

# Role of the Credit Rating Agencies in the Subprime Mortgage Crisis

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## Abstract

The subprime crisis has caused global market disruption. The purpose of the research was to determine the role of the credit rating agencies in the growth and crash of securities backed by subprime mortgages. The objective of the research was to determine the key areas the credit rating agencies failed in their analysis and rating of securities backed by subprime mortgages and why. A mixed method was employed using primary and secondary historical research. The analysis showed rating agencies were overrating the securities, had a monopoly status, and conflicts of interest. Oversight over the credit rating agencies application of investment grade ratings and upgrades and downgrades is lacking. Strong regulation, oversight, and training would strengthen investor confidence.

## Overview of the Topic

“Edward M. Gramlich, a Federal Reserve governor who died in September [2007], warned nearly seven years ago that a fast-growing new breed of lenders was luring many people into risky mortgages they could not afford” (Andrews, 2007, p. 1). Now, it seems, he has our attention.

As someone who works at an investment bank, it is disheartening for me to note that the opinion of someone who set monetary policy was disregarded instead of heeded. Governor Gramlich had the foresight to see mortgage lending was heading down the wrong path, yet no one listened.

Now, the subprime mortgage crash is having broad effects on consumers, the financial world, and the economy that have not begun to slow. Subprime mortgages, consisting largely of loans to borrowers with little or no credit, or poor credit, grew significantly from 2001 through 2006. These mortgages were not the typical fixed rate, long-term products. Instead, lenders applied loose guidelines to risky buyers offering them interest only, negative amortization, or “2/28 loans” that have fixed interest for two years and adjustable interest rates for 28 years (Gramlich, 2007). For many of the loans, supporting documentation to substantiate the economic situation of the borrowers was lacking or was non-existent.

Consumers jumped at the chance to purchase homes that were out of their income range hoping to sell them when the value continued to appreciate; it did not. Mortgage lenders earnings flourished as they perpetuated the subprime loan industry without any risk to them. Instead of lenders holding the loans on their books, investment banks purchased and packaged subprime loans into securities, i.e., negotiable instruments, such as a residential mortgage-backed securities (RMBS) or collateralized debt obligations (CDO) (Dodd, 2007, ¶ 1-2). When these

securities were sold on Wall Street, many investors did not do their homework or could not because of the complex structures. Rating agencies had assessed the securities at investment grade or above i.e. BBB- and above, a sign that they were considered stable investments. With the ratings much higher than they should have been considering the risk of subprime, the securities were appealing to a wide variety of investors, not just to speculators for whom that level of risk would have been more suitable. The magnitude of the rating agencies actions has led to a failure that some are equating with Enron, WorldCom, and the Savings and Loan scandals (Levitt, 2007).

“Just like we did after the implosion of Enron and Worldcom, we are now learning that a number of critical gatekeepers and market actors did not perform as we had hoped,” stated Arthur Levitt, Jr. former Chairman of the U.S. Securities and Exchange Commission (SEC) in his November 27, 2007 remarks on the subprime mortgage failure to the Ontario Securities Commission (OSC) (p. 2).

Who are the gatekeepers Mr. Levitt is referring to? They are the major credit rating agencies that assign a “grade” or credit rating to securities.

#### *Statement of the Problem*

Inaccuracy of credit ratings assigned to financial products backed by subprime residential mortgage loans was a significant contributing factor in the major market disruption that began with investors and spread through the financial industry to government and to consumers on a global scale. An estimate provided in April 2008 to Reuters, a leading financial industry publication, forecasted global losses stemming from subprime at \$1.08 trillion. “All told, investors are facing the ‘worst financial crisis of our lifetime’, Mr. Soros said” (Reuters, 2008, ¶ 21).

Credit rating agencies are a critical gatekeeper in the financial markets; they are relied upon for the accuracy of their analysis. Ratings assigned by the rating agencies are an indication of the risk of default of payment by the issuer; will the investor be paid. Investors use ratings to purchase securities that fit their risk profile – the level of risk they were willing to accept. The importance of the rating is amplified by the complexity of the security whereby investors have difficulty completing their own review. By the rating agencies, securities backed by subprime mortgages were given a rating of investment grade or above, signifying that they were fairly stable and not at high risk for default when they actually were (Subprime Blame, 2007, ¶ 7).

Once a rating opinion was issued, the investors relied on the rating agencies timing of upgrading or downgrading securities, so they could react accordingly in determining whether to hold or sell a security. In general, the financial market participants relied on the rating agencies for an indication of the changes of the financial health of an issuer of the securities. There was an expectation of a timely reaction by the rating agencies.

Could global market disruption have been prevented if credit rating agencies had accurately assigned ratings and then downgraded them in a timely manner?

#### *Purpose and Objective of the Research*

The purpose of the research was to determine the role of the credit rating agencies in the growth and crash of securities backed by subprime mortgages.

The objective of the research was to determine the key areas in which the credit rating agencies failed in their analysis and rating of securities backed by subprime mortgages and why.

#### *Potential Significance of the Research*

The potential significance of the research is a deeper understanding of how and why the rating agencies inaccuracies occurred and what can be done to prevent something similar from happening again. On a personal level, the topic of research ties to the areas in which I have been

employed: currently as a financial advisor at an investment bank and formerly as an auditor for a housing finance agency. From the banking perspective, I interact with the rating agencies regularly to obtain credit ratings and am employed by an investment bank that serves as financial advisor to a housing finance agency that issues residential home mortgage revenue bonds. These securities are not of the complexity level of those discussed in this study. This project was a learning experience. From the auditing perspective, the issue of consulting and providing an opinion, as with Arthur Andersen in Enron (Verschoor, 2007), is very similar to the credit rating agencies consulting and then rating a security.

### Literature Review

This section of research provides a knowledge base for the varying points of view in the financial industry regarding the credit rating agencies involvement with subprime mortgage-backed securities. The articles were obtained through educational databases, financial and real estate magazines, and newspapers online. The documents provided a comprehensive overview of the areas where two main credit rating agencies, Standard & Poor's and Moody's Investors' Service, failed investors in their analysis of the securities, in addition to demonstrating the impact from their inaccuracies, and the conflicts of interest that exist.

Through research, key problem areas surfaced indicating how the rating agencies contributed to the growth and subsequent crash of securities backed by subprime loans. The articles provided a base for contrast and comparison with the data analysis, findings, and conclusions sections of this study.

### *Credit Rating Process*

The three primary rating agencies that assign ratings are Fitch Ratings ("Fitch"), Moody's Investors' Service ("Moody's"), and Standard & Poor's ("S&P").

Credit rating agencies evaluate the financial health of an entity that has the legal authority to issue securities, an issuer, to determine its creditworthiness and the probability that a security it issues will default. The credit rating assigned by the rating agencies is an indicator of the level of risk of default. For most securities, a credit rating is typically obtained prior to a security being sold on Wall Street. It is a tool for investors to evaluate whether or not the security meets their level of safety or risk tolerance when considering purchasing it for inclusion in their financial portfolio.

When credit rating agencies first came into existence in the late nineteenth century, it was the investors who requested and paid for credit ratings, not issuers. Following the stock market crash in 1929 investors lost confidence in the rating agencies and “the rating business remained stagnant for decades” (Partnoy, 2005, pg. 6). Now, 90% of the ratings are purchased by issuers.

#### *History of the Credit Rating Agencies*

The history of the two credit rating agencies chosen for this study, S&P and Moody’s, is as follows. By 1890 Poor’s Publishing, the predecessor of S&P, was publishing an analysis of mostly railroad bonds. While other analysts began performing detailed reviews and financial analysis, John Moody was the one who felt investors would pay for the service. He collected the financial information and packaged it into something they could use. Now known as Moody’s Investors’ Service, John Moody published his first rating report in 1909 (Partnoy, 2005, p. 6).

#### *Credit Analysis*

Credit analysis is the process used by credit rating agencies to assign a credit rating that signifies the probability of default of a financing instrument or an issuer’s ability to meet its obligations. The rating is an indicator of credit risk. Will investors be paid in a timely manner? Once an initial rating has been assigned, changes in the risk of default can result in upgrades or downgrades to a credit rating.

## *Credit Ratings as an Indicator of Financial Performance*

Credit ratings remain one of the most important indicators of financial performance readily available to the investment community. The broad long-term obligation credit rating categories are triple-A (“Aaa” or “AAA”) for the being the best possible rating and “D” for default being the worst. Credit ratings considered to be “investment grade” are those in the “Baa/BBB“ category or higher, with rating categories then ascending from “A/A” to “Aa/AA” to “Aaa/AAA”. These rating categories are often specified up or down through the use of modifiers - Moody’s assigns modifiers of “1”, “2” or “3” while S&P employs “+” or “-” signs. For example, a Moody’s rating of “Aa1” is considered superior to a rating of “Aa3”, while an “AA+” rating from S&P is of higher credit quality than an “AA-” rating.

Table 1

### *Equivalent Credit Ratings*

Credit Risk	Moody's	S & P's
Investment Grade		
Highest quality	Aaa	AAA
High quality (very strong)	Aa	AA
Upper medium grade (strong)	A	A
Medium grade	Baa	BBB
Not Investment Grade		
Lower medium grade (somewhat speculative)	Ba	BB
Low grade (speculative)	B	B
Poor quality (may default)	Caa	CCC
Most speculative	Ca	CC
No interest being paid or bankruptcy petition filed	C	C
In default	C	D

*Note: The Bond Market Association, as cited on Blaha.net, 2008.*

## Review of Related Literature

The literature review resulted in the following major themes:

- Complexity of the securities increased reliance on the credit ratings;
- Ratings were higher than they should have been given the underlying risk of the collateral for the securities;
- Numerous rating agency conflicts of interest exist: consulting and rating, lowering ratings to stifle competition, payment by the issuer not the investor whom the rating is for; and a natural monopoly as Nationally Recognized Statistical Rating Organization (NRSRO) rating agencies;
- Regulatory oversight by the SEC and Congress – taking a fresh look at the role of the credit rating agencies; and
- Comparison of rating agency actions with subprime mortgage-backed securities with similar rating and consulting actions, and valuation of the assets that were instrumental in the Enron, WorldCom, and the Savings and Loan Crises.

### *Complexity of the Securities*

In comparison to a general obligation bond which the public votes on to provide cash for schools, roads, and other public projects, securities used to package mortgages are considered complex. The intent of the added complexity is to free up the balance sheet of lenders to make more loans and diversify the risk from the pool of mortgages among investors. Ratings are meant to be an indicator of the risk that the security will default. This provides a measure for investors to use when analyzing what securities to buy as they balance out their portfolios. Using the ratings, investors can select securities with the amount of risk that is appropriate for their threshold (Dodd, 2007; Rosner, 2007; Tavakoli, 2003).

### *Mortgage-Backed Securities (MBS) and Collateralized Debt Obligations (CDOs)*

In the packaging of subprime residential mortgage loans, two structured finance securities were prominent: residential mortgage-backed securities (RMBS), herein referred to simply as mortgage backed securities (MBS), and collateralized debt obligations (CDO) (Dodd, 2007; Tavakoli, 2003).

In the securitization process for mortgage-backed securities, mortgage loans are purchased by governmental, quasi-governmental, or private entities e.g., investment banks, financial institutions, and home builders. From there, securities can be created that rely on the cash flows generated by a pool of the mortgage loans or other financial assets (Bond Market Association, 2002).

Similarly, CDOs are subsets of securitizations backed by a portfolio of bonds or loans (Tavakoli, 2003). The securities issued by the CDO are categorized in tranches as senior, mezzanine (middle), and subordinated/equity, according to their degree of credit risk (Securitization, 2008). The pools of payments from the portfolio are sold off in layers to investors with different tranches having different risk levels and ratings. Typically, the ones with the highest credit risk have the most probability of default (Dodd, 2007, ¶ 17).

Both, MBS and CDOs use a Special Purpose Entity (SPE), a subsidiary used to isolate financial risk. It serves as a depository for the assets, i.e., pools of loans, and issues securities that “represent claims on the principal and interest payments made by borrowers on the loans in the pool” (Bond Market Association, 2002, p. 1; Mortgage-Backed Securities, 2007, p. 1).

Issuers and investment banks have special modeling software to create financing structures that meet the debt pay-back needs i.e., principal and interest payments for the life of the bond or other financial product. Even for an investment bank analyzing another’s model, it would require understanding the risk in the original pool of mortgages, then from there how the principal and interest payments were carved up, and how the risk was reallocated. No matter what, understanding the “underlying security”—the borrower’s ability to pay principal and interest on their home loans is a critical factor. Knowing this and diversifying the portfolio to limit the probability of default should be a key consideration.

Initially, only governmental agencies were authorized to package and issue securities backed by mortgages. Then, as investment banks were allowed to package the securities, the underlying data was not afforded the same diligence as before and the structures became more complex. There was a greater need for rating agency analysis and accuracy of the data that is not available to the average citizen (Dodd, 2007).

#### *Complex Securities Increase Reliance on Ratings*

A certain trust and faith is placed in the ratings assigned by the credit rating agencies. The agencies have expertise honed by analyzing all types of issuers and securities. Their analysis and determination has a significant impact on issuers by affecting how the financial marketplace as a whole views their securities. The importance of the rating agency review compounds as the complexity of the issuer and security increases.

According to former Moody's analyst, Sylvain Raynes, "The rating drives everything..." (Benner & Lashinsky, 2007, ¶ 7). Others note the structure of the CDOs are too complex even for sophisticated investors to understand. When this is the case, the reliance on credit ratings goes way up (Benner & Lashinsky).

Particularly with the complexity of the securities, Doug Cifu, a partner who specializes in private equity and finance at Paul Weiss Rifkind, Wharton & Garrison notes most people cannot do quantum math to figure out the default rate on a CDO, so there is a greater expectation on the gatekeepers for a rating (McLean, 2007).

Because many designated investment policies use the investment grade rating levels of the main credit rating agencies as a measure of the credit quality of investments with which an entity can place its funds, "credit ratings agencies play a more important role in the debt markets than stock analysts do with regard to equities" stated Joshua Rosner, Op-Ed Contributor for the

New York Times (2007, p. 1). According to Rosner, it is common to see policies where investors are restricted to investment grade or above i.e., BBB- up to AAA+/Aaa1.

When ratings were inaccurate, there was no watch dog overseeing the rating agencies methodologies and outcomes to determine the accuracy and consistency of their ratings over time. The agencies methodologies were all different. For subprime, there was no trigger to signify the securities were overrated until the booming housing market fell. Then, Wall Street served as a point of correction.

### *Overrated Subprime Mortgage-Backed Securities*

Several issues were created by securities being overrated. Investors thought they were complying with their investment policies requiring their monies be invested in safe products when they were not; shareholders for whom they worked did not know the risks they were assuming; and investors did not know the securities were so overrated that when ratings were corrected substantial losses would occur.

Investors who were restricted to buying securities that were investment grade, and purchased MBS, were going against their own procedures without even realizing it. Instead they thought they had low risk triple-A bonds. Keith Anderson, chief investment officer of fixed income at BlackRock “plants the blame for the subprime mortgage mess firmly at the feet of the bond rating agencies, saying, ‘they are a huge concern’” (Subprime Blame, 2007, ¶ 12).

The affect of the overrating was that many of the AAA ratings went to junk level because the rating agencies had underestimated the risk of default in subprime mortgages. The housing market had been booming for so long that the rating agencies did not recognize the initially low foreclosures as unusual but instead took them for granted (Tully, 2007).

Standard & Poor’s noted that some of the data they had used historically was no longer reliable and the housing market had been more severe than expected (Schroeder, 2007, ¶ 7).

Downgrades would force investors who could not own any non-investment grade securities to sell at a loss. The economic loss would vary with each investor depending on how much he or she had invested in securities backed by housing mortgages affecting “the bottom line of an untold number of companies, including insurers and possibly even mutual funds” (McLean, 2007, ¶ 8).

If the ratings had more accurately reflected the true underlying value of the subprime mortgages, the securities would have initially had a much lower rating and would not have sold as well. Therefore, the losses from downgrades would not have been as bad (Petroff, 2007).

Paul Schott Stevens, president of the Investment Company Institute suggested as early as March 2006, “To keep the ratings pure, agencies should publicly disclose how they make rating decisions and what conflicts of interest they might have” (Shaw, 2006, ¶ 5). This would allow investors to conduct their own cursory review of the issuer and compare it with that of the rating agencies. In addition, it would allow the investors to track the rating agencies accuracy of defaults according to rating level over time (Shaw).

#### *Data Issues with the Mortgage Portfolios*

The value of the underlying collateral for the securities was one thing, data issues were another. Even without the complexity of the financing products, the data that was available was partial, altogether missing, or was inaccurate. Mortgage companies, investment banks, and the rating agencies were all involved.

Prosecutors discovered investment banks had been advised of the large number of high risk loans known as “exceptions” in the portfolios they purchased to bundle and sell as securities when they hired outside consultants to perform quality control. But, they hid this fact and did not disclose the details to rating agencies (Bajaj & Anderson, 2008).

Contributing to the problem, the rating agencies did not question the data. CNBC noted that now, S&P realizes “they should have scrutinized the underlying data of the subprime market more closely, particularly the historical anomaly of a housing boom that lasted so long”. (Gasparino, 2008, ¶5). Moody’s admits that in hindsight there were failures of key assumptions in their analytics and models (Norris, 2008). In addition, Moody’s notes that the gilt edged ratings they applied to structured mortgage products were flimsy (Beleagured Industry, 2008, ¶ 3).

“How could anyone analyze the risk in holding loans when the borrowers have little or no equity in the property and there is no way to verify their ability to make payments...” (Subprime Blame, 2007, ¶ 21). If the rating agencies could not obtain the proper documentation, why did they issue a rating? Instead of declining to rate the securities, the rating agencies issued ratings and at a higher level than should have been afforded to them in light of the high risk of subprime loans.

Ohio attorney general Marc Dann is building a case against the rating agencies. One of his complaints is that “S&P, Moody’s, and Fitch do not vet data provided by these customers-information the agencies use to make their credit assessments. It’s a bit like a take home final” (Benner & Lashinsky, 2007, ¶ 5). On the other hand, some mortgage lending industry officials said “weak lending standards, not exceptions, were largely to blame for surging defaults” (Bajaj & Anderson, 2008, ¶ 2).

OVERRATING THE SECURITIES AND DOCUMENTATION ISSUES WERE ONLY THE BEGINNING OF THE TURN TOWARD RATING DOWNGRADES. An inflated housing market sharply declined without signs of recovery. How did the rating agencies respond?

### *Rating Agencies Slow to Downgrade Credit Ratings*

The reaction from the marketplace when subprime issues began to fail was anger at how slow the rating agencies were to downgrade instead of reacting timely to the market changes. It garnered the attention of the SEC who began reviewing the dynamics of the situation to determine if rating agency actions had been inappropriate.

According to the April 2, 2007 edition of *Fortune Magazine*, while the subprime mortgage crisis was escalating, “the three major credit-rating agencies—Fitch, Moody’s, and Standard & Poor’s—have been the voices of calm” (McLean, 2007, ¶ 1). They only downgraded a small amount of debt backed by subprime mortgages and said they expected the problem to remain in the subprime sector (McLean, 2007).

The deterioration of the housing market had been apparent for five months. Finally, Moody’s Investors Service, Fitch Ratings, and Standard & Poor’s reacted to the financial crisis “which involves more than \$1.2 trillion of subprime mortgages originated in 2005 and 2006 alone” (Rosner, 2007, ¶ 1). As one investor asked during a mid-summer 2007 S&P conference call, “What is it that you know today that the markets didn’t know three months ago?” (Rosner, ¶ 1).

The SEC is looking at the issue from the lenders to the investment banks to the rating agencies and anyone in between. “Our team is focusing on whether any improper accounting, disclosure, or insider sales occurred” (Securities and Exchange Commission [SEC], ¶ 1).

### *Superbowl of Rating Downgrades*

When the agencies finally decided to downgrade the ratings, it was massive. The Asset Securitization report (2008) noted July 12, 2007 “could be called the veritable Super Bowl of downgrades” in the history of downgrades (p. 16). Standard and Poor’s and Fitch cut the ratings

on billions of products backed by subprime mortgages while Moody's downgraded over \$5 billion (Rating Agencies, 2008, p. 16).

The downgrades brought up the hackles on investors and finance professionals alike who noted that ratings are only subjective and do not assure anything. And, the finance community felt that not only had the rating agencies failed in their original ratings, but by correcting their errors, they were creating new problems. Those new problems were driving the prices lower and the agencies would continue to downgrade as the prices dropped compounding the problem (Lehmann, 2008).

“All three rating agency heads place much of the blame for the economic downturn on the broken housing market and its ripple effect on the credit markets” (Johnson, 2008, ¶ 38). But, Congress holds the rating agencies accountable for not acting quickly to downgrade the overrated securities (Johnson).

Investor losses from the fall of the housing market and slash of ratings was too much. When everything began to unravel, investors were unable to access the credit risk in the complex products and then quit buying mortgage-backed securities (Dodd, 2007).

Stephen Walsh, the deputy chief investment officer for Western Asset Management, agrees that investors have been complacent. The fact that 50% of the subprime loans had no or little documentation should have been a clue that it was not a solid investment (Subprime Blame, 2007).

Some feel the rating agencies should not hold all the blame. “Many investors knowingly bought risky mortgage bonds, thereby inflating the housing bubble” (Samuelson, 2007, ¶ 9). One reason may have been the false sense of confidence created by the growth in the U.S. economy (Samuelson).

Although there were other mitigating circumstances, was there consensus on a main contributing factor to the subprime mortgage-backed securities growth and downfall? Some say yes; it was the conflict the rating agencies had with both consulting on and then rating an issue.

### *Conflicts of Interest*

Rating agency conflicts of interest were noted as follows: consulting and rating; overrating securities which substantially increased their bottom line; lowering ratings on business they did not have—to obtain it; receiving payment from the issuer – not the investor who the rating was for; and a natural monopoly as Nationally Recognized Statistical Rating Organizations (NRSRO's) – until recently there were only five such designated organizations.

### *Consulting and Rating Conflict*

Rating agencies played an important role in contributing to the growth of subprime mortgage securities when they went beyond just rating the CDOs and MBS. They were paid to consult investment banks on how to structure the deal to obtain an investment grade rating. It was an active consulting role as the banks presented a structure, refined it according to the comments they received, and then fine tuned it to the rating agencies standards for investment grade and above. In this way, the investment banks could attain the rating level they sought. The agencies would finish consulting on the financing, “switch hats” and provide a written “objective” opinion (Redmon & Schewe, 2007). Mason and Rosner (2007) noted that in the structured-finance-rating process, “the agencies considered all their work to be hypothetical and not deal-specific up to the point of final execution” (p. 16). The role of the credit rating agencies “was critical to the very existence of the subprime lending market” (Verschoor, 2007, ¶ 11).

Mason and Rosner (2007) opined that the rating agencies assistance in modeling CDOs provided a way for issuers to reconfigure sub-investment grade assets into investment grade that was statistically modeled to have less risk and offer a higher yield. Their efforts were a response

to market demands resulting in the agencies creation of new models for rating the assets. That is how the rating agencies played a primary role in the transformation of subprime assets into investment grade securities.

This part of the rating business helped the agencies bottom line as well. The CDO sector grew from zero in 1995 to over \$500 billion in 2006 (Mason & Rosner, 2007). When the agencies began consulting and rating the structured products, it contributed to the rapid growth of their earnings. In this manner, the subprime backed products became a critical part of the agencies earnings (Elstein, 2007; Redmon & Schewe, 2007).

According to the New York Times, over the last decade Moody's saw "its stock increase six fold and its earnings grow by 900 percent" (Lowenstein, 2008, ¶ 1). New York Times columnist and commentator Thomas Friedman quipped "that there were only two superpowers in the world—the United States and Moody's—and that sometimes it wasn't clear which one was more powerful" (Lowenstein, 2008, ¶ 1).

According to Rosner, Managing Director of Graham Fischer, and Grebeck, CEO of Temps Advisors, "Moody's and S&P generate almost 50% of their revenue from a category of business known as 'structured finance' " (Farrell, 2008, ¶13). Structured finance includes the complex securities such as CDOs and MBS.

As noted in *Fortune*, Moody's net income went from \$159 million in 2000 to \$705 million in 2006 in part because of increases in fees from "structured finance" (McLean, 2007, ¶ 5). "More importantly, rating these kinds of bonds provides Moody's and S&P with some of their most profitable work, because profit margins are as high as 70%, Credit Suisse estimates" (Elstein, 2007, ¶ 3). With that, it is not surprising that S&P and Moody's "dominate the roughly \$3 billion-a-year business of grading debt securities by companies and municipalities that pay them for those investor report cards" (Blair Smith, 2006, ¶ 6).

With regard to any conflict for consulting and rating Moody's and S&P counter that they do not let investment banks play a role in how ratings are determined and that there is no evidence that their ratings are not objective (Farrell, 2008, ¶ 14-15). How can they advise investment banks on how to structure the issue to achieve a certain rating and then say the banks are not involved in the process?

#### *“Notching” Lowering Rating to Stifle Competition*

When rating agencies notch, they offer to analyze the financial data for a security or entity and provide a preliminary rating review for business they do not currently have. If they come in with a lower rating than their competitors, they typically gain the business and the prior rating agency loses it.

The SEC considers notching to be one of the most controversial issues discussed by the commission. In this situation a rating firm lowers a rating where they do not have “the business of rating a substantial portion of the underlying assets. The practice is often thought to be a way to stifle competition” (Rappeport, 2007, ¶ 5). According to Rappeport, this is another way the rating agencies are misrepresenting the value of securities.

“Notching is a very difficult issue, and there is no easy answer,” Commissioner Kathleen Casey said. The commissioner noted the SEC would call attention to the issue and that the commission was exploring agency registration as one mechanism to avoid potential conflicts of interest (Rappeport, 2007, ¶ 6).

#### *Payment by the Issuer Not Investor*

Another area of conflict is that payment for the rating is by the issuer and not the investor. The ratings are actually for the investor, yet the issuer is paying for it. With this arrangement, rating agencies are trying to please the issuer which is a direct conflict, not to

mention the fees the rating agencies charge are twice as high for mortgage-backed securities than they are for corporate bonds (Swindell, 2007).

Following the 1929 stock market crash, investors were no longer interested in paying for the ratings due to the agencies lack of anticipating dramatic drops in bond values (Partnoy, 2005). In the current market environment where ratings have not met expectations, it seems switching back to an investor paid model may be difficult, if not impossible.

Standard & Poor's opines that the issuer pays model benefits the investor. Without payment of the ratings by the issuer, the ratings would be "subscription-based instead of free of charge to investors" (Schroeder, 2007, ¶ 10).

#### *Monopoly by NRSRO Appointed Credit Rating Agencies*

According to Partnoy (2005) in the 1970s the Securities and Exchange Commission created the Nationally Recognized Statistical Rating Organization (NRSRO) designation. This designation permitted financial firms to use the NRSRO ratings knowing that some standards were required of the agencies. Originally, NRSRO recognition was granted by the SEC through a "No Action Letter" sent by the SEC staff after they determined the ratings of that agency were being widely used. Another caveat was that those wishing to have the designation be a major established credit rating agency and meet certain net capital requirements. Although the SEC created the NRSRO concept, "it neither defined the term nor indicated which agencies qualified as NRSROs" (Partnoy, 2005, p. 7). From there, the SEC, Congress and other administrative agencies established additional legal rules that depended on NRSRO ratings (Partnoy, pp. 5-8).

Once the NRSRO designation was in place, institutions followed suit adopting guidelines using the agencies ratings as a standard. Governmental and institutional investor guidelines typically require minimum credit ratings, often referred to as investment grade, from one of the

five designated rating agencies giving them a natural monopoly over the competition (Shaw, 2006). Now, S&P and Moody's have 80% of the rating market (Partnoy, 2005).

### *Regulatory Oversight*

An element from the Credit Rating Agency Act of 2006 was a response to the cry for better regulation of the credit rating agencies by strengthening the SEC's oversight of the rating agencies and by opening them up to more competition. The Act was "intended to introduce greater transparency, accountability, and competition into the credit rating industry" (SEC Allows, 2007, p. 1). The rules for oversight were implemented by a unanimous vote of the commission on May 23, 2007 (SEC Allows). The rules gave the SEC the authority to "suspend or revoke the NRSRO status of a current registrant if it didn't have the financial or managerial resources to produce ratings with integrity" (Mason & Rosner, 2007, p. 29). The Act was a response to prior scandals such as Enron and WorldCom.

On a global level, in December 2004, the International Organization of Securities Commissions (IOSC) released a code of conduct for the rating agencies as a way to assess and monitor their role. The IOSC was concerned about actual conflicts and the appearance of them that would undermine investor confidence (Mason & Rosner, 2007, pp. 30-31).

Beginning in the summer of 2007, the subprime meltdown captured the direct attention of Congress. Members of the Senate Committee on Banking, Housing and Urban Affairs noted during a hearing on September 26, 2007, that the credit rating agencies did have a role in the subprime fiasco. They were reviewing the rating process and the fact that the agencies were paid for the actual rating, not a comprehensive review (Role, 2007).

### *Comparison to Enron, Worldcom, and Savings and Loan*

What similarities have been noted between the above scandals and the failure of subprime mortgage-backed securities? Rating agencies have been accused of consulting on an

issue and then rating similar to the accounting firms consulting and providing an opinion in the Enron scandal. Comparisons have been made between how the agencies overrated securities and delayed downgrades with Enron and WorldCom as well. Lastly, they have been accused of overvaluation similar to the Savings and Loan scandal.

With the complexity of the financial products, rating agencies were advising how to structure a deal and then turning around and rating the same deal. There is a striking similarity to how in the early years of the 21<sup>st</sup> Century, Arthur Anderson “was paid high consulting fees to advise Enron on how to meet the letter but not the principle of various Generally Accepted Accounting Principles (GAAP) requirements and then expressed a favorable ‘independent’ opinion on the fairness of the result” (Verschoor, 2007, p. 11).

The intent of credit ratings is to provide an indication of the probability of default of an issuer. But, the continued financial crises are evidence of a pattern of rating inaccuracy: “Enron, Global Crossing and WorldCom, which enjoyed investment-grade ratings only months --- and, in the case of Enron, days—before the companies’ bankruptcy filings” (Blair Smith, 2006, ¶ 5).

#### *Valuation of Mortgage Assets*

An area of concern with both the Savings and Loan and the subprime mortgage crisis was the valuation of assets. In both cases there was a notable shift in the housing market requiring markdowns to accurately reflect the market price. Did the markdowns occur timely with the decline in the housing market?

Richard Lehmann, a Forbes/Lehmann Income Securities Investor, feels the events are similar to the 1980’s housing crash, but in this instance the complex structures make the mortgages impossible to value (Lehmann, 2008). And, it was not only the MBS and CDOs that made them complicated. Former SEC Chairman, Arthur Levitt, Jr. noted oftentimes the subprime mortgages were held in Structured Investment Vehicles (SIV’s) and were not reported

on a company's balance sheet, hiding the financial health of the company. This was a technique used for Enron as well (Levitt, 2007).

According to former SEC Chief Accountant Lynn Turner, there are similarities to the savings-and-loan crisis of the 1980s, which drove some 1,000 mortgage lending institutions "out of business and cost taxpayers roughly \$125 billion" (The SEC Wants More Answers, 2007, ¶ 4). The housing market declined and the Savings and Loans (S&Ls) could not collect anything close to the value of the assets. They were slow to recognize the decline in value and to boost their reserves. This gave the S&Ls an appearance of stability that did not exist. With subprime mortgage portfolios, institutions may be slow to record their loan losses as well (SEC, 2007).

Of course, much has changed since then, in particular who will be absorbing the losses. Now, banks and mortgage lenders do not hold most of the loans they make. They are packaged into complex securities that are held by investors. "Today, about 56% of all mortgages are securitized, compared with just 10% in 1980. That complexity will make it much tougher for the SEC to determine if assets were properly written down and where losses may lie," says Janet Tavakoli, president of Tavakoli Structured Finance, Inc. (SEC, 2007, ¶ 4).

Another problem is that standard accounting rules allow a delay in reporting delinquent loans for at least a month and sometimes for several quarters. Then, when the mortgages are going back to Wall Street firms, prices the firms are asking are unrealistic "and investors who hold large portfolios of mortgage-backed bonds use complex and widely varying internal valuation models...There's come concern that banks are not basing their estimates on objective evidence" (SEC, 2007, ¶ 7).

### *Summarizing Conclusion Contrasting all the Points of View*

The complexity of the securities was a main contributing element in the rating agencies failure to accurately assess risk and of the increased the reliance by the investors on their analysis.

The rating agencies all have different rating methodologies. Without oversight of and consistency between the agencies, the marketplace is the only correction point to signify when the ratings are off. When the booming housing market declined, it triggered significant downgrades.

Investors were relying on the agencies measure of investment grade securities which became a mainstream requirement in investment policies. When rating agencies stamped subprime mortgage-backed securities as investment grade, they sold much better than they would have at the lower rating levels that more accurately reflected their risk of default. Investors invested in securities that they thought were investment grade but were not. They could not keep them in their portfolios but had to sell them at an economic loss.

Both rating agencies admitted discrepancies in their methodologies. Standard and Poor's noted the data they had historically used was no longer reliable while Moody's stated there were key failures in their models and analytics.

One suggestion to restore investor confidence is that the rating agencies should disclose how they make their rating decisions and disclose their conflicts of interest. This would allow investors to track and compare the accuracy of their analysis over time.

In addition to the securities being overrated, there were data issues with the mortgage portfolios where the information was partial or altogether missing. To complicate matters more, some investment banks had hidden the number of exceptions from the rating agencies. In turn, the rating agencies did not question the data and now realize they should have scrutinized it more

carefully. But, some industry officials feel the rating agencies should not take all the blame.

Weak lending standards have been noted as the initial culprit here. On a broad scale, the SEC is looking at all market participants for key failures.

Market place participants were disheartened at the rating agencies slow response to the change in the housing market and taking over five months to begin downgrading subprime MBS. Then, when rating agencies downgraded billions in securities, the investors were quick to react. It was an immediate backlash against the rating agencies for their inaccuracies. Investors began to unload securities that no longer met their policies requiring investment grade securities and endure economic losses to their companies.

Although investors bore the load of the downgrades, they should have been more diligent knowing that many of the subprime loans had little or no documentation. All three rating agencies blamed the economy for the effect on the housing market and in turn on the credit markets while Congress holds the rating agencies accountable. The SEC is looking at all market participants for key failures.

Rating agencies consulting and rating is looked to as something that grew the subprime market. Rating agencies would advise on what investment banks needed to do to achieve a specific rating. Then, the agency would turn around and rate the deal making the role of the rating agencies critical to the very existence of the subprime market. In addition, rating agencies assistance in modeling allowed investment banks to reconfigure sub-investment grade assets to investment grade. Consulting and rating structured finance issues, MBS and CDOs, led to dynamic growth in the rating agencies earnings becoming a critical part of their business, nearly 50% of it.

Market participants feel there is a direct conflict with ratings being paid for by the issuer, not the investor who the rating is for. Payment was not always by the issuers as it is now. When

rating agencies came into existence, investors paid for the credit ratings. With the stock market crash of 1929, investors no longer had confidence in the ratings and the rating industry remained stagnant. Eventually, issuers began paying for the ratings. S&P notes that the current system actually benefits the investor who receives the ratings free of charge.

The issues experienced with subprime mortgage backed securities are nothing new. There are many similarities to problems that arose with Enron, WorldCom, and the Savings and Loan crises. For these, ratings were high and there was a failure to mark down assets in a timely manner. And, there have been conflicts similar to consulting and rating with the accounting firm Arthur Andersen.

In the 1970s the SEC created the Nationally Recognized Statistical Rating Organizations (NRSRO) designation as a measure of widely used rating agencies. Entities adopted the NRSRO investment grade ratings into their policies which gave those NRSRO rating agencies a monopoly on the credit rating market. It is noted that although the SEC created the designation, it did not define the term or who qualified. But, they did want the agencies to demonstrate their ratings were being widely used and for them to meet certain net capital requirements.

The SEC, Congress, investors, market place participants such as investment banks, lenders, and others involved in financing, along with rating agencies are looking for solutions to correct the deficiencies that led to the subprime securities failure.

#### *Recommendations for Areas that Require Additional Work*

A review of the transcript for hearings on the Credit Rating Agency Act of 2006 would provide background on the issues discussed resulting in the changes they were attempting to make with the Act. Are they broad enough and detailed enough to curtail some of the issues that arose with subprime? Do the regulations for the Act adopted in May, 2007 accomplish what they were meant to? Does the SEC truly have any teeth for oversight of the credit rating

agencies now or just broad oversight? Will the Act actually curtail events such as subprime from happening again? In addition, review of the self imposed guidelines the rating agencies have instituted over the last six months would show if they are serious about correcting deficiencies. This should include a thorough review of their rating methodologies and the appropriateness of each to the different types of issuers and financial instruments.

Review of a range of congressional hearings that occurred after the September 2007 hearing would be beneficial as the one reviewed for this study was just the starting point of taking a critical look at the rating agencies role in subprime. In addition, review of any Securities and Exchange Commission speeches and papers on this subject, may uncover other areas of deficiency and/or pending regulations or guidelines.

## Methodology

### *Introduction*

The purpose of the research was to determine the role of the credit rating agencies in the growth and crash of securities backed by subprime mortgages.

The objective of the research was to determine the key areas in which the credit rating agencies failed in their analyses and rating of securities backed by subprime mortgages and why.

### *Summary of the Study Process*

This section of the study covers the: research method; research approach; research design; documents; researcher's statement; data collection; data analysis; organization, analysis and interpretation; categories and coding the data; search for alternative understandings; and validity and reliability.

A mixed method approach using both quantitative and qualitative analysis was used in conjunction with primary and secondary historical document research providing comprehensive coverage for all problem areas discovered during the literature review.

During the literature review process, articles, journals, and other financial documents about the credit rating agencies involvement with subprime mortgage-backed securities were gathered. These were organized into categories where there was a strong pattern of repetition. Then, quotes were selected to draft the literature review.

From the literature review, these initial categories emerged.

- Complexity of Securities
  - Mortgage-Backed Securities (MBS) and Collateralized Debt Obligations (CDOs)
  - Complex Securities Increase Reliance on Ratings
  - Overrated Subprime Mortgage-Backed Securities
  - Data Issues with the Mortgage Portfolios
  - Rating Agencies Slow to Downgrade Credit Ratings
  - Super Bowl of Rating Downgrades
- Conflicts of Interest
  - Consulting and Rating Conflict
  - “Notching” Lowering Rating to Stifle Competition
  - Payment by the Issuer Not Investor
- Monopoly by NRSRO Appointed Credit Rating Agencies
- Regulatory Oversight
- Comparison to Enron, WorldCom and Savings and Loan
  - Valuation of Mortgage Assets

### *Research Method*

A mixed method research approach was used that employed collection of both quantitative and qualitative data concurrently. According to Creswell in *Research Design*, concurrent use of qualitative and quantitative analysis can be used to provide comprehensive analysis of the research problem (2003, p. 16).

### *Research Approach*

The research approach used was the historical research method proposed by Sharan B. Merriam in *A Guide to Research for Educator and Trainers of Adults* (2000). This approach suggests beginning with a general historical topic noting that once a person becomes acquainted

with it, questions will arise. Through continued review and research, the topic can be narrowed to a specific “segment of the problem area” (p. 78).

Historical inquiry was used as a guide for performing research. In historical inquiry, primary “sources are the basic material used in historical studies” providing general thoughts and ideas while “secondary sources report the observations of those who did not witness the actual event” (Merriam & Simpson, 2000, p. 79). Secondary sources can be analyzing data in the documents and in a manner that is not for its stated purpose which, originally, was just reporting the exact details of the hearing.

For review of both primary and secondary historical documents the following must be considered: “(1) proximity to the historical event; (2) competence of the author; and (3) purpose of the document” (Merriam & Simpson, 2000, p. 80). Public records would be the most impartial but those written for a smaller audience may be more revealing.

Primary review of the hearing record provided comprehensive background on the issues presented during the testimony. The secondary review provided the detailed words and phrases and frequency to conduct data analysis bringing the most important issues to light.

For this analysis, the documents that were considered primary or basic material were also reviewed using secondary document analysis due to their content and weight that they carried with the chosen subject of study.

### *Research Design*

The strategy that was employed for data gathering was concurrent: determining the thoughts and ideas of an individual or several individuals could be as qualitative data gathering while any “phenomenon that can be counted or measured...may be the subject of quantitative data” (Merriam & Simpson, 2000, p. 81).

For quantitative data gathering “content analysis—establishing the frequency of certain ideas, attitudes, or words within a particular body of material” was used (Merriam & Simpson, 2000, p. 81). This analytical technique was successful in determining where the weight of the discussion fell with regard to the categories and subcategories that had been created. It provided a tool to determine the key focus of the witnesses through their testimony.

For qualitative data gathering, the verbal hearing record was reviewed for the witnesses’ thoughts and feelings with regard to the categories and subcategories that had been established.

In researching subprime mortgage-backed securities, it seemed the focus was on the credit ratings, one being overrated and second on the downgrades. The thought was in reviewing the expert witnesses’ testimony the key issues to the nation would be defined.

#### *Documents*

The document selected for analysis was the full congressional hearing record from “The Role of Credit Rating Agencies in the Structured Finance Market”, before the Subcommittee on Capital Markets, Insurance and Government Sponsored Enterprises of the Committee on Financial Services U. S. House of Representatives, One Hundred Tenth Congress, First Session, September 27, 2007 (Role, 2007). The hearing testimony was transcribed, with both verbal and written testimony recorded as the historical hearing record before the committee. The committee hearing was lead by Chair of the Capital Markets Subcommittee, Paul E. Kanjorski, congressman for Pennsylvania (Role of the Credit Rating Agencies [Role], 2007).

With the exception of the subcommittee chair, resumes for the witnesses were provided with the hearing record:

H. Sean Mathis, Managing Director, Miller Mathis, an investment banker  
J. Kyle Bass, Managing Partner, Hayman Capital and portfolio manager  
Mark Adelson, Adelson-Jacob Consulting and former Moody’s analyst 9 ½ years  
Michael Kanef, Group Managing Director, Moody’s Investors’ Services  
Vickie Tillman, Executive Vice President, Credit Rating Services, Standard & Poor’s  
Joseph Mason, Professor, LeBow School of Business, Drexel University

This hearing was chosen due to the weight and timing of the testimony and the committee hearing being a public written record as a whole with actual and attached written testimony and supporting documentation. For proximity to the event, the hearing was on September 27, 2007. This hearing followed within three months the “Super Bowl of downgrades” on July 12, 2007 where rating agencies simultaneously downgraded a significant number of subprime mortgage-backed securities (Rating Agencies, 2008, p. 16).

The topics discussed during the hearing were comprehensive and encompassed how the issues were impacting the United States on a national level. The hearing file contained not only the hearing record but any backup documentation and written hearing materials provided to the committee.

#### *Researcher Statement*

Three components of my professional work experience made this project a great fit: investment banking, auditing, and legislative experience. As an employee at an investment bank, I work on behalf of state and local issuers to obtain credit ratings and rely on the credit rating agencies research materials and analysis for public and private sector clients. This background provides an understanding of the rating agencies responsibility and creates a need to see what really happened. As a former internal auditor at a housing corporation, with the similarity of analysis between auditing and rating and the functions being gatekeepers, it is both of professional and personal interest to me to see how much responsibility the rating agencies had with the growth and crash of these securities. Lastly, being a former legislative committee aide, it was very interesting to see the structure of the committee hearing and to analyze the transcript on the role of the credit agencies with regard to subprime.

### *Data Collection*

Data collection procedures for both quantitative and qualitative research used a matrix format with coded categories to collect data that tied directly to the problem areas noted in the literature review that have been listed above. This format was used simultaneously to code and gather primary and secondary information from the transcript.

### *Data Analysis*

The data analysis was secondary analysis of historical documents that noted and developed upon the major categories and subthemes. Through categorizing and coding the data thoughts and feelings of the participants began to take shape and meaning.

According to Marshall and Rossman (2006):

Typical analytic procedures fall into seven phases: (a) organizing the data; (b) immersion in the data; (c) generating categories and themes; (d) coding the data; (e) offering interpretations through analytic memos; (f) searching for alternative understandings; and (g) writing the report or other format for presenting the study. Each phase of data analysis entails data reduction, as the reams of collected data are brought into manageable chunks, and interpretation, as the researcher brings meaning and insight to the words and acts of participants in the study...data analysis transforms data into findings. (pp. 156-157)

For the study, the format of the Marshall and Rossman procedures was used in combination with the Miles and Huberman Matrix using themes and subthemes to drill down to the key elements. This process began with reading and re-reading the transcript and making notations on elements on the document. Then, hard coding analysis began with the transcripts where themes and subthemes were noted (Miles & Huberman, 1994, p. 130).

### *Organization, Analysis and Interpretation*

Organization of the rating agency data was accomplished by sorting the information contained in the congressional hearing transcript. To begin to analyze and interpret the data, the transcript was coded using the categories and subcategories developed from the literature review.

### *Tools for Sorting and Categorizing*

One of the methodologies used for sorting and categorizing data is the use of a matrix or a template. “Template strategies apply sets of codes to the data that may undergo revision as the analysis proceeds. Editing strategies are less prefigured” (Marshall & Rossman, 2006, p. 155). The format I chose for this study was Miles and Huberman’s 1994 matrices: Ordered Matrix and Conceptually Clustered Matrix which provide a clear cut way of organizing the data for analysis. Through use of a rough matrix themes and subthemes from the categories emerged from the literature review.

### *Categories and Coding the Data*

“Patton (2002) describes the processes of inductive analysis as ‘*discovering* patterns, themes, and categories in one’s data, in contrast with deductive analysis where the analytic categories are stipulated beforehand” (Marshall & Rossman, 2006, p. 159).

Analytic categories were developed from the list of issues that emerged during the literature review. A general category named credit ratings miss the mark (CRMM) was added. This was to catch any discussion that the rating agencies were off. Mortgage-backed securities and collateralized debt obligations were listed as separate categories under CRMM. A category for unsolicited ratings was added. Then, two additional categories of regulatory significance were added. The first additional category that was added was the Sarbanes-Oxley Act which required the SEC to study the performance and oversight of the NRSRO rating agencies. The other category of significance added pertains to the Credit Rating Agency Act of 2006, which

was an effort to tighten governance over the credit rating agencies. It gave the SEC permission to hold rating agencies accountable for credible and reliable credit ratings. Implementation of the rules for the Act was not finalized until June 28, 2007 (SEC Allows, 2007). Regulatory oversight was a category that was added to the literature review near the completion of the study and therefore was not included in the coding analysis. But, this field was covered through the credit rating agency act which was implemented as a means of regulating the agencies. An additional category was created from a theme seen in the literature review; it was credit rating agencies place blame elsewhere. Data analysis was performed through review of the documents and use of the categories.

After the coding was completed, the data in the analysis was reviewed to determine what was relevant and remove anything that was not. According to Marshall and Rossman (2006) this is an important process where the researcher has to be careful and have a process for selection for removal. This needs to be approached with care. The process of reducing the data to be incorporated into the study is critical and can sway the findings (2006).

After coding, the categories were defined more as necessary to bring out the clear information from the participants and produce major themes and sub-themes within the data.

#### *Search for Alternative Understandings*

While reviewing and documenting to determine what patterns exist in the data, the researcher also needed to look on the flip side. “As the researcher discovers categories and patterns in the data, she should engage in critically challenging the very patterns that seem so apparent” (Marshall & Rossman, 2006, p. 162). The alternate patterns were documented showing all aspects of the research, not only the one that supports the researcher’s determined outcome.

In this study, the search for alternative understandings was through determining areas where the rating agencies relied on data or structures provided by others where the rating agencies had limited or no control and the addition of a category for transcript analysis of unsolicited ratings which appeared to be one that was important to the rating agencies. With the mortgage lending institutions, the rating agencies were relying on the accuracy of the mortgage portfolio data. With the investment banks, the rating agencies were relying on the accuracy and applicability of the structures the investment banks created for the MBS and CDOs. Then, the complexity of the structures would require investment banks forthright interactions with the rating agencies for them to be able to achieve an accurate understanding of how the models function and how the results could be swayed.

These were some areas where the rating agencies had limited or no control and were relying on the data or work of others. Because of this, it appeared to impact the rating agencies acceptance of culpability. Although others were involved in the subprime blame, the weight of blame was focused on them.

#### *Validity and Reliability*

To test the validity and reliability of the data and findings, triangulation is a strategic choice that can “enhance a study’s generalizability: triangulating multiple sources of data. Triangulation is the act of bringing more than one source of data to bear on a single point” (Marshall & Rossman, 2006, p. 202).

Triangulation was achieved through the use of multiple instruments: the congressional hearing record, the literature review, the supplementary data and articles and research of prior journals on the subject. External data demonstrated the validity of that which was obtained through primary and secondary historical document analysis. In general, the same themes existed in the hearing and as in the external data.

The role of the credit rating agencies background obtained through an extensive literature review was supported and expanded upon by the data extracted from the congressional hearing record. This provided some validity and confirmation to the themes I saw repeated throughout much of my research.

The following coding was developed to analyze the hearing transcript:

Table 2

*Coding for Transcript.*

<b>Category</b>	<b>Sub Category</b>	<b>Code</b>
Complexity of Securities		COS
	Complex Securities Increase Reliance on Ratings	ROR
	Mortgage-Backed Securities	MBS
	Collateralized Debt Obligations	CDO
Credit Ratings Miss the Mark		RMM
	Overrated Subprime Mortgage-Backed Securities	OMS
	Data Issues with the Mortgage Portfolios	DIP
	Rating Agencies Slow to Downgrade	RSD
	Rating Agencies Super Bowl of Downgrades	RSB
Conflict of Interest		COI
	Consulting and Rating Conflict	CRC
	Unsolicited Ratings	UNR
	“Notching” Lowering Rating to Stifle Competition	NRC
	Payment by the Issuer Not Investor	PIN
	Monopoly by NRSRO Appointed Credit Rating Agencies	MCR
Comparison to Enron, WorldCom and Savings and Loan		EWS
	Lawsuits	LAW
Credit Rating Agencies Place Blame Elsewhere		RAB
Sarbanes-Oxley Act		SOX
Credit Rating Agency Act of 2006		CRA

The findings were developed from the frequency of coding for the quantitative analysis and from the meaning gained from the language in the qualitative analysis.

Coding and analysis was performed for both the verbal testimony and written congressional testimony from the hearing on the role of the credit rating agencies in the structured finance market. Using the coding fields with categories and subcategories, the outline was used as a template to see where the findings emerged.

## Findings

### *Quantitative Results*

The results from the quantitative analysis were conducted through frequency of categories appearance in the testimony. Both written and verbal testimony was analyzed for the quantitative analysis providing the full statement of each witness.

In order of frequency the top ten issues discussed were:

1. The credit rating agencies had a monopoly through the NRSRO structure whereby only a limited number of agencies are designated such. The investors and financial entities relied on the NRSRO designated rating agencies investment grade ratings of securities as a benchmark for their investments. Accuracy was critical.
2. Mortgage-backed securities complexity and the amount of subprime loans included in the underlying asset base was a significant factor.
3. The complexity of the collateralized debt obligations (CDOs) was a significant factor.
4. The rating agencies were slow to downgrade their ratings on mortgage-backed securities.
5. Credit rating agencies looked to other factors when placing blame for the growth and crash of subprime mortgage-backed securities.
6. The credit rating agencies missed the mark in rating the securities and valued them much higher than the underlying risk called for.
7. Payment by issuer not the investor influenced the rating when the rating was for the investor.
8. Rating agencies had a conflict of interest by consulting on and in turn rating the same securities.
9. The Credit Rating Agency Act of 2006 was intended to strengthen regulatory oversight of the credit rating agencies and was a response to prior financial crises.
10. Data issues were experienced with mortgage portfolios and also with the credit rating agencies application of housing market trends and consistency of updating data throughout their models.

Table 3

*Results of the Quantitative Frequency Analysis.*

	Category	Sub Category	Code	Frequency
1	Conflict of Interest	Monopoly by NRSRO Appointed Credit Rating Agencies	MCR	88
2	Complexity of Securities	Mortgage-Backed Securities	MBS	68
3	Complexity of Securities	Collateralized Debt Obligations	CDO	61
4	Credit Ratings Miss the Mark	Rating Agencies Slow to Downgrade	RSD	53
5	Credit Rating Agencies Place Blame Elsewhere	General	RAB	33
6	Credit Ratings Miss the Mark	Overrated Subprime Mortgage-Backed Securities	OMS	32
7	Conflict of Interest	Payment by the Issuer Not Investor	PIN	32
8	Conflict of Interest	Consulting and Rating	CRM	29
9	Credit Rating Agency Act of 2006	General	CRA	26
10	Credit Ratings Miss the Mark	Data Issues with the Mortgage Portfolios	DIP	21

The frequency analysis and table provided a strong method of boiling down a large amount of data to uncover any patterns and show where the discussion was focused. The top ten gave a clear indication of where the weight of the testimony was and what issues were important without having to go into detail on the pros and cons of each topic.

I did not expect the category credit rating agencies place blame elsewhere to have as high a frequency (#5) as it did and for data issues with mortgage portfolios to be in the top ten (#10).

The reason for the high frequency for both of these categories was the dual frustration by the rating agency and investor sides although their reasons differ. For placing the blame and data issues, rating agencies stressed the housing market which they had no control over and anomalies that could not have been anticipated from the historical data they had typically relied on. In addition, loosened mortgage lending standards, and the incorrect or missing data in the mortgage

lending files compounded the problems. They did admit they may have been using some outdated data. The investor side countered noting the rating agencies should have performed due diligence on the data they received. They were selectively updating their models with 2007 housing data when they had data from 2005 and 2006 but did not enter it. The investor side noted the probable reason 2005 and 2006 data were not entered was due to the impact it would have on investment grade ratings which would result not only in economic loss to investors but loss of clients for the rating agencies. The investor side noted the rating agencies were to blame; they were in a control position and had a major impact on investors through overrating and downgrading.

### *Qualitative Results*

#### *Introduction*

The qualitative analysis relied on the verbal testimony provided at the hearing. The chairman of the committee arranged for expert testimony on both sides of the issue: the financial world/investor side and the rating agency side. It is customary to vet both sides and ensure that the key points come out and are on the record. From the chairman, several committee members, and the expert witnesses in banking and rating, these were the key themes that emerged from the verbal testimony. Due to the influence of the hearing format and logistics, these were not ranked in order of importance.

Table 4

*Qualitative Findings.*

Theme	Sub-theme
Complexity of Securities	<ul style="list-style-type: none"> <li>• Overrated securities (use modeling and assumptions)</li> <li>• Rerating and downgrades</li> </ul>
Conflict of Interest	<ul style="list-style-type: none"> <li>• Consulting and rating</li> </ul>
Monopoly by NRSRO designated Agencies	<ul style="list-style-type: none"> <li>• Investment grade ratings</li> <li>• Freedom of speech protection</li> </ul>
Regulatory Oversight	<ul style="list-style-type: none"> <li>• Credit Rating Agency Act of 2006 (CRA)</li> <li>• Comparison to Enron, WorldCom and Savings and Loan (CRA was supposed to fix those problems)</li> <li>• SEC</li> </ul>

The four main themes from the verbal hearing testimony were:

- Complexity of Securities;
- Monopoly by NRSRO designated agencies;
- Conflict of Interest – Consulting and Rating; and
- Regulatory Oversight.

*Complexity of Securities*

The complexity of the securities was a major factor that led to overrating the securities. With the MBS and CDOs investors relied on the expertise and analysis of the rating agencies. The rating agencies understanding of the performance of the mortgage pools and risk was lacking which lead to overrating the securities. Where investors would typically perform their own detailed analysis in combination with reviewing the rating, they had to rely on the rating agency analysis of the modeling and data.

*Overrated securities.* With the complexity of the securities, several factors led to overrating the securities. Rating agencies were rating CDOs and MBS backed by subprime without giving the mortgage pools time to mature. The agencies had not kept their models up to date and only recently incorporated subprime data. The ratings relied on the modeling of cash flows from the pools of assets where the performance of the pools would not be clear for two to

three years. Rating agencies were using a corporate rating methodology and applying it to a static pool of mortgages. The corporate structure assumes that the income received can go up and go down. In a mortgage pool, the principal and interest on the loan is static and then can go down, but cannot go up. The credit enhancement along with diversification of assets presumed with CDOs and MBS allowed assets that would separately be very risky be rated investment grade securities and above. Rating agencies were looking at the performance of prior mortgage pools but the ratings were for the current housing market environment which had changed.

In response to how such high ratings could be achieved for a pool of subprime loans, both S&P and Moody's noted it was because of the excess collateral in the transaction or the credit enhancement, i.e., insurance. Without the cushion, they could not rate them as high. Both agencies stated they had tightened their rating criteria but did not anticipate the speed or magnitude of the deterioration of the housing market. In addition, patterns emerged that were at odds with historical data, and the data provided with the mortgage portfolios was inaccurate. The rating agencies noted broader market reforms including all parties involved in transactions, but particularly the mortgage lending industry, are necessary. The rating agencies commented that they publish rating methodologies that are transparent to the business professionals in the finance industry. The agencies lamented the pros and cons and merits of different approaches of analyzing risk are publicly debated.

*Rerating and downgrades.* The rating agencies were not diligent about rerating issues once the initial rating is issued. They were paid for the initial rating but not downgrades or upgrades. There was no incentive to cut ratings. The agencies do not have criteria or methodologies for upgrading or downgrading. When issues backed by subprime began to fail, the rating agencies did not act in a timely manner to downgrade them. Then, initially when the rating agencies reacted, the issues that were downgraded were mostly below the investment

grade line which would not cause a backlash in the investment community. When the assumptions or data changed, the rating agencies changed the data in their models for 2007 but did not change it for 2006 and 2005. Reratings on the subprime backed structured finance products should have been done across the board. Instead, the rating agencies were selective in their downgrades. It was felt across the board downgrades did not occur because of the large losses that would be incurred and due to the rating agencies relationship with the issuers who paid them to rate. If they downgraded so many issuers, would those rating agencies still retain those issuers business in the future? It was felt it was the responsibility of the rating agencies to be comprehensive and rerate regularly and completely.

In response to rerating and downgrades both S&P and Moody's stated that they have "surveillance" teams that monitor the data coming in for the transactions on a monthly basis. The performance of the pool was reviewed and compared to original expectations to see if the issue warranted an upgrade or downgrade. Regarding any disincentive, the agencies noted ratings, upgrades, and downgrades were not tied to analyst compensation, ratings were performed by committees. The agencies stated that downgrades occurred when the data warranted it. The market turmoil was not a result of widespread defaults on securities but a fall in market prices and tightening of liquidity. The agencies stated that their ratings were not meant to address those issues.

#### *Conflict of Interest – Consulting and Rating*

Rating agencies major conflict of interest was that they were both consulting and rating on structured finance issues (CDOs and MBS). With the complexity of the issue the rating agencies would advise on how an issue could be structured to achieve a certain rating. This allowed the investment bank to create a deal where they could attain the rating they desired making it a successful issue. The amount of money the agencies received on these deals was

incentive to focus on this line of business. According to Mr. Kanef of Moody's, a rating agency would receive roughly \$130,000 per rating on a MBS issue with a pool of several hundred million to several billion in loans for an MBS deal with prime and subprime (Role, 2007, p. 30). For comparison, rating agencies are paid between \$20,000 and \$30,000 for a rating on a general obligation bond issue upon which citizens then vote. Chairman Kanjorski noted that almost 50% of Moody's and S&P's revenue comes from structured finance where the agencies both consult and rate (p. 21)

A direct response was not provided in verbal testimony from either of the rating agencies on consulting and rating. They just noted the steps they take to mitigate conflicts of interest.

#### *Monopoly by NRSRO designated Agencies*

It was felt that the SEC's 1970s creation of NRSRO's rating agencies created an unintentional monopoly that has allowed such agencies to apply investment grade ratings at will without the existence of a clear definition of the term. In addition, it has allowed them protection from liability through freedom of speech which is how they see their ratings.

The rating agencies did not comment on NRSRO designation in the verbal testimony.

*Investment grade ratings.* Investment grade ratings are the cornerstone for investing decisions by the financial community and serve as the seal of approval by the NRSROs. The NRSRO designation was not meant to convey the power to rating agencies to apply the term investment grade at will, yet there is no clear definition of the term. Without it, the ratings framework of investment grade has been used to cover instruments which are the opposite of what it was intended to cover. The subprime fallout would have never grown to this magnitude without the rating agencies willingness to assign investment grade ratings to subprime backed securities. This has occurred not only with subprime, which covers an entire class of securities, but has occurred in the recent past with individual firms such as Enron and Worldcom.

The rating agencies responses in testimony covered overrated securities but did not specifically address NRSRO investment grade and the complexities created from the unintentional monopoly wherein firms are required to use investment grade ratings.

*Freedom of speech protection.* Rating agencies are protected from liability for their opinions by SEC action and by their argument that their ratings are only opinions. In addition, the courts have supported the argument that the actions of the rating agencies are free speech. Others in the financial and business community are held to a standard but for the rating agencies their product is just an opinion. They have been successful in lawsuits thus far using the argument of freedom of speech. Nothing in the verbal testimony of the rating agencies was found to counter this point.

#### *Regulatory Oversight*

When it comes to regulatory oversight, reference is made to regulations from the Credit Rating Agency Act of 2006 which was specifically designed to put more controls in place with regard to the rating agencies. Mostly, there were favorable responses to the new law, including from the credit rating agencies. But, some on the investor side feel that the law codified what was already in place; it doesn't really have any teeth to it.

*Credit Rating Agency Act of 2006.* Chairman Kanjorski, opined that it has strengthened the regulatory system considerably. He noted that it gave the SEC oversight where they can hold the rating agencies accountable for producing credible ratings, be required to register and disclose all non-public information to the SEC, and it improved transparency with CDOs requiring a seasoning period and requiring consistency of assumptions and models along with rerating requirements (Role, 2007, p. 3 & p. 12).

Mr. Mathis noted that the Act just institutionalized everything the rating agencies are already doing "leaving them free to do what they want" (Role, 2007, p. 9).

Dr. Joseph Mason stated that there are already regulations that, if enforced, would resolve significant problems in structured finance, such as SEC Regulation AB and Financial Accounting Standards 140. Enforcement of these regulations and monitoring of the NRSROs would be a positive step. (Role, 2007, p. 19)

*Comparison to Enron, Worldcom, and Savings and Loan.* Comparisons to prior financial scandals included reference to the rating agencies failure to warn investors about WorldCom and Enron which are other instances where investment grade ratings were applied exactly opposite of what they were intended for. Concern was noted about the systemic failure with subprime: this time it was worse--it was not confined to a company but was a whole asset class of structured finance (Role, 2007, p. 9).

The findings ended up being more boiled down than as broad as I felt they may have been from the overwhelming amount of detail encountered in the literature review. The hearing really concentrated on the areas where investors were impacted the most and what went wrong. In combination, complex financial products and lack of rating agency understanding led to securities being overrated. Then, due to lack of regulatory control over the agencies, other factors such as earnings from consulting and rating compounded the drive to foster the subprime industry. This led to the heart of what needed to be fixed—the NRSRO designation and applied investment grade rating system that failed not only with subprime but with prior financial scandals as well.

#### Discussion

Comparison of the quantitative and qualitative findings with the literature review is organized by the quantitative findings first due to their specific “ranking” of the level of importance as determined by frequency of appearance in the congressional hearing. These are listed beginning with quantitative findings one through ten.

Conflict of interest with specific emphasis on the monopoly of the credit rating agencies was the number one finding in the quantitative analysis. It ranked in the top four themes for qualitative analysis and was one of six main themes in the literature review. In the literature review, Partnoy (2005) and Shaw (2006) noted that the NRSRO designated rating agencies had a natural monopoly due to institutions reliance on the rating agencies investment grade ratings as a standard.

Complexity of securities ranked two (MBS) and three (CDO) in the quantitative analysis and was one of four main themes for the qualitative findings. In addition, the literature review noted it as one of the main factors of overrating by the rating agencies and a major issue for investors who had difficulty performing their own analysis for this type of instrument. In the literature review, Benner and Lashinsky (2007) and McLean (2007) noted the importance of the rating goes way up due to the complexity of the securities.

Rating agencies slow to downgrade, a subcategory, ranked number four in the quantitative analysis and was a subtheme in the qualitative findings. This category was strong in the literature review as the downgrades caused economic loss to the investors and made them out of compliance with their policies requiring investment grade ratings. In the literature review, McLean (2007) and Rosner (2007) noted the rating agencies were slow to downgrade debt and initially only downgraded a small portion.

Credit rating agencies placing blame elsewhere ranked number five in the quantitative analysis. In the qualitative analysis this area was not reflected as a specific category but was noted in rating agencies responses to overrated securities and rerating and downgrades. Johnson (2008) and Schroeder (2007) noted the rating agencies place the blame of downgrades on the economy and housing market which the agencies lamented affected the credit markets. Instead

of admitting culpability during the hearing, the agencies would continue commenting on how they had warned of the changing housing market and that they kept revising their rating criteria.

Overrated subprime mortgage backed securities, a subcategory in the quantitative analysis, ranked number six. In the qualitative analysis, it was a subtheme of one of the four major themes. In the literature review, this was one of the six main categories. Tully (2007), McLean (2007), and Petroff (2007) concur that the MBS ratings did not reflect the true underlying value of the securities and that they were overrated.

Payment by issuer not investor, a subcategory of conflict of interest in the quantitative findings, was ranked number seven. In the qualitative analysis, it was not significant enough to rank as a subtheme under the four main themes. In the literature review, this area had merit but was not noted as significant in comparison to the other categories. Swindell (2007) noted the issuer pays model is a direct conflict and is not supporting the investors, while Partnoy (2005) noted switching back to an investor paid model may be difficult if not impossible. Standard and Poor's opined the issuer paid model benefits investors.

Consulting and rating, a subcategory of conflict of interest in the quantitative findings, was ranked number eight. In the qualitative analysis, it was a subtheme of the four major themes noted. In the literature review, this area carried heavy weight due to the conflict and the large increase in revenues of the rating agencies from the growth in structured finance. Redmond and Schewe (2007), Mason and Rosner (2007), and Verschoor (2007) lamented on the agencies consulting and rating and its contribution to the growth in the subprime mortgage market. Mason and Rosner (2007), Elstein (2007), Redmond and Schewe (2007), Farrell (2008), McLean (2007) and Blair Smith (2006) commented on the growth in the rating agencies earnings due to structured finance wherein they were consulting and rating.

Credit Rating Agency Act of 2006, a major category in the quantitative findings, ranked number nine. In the qualitative findings, it was a subtheme under Regulatory Oversight and in the literature review, Derchert (2007) noted the Act was a response to a cry for better regulation of the credit rating agencies (SEC Allows).

Data issues, a subcategory of credit ratings miss the mark in the quantitative findings, was ranked number 10. In the qualitative analysis, data issues were not discussed. In the literature review, Bajaj and Anderson (2008) noted investment banks had a large number of high risk loans but they did not perform reasonable quality control or notify rating agencies. Benner and Lashinsky (2007) noted the agencies do not vet data while Bajaj and Anderson (2008) commented that the problem may be more with weak lending standards.

Overall, the results of the literature review in comparison with the findings, demonstrate consistency through the various types of analysis. Due to the depth in the literature review and the discussion in the qualitative findings, I was surprised that consulting and rating ranked number eight. It was a strong category in the literature review as a significant element in the agencies conflicts due to the impact it had on the growth of the subprime mortgage industry and securities. But, the hearing was trying to get to the heart of the problem with how the agencies affected investors which was through the investment grade ratings.

Valuation of mortgage assets was not discussed in the congressional hearing but came to light in the literature review. With the savings and loan crisis and the subprime mortgage crisis, markdowns were not occurring timely with the decline in the housing market. Then, the subprime mortgages were no longer held on a company's balance sheet but were held in SIV's, hiding the financial health of the company. This technique was used for Enron (Levitt, 2007). Lastly, standard accounting rules allow for a delay in reporting delinquent loans up to several quarters and investors holding the loans use widely varying valuation models (SEC, 2007).

### *Recommendations*

From this investigation, it would seem logical for the SEC to specifically have an umbrella division that focused solely on the rating agencies. To give this entity strength, a team of the best regulators, investment bankers, and raters should be hired to create a solid training and rating agency review foundation. This would alleviate the upper hand the investment bankers may have had where complex models were involved and provide the rating agency perspective concurrently.

Training and certification of raters to create consistency among the rating agencies should be a top priority. Making the rating methodology available to issuers where they can walk through the rating step by step to gain an understanding of how they are reviewed and the agencies should be providing a three-year look so issuers know they are getting what they are paying for, is a good starting point (Role, 2007). From this investigation, it seems the rating agencies should have the various forms of investment banking modeling software and have a solid understanding of the assumptions used and how changes affect the model. At this point, the agencies are relying on the investment banks and the structures they provide. But, they are not getting a behind-the-scenes look.

Consulting and rating can be fixed. Underwriters used to be able to serve as financial advisor and underwrite bonds for an issuer on the same bond issue; now there are regulations forbidding it. The same similarity exists for accounting firms advising and then providing an opinion. The same separation of duties should be regulated with the rating agencies (Role, 2007).

From this investigation it appears the monopoly the NRSRO rating agencies have had can be fixed by having the new NRSRO agencies involved in review of the existing agencies

ratings. This would provide a learning base by helping them achieve knowledge that has not been available to them.

Structured products are complex and are a large segment of the ratings the agencies are producing. The SEC should develop systematic rating and rerating methodologies for these products taking a close look at the risk factors and detail the impacts different risks have on the modeling. In addition, since this is where the most money is made and where the most significant risks are, this area of finance should be reviewed on an annual basis for each financing. Performance of the financing in comparison to the overall risks should be reviewed for monitoring and understanding (Role, 2007).

#### *Limitation of the Study*

The topics that were covered in the verbal and written testimony from one congressional hearing were so broad and detailed that it made it difficult to succinctly capture all of the issues. Therefore, the qualitative analysis for this study was limited to the verbal testimony of the hearing. I felt this focused on the points the committee chair felt were critical and what he wanted on the record.

But, the verbal testimony had its own challenges. Responses by the rating agencies had a pattern of focusing on how they had warned about the market decline, kept their criteria updated, and the fact that they were provided with faulty data or they changed the subject to something they wanted to discuss. They would always cycle back to these statements and then to others in the financial industry who had culpability instead of providing a clear response.

In addition, the committee chair, committee members, and witnesses used analogies to describe events and would keep making the rating agencies circle back on issues when they were not getting the response they wanted. This made the analysis difficult. Needless to say, the

committee was successful in recording most major points on the record. These are detailed in the findings.

A look at hearings that occurred during a specific period of time, from September 2007 to January 2008, would fully flesh out the issues and may uncover greater depth of response from the rating agencies. The hearing reviewed for this study was just the cusp of the hearings on subprime.

### *Implications for Further Research*

The NRSRO designation issue was one that was new to me but has appeared before. It seems that was one of main reasons for the Credit Rating Agency Act of 2006. Implications for further research would be to review the NRSRO rules for the Act that came out in 2007 and compare those with the issues raised with the growth and fall of subprime mortgage backed securities to determine if these are really going to fix what needs to be fixed. Hearings are still continuing on the topic of this study, so more data will be available showing what actions are being taken by Congress and the SEC.

### Conclusions

Although there were other participants involved in the overall growth and crash of the subprime mortgage-backed securities, the credit rating agencies played a key role and, as NRSRO designated agencies, were in positions of power. They were consulting and rating on complex securities leveraged with an abundance of subprime debt. By advising on specific structures, these could be tweaked until the rating agencies were then able to assign high ratings on risky mortgage-backed securities and collateralized debt obligations. Investors, believing these were investment grade and above, kept buying and spreading the risk not only nationally but globally.

Oversight over the credit rating agencies application of investment grade ratings and upgrades and downgrades is lacking. Consistency in rating methodologies between all of the agencies, along with strong oversight and training, would strengthen investors confidence.

In the end, it appears the world the NRSRO credit rating agencies have been living in will continue to undergo transformation due to the global magnitude of the subprime mortgage crisis some are equating to the Great Depression.

During the review of materials gathered for the study, it was difficult to find much where the credit rating agencies admitted any culpability. But, a defining moment occurred on May 8<sup>th</sup>, 2008 at 9:00 a.m. in Alaska. It was at the spring Alaska Government Finance Officers Association meeting in Palmer, Alaska where the majority of chief financial officers from municipalities from across the state, top level officials from Alaska Housing Finance, and the Federal Office of Housing and Urban Development were in the audience. Mr. Ian Carroll, a rating analyst from Standard and Poor's in New York, was presenting How Ratings Work & the Effects from the Subprime Mortgage Market when he summed it up succinctly, "We were wrong."

## References

- Andrews, E., & Morgenson, G. (2007, December 18). Fed and regulators shrugged as the subprime crisis spread. *New York Times*. Retrieved July 3, 2008 from <http://www.nytimes.com/2007/12/18/business/18subprime.html>
- Bajaj, V., & Anderson, J. (2008, January 12). Inquiry focuses on the withholding on data loans. *New York Times*. Retrieved March 7, 2008 from: <http://www.nytimes.com/2008/01/12/business/12lend.html>
- Beleagued Industry. (2008, February 7). Restructured products: A beleaguered industry looks to reform itself. *The Economist*. Retrieved on February 26, 2008. [http://www.economist.com/finance/displaystory.cfm?story\\_id=10655009](http://www.economist.com/finance/displaystory.cfm?story_id=10655009)
- Benner, K. & Lashinsky, A. (2007, July 5). Subprime contagion. *Fortune*. CNN Money.com Retrieved on May 8, 2008 from <http://money.cnn.com/2007/07/05/news/economy/subprime.fortune/index.htm>
- Blair Smith, E. (2006, June 15). Credit rating agencies closer to tough regulations. *USA Today*. Retrieved on March 15, 2008 from [http://www.usatoday.com/money/companies/regulation/2006-06-15-credit-ratings-usat\\_x.htm](http://www.usatoday.com/money/companies/regulation/2006-06-15-credit-ratings-usat_x.htm)
- Blaha, J. (2008). Finance corporate debt ratings Moody's and S&P (source: the Bond Market Association). Retrieved on October 10, 2008 from: <http://www.blaha.net/Finance%20Corporate%20Debt%20Ratings.php>
- Bond Market Association. (2002, February 1). (2002, February 1). *Special purpose entities (SPEs) and the securitization markets*. Bond Market Association; International Swaps & Derivatives Association; and Securities Industry Association. Retrieved July 17, 2008 from: <http://www.isda.org/speeches/pdf/SPV-Discussion-Piece-Final-Feb01.pdf>
- Creswell, J. (2003). Research design. *Qualitative, quantitative, and mixed methods approaches*. Second Edition. Thousand Oaks: Sage.
- Dodd, R. (December 2007) Subprime: tentacles of a crisis. *Finance and Development (Quarterly Magazine for the Intl Monetary Fund, 44 (4))*. Retrieved on January 27, 2008 from: <http://www.imf.org/external/pubs/ft/fandd/2007/12/dodd.htm>
- Elstein, A. (February 27, 2007) Subprime unrest may hit rating agencies. Moody's Standard & Poor's could feel impact of mortgage turmoil. *Crain's New York Business*. Retrieved on March 15, 2008 from <http://www.crainsnewyork.com/apps/pbcs.dll/article?AID=/20070227/FREE/70227004/1048>

- Farrell, G. (2007, August 13) Credit-rating agencies feel heat. *USA Today*. Retrieved on February 25, 2008 from: [http://www.usatoday.com/money/economy/2007-08-12-crunch-rating\\_n.htm](http://www.usatoday.com/money/economy/2007-08-12-crunch-rating_n.htm)
- Gasparino, C. (2008, January 23) Agencies review subprime lending practices. *CNBC*. Retrieved on February 11, 2008 from: <http://www.cnbc.com/id/22811165/>
- Gramlich, E. (Fourth Quarter 2007). Booms and busts: The case of subprime mortgages. *Economic Review*, 105-113. Retrieved on January 27, 2008 from: [www.kc.frb.org/publicat/econrev/pdf/4q07Gramlich.pdf](http://www.kc.frb.org/publicat/econrev/pdf/4q07Gramlich.pdf)
- Johnson, S (2008, March 10) SEC relies on the rating agencies, too. *CFO.com* Retrieved on February 10, 2008 from [http://www.cfo.com/article.cfm/10710309/c\\_10689080?f=TodayInFinance\\_Inside](http://www.cfo.com/article.cfm/10710309/c_10689080?f=TodayInFinance_Inside)
- Lehmann, R. (2008, February 15). Subprime debacle lessons. *Forbes*. Retrieved February 26, 2008 from: [http://www.forbes.com/2008/02/14/subprime-ford-cmo-pf-ii-in\\_rl\\_0214soapbox\\_inl.html](http://www.forbes.com/2008/02/14/subprime-ford-cmo-pf-ii-in_rl_0214soapbox_inl.html)
- Levitt, A. (2007, November 27). Speech to the Ontario Securities Commission. Retrieved March 14, 2008 from: [www.osc.gov.on.ca/Media/Dialogue/2007/dwo\\_20071127\\_program.pdf](http://www.osc.gov.on.ca/Media/Dialogue/2007/dwo_20071127_program.pdf)
- Lowenstein, R. (2008, April 28). Triple A failure. The ratings game. *The New York Times*. Retrieved on September 27, 2008 from: <http://www.nytimes.com/2008/04/27/magazine/27Credit-t.html>
- Marshall, C., & Rossman, G. (2006). *Designing qualitative research* (4<sup>th</sup> ed.), Thousand Oakes: Sage, pp. 156-157.
- Mason, J., & Rosner, J. (2007, May 14) Where did the risk go? How misapplied bond ratings cause mortgage backed securities and collateralized debt obligation market disruptions. *Social Science Research Network*, 1-86, Retrieved on March 27, 2008 from: [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=1027475](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1027475)
- McLean, B. (2007, March 19). The dangers of investing in subprime debt. *Fortune*. Retrieved March 11, 2008 from [http://money.cnn.com/magazines/fortune/fortune\\_archive/2007/04/02/8403416/index.htm?postversion=2007031909](http://money.cnn.com/magazines/fortune/fortune_archive/2007/04/02/8403416/index.htm?postversion=2007031909)
- Merriam, S. (1998). *Qualitative research and case study: Applications in education*. San Francisco: Jossey-Bass.
- Merriam, S. & Simpson, E. (2000). *A guide to research for educators and trainers of adults* (Updated). Malabar: Kreiger Publishing.
- Miles, M.B. & Huberman, A.M. (1994). *Qualitative data analysis: An expanded sourcebook* (2<sup>nd</sup> Ed.). Thousand Oaks, CA: Sage.

- Mortgage-Backed Securities. (2007, June 25). Mortgage-backed securities. *U.S. Securities and Exchange Commission*. Retrieved on July 19, 2008 from: <http://www.sec.gov/answers/mortgagesecurities.htm>
- Norris, F. (January 25, 2008). Moody's says it was deceived about subprime mortgages. *International Herald Tribune*. Retrieved on January 28, 2008 from <http://www.iht.com/articles/2008/01/25/business/rate.php>
- Partnoy, F. (2005). *How and why credit rating agencies are not like other gatekeepers*. In Yasuyuki Fuchita, Robert E. Litan, (Eds). *Brookings Institution Press and the Nomura Institute of Capital Markets Research*; [San Diego Legal Studies Paper No. 07-46]. Retrieved on February 19, 2008 from Social Science Research Network: <http://ssrn.com/abstract=900257>
- Petroff, E. (2007). Who is to blame for the subprime crisis? *Investopedia*. Retrieved on March 15, 2008 from: <http://www.investopedia.com/articles/07/subprime-blame.asp>
- Rappeport, Alan (2007, May 23). SEC adopts rating agency rules. *CFO.com* Retrieved on February 26, 2008 from: <http://www.cfo.com/article.cfm/9222926>
- Rating Agencies. (2008, January 14). Rating agencies targeted in collapse. *Asset Securitization Report*. Retrieved March 17, 2008 from: [http://www.accessmylibrary.com/coms2/summary\\_0286-33695940\\_ITM](http://www.accessmylibrary.com/coms2/summary_0286-33695940_ITM)
- Redmon, M., & Schewe, B. (2007, October). The likely areas of litigation flowing from the crash of the U.S. subprime lending market. *Real Estate Finance*, 18-21.
- Reuters (2008, April 10). George Soros likens markets crisis to Great Depression. *The Australian Business*. Retrieved June 1, 2008 from <http://www.theaustralian.news.com.au/story/0,25197,23515757-643,00.html>
- Role (2007). *The role of credit rating agencies in the structured finance market before the Subcommittee on Capital Markets, Insurance and Government Sponsored Enterprises of the Committee on Financial Services*. U. S. House of Representatives, 110<sup>th</sup> Cong., September 27, 2007. Retrieved on March 15, 2008 from: [http://www.house.gov/apps/list/hearing/financialsvcs\\_dem/ht092707.shtml](http://www.house.gov/apps/list/hearing/financialsvcs_dem/ht092707.shtml)
- Rosner, J. (2007, July 25). Stopping the subprime crisis. *New York Times*. Retrieved on February 26, 2008 from <http://www.nytimes.com/2007/07/25/opinion/25rosner.html>
- Samuelson, R. (2007, September 24). The catch-22 of economics. *Newsweek*. Retrieved on February 25, 2008 from: <http://www.newsweek.com/id/41019/output/print>
- Schroeder, R. (2007, September 26). SEC probing rating agencies' subprime role. *Market Watch*. Retrieved February 26, 2008 from: <http://www.marketwatch.com/news/story/sec-probing-ratings-agencies-subprime/story.aspx?guid=%7B7387D333-4133-416D-AE18-42430DA60830%7D>

- SEC (2007, September 17). The SEC wants more answers. News and Insights. *BusinessWeek*. Retrieved on February 25, 2008 from: [http://www.businessweek.com/magazine/content/07\\_38/b4050052.htm](http://www.businessweek.com/magazine/content/07_38/b4050052.htm)
- SEC Allows. (2007, July). SEC allows existing credit rating agencies to act as NRSROs. Derchert, LLP., pp. 1-6, Retrieved on March 25, 2008 from: [www.dechert.com/library/FSG\\_19\\_07-07\\_SEC](http://www.dechert.com/library/FSG_19_07-07_SEC)
- Securitization. (2007) *Risk Glossary*. Retrieved June 28, 2008 from: <http://www.riskglossary.com/link/securitization.htm>
- Shaw, H. (2006, March 9). How sarbox can cure the rating agencies. *CFO.com*. Retrieved on February 26, 2008 from: <http://www.cfo.com/article/5601170?f=search>
- Subprime Blame. (2007, July 2). Managers: subprime blame lies with rating agencies. Mutual Fund Monday. *The Street.com*. Retrieved February 19, 2008 from: [http://www.thestreet.com/\\_yahoo/funds/mutualfundmonday/10365816\\_3.html?ref=patrick.net](http://www.thestreet.com/_yahoo/funds/mutualfundmonday/10365816_3.html?ref=patrick.net)
- Swindell, B. (September 26, 2007) Cox says SEC will review credit rating agencies' subprime role. *Congressional Daily*, 3-3. Retrieved on February 25, 2008 from: <http://proxy.consortiumlibrary.org/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=aph&AN=26804616&site=ehost-live>
- Tavakoli, J. (2003). Introduction to collateralized debt obligations. *Tavakoli Structured Finance, Inc*. Retrieved on June 18, 2008 from: [http://www.tavakolistructuredfinance.com/collateralized\\_debt\\_obligation.html](http://www.tavakolistructuredfinance.com/collateralized_debt_obligation.html)
- Tully, S. (2007, November 12). Wall Street's money machine breaks down. *Fortune Magazine*. Retrieved on January 18, 2008 from: [http://money.cnn.com/magazines/fortune/fortune\\_archive/2007/11/26/101232838/](http://money.cnn.com/magazines/fortune/fortune_archive/2007/11/26/101232838/)
- Verschoor, C. (2007, December) Who should be blamed most for the subprime loan scandal? *Strategic Finance*, 11-59. Retrieved on March 19, 2008 from: [http://www.imanet.org/pdf/12\\_07\\_ethics.pdf](http://www.imanet.org/pdf/12_07_ethics.pdf)
- Wadell, M. (2007, September 26) Rating agencies culprits in subprime fiasco. *Investment Advisor*. Retrieved on April 20, 2008 from: <http://www.investmentadvisor.com/article.php?article=8149>