by allowing market participants to know what the future holds.[142] While the takeover won't immediately stop declining home prices, it may limit the magnitude of the declines to 5-10% over the next year, rather than the additional 15-20% declines experts projected would occur if the companies were allowed to fail.[143] However, this intervention is not without significant cost. By one estimate, the bailout of Fannie Mae and Freddie Mac could end up costing each U.S. taxpayer more than $16,000.[144]

---

information about Fannie and Freddie's mortgage portfolios. Russell Berman, *Fannie, Freddie Takeover Meets with Skepticism*, NEW YORK SUN, Sept. 8, 2008, at 10.

137 N. Eric Weiss, *Fannie Mae's and Freddie Mac's Financial Problems: Frequently Asked Questions*, CRS Report for Congress, Sept. 12, 2008 at. 4, available at http://fpc.state.gov/documents/organization/110096.pdf. See also Russell Berman, *Fannie, Freddie Takeover Meets with Skepticism*, NEW YORK SUN, Sept. 8, 2008, at 10.

138 *Fannie Mae's and Freddie Mac's Financial Problems: Frequently Asked Questions*, CRS Report for Congress, Sept. 12, 2008, available at http://www.gelbedokumente.com (Choose No. 106 and then no. 50271).
See also Russell Berman, *Fannie, Freddie Takeover Meets with Skepticism*, NEW YORK SUN, Sept. 8, 2008, at 10.
139 Maya Jackson Randall, *U.S. News: U.S. Reaffirms Backing Of Fannie, Freddie Stock*, WALL STREET JOURNAL, Sept. 12, 2008, at A5; James Hagerty, *U.S. News: Mortgage Plan Isn't Cutting Rates – Borrowing Costs for Fannie Mae, Freddie Mac Are Rising Amid Debt Buyers' Jitters*, WALL STREET JOURNAL, Oct. 30, 2008, at A3; Russell Berman, *Fannie, Freddie Takeover Meets with Skepticism*, NEW YORK SUN, Sept. 8, 2008, at 10..

140 Maya Jackson Randall, *U.S. News: U.S. Reaffirms Backing Of Fannie, Freddie Stock*, WALL STREET JOURNAL, Sept. 12, 2008, at A5..

141 Maya Jackson Randall, *U.S. News: U.S. Reaffirms Backing Of Fannie, Freddie Stock*, WALL STREET JOURNAL, Sept. 12, 2008, at A5.

142 Randall Smith and Serena Ng, The *Fannie-Freddie Takeover: Street Set to Fill Hole in Mortgage Market*, WALL STREET JOURNAL, Sept. 8, 2008, at C2.

143 Michael Corekery, *The Fannie-Freddie Takeover: Plan Skirts Housing's Biggest Troubles – Rescue Won't Fix Falling Home Prices, Rising Foreclosures*, WALL STREET JOURNAL, Sept. 8, 2008, at A14.

144 Ann M. Burkhart, *Real Estate Practice in the Twenty-First Century*, 72 MISS. LAW REVIEW 1031 at 1043 (2007)..

Rating Agency regulation

The RMBS derivative market depended heavily on the ratings of Ratings Agencies to serve as a proxy for due diligence and testing for economic soundness. If the Ratings Agencies had not issued high ratings for what now we see now know were securities of questionable risk the market would not have thrived.[145] In essence the ratings drove the profits. Rating agencies steadfastly maintain their role in the transaction is to assess likelihood of repayment on time.[146] To the contrary, market players viewed ratings as a proxy for value. In response to this perceived lack of rigor in the rating system the SEC published new rules in February 2009 regulated certain activities of nationally recognized statistical rating organization ("NRSROs").[147] Generally speaking the new rules impose additional requirements on NRSROs to regulate or prohibit certain conflicts of interest in the rating process, require specified rating related information to be publicly disclosed and require other information to be recorded and retained by NRSROs for use in Commission examinations.[148] [Did these rules become effective April 10, 2009?]

The new rules lift the veil that previously shrouded the process and provides transparency to the transaction.[149] New requirements include:

> Adopting requirements that NRSROs disclose prescribed ratings performance statistics for each class of securities they rate;
>
> Adopting requirements that NRSROs disclose specific information about their methodologies for determining and maintaining ratings;
>
> Adopting requirements that NRSROs maintain internal records of the full rating histories for each credit rating they assign and make public the ratings histories for a 10% sampling of their issuer-paid ratings;

---

[145] David J. Matthews*, Ruined In A Conventional Way: Responses To Credit Ratings' Role In Credit Crises,* 29 NW. J. INT'L L. & BUS. 245 (2009)

[146] Georgette C. Poindexter, *Subordinated Rolling Equity: Analyzing Real Estate Loan Default in the Era of Securitization*, 50 EMORY L. J. 519 at 543 (2001). See, e.g., Fitch Rating Definitions, available at http://www.fitchratings.com/creditdesk/public/ratings_defintions/index.cfm.

[147] SEC release Nos. 34-59342 (the Adopting Release) and 33-9005 (the Re-Proposing Release) both dated February 2, 2009.

[148] See, Cleary Gottlieb, SEC Publishes Final Rules for Credit Agencies, Reproposes Others, February 2009, p. 1, available at http://www.cgsh.com/files/News/3b4c44ff-1d80-4aa7-bfbc-2109a312d5e8/Presentation/NewsAttachment/1c075dd4-7e4c-4345-83e9-241d702fb573/SEC%20Rating%20Agency%20Adoption%20Reproposal%20Alert%20Memo.pdf.

[149] It is worth noting that the proposed rule arguably was of the greatest significance to the transparency of the rating process—public disclosure of information used to determine an issuer paid rating—was not adopted. Comments to the proposed new disclosure requirement raised problems with confidentiality. In the reproposal of this rule would make this type of disclosure a new type of conflict of interest disclosure locked under a password protected website that can be accessed only to monitor credit ratings. See, Cleary Gottlieb, p. 10, available at http://www.cgsh.com/files/News/3b4c44ff-1d80-4aa7-bfbc-2109a312d5e8/Presentation/NewsAttachment/1c075dd4-7e4c-4345-83e9-241d702fb573/SEC%20Rating%20Agency%20Adoption%20Reproposal%20Alert%20Memo.pdf.

> Proposing for comment an additional rule requiring NRSROs to disclose rating histories for all of their issuer-paid credit ratings with a 12-month lag;
>
> Adopting requirements that NRSROs maintain internal records of material deviations in final structured finance ratings from those implied by the NRSRO's quantitative model;
>
> Adopting requirements that NRSROs maintain internal records of third party complaints against credit analysts;
> Adopting prohibitions on NRSROs making "recommendations" to arrangers of structured finance products they rate concerning how to obtain a desired rating;
>
> Adopting prohibitions on NRSRO personnel involved in the credit rating process negotiating fees with arrangers or receiving gifts from them[150]

Furthermore, there is increased disclosure on performance already rated and issued securities. Form NRSRO currently requires disclosure of procedures and methodologies use by NRSROs to assign credit ratings, and specifies several aspects of the ratings process that must be described. The new rules add three additional areas of specific disclosure:

> If the NRSRO relied on information of verification of performance of assets underlying the structured product (and if so, how)
>
> If assessments of the underlying asset originators' quality are used to determine ratings (and if so, how)
>
> How often are ratings reviewed and the criteria employed.[151]

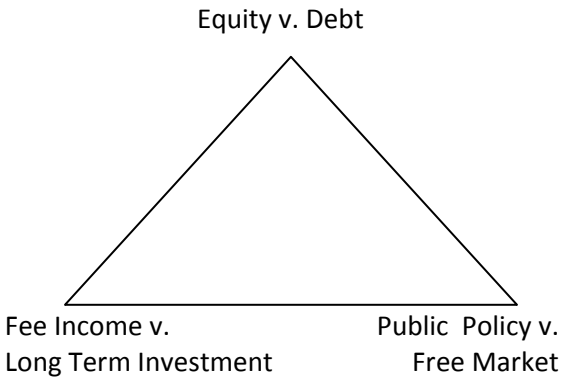
IV. Future of RMBS market

Regulatory response to the problem has tended to be reactive as opposed to proactive. This route misses the mark. Indeed, the eulogy for the CDO market has been written.[152] Regulating with an eye to the rear view mirror will produce laws designed to hit a target whose time has come and gone. Financial innovation results in a dynamic market that through its nimbleness results in regulatory and

[150] Cleary Gottlieb, SEC Publishes Final Rules for Credit Agencies, Reproposes Others, February 2009, p. 2, available at http://www.cgsh.com.
[151] Cleary Gottlieb, SEC Publishes Final Rules for Credit Agencies, Reproposes Others, February 2009, p. 4, available at http://www.cgsh.com.
[152] Jody Shenn*, CDO Market is Almost Frozen, JP Morgan, Merrill Say*, Feb. 5, 2008, available at http://www.bloomberg.com/apps/news?sid=aCk0Qr1f2Eew&pid=20601087.

informational gaps.[153] On the other hand the residential mortgage market is more than a Wall Street playground. It constitutes a bedrock of American values that no longer can be subject to the "investment du jour" attitude of high stakes financial games. We witnessed a dangerous liaison between greed and financial innovation that was played out in the basements of America's homeowners.

In the spirit of exalting principles over rules in regulatory reform,[154] I propose to attempt to delineate the optimal balance of leeway for innovation and low risk investment that results in an equilibrium of a responsive, yet sound, housing finance market. Rather than picking out individual regulatory goals I would suggest that regulation of the residential mortgage market should focus on interplay of three touch points:



Equity v. Debt

In a usual delineation of debt versus equity the discussion focuses on optimal firm capitalization. Beginning with Modigliani and Miller and through contemporary finance literature, much has been written about the economics of debt vs. equity decision making.[155] However, in this discussion of the future of the RMBS market the focus shines on how equity and debt should be regulated-not optimized. The irony of the situation is that the securities market is heavily weighted towards equity regulation. What is not adequately regulated is the homeowner equity. Unlike a more traditional approach to firm capital structure the home mortgage market requires both an examination of the effect of equity held by the homeowner and the impact of debt held by third parties on that homeowner equity. Regulation on one side necessarily affects regulation on the other.

---

[153] See, Frank Partnoy, *Historical Perspectives On The Financial Crisis: Ivar Kreuger, The Credit-Rating Agencies, And Two Theories About The Function, And Dysfunction, Of Markets*, 26 YALE J. ON REG. 431, 431 (2009).

[154] For a discussion of rules versus principles see, John C. Coffee, Jr., Hillary A. Sale, *Redesigning The SEC: Does The Treasury Have A Better Idea?*, 95 VA. L. REV. 707, 751 et seq. (2009).

[155] See, Franco Modigliani & Merton H. Miller, *The Cost of Capital, Corporation Finance and the Theory of Investment*, 48 AM ECON. REV. 261, 267-70 (1958). See also, Franklin Allen, *The Changing Nature of Debt and Equity: A Financial Perspective*, in ARE THE DIFFERENCES BETWEEN EQUITY AND DEBT DISAPPEARING?, CONFERENCE SERIES NO. 33, FEDERAL RESERVE BANK OF BOSTON, 12-38 (Richard W. Kopcke & Eric S. Rosengren eds., 1989); Paul Marsh, *The Choice Between Equity and Debt: An Empirical Study*, 37 J. FIN. 121, 121-144 (1982).

Much of the anecdotal information during the recent crisis centered on how the financing opened up the market to homebuyers who then operated way beyond their means.[156] It is no surprise that if the market of available capital permits buyers to push loan to value ratios further and further upward the slightest down turn in the housing market will have disastrous consequences. Although the policy of promoting homeownership will be discussed, infra, it certainly bears mentioning here that market discipline, through regulatory intervention, should be imposed on the minimum amount of equity.[157]Although some commentators choose to assign fault with the lenders by categorizing some loans as "predatory,"[158] hurling labels obfuscates the issue: people bought houses they could not afford. The first regulatory step should include minimum LTV maximum income/payment ratios. High loan to value ratios (which must include both first and second liens) have a strong positive association with the likelihood of default.[159] It may be less important to regulate debt to income ratios (DTI).[160] Studies of the effect of higher DTI conclude that this ratio only becomes significant in predicting default if above 50%.[161]

The other side of the equation addresses the somewhat unbalanced approach of debt regulation (versus equity regulation). First line RMBS offerings (and CMBS offerings) are regulated as equity securitizations. In other words the interests in the pool are offered in an equity offering. The underlying pool for payment, however, is a debt pool. I have written in prior articles that, at least in the lower tranches, the investors should approach this as equity investment.[162] As such when these lower tranches are spun off into "AAA" CDO tranches the debt side risk (non-payment) evaporates as the equity interest emerges deceptively risk free.

Through lack of transparency (because of lax regulatory reporting requirements), a false dichotomy emerged between the riskiness of the debt investments and the riskiness of derivative offerings. For

---

[156] See Tara Siegel Bernard, *With Eyes Bigger than their Wallets, Homebuyers are forced to Revisit Old Rules*, NY TIMES (March 20, 2009), available at http://www.nytimes.com/2009/03/21/your-money/mortgages/21thirty.html?_r=1.

[157] Indeed in other scenarios limitations on LTV have instilled market discipline. For example after the commercial real estate market crashed in the early 1990s LTV rates plummeted.

[158] See Victimizing *the Borrowers: Predatory Lending's Role in the Subprime Mortgage Crisis*, available at http://knowledge.wharton.upenn.edu/article.cfm?articleid=1901.; Eliot Spitzer, *Predatory Lenders' Partner in Crime, How the Bush Administration Stopped the States from Stepping in to Help Consumers*, WASHINGTON POST, Feb. 14, 2008.

[159] Gene Amromin and Anna L. Paulson, *Comparing Patterns of Default Among Prime and Subprime Mortgages*, 33 No. 2 Econ. Perspectives 18, 26 (2009). Stated another way, the value of the borrower's default put option depends on the initial LTV. See Andrew Haughwout, Richard Peach & Joseph Tracy, *Juvenile Delinquent Mortgages: Bad Credit or Bad Economy?*, 64 Iss. 2 JOUR. OF URBAN ECON. 246 at 249 (2008).

[160] The maximum income payment ratios are relevant because many homeowners got into financial difficulty when their teaser rate loans reset into market interest rate amortizing loans.

[161] Andrew Haughwout, Richard Peach & Joseph Tracy, *Juvenile Delinquent Mortgages: Bad Credit or Bad Economy?*, 64 Iss. 2 JOUR. OF URBAN ECON. 246 at 254 (2008). See also Gene Amromin and Anna L. Paulson, *Comparing Patterns of Default Among Prime and Subprime Mortgages*, 33 No. 2 Econ. Perspectives 18 at 27 (2009). In fact, DTI was found not to be significantly correlated for prime loans.

[162] Georgette C. Poindexter, *Subordinated Rolling Equity: Analyzing Real Estate Loan Default in the Era of Securitization,* 50 EMORY L. J. 519 (2001).

example, ERISA prevents certain institutions from engaging in risky investments.[163] This prohibition takes the form of requiring a minimal rating from a credit rating agency. However, through the "magic" of spinning and tranching a formerly ineligible investment becomes eligible.

To rectify this situation regulatory reporting requirements must be clear that real estate mortgages are the repayment source for **any** RMBS investment (including the derivatives spun off). An investor that traces its repayment stream back to the homeowner must be aware the flow of this stream will be immediately impacted by any slowdown in home owner repayments of the underlying mortgages. Looking back on the interface between the investment market and the real estate market immediately preceding the crisis, this seemingly obvious fact was not always clear. Wall Street didn't comprehend Main Street and Main Street didn't comprehend Wall Street. This clash of cultures resulted in a mutual misunderstanding and massive regulatory holes. Investments such as the derivatives discusses herein drove a large arbitrage truck through these gaps of understanding.

Regulation, therefore, must bring not only bring Main Street (traditional real estate mortgages) in line with minimum LTV and DSCR. It also must address the other side of the equation by forcing Wall Street (investment community) to model risk based on likelihood of repayment of the underlying real estate debt.

Fee Income vs. Long Term Investment

Whole mortgages are the epitome of long term investment. To make matters even worse, in residential lending they probably lack a call feature and usually do not have automatic market based interest resets. Not surprisingly this lack of investment agility was a driving factor that led to the buying, bundling and securitizing of mortgages. Investors in RMBS securities can match investments with risk profile and investment horizon quite divorced from the long slow pay of a 30 year mortgage. The recent market upheaval, however, goes one step further. Investors were not content with making money from the investments. The real money was in the generation of fee income.

Fee income completely escaped regulation. Lenders who made loans on Monday and sold them on Tuesday were not concerned that the Borrower stopped paying by Wednesday. The fee drove the deal; and the fee was collected on Monday. The moral hazard in this scenario is widely discussed.[164]The churn of mortgages caused lenders to disregard any lending standards and practices.[165] Fees, however, were not solely the province of initial lenders. They were also a major driver in the derivatives market. When AIG Financial underwrote a swap, the fees were a massive source of income.[166] In other words, AIG did

[163] See, e.g., Employer Retirement Income Security Act of 1974 (ERISA), § 404(a)(1)(B), 29 U.S.C. § 1104(a)(1)(B) (1988).
[164] Karl Okamoto, *After the Bailout: Regulating Systemic Moral Hazard*, __ UCLA LAW REVIEW (2009), available at http://works.bepress.com/cgi/viewcontent.cgi?article=1007&context=karl_okamoto.
[165] "The typical borrower may have received less scrutiny over time that it became easier for borrowers to get loans overall, as well as to get larger loans." See Gene Amromin and Anna L. Paulson, *Comparing Patterns of Default Among Prime and Subprime Mortgages*, 33 No. 2 Econ. Perspectives 18, 19 (2009).
[166] "AIG (AIG, Fortune 500) sold protection on nearly $600 billion of fixed income assets in the form of credit default swaps - including $57.8 billion tied to subprime mortgages." Katie Benner, "*AIG Woes Could Swat Swap*

not enter the transaction as a traditional insurer, assessing risk by performing due diligence on likelihood of loss. Rather, risk was dismissed in the name of a quick fee. The frenzy to compete simply overwhelmed the process.[167] The thirst for the fee income blinded market participant, who focused myopically on the derivative market and ignored the real estate market, to the risk of the underlying mortgages.

Therefore, fee regulation on investment in the RMBS market must be imposed. The secondary mortgage market system was supposed to instill market discipline by smoothing loan consistency and homogeneity so as to minimize the necessity of in depth due diligence on each pool. Instead, attention to the underlying pool and the real estate risk it entailed was simply completely ignored.[168] This disregard occurred not because investment was risk-free but rather because the driving force of engaging in the market was the generation of fee income, not investment income.

Public Policy v. Free Market

There are many theories of why, if and when markets should be subject to regulation.[169] Imposition of regulatory strictures constrains free markets. In fact deregulation was hailed as the bedrock of market self correction and efficiency.[170] However, as a self-regulating industry (under the purview of the International Swaps and Derivatives Association) the derivatives market is a miserable failure. As one commentator noted, "It is obvious this self-regulating institution does not possess the discipline to independently oversee the market. Allowing the derivatives market to proceed in this manner is essentially equivalent to allowing investment banks to self-regulate the securities industry."[171]

To make the mess of self-regulation of the derivatives market even worse, at the same time as the RMBS market was being ornamented with derivatives, Washington signaled a strong push toward expanding and broadening access to homeownership.[172] However, as the number of high quality borrowers naturally dried up, the secondary market fueled demand for real estate loans. The resultant explosion opened up the market to new, marginal quality, borrowers.[173] Before long our economy witnessed the intersectional collision of the public policy of promoting homeownership with the reality

---

Markets," Sep. 17, 2008, available at http://money.cnn.com/2008/09/16/news/derivatives_benner.fortune/index.htm.

[167] Joseph Philip Forte, *Disruption in the Capital Markets: What Happened?*, 22 OCT Prob. & Prop 8 (2008)..1

[168] John C. Coffee, Jr., Hillary A. Sale, *Redesigning The SEC: Does The Treasury Have A Better Idea?*, 95 VA. L. REV. 70, 732 (2009) ("…underwriters had become willing to buy portfolios of mortgage loans for asset-backed securitizations without seriously investigating the underlying collateral.").

[169] A seminal article with an exhaustive discussion of this topic is Steven P. Croley, *Theories of Regulation: Incorporating the Administrative Process*, 98 COLUM. L. REV. 1 (1988).

[170] John C. Coffee, Jr., Hillary A. Sale, *Redesigning The SEC: Does The Treasury Have A Better Idea?*, 95 VA. L. REV. 707, 710 (2009).

[171] Aaron Unterman, *Perverse Incentives: Risk Taking and Reform*, 28 NO. 6 BANKING & FIN. SERVICES POL'Y REP. 11, 20 (2009).

[172] http://www.fanniemae.com/markets/debt/pdf/infostmtmar2002.pdf; See http://georgewbush-whitehouse.archives.gov/infocus/homeownership/homeownership-policy-book-ch2.pdf.

[173] See, Tomlinson & Evans, The Ratings Charade Bloomberg Markets (2007).

of the free market. The ensuing financial debacle played out on the backs of the US housing industry.

From tax preferences to special programs homeownership has long been a bedrock of US public policy. Perhaps it is time to re-consider whether **everybody** should be a homeowner. Leaving aside all of the anecdotes of homeowner greed and living beyond means, pushing the market beyond where people can reasonably function in a sound economic fashion is a fraud on the market and a lie to the homeowner. Even if the derivatives market is regulated, the primary mortgage market must return to sound underwriting criteria that may close some marginal borrowers out of the market. During the last market upturn, model driven structuring and underwriting replaced human driven interaction between borrower and lender.[174] The result was people who did not understand the financial obligations they undertook and a lender who had no accountability for that lack of understanding.

The secondary mortgage market occupies a fundamental financial foundation for home mortgage capital. As such it must be treated with protection from speculative and risky investments. Simply regulating out specific investment vehicles, however, only begs for methods to innovate around regulation. Focusing on maintaining transparency and linkage between debt and equity risk, maintaining focus on long term investment while solidifying the mortgage consumer profile are important steps in securing the safety of this important market.

[174] Williams, Nesiba, & McConnell, *The Changing Face of Inequality in Home Mortgage Lending*, 52 SOCIAL PROBLEMS, 181, 184 (2005).