CORNELL
REAL ESTATE
REVIEW
VOL. 7, MAY 2009

CMBS:

An Introduction

by Alex Weis (and John Njoku, contributing author)

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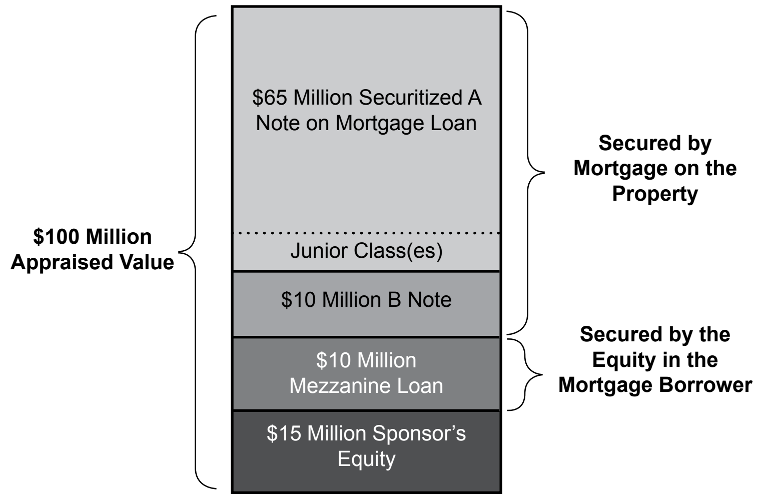
CMBS: An Introduction

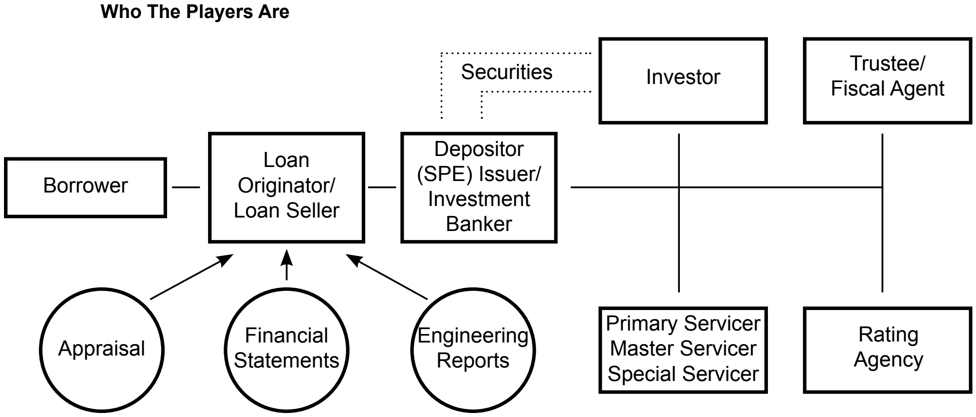
Commercial backed securities (CMBS) were conceived during the last major real estate downturn- the Savings & Loan Crisis of the early 1990s- as an answer to a lack of liquidity which plagued real estate. Deemed viable financial instruments, they were extolled as risk mitigators and credit enhancers and provided a means to finance large transactions by breaking them into smaller components.

CMBS are created through securitization, which pools loans and converts them into securities which are to be sold to investors. Divided into tranches, they are secured by specific cash-flows and denominated by credit risk. Such a structure provides security to senior classes by providing first claim on cash-flow; junior classes only receive repayment after the more senior classes have been paid. The diagram to the right illustrates the relationship between tranches and is a typical capital structure.

Figure 1: Typical Capital Stack of CMBS



Service to CMBS pools is provided by the Master Servicer, which serves as the de facto lender. Under normal circumstances the master servicer has the straight forward duty of collecting payments and disbursing cash flows to bondholders. Throughout a CMBS transaction the following stakeholders are involved:



Author

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The Master Services ". . . has greater incentive to wait for a technical default than to be proactive, for any number of reasons." [1] "Special Transfer Events" are triggered during the occurrence of:

- Payment default at maturity
- Monthly payment is 60 days or more delinquent
- Borrower bankruptcy
- Borrower admits that it is insolvent

The Special Servicer replaces the Master Servicer as the de facto lender once any of these occur. The Special Servicer has a larger array of powers to modify the terms of the mortgage debt underlying the CMBS pool. Importantly, the primary objective of the Special Servicer is to maximize value of the CMBS pool, a mindset that guides the Special Servicer throughout the workout process.

During the workout process the Special Servicer has three options to maximize value on behalf of bondholders:

- Modification or amendment of the loan terms
- Foreclosure of the property
- Sale of the loan

CMBS workouts should result in a predictable process given the rights bestowed to the Special Servicer. The entanglement of parties and their rights make workouts incredibly time consuming and expensive. Industry-wide there are currently three roadblocks to a CMBS workout that are viewed as critical.

CMBS are contained in a structured vehicle referred to as a Real Estate Investment Conduit. REMICs assure bondholders that the trust will be a pass through entity that avoids double taxation. The same rules that allow the entity to be tax free also require a rigid structure. The REMIC must hold a static pool of qualified loans whereby adding new loans to the pool is generally prohibited. Prior to distress, there is little leeway for loan modification because what constitutes a "new" loan is vaguely defined. Only when the loan is declared "distressed," can it be modified and restructured. Such bureaucracy and rigidity results in loan workouts being incredibly challenging and often not optimal for parties involved.

CMBS are governed by numerous contracts and other ancillary agreements. Chiefly, transactions are bound by the Pooling and Servicing Agreement ("PSA") and the Intercreditor Agreement, which govern:

- the rights and responsibilities of the Special Servicer
- the interrelation of the bondholders
- the REMIC tax treatment of the trust
- the resolution of conflicts between the various classes of bondholders, the issuer, etc

Additional parties to this agreement usually include the Trustee (the custodian for the trust holding the mortgages), the Master Servicer, and the Special Servicer.

The multitude of parties, in the chart above, foreshadows various issues that are currently affecting the industry. The contradictory goals that each party has in the outcome of a CMBS transaction have acted as a cause of the credit crisis and roadblocks to recovery. The structure of CMBS securities is characterized by incentives that diametrically oppose parties which otherwise should be cooperating.

[1] Frebres – Mazzei, Workouts in CMBS: The Roles, Rights, and Responsibilities of Stakeholders and Special Servicers.

The relationship that developed between originators of CMBS and bondholders is one example of this misalignment. Originators have less incentive toward credit quality and greater incentive to loan volume since they do not bear long-term risk and profit from fees associated with origination and securitization. Bondholders, on the other hand, have substantial incentives to manage credit quality as they earn income when borrowers are credit worthy and are able to make payment.

Unfortunately, structured finance has contributed to the struggles of the capital markets. As fractures to the structure are gradually exposed, investors continue to be reluctant to commit capital to securities tied to CMBS pools. As a result, these instruments are clogging the balance sheets of major US banks and institutions. Problematically they are a cause of the problem they were invented to cure- a lack of liquidity in the capital markets. The inherent mismatch of interests and contrasting incentives imbedded in the structure of CMBS will result in litigation and conflict. As a set of solutions emerge to address the issues outlined, they must do so with the understanding that at the root of the problem is a structure built to implode during economic recessions. In order to make progress objective parties will need to resolve conflict of interests which are currently abating solutions.

Why should it matter that an esoteric product- the CMBS- is under strain? It is of critical importance due to several reasons:

- Financial ramifications
- Recovery of the commercial real estate market
- Implications to the securities market

First, in this decade alone, $951 billion of CMBS have been issued (commercial mortgage alert.) Given that default rates are projected to increase substantially over the next several years, the result to financial institutions in precarious standing might have dire consequences. Secondly, if the CMBS market can be fixed, it holds the promise to accelerate the recovery of the commercial real estate industry by providing pricing guidance and stabilization. Finally, the CMBS is a part to a whole. If the complex issues that are plaguing the CMBS market can be disentangled, progress on CDOs and RMBSs can follow the path cleared by CMBS resolution.

Introduction: Focus of this Paper

A lack of case law exists currently that can help address disagreements among CMBS stakeholders. Legal remedies will play a significant role in the numerous conflicts of interests inherent in the contractual structure governing CMBS securities and the stakeholders. This paper delves into the exploration of the solutions that will address:

- Bankruptcy
- Inadequacy of CMBS contracts
- Tranche warfare

The scope of the financial problem, exacerbated by a lack of capital in the private sector, will require that the government participate in large scale in order to provide liquidity. The newly proposed Legacy Securities program will be explored and suggestions where gaps exist will be expounded upon.

There are an endless number of issues that will need to be resolved in order to spur liquidity in the CMBS market. However, this paper focuses on two issues its authors found to be prescient, how legal and governmental solutions will aid in the process.

Legal Remedies: Issues with Bankruptcy and Possible Solutions

The primary benefit of bankruptcy- chapter 7 or chapter 11- is that it acts as a cleansing process under which courts properly allocate the assets to unsecured creditors.

Chapter 7 bankruptcy "contemplates an orderly, court-supervised procedure by which a trustee takes over the assets of the debtor's estate, reduces them to cash and makes distributions to creditors..." Chapter 11, on the other hand, is employed whereby the commercial enterprise desires to continue operating as a business, while concurrently satisfying creditors. Hence, creditors are satisfied by a court-approved plan that allows the debtor to satisfy debts to creditors and ultimately emerge free and clear as a new entity.

Chapter 11 Bankruptcy, in stark contrast to the past, is no longer a viable option for CMBS borrowers. The main culprit preventing the option to the borrower is the credit crisis. In a Chapter 11 bankruptcy, because the entity is still operational during the process, the debtor typically seeks financing to capitalize the entity through the process. Debtor-in-possession ("DIP") financing is best described as ". . . fuel that keeps companies going through bankruptcy, allowing them to continue paying their suppliers and their employees as they try and become profitable again." [2]

There are two reasons to account for the slowdown in DIP financing:

- Increased competition for the debt. According to Lisa Donahue, ". . . the lack of liquidity and competition make DIP loans harder to get . . . pushing rates and fees to unprecedented levels."
- Entities that once provided such financing are not positioned to make such loans en masse as the market would demand.

Experts estimate that as recently as a year and a half ago, as many as 30 companies were vying to provide such financing. Now, there are fewer than five entities. The proposed cure for this supply/demand imbalance is that the government should participate in the DIP financing process. Such lending can occur in two different forms.

- First, the government can enter the market as a lender and provider of DIP financing. The government as a larger player, should cure the supply/demand imbalance and naturally bring down the interest rate spreads.
- Second, the government could create a DIP financing fund that it could co-invest in alongside other major banking institutions as partners.

DIP financing is a relatively safe form of investment because of the position such lenders take in the capital stack and government participation in the bankruptcy process has been occurred before. The proposed financing could come from money set aside under the TALF, which has proven to be a flexible vehicle of finance for the government.

Legal Remedies: CMBS Contracts

The CMBS process is governed primarily by a few central and important documents. Notable among these documents is the PSA and the Intercreditor Agreement. Problematically, the agreements that bind these transactions together have not been able

[2] [http://www.reuters.com/article/businessNews/idUSTRE49B22Z20081012?feedType=RSS&feedName=businessNews&pageNumber=1&virtualBrandChannel=0]

to keep pace with the rapidly changing CMBS environment.

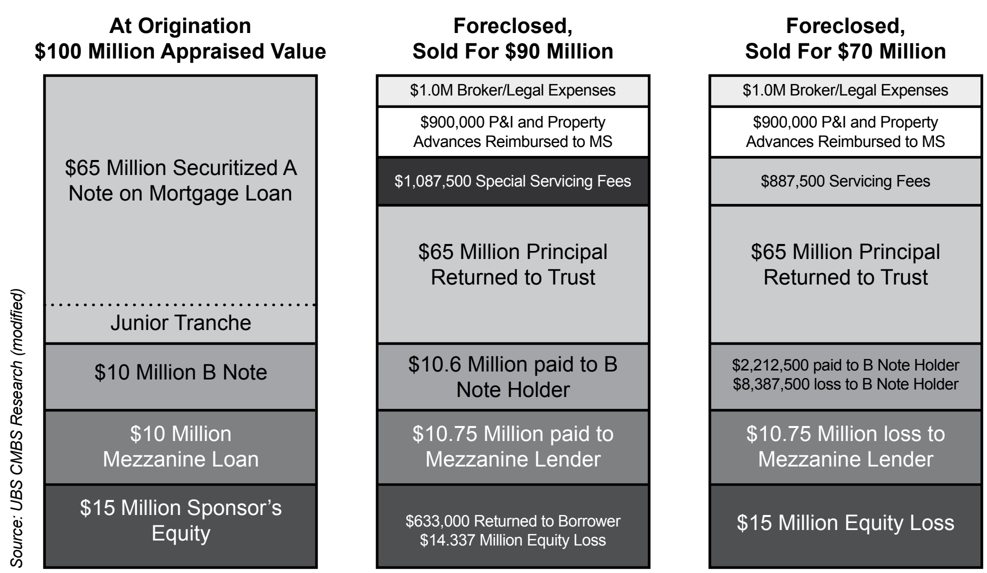
There are two major problems with CMBS documentation. First, their complexity and volume makes them rigid and non-malleable to adjust to systemic changes. Since the workouts and transfers to the special servicer have become more common, issues associated with this have exposed oversights in clauses. Such changes have resulted in a reinterpretation of certain provisions of the agreements. Secondly, professionals increasingly spent less time negotiating contracts due to the increase in the quantity of transactions. Thus, while the entire landscape for CMBS has shifted paradigmatically, the documentation did not evolved accordingly. The result is documentation that is not commensurate with the complexity of the transactions it governs and will result in time delays and bottlenecks as more CMBS transactions shift to workout mode.

In order to facilitate transactions, reduce errors, and increase the ability for transaction documents to evolve alongside the regulatory landscape, a standardization of documents will need to be implemented. The documentation for government sponsored entities and for swaps and derivatives serve as models for this initiative. Government sponsored entities (GSEs) like Fannie Mae and Freddie Mac each maintain a servicing guide that is consistent across servicers and transactions. Standard terms in place only negotiated items are the amendments and other mutually agreed upon changes.

A servicing guide will be a benefit to the industry because it will provide transparency and consistency. A more transparent CMBS process is a more efficient process, as the visibility of general provisions as well as negotiated provisions will be increased. Consistency will be increased because standardization will preclude divergent drafting styles, reduce potential errors, and generally, simplify the process. Most importantly, standard documentation will allow for parties to a transaction to focus on the nuances and intricacies of the transactions as opposed to already standard items.

Legal Remedies: Tranche Warfare

In order to illustrate how tranche warfare occurs in a CMBS security let's examine a scenario of a loan where the value of the property has dropped below the balance of the debt issued. The diagram below demonstrates the financial implications to bondholders under different foreclosure scenarios.



Source: UBS CMBS Research (modified)

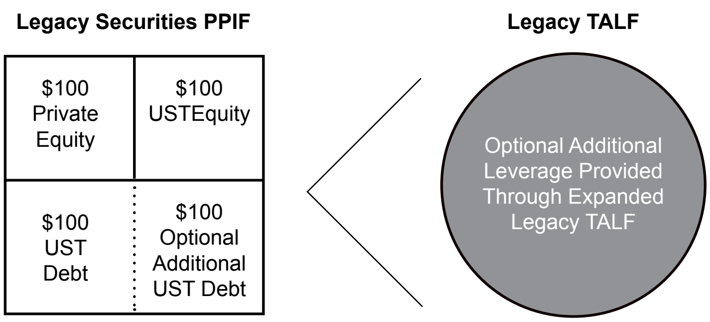
As displayed in the example, the senior bondholders will be paid in entirety whether the property sells for $90 million or $70 million. Driven by financial incentives, investors in the most senior tranches will press for an immediate foreclosure to recoup the value of their investment back immediately. On the other hand, while the junior bondholders get full principal returned when the property sells for $90 million, they suffer a loss when the property sells for $70 million. The investors of junior tranches are incentivized to seek a loan workout so that there is an opportunity to recoup their investment.

Government Remedies: PPIP Legacy Securities

The government will be obligated to play a significant role in the revival of the securities market given the financial scope and complexity of the problem that has been described. Already the treasury has introduced the following three main programs to combat further deterioration of the debt and securities market:

I. a Legacy Loan Program to form Public-Private Investment Funds (PPIFs) to purchase residential and commercial real estate loans (Legacy Loans),
II. a Legacy Securities Program to form PPIFs to purchase asset-backed securities
III. an expansion of the NYFRB's Term Asset-Backed Securities Loan Facility (TALF) to allow highly leveraged purchases of Legacy Securities with NYFRB TALF loans.

The Legacy Securities program, along with the expansion of TALF to provide additional financing, is the most relevant to the CMBS market. This program will seek to create PPIFs which will be funded by a combination of private equity and US Treasury (UST) equity. Additionally, the UST will provide debt to provide leverage with the option of increasing leverage by using TALF funds. The proposed structure of such a Legacy Securities PPIF would look as follows:



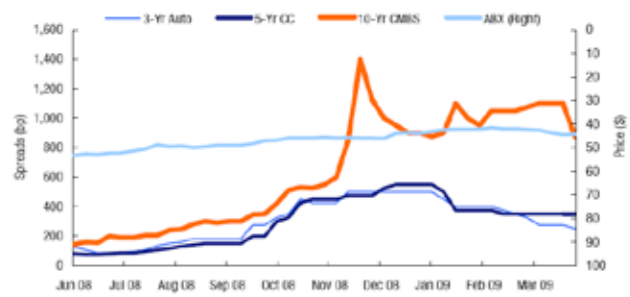
As it is currently proposed, Legacy Securities will involve five asset managers which will purchase "eligible assets," defined as original AAA rated non-agency RMBS and currently AAA rated CMBS and ABS. Each asset manager will have to raise $500M in equity which will be matched equally by UST equity. Ultimate control in regards to the selection, pricing and liquidation of assets will remain strictly with the fund managers.

Distribution of write-downs and cash flows will proceed as follows:

- Write-downs will be first allocated pro-rata to equity tranches and thereafter to debt. TALF funds will be in a senior position to UST debt.
- Principal payments will be allocated pro-rata to debt and equity according to initial leverage ratios.
- Interest payment will go towards paying the following in order:
    - o UST loan financing fee
    - o Treasury fee on equity
    - o Management fee
    - o Investor and UST equity on a pro-rata basis

Although the legacy securities program has been released for a relatively short time, most securitized products have responded positively by increasing in price and tightening spreads in the short-term, as can be seen in the diagram below.

Figure 1. Securitized Products Triple-A Spreads, Dec 08–Mar 09



Source: CIRA.

Central, however, to the long term recovery of these assets is the following question: how will leverage terms offered by TALF and PPIP affect the pricing of CMBS securities in the market? In attempting to predict the future success of the PPIP Legacy Securities, there are two worthwhile analyses which might provide accurate guidance.

First, one may look to the tightening of ABS spreads when TALF was originally released. As the graph and chart below represent, credit spreads on auto, credit card, and student loans have tightened significantly since the introduction of the TALF.

Figure 3. TALF-financed Securitized Products Leveraged Returns

ABS Sector	Expected AVL (Years)	Haircut (%)	Current Spread (%)	TALF Spread (%)	ROA (%)
Prime auto	3–4	9	250	2.50	15.0
Prime credit card	3–4	7	3.25	2.30	20.7
Private student loan	3–4	11	NA	3.10	20.4
FFELP student loan	3–4	6	1.50	2.10	20.8

Source: CIRA.

Tightening in spreads indicates that liquidity has returned to markets. While the graph above represents asset types that are different from real estate, one may expect that CMBS will act similarly as investors seek higher returns due to the leverage provided by the government.

The second analysis that offers insight into the program's effect involves calculating a leveraged yield analysis of CMBS securities with the proposed PPIP leverage terms.

The table above represents the unlevered purchase of a CMBS bond that is selling for $65, paying a coupon of 5.81% and has a maturity of 9 years. The cash flows and return are straight forward, as the bondholder collects a payment of $5.81 per year and on year 9 collects the face value of the bond upon maturity.

	Purchase Price	Face Value	Coupon	PMT	Loan	Interest	Interest PMT			
Terms	65	100.00	5.81%	5.81	32.5	4.76%	1.55			
Year	0	1	2	3	4	5	6	7	8	9
Cash Flows:	32.5	5.81	5.81	5.81	5.81	5.81	5.81	5.81	5.81	105.81
Debt Payment:		1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55	34.05
Net Cash Flows:	-32.5	4.26	4.26	4.26	4.26	4.26	4.26	4.26	4.26	71.76
Return:	IRR	19%								

Purchasing the same bond under the terms proposed for the Legacy Securities programs has a positive effect on returns as is demonstrated above. Under this example, terms are maintained to be constant, however, leverage terms of a 50% LTV and a 4.76% interest rate are introduced. The result is that the internal rate of return increases to 19% from the 13% of an unlevered purchase.

	Purchase price	Face Value	Coupon	PMT						
Terms:	65	100	5.81%	5.809						
Year:	0	1	2	3	4	5	6	7	8	9
Cash Flows:	-65	5.81	5.81	5.81	5.81	5.81	5.81	5.81	5.81	105.81
Return:	IRR	13%								

Government Remedies: Unresolved Issues and Proposed Solutions to Legacy Securities

While the main outline of these programs has been laid, there are still critical questions that need to be answered in order to make the program amenable to investors, these include:

I. Unexpected changes to the program
II. Trading strategy/disposition of securities
III. Seller and asset eligibility criteria
IV. Terms

One of the major disincentives to the Legacy Securities program is the possibility that changes will be made to the program after it is instituted. Fear that income from participating investors will be scrutinized by the government comes as a result of the political furor that AIG bonuses caused. Probably, though, a more valid concern comes from a clause of the program that retains the right to cease funding of committed but undrawn UST equity capital and debt financing at the sole discretion of the UST. Providing clarity on this clause and elaborating on a concrete set of reasons for how this clause would operate will essential to attracting the best possible participants.

As it stands, the PPIP plans to encourage long term "buy and hold" strategies. However, what is meant has yet to be defined and it is unclear how involved the government will be in setting trading strategy. Ensuring that PPIP managers are able to trade as they see fit will be critical to the success of the program and will help PPIP managers in their efforts to raise capital on their own track record.

Eligible assets, while defined in broad terms, will need to be further explained and outlined. For example, currently UST has stated that loans and other assets purchased by PPIFs will need to be situated predominantly in the US. Additionally, assets purchases are currently limited to institutions that may preclude hedge funds.

Finally, the terms offered under the TALF program in order to finance asset purchases will also be critical to the success of Legacy Securities. Terms of importance will include:

- Interest rate: Currently, the proposed/anticipated interest rate is Libor plus 100 basis points. In order to maximize investors' appetite for CMBS securities, UST will need to provide capital at terms that are not onerous.
- Term: As investors see it, it will be critical to match the maturity of loans to the maturity of the CMBS securities.
- Pre-payment penalties: There are questions as to whether the government will attempt to use prepayment penalties in order to incentivize long term investment. It is important to allow investors to invest in time frames that make sense for their sources of capital and not hamstring them into investment horizons that are capriciously determined by the government.

While providing liquidity to the CMBS markets holds promise to narrow the spreads the securities are currently trading at, it falls short of remedying the issues that are affecting the underlying assets that are encompassed in the security. Ultimately, Legacy Securities will need to work in conjunction with Legacy Loans so that once the CMBS market benefits from liquidity, borrowers will be able to address maturing loans by refinancing their debt.

Legacy Securities is a step in the right direction for alleviating some of the pressures currently existing in the CMBS market. However, purchasers of CMBS securities should not make the naïve mistake of believing that such a security is simply a collection of future cash flows. Ultimately, the prices and resolution of each security will depend on the collateral that secures the cash flows. Questions such as:

- What is the market value of the collateral?
- Where is the collateral located?
- How is the collateral positioned versus competition in its local marketplace?

Answers to these questions will be essential in evaluating the cash flows of CMBS and will help purchasing investors in properly valuing the security.

Conclusion

The following twelve months will provide answers and clarity to the issues that have been raised with the CMBS market. Fundamental problems with the legal and financial structure of securities will make the resolution of these problems complex and highly nebulous due to a lack of past history. A system that currently incentivizes diametric behavior by parties promises to be mired in insidious litigation. Therefore, it will be of critical importance to preempt some of the legal issues with a proactive approach at addressing bankruptcy and issues with the documentation of securities. A systematic approach must be taken in order to ensure that these measures are implemented efficiently.

As the future of the CMBS securitization market is discussed, it is important to note that several structural problems need to be addressed. Of importance are the incentives that have clearly resulted in behavior that is against the long-term viability of the industry. Originators zeal at producing as much business as possible will need to be tempered. One possible solution is that they retain part of the pool they are originating in order to make sure that they have some “skin in the game” and will look out for the credit quality of the pool going forward. Additionally, it will be important to address the issues that are leading to tranche warfare. A possible solution will be to provide the legal framework for a “clearinghouse” which can set up the participation of all parties and make decisions based on market information and ultimately on their mutual interests.

The government’s role will play a key part at providing the liquidity that the market currently desperately needs. An infusion of money, at the scale that is currently being proposed for Legacy Securities should motivate investors to begin purchasing CMBS securities. However, it is important to note that mere liquidity will not solve the issues of maturing loans, legal squabbles, etc. As such, it is important that Legacy Securities works in conjunction with Legacy Loans in order to ensure that buyers, for example, that should qualify for refinancing will have such an opportunity. Also of importance are the recent changes to mark-to-market accounting rules which might ultimately dissuade sellers from selling assets. Currently proposed changes by FASB seem to be providing the wrong incentives to sellers by relaxing the rules for marking securities.

Ultimately, the solution to the CMBS market will need to come in numerous forms. The issues plaguing the parties involved are complex and unprecedented. As such, proposal will need to comprehensively address legal, financial, and regulatory problems. We hope this paper has began such a process and moved the conversation along.

The credit crisis has forced investors to reassess how risk is measured. Modern Portfolio Theory ("MPT") dictates that one can reduce portfolio risk by holding combinations of financial instruments that are not positively correlated. Structured financial products that are diversified by geographical location and asset-type, such as collateralized debt obligations ("CDOs") and commercial mortgage-backed securities ("CMBS"), follow the principles laid out by MPT. There are two key lessons to be learned from the credit crisis. First, there are limits to the structuring of financial products. In other words, risk cannot be completely structured out of financial transactions. Second, CMBS should not be looked at as strictly a set of cash flows but rather should be underwritten for the quality of the real estate that produces the payments to investors.

As Keynes notes, one bet soundly considered is preferable to many poorly understood.

In short, the intricate relationships in a CMBS transaction are governed by several agreements and limited by the rigid structure of the REMIC. Understanding agreements, including the PSA and Intercreditor Agreement, will be indispensable as CMBS workouts are attempted and unintended consequences are explored. Moreover, it is important to realize that maintaining the tax-free structure of the REMIC will take precedence during the consideration of workout options and any action that might compromise this status will be avoided.