Default Issues in Commercial Mortgage Backed Securities

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This issue report, which alludes to the current financial crisis, is dedicated to future students and developers who may not have the opportunity to experience real estate markets as the one during which this practicum is written in.
Synopsis

Capital markets can provide both liquidity and transparency to borrowers and lenders alike, and as such have become increasingly sophisticated in catering to the needs of various stakeholders. In real estate, the secondary market for commercial loans escalated in the 1990s, stemming from privately placed loans that were traded between banks and institutional investors, to the regulated and standardized financial instrument known as CMBS (Urban Land Institute, 2006). As demand for these lender-less loans evolved into more complex structures, it is likely that not as much attention was lent towards difficulties which borrowers or lenders would face when and if a loan were to hit troubled waters. In the current economic crisis, with a scarcity of capital from the financial markets, more conservative traditional lenders, and the threat of loan delinquencies from looming CMBS debt maturities, the inherent complications of a loan un-winding is becoming strikingly daunting.

In deconstructing the nature of default in the CMBS process, this paper presents the structure and layout of the CMBS asset class by shedding light on the various stakeholders involved, as well as to the resources and policies available to efficiently manage the un-winding, resolution, and price discovery process.

Since an extensive literature review reveals very little research on assessing the impact of default on the actions of the stakeholders and the value of the assets, this study looks at older literature on mortgage securities and uses those frameworks in a current and relevant application. Furthermore, these insights are coupled with anecdotal evidence from the real estate and capital markets community on the issues surrounding the CMBS default process in the current economic climate.

Lastly, the paper makes possible recommendations and suggestions towards improving CMBS structural issues in lieu of default resolution and price discovery, and hopes to narrow the theory-practice gap on this topic from which further research can be conducted on the role of effective policy on the onset of CMBS default.
Acknowledgement

Not having been taught by Jay Gouline, it is with mild trepidation that I had emailed him, hoping to garner his interest in working with me on my practicum thesis. I am glad that I did, because it is his encouragement which has made this writing a useful and exploratory project, rather than simply an academic exercise.

I also wish to acknowledge and thank Bob Rajewski and Gene Parker, who introduced me to real estate, Mike Anikeef and Isaac Megbolugbe who have managed and guided the program and this course, and Roger Staiger and Jay Gouline who have continued to inspire my interest in finance and investments.

List of Key Abbreviations

CMBS – Commercial Mortgage-Backed Securities
REMIC - Real Estate Mortgage Investment Conduit
PSA – Pooling and Service Agreement
IRS – Internal Revenue Service
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**Introduction**

Commercial Mortgage Backed Securities are financial instruments which bundle commercial loans into tranches and are subsequently sold as securities. They are managed by separate entities known collectively as servicers, who oversee the collection of monthly loan payments, keep records, monitor the underlying properties, and amongst other things, transfer the collected funds to the trustee for payment.

As the credit crunch continues, loans held within a CMBS are under considerable distress as borrowers struggle to find refinancing amidst rapidly deteriorating property values (Weinberg, 2010). In addition, the recession has further strained debt coverage as rental income is eroded through vacancies and a weak rental market. Consequently, borrowers are defaulting on their CMBS loans to the point where they are more frequently undergoing special default proceedings and enforcements. This trend is expected to continue throughout the recessionary period, thus creating an increasingly significant and critical role for a class of loan administrators known as servicers and special servicers (Weinberg, 2010).

Three broad categories of servicers handle various aspects of the management and control of the underlying loans. The master servicer oversees the deal and insures appropriate servicing and payment of agreements while the sub-servicer is typically the loan originator who has sold the loan but has retained servicing authority. Both the master and sub-servicer are also responsible for loan advances on the onset of delinquency.

However, once the loan becomes past due for more than sixty days, the special servicer steps in to judge the extension, restructuring, or foreclosure of the loan. This role is of critical importance as the timing of the loss can greatly enhance the magnitude of the returns. The existence of multiple tranches increases the impact of default decisions made by the servicer and can dramatically impact or wipe-out subordinated class returns. Conversely, the special servicer, working in self-interest, may be prone to moral hazard issues when it votes against an immediate foreclosure on the property in the interest of subordinated class investors.
Commercial loans, and hence CMBS instruments, carry prepayment penalties, and thus, in times of economic stress these provisions contribute towards illiquidity. Furthermore, myopic and often ambiguous policy has marred the efficient handling of CMBS default, thus creating an unclear means of price discovery and dispute resolution. In the current economic environment these issues have magnified market inefficiency and hindered the process of the real estate market correction. It is thus of critical importance to explore, identify, and find resolutions to improving policy on CMBS defaults.

**Points of Investigation**

The paper is an Issue Report which explains the CMBS structure and relationships between various stakeholders, and the consequential problems, including moral hazard issues, which may arises on the onset of default. The paper particularly seeks to highlight how these problems are manifested, gives examples from current research, and brings to light the larger market issues tied to problems with CMBS policy. Lastly, the paper offers possible recommendations towards resolution of CMBS policy issues in lieu of default resolution and price discovery.

**Research Questions**

In order to narrow scope and thus more effectively accomplish conclusive analyses and critical reading necessary for this study, the following key questions are being asked:

- What problems arise during default of CMBS loans?
- How does moral hazard play a role in the lack of resolution and price discovery?
- What operational, infrastructural, and policy issues contributed or should contribute to the relative effectiveness of un-winding a CMBS structure?
Commercial Mortgage Backed Securities

Current Prognosis

Servicers resolved approximately $8.7 billion of distressed CMBS loans last year and are continuing to make progress towards resolution of these troubled loans (Shenn, 2010). However, the percentage of loan resolved in special servicing has significantly declined given a much larger pool of distressed assets since 2008, as well as continued decline in real estate prices and liquidity.

On a more positive note, 75% of specially serviced loan were resolved, restructured, and returned to the master servicer (Shenn, 2010), indicating that they were either refinanced, paid-down, or are performing under new terms. The on-going market climate will eventually ascertain whether these modified loans will continue to remain outside the scope of the special servicers.

Figure 1: CMBS Issuance by Quarter

![CMBS Issuance by Quarter ($ millions)](image)

Modified from Source: Invalid source specified.
To understand the sheer size of the issue, especially in lieu of historical performance, the end of 2009 yielded $74 billion in specially serviced loans, up from only $4.4 billion 2 years ago. For the special servicers with limited resources, this sky-rocketing escalation is as difficult to manage as the size of the distressed asset pool itself\(^1\). However, given that there are currently almost $800 billion\(^2\) of outstanding commercial securities, the distressed pool is still less than 10% (Securities Industry and Financial Markets Association (SIFMA), 2010).

**Structure**

Commercial Mortgage Backed Securities are a collection of single mortgage loans which are collected and “securitized” into a single pool, and then subsequently transferred to a trust. The trust then issues tradable bonds which are sold to investors and vary in duration, yield, and payment priority. This pooling of loans creates liquidity and efficiency for the borrowers and allows investors to diversify unsystematic risk and gives them access to various types and sizes of investments which would be otherwise unavailable if it was an individual loan. However, despite these overwhelming advantages, increased rules and regulation can mean that there is less flexibility and discretion in altering loan structure and terms once it has been securitized.

\(^1\) Appendix 1 is a list of nationally approved special servicers

\(^2\)As of January 2010 according to the Securities Industry and Financial Markets Association (SIFMA)
Ratings agencies assess the array of bond classes and assign a variety credit ratings, adjusted for risk and return, to the CMBS issues ranging from investment grade\(^3\), to below investment grade\(^4\), and lastly to the most subordinated or unrated bonds. This allows investors to choose those financial instruments which meet their risk, return, and duration requirements. Accordingly, the returns to the various investment grades of bondholders are tiered through a waterfall structure for both interim cash flows as well as principal redemption. If there is a shortfall in the contractual loan payments insufficient to service all proceeds to all bond holders, then it is the most subordinated bond holders who are the most impacted followed by the remainder of the bond classes in ascending order of priority.

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\(^3\) Rated by various nationally recognized ratings agencies as AAA/Aaa through BBB-/Baa3

\(^4\) Id.BB+/Ba1 through B-/B3
Real Estate Mortgage Investment Conduits (REMIC) is the terminology given to the Special Purpose Entity (SPE) created to contain the Trust of pooled mortgages and allow it to function as a pass-through entity for tax purposes. This structure is critical to the pricing of the CMBS instrument given that adherence to REMIC regulation removes the tax burden at the Trust level.

As the portfolio of diverse assets grows within the Trust, the CMBS backed by a pool of loans becomes more valuable as a whole than would the sum of the individual loans otherwise individually subject to unsystematic risk. The enhanced value, coupled by increased liquidity and choice, allows a larger and broader set of investors to participate in commercial mortgage transactions. Conversely, the increased access to capital as well as the value creation benefit offers significant advantages for the borrower to encourage the creation and proliferation of the CMBS asset class. However, though the basic process of
loan administration for CMBS loans is fairly similar to regular portfolio loans, in understanding how stakeholders will be impacted during a default, it is important to appreciate the structure and methodology of the CMBS instrument.

*The Pooling and Servicing Agreement*

Once the pool of loans is transferred to the Trust structure described above, the loan documents along with the Pooling and Servicing Agreement (PSA) ascertain the distribution and allocation of loan proceeds to the various classes of investors. This document is essentially the “glue” which binds the various securitization players in the CMBS structure. Since a variety of loans and loan types are aggregated into this Trust, the PSA applies a standardized agreement applicable to all loans within its pool. This is a key difference between traditional portfolio loans where agreements can vary across loans and loan types.

The PSA details how loans are to be serviced and administered, and ensures that REMIC compliancy is being maintained for tax-exempt status. These earnings are taxable at the individual taxpayer level, of course, but failure to comply with the PSA will cause significant losses to the investor through rescinding of the tax-free status of the trust (Fazbozzi, 2001).

The PSA outlines the comprehensive terms and description of the loans being pooled and is the principal CMBS securitization document. The PSA also describes the rights and obligations of the servicers of the various classes of loans and certificates. However, the borrowers are not parties to the PSA even though it still holds authority and direction over the original loan. In fact, the PSA is standardized across the pool of loans and is typically more inflexible and stringent than the portfolio loans of a typical balance sheet lender. This stems from policy outlined by REMIC rules and described in this paper. Furthermore, though PSAs may be available in practice to the borrower, and accessible through the SEC database, these documents run several hundred pages long with only a couple of pages associated with default provisions.
Industry Participants on the Onset of Default

The following parties are typically involved with a loan once it has been securitized and play a role on the onset of default:

- Special Servicer
- Primary or Sub-Servicer
- Master Servicer
- Investors (especially B-Piece Buyers / Directing Certificate holders / Controlling Classes)
- Trustee
- Rating Agency(ies)
Servicer

The servicer, as defined by the SEC is any person or institution responsible for managing the collection of securitized pooled assets, and servicing the distribution to the investors of these assets, i.e. the certificate holders. The definition of servicer is an umbrella term for master servicers, primary servicer, and special servicers, and to also to the trustee of the CMBS trust. Thus, in line with the stance of the SEC, the role of the servicer is “principle based” and does not detail the types of institutions that might share the role and decision-making authority.

Guidelines towards selecting a servicer and outlining responsibilities are especially strict, and represent standards the industry must follow to ensure that duties are carried out efficiently and sufficiently. The stricter criterion requires greater resources and capabilities which in turn demand higher fees. However, this has also led to greater investments in technology and personnel to build infrastructure to support the growing business.
**Primary or Sub-Servicer**

In some cases, the borrower may deal with a Primary Servicer, which may be the same entity as the loan originator or mortgage banker who sourced the loan. As such, the borrower maintains direct contact with the Primary Servicer, who in turn may be assigned further responsibility from the Master Servicer. According to the PSA, however, the Master Servicer still retains all responsibility for the actions and performance of the Primary Servicer, and must indicate and outline any duties which it wishes to subcontract through the sub-servicing agreement. These responsibilities are already outlined within the PSA and are typically passed on as-is from the Master Servicer to the Primary Servicer. However, this structure can prove to be advantageous since the Primary Servicer and Mortgage Banker, when the same entity, can build and maintain closer ties with the borrower.

**Master Servicer**

The routine flow of payments between the borrower and the investors, unless the borrower defaults, is managed by the Master Servicer. This regular interaction with the borrower also includes managing information, loan administration functions, and analyzing the rent rolls, operating statements, and other financial information of the borrower and their property. Further functions also usually include disbursements from escrows, as well as conducting physical examinations of the property itself. These responsibilities may be shared or subcontracted to the Primary servicer to the extent that a subservicing agreement is in place. Also, though the Master Servicer has leeway to modify terms of the mortgage loan, their ability is limited by the scope of the PSA and may require the consent of the other categories of servicers. In short, the Master Servicer is responsible for management of all performing loans, but consent may need to be reached from other stakeholders, including ratings agencies and trustees.

**Special Servicer**

The role of the special servicer primarily becomes operative during a loan default, and administrative and decision-making activities shift from the master servicer. This transfer of responsibility will be made known to the borrower, being that the special servicer is considered the specialist in administrating distressed loans. The special servicer has considerable leverage, though limited to the extent of the PSA, on the resolution and
liquidation process of the loan. Interestingly, since the B-class or directing certificate holders are the most at risk of losing their stake during a default scenario, they are the group who typically select the special servicer (and may be the same entity), and as such yield considerable say over the potential outcome of default. However, the special servicer, as do other stakeholders, has a fiduciary duty towards the trust and subject to certain standards, i.e. to maximize the value of the overall payout to the investors as a collective whole. As one can imagine, this is a complicated and challenging task involving a mixture of opinion, analysis, and diplomacy. The special servicer has several options and scenarios to analyze, and would likely choose the scenario which yields the largest net present value to the property(ies). These scenarios include the possibility of a negotiated pay-off, foreclosure, loan modification, or deed-in-lieu amongst other possibilities.

To incentivize the Special Servicer to act in interest of all stakeholders, they may also be required to hold a financial stake as a Directing Certificate holder. However, one may argue that this may rightfully bias their opinion towards the class of stakeholders subject to first-loss.

Frequently the Directing Certificate holder also has the ability to direct the Special Servicer’s actions with respect to defaulted loans, provided the servicing standard is maintained (Fabozzi F. J., 2000).

**Investors**

Depending on the risk appetite of an investor, senior, mezzanine, and unrated classes of securities typically comprise the gamut of investors in the CMBS loan pool. The junior or mezzanine tranches are subordinated to the more senior tranches in terms of the priority they hold with respect to payment of principal cash flows. Conversely, investors in the most subordinate tranches absorb losses prior to the more senior investors. Figure 6 describes the payment stream of principal and interest to an hypothetical mortgage pool of investors, indicating not only the timing of the cash flows, but also the maturity of the principal payments. A typical capital structure will include unrated or “junk” bond investors, as well as investment grade investors who buy into securities rated by specific rating agencies.
Directing Certificate holder / Controlling Class / B-Piece Buyer

These certificate holders are investors in the most subordinate tranche of the CMBS investor pool, and are commonly referred to as B-Piece buyers. Ratings agencies may rate this class of certificates as B grade or BB/Ba grades, though may also include unrated tranches in this category. However, the most subordinated class is the position of the Directing Stakeholder, and since subject to first-loss, is also referred to as the Controlling Class of investors. As such, the PSA explicitly allows the Directing Certificate holders a role to play in the decision-making and monitoring authority on the CMBS loan pool.

Trustee

The Trustee, under the PSA, is given broad authority to both management and administration of the loans, though typically assigns these responsibilities to the servicers. Effectively, the trustee holds all documentation between the investors and borrowers and is the named entity which acts on behalf of the CMBS for legal, administrative, and other
enforcement purposes. That said, the Trustee typically seldom interacts with the borrowers and the servicers are typically the first point of contact for either party.

**Rating Agency(ies)**

There are several ratings agencies which work in the national CMBS market, and a larger number in international markets. Their job is to classify the various tranches of bonds or certificates into industry standard grades, i.e. classes. This includes the initial rating, as well as the continued monitoring and subsequent change in ratings through the tenor of each security issue. Though each agency has separate rating methodologies, they typically are standardized with respect to the comparable attributes of other similar securities ranked by the same agency. These rankings rest on the quality of the overall pool, as well as that of the individual tranches, and include factors such as potential for loss, delinquency, and general performance. Secured collateral also plays a large part in ratings, as such any changes can offset an initial rating, and hence the risk and return relationship of the bond.

**Regulatory Authorities**

CMBS servicer actions are governed by the loan documents, the IRS, the PSA, and REMIC restrictions.

IRS - It is important for the trust to comply with certain tax code provisions of the Internal Revenue Service (IRS) in order to avoid being subject to tax.

PSA - The Pooling and Servicing Agreement (PSA) for the pool describes how the loans will be serviced so that the proceeds and losses are properly distributed among the bondholders.

REMIC - Commercial real estate loans are securitized through a Real Estate Mortgage Investment Conduit (REMIC), which brings with it certain restrictions. The good news is that many of these restrictions can be avoided by having the foresight to specifically address them in the loan documents. For instance, REMIC regulations prohibit defeasing the loan within 2 years of the securitization date, even if distressed, and changing the interest and amortization payments, no matter what the individual loan documentation specifies. But if it is explicitly set forth in the loan documents, REMIC regulations do allow for the releasing of a material portion of the collateral, substitution of collateral, uncrossing of
loans, changing of escrow payments, or release of lease termination payments to the borrower (An X. Y., 2006).

<table>
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<th>Table 1: Regulation authority under REMIC</th>
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<tr>
<td>REMIC Prohibition</td>
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<td>- Defease the loan within 2 years of the securitization date</td>
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<tr>
<td>- Change interest and amortization payments</td>
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<tr>
<td>REMIC Permissible (with advance planning only)</td>
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<tr>
<td>- Release a material portion of or expand the collateral</td>
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<tr>
<td>- Substitute collateral</td>
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<tr>
<td>- Uncross loans</td>
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<tr>
<td>- Change escrow payments</td>
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<tr>
<td>- Release lease termination payments to the borrower</td>
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<tr>
<td>REMIC Permissible (but loan or servicing documents may still restrict)</td>
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<tr>
<td>- Prepay the loan during a lockout period</td>
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<tr>
<td>- Waive or reduce a prepayment premium</td>
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<td>- Allow secondary financing</td>
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<td>- Release a guarantor of non-recourse carve-outs</td>
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<td>- Modify existing casualty/condemnation proceeds distributions</td>
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<td>- Allow an assumption of the loan pursuant to the loan documents</td>
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<td>- Allow an assumption of the loan not pursuant to the loan documents</td>
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<tr>
<td>- Modify borrower reporting requirements</td>
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<tr>
<td>- Release escrows</td>
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<tr>
<td>- Release casualty or condemnation proceeds pursuant to documents</td>
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Issues Arising from Default

The onset of default of a loan (or several loans) within the CMBS pool is usually indicated through a delinquency period, or through active management and monitoring, even before the delinquency event occurs. A borrower may decide to miss or forget a payment, triggering investigation by the Master or Primary Servicers. The intent can generally be clarified to the extent of a borrower’s deliberate indication to garner steps towards recalling the loan, or simply an unintentional act that can be easily rectified. If the servicer is more proactive, through monitoring and relationships with borrowers, they may foresee the onset of default prior to the loan even entering the delinquency stage (Fabozzi F. J., 2001).

However, a delinquency of more than one payment typically indicates a clear sign of default, and as such, is treated that way. Regardless of intent, this event is the exercising of an implicit put option on the loan and triggers default proceedings as indicated in the PSA. The notion of a put option is relevant here as when property prices decline, the borrower has the option to default on the loan, and hence implicitly exercise a put option. Though not explicitly structured into documentation, a rational, profit-maximizing borrower would effectively transfer the property to the lender in exchange for abandoning payments.

The process and timing of exactly which entity takes on the leading role and interacts with the borrower, before default has actually occurred, can be managed between the different servicers and the original lender. However, once the loan is in default and thus truly in trouble, the Special Servicer steps into handle the default, whether it be to prevent or allow the put option. In some cases there may not be a choice. It is typically after the 90 day past-due status that the Special Servicer makes the decision to comment on the loan being a deliberate default and in deciding the appropriate work-out strategy (Esaki, 1999). As described earlier, the quality of the collateral, borrower and tenant conditions, as well as current and expected market conditions all play a role in ascertaining the best workout strategy. If there is a possibility of the borrower returning to performance status shortly, then through added yield enhancement, a workout to turn the loan back to performance status would be ideal. However, if the projected time period for reverting to a performance
status is too long, it could be more beneficial to foreclose. The prudent objective here is to outline the various options available, attempt to quantify these in terms of expected cash flow (from operations and capital events) and arrive at various net present values. Typically, unless there is a compelling reason otherwise, the highest net present value scenario would bring the greatest value to the CMBS pool and all the stakeholders. Challenges arise because of different opinions of stakeholders, which to complicate things further, can change during the course of default proceedings.

**Tranche Warfare**

Since an individual loan is still governed under the PSA applicable to the entire CMBS pool, certain loan restructuring could alter the terms of the CMBS bonds themselves. If the nature of the default were to materially change the risk and value of the bonds, such as the quality of the collateral or an extension of tenor, it can prove challenging to garner consensus on the best way to maintain the CMBS structure. The recent case of the Stuyvesant Town loans which were packaged into several CMBS instruments, are a prime example of things going awry. Since the Manhattan development was built using city assistance and tax breaks, an increase in rents was unlawful, and hence the property was not able to realize the necessary cash flows to service its debt. Furthermore, with a decrease in value from a $5.8 billion dollar purchase 5 years ago, to sub $2 million at present, the imminent default is marred by divergently different views from the various stakeholders (Ciochetti, 2003).

The challenge lies in the fact that the various tranches of bond holders have divergent interest, based on their risk and return expectations relative to their seniority placement in the capital stack. This tendency results in tranche warfare, given the divergent objectives and concerns of the investors with regards to how restructuring will impact and match their expectations. This conflict of interest is especially apparent when the performance and prices of properties can have a significant impact on returns. However, it is the subordinated class of investors who are at most risk of losing, if not all, at least a majority of value in the deal. Especially in current market conditions, it is not all uncommon to see entire classes of investors being effectively wiped out based on a revaluation of property assets. Therefore, if performance metrics are not being met, more senior investors would likely choose to immediate foreclosure to redeploy assets into better performing
investments. Even if property values have diminished significantly, senior debt holders could still realize a 100% recovery.

It is, however, of critical importance to subordinated certificate holders as to the timing of foreclosure and sale, in determining how much of their investment will be returned to them. Thus, as in today's market environment, where B-class or unrated class bond holders have little or no residual value on their investments, it is likely that these investors would lean towards delaying imminent sale and prefer extensions and modification which allow the assets of the CMBS to be held until property values hopefully rise again.

**Capital Investments**

Capital investments and tenant retention strategy is part and parcel of managing property collateral. For borrowers, these investments can enhance value and in turn impact the performance of the CMBS certificates for the investors. When lease are coming due, and as the building ages, any investment which attracts better tenants and tenant cash flow streams, will likely improve the quality and performance of the CMBS certificates (Archer, 2002). In fact, it is not uncommon to see significant rises in value with modest capital investments. As values of properties drop, and performing properties can quickly run into difficulties as leverage ratios increase. Increased leverage makes it harder to justify additional capital investments to attract or retain tenants, and given the possibility of continued higher leverage, borrowers or their sponsors are unmotivated to deploy additional capital.

This creates a dilemma for the servicers as despite the intention of the borrower, it may serve the interests of the investors to arrange for additional capital to enhance the performance of the properties. There may also be the possibility of prearranged liquidity facilities from which servicers can access capital to use in such situations, but for the most part, they need to decide whether additional capital will truly enhance the long term value of the property and returns to investors. A prearrangement clause could also allow the servicer to use funds, otherwise available to more subordinated certificate holders, toward capital deployment. However, since the Directing Certificate holders have authority during default, it can be difficult to convince and reach consensus on the best course of action towards "money now or money later."
Unclear Documentation and Policy

Given that documentation and policy on the CMBS asset class was mostly conceived during a time when there was a great demand for such a product, coupled with highly optimistic views on the performance of commercial real estate, not as much attention was actually paid towards documenting the myriad of possibilities and challenges during a default scenario. These challenges can be classified under to broad types (Akin Gump Strauss Hauer & Feld LLP, 2005):

1. Consent requirements between the subordinate investors, ratings agencies, trustees, other investors, and servicers

2. Unclear, contradictory, and often irrelevant information in terms of provisions which would impact otherwise smoother resolution

Although these issues came to light during defaults that have occurred throughout the history of CMBS’s, the scale and the subsequent problems created in terms of resolution and price discovery is unprecedented.

Documentation and policy discrepancies and issues, lend themselves to judicial handling, and as such involve considerable amounts of time and capital investments. This is further exasperated as a lack of a timely resolution process which further impacts property values and escalates issues arising from default,

Moral Hazard and Conflict of Interest

Monetary Incentives

In accordance with the PSA, the servicer must continue to fulfill mortgage payments to the trust regardless of whether it actually receives payments from the borrower. The only way for the servicer to halt these monthly payments is to foreclose on the property. The fact that default servicing is more lucrative for the servicer means that its motivation is at odds with the trust, thus creating a financial incentive for moral hazard. This financial incentive comes in the form of all the additional fees and late payment penalties which are paid by the borrower through an escrow account initially set-up for this purpose.
Losses, as and when they occur, first impact the first-loss tranches, and as a result the entire CMBS is re-priced due to the change in underlying fundamentals. This also means that the next subordinated position becomes the position of first-loss in the re-priced structure, and so on as the value of the asset falls.

Nevertheless, since the pool of assets comprising a single CMBS issue is static, in order to adhere to REMIC status, only a small fraction of the mortgages can be restructured (Deng, 2005). This is also the reason why third parties, including governments, cannot simply buy-out the troubled loans, and the only likely way for resolution is to actually change the bankruptcy code or the REMIC statutes.

**Special Servicers as Directing Certificate Holders**

In an effort to maximize the cash flows to investors in the CMBS, the special servicer holds broad latitude to modify the terms or foreclose the loan. Since the directing certificate holders (B-piece buyers) have the most at stake in the event of a loan failure, these investors often control the appointment of the special servicer. Oftentimes, in order to properly align incentives, the special servicer will hold a position of the B-piece/first-loss security in order to better align the incentives of all the investors (Ernst & Young LLP, 1994). However, this also means that the special servicer may not be concerned specifically with the senior investors, but instead focus on maximizing the position of the first-loss investors. The servicer is also subject to a loss in fee income if the tranche is deemed a 100% loss.

**Conflict of Interest**

Conflict of interest issues arise when servicers own a tranche of the CMBS loan, as well as have servicing duties to perform, receive compensation, and hold the fiduciary responsibility to make protective advances and debt service when loans go into default.

Oftentimes, the sponsor or originator of the CMBS is also the special servicer, and thus may hold the first-loss, B-piece position concurrent to being the special servicer. Since the most subordinated class of investors also have the authority over choosing or replacing the special servicer, albeit with approval from the rating agency, another potential source of conflict can arise.
These conflicts of interests create a multi-layered, complex, and ambiguous set of guidelines for the servicers, and at the time of a default, tranche investors can and do use this subjectivity against each other to delay the price discovery and resolution, often in the favor of the B-Piece buyers/special servicers.

In addition, the PSA, which only dedicates a small fraction of otherwise lengthy documentation, on default issues⁵, does not address questions arising from bankruptcy and restructuring adequately. In fact, there also appears to be no documentation on addressing bankruptcy impacting multiple loans within the same pool, even though they may be affiliated loans in terms of borrowers.

Thus, valuation models by the different stakeholders, including the servicers, assess the property differently, impacting the relative value and position of the investors. In fact, as the valuation of the pool of loans decreases, the most subordinated lenders are wiped-out and lose their position of control as directing certificate holders. Decreased valuations would also lead the ratings agencies to reevaluate the ratings of the investors, possibly creating a new set of unrated investors, and thus changing the control structure of the CMBS. Concurrently, special servicers looking to garner servicing fees are incentivized by the property remaining under default proceedings, as well as by preventing an imminent sale which could wipe-out their investment. Conflict of interest between the servicers leaves the price discovery process hostage, potentially further eroding value and distressing the real estate.

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⁵ As few as two pages of a document hundreds of pages long
Solutions and Recommendations

Restructuring

Restructuring proposals, in recent literature, have seen a mixed response from bondholders, and thus ascertaining an outcome, time to resolution, and hence price discovery, is far less easy to predict than anticipated. There are situations where even senior bondholders have been supportive of restructuring through extensions and delays in enforcements. In some cases this may be that senior bondholders also hold interest in more subordinate securities within the capital stack, and hence have some incentive to support a restructuring initiative which could salvage their capital stake in the lower-rated securities. At other times, senior certificate holders may simply be wary of alternate outcomes in an untested and volatile market environment. Recent decisions in the European marketplace serve as good examples concerning bondholder actions. Earlier this year, bondholders from the White Tower\(^6\) (2006-3) transaction, in order to prevent the uncertain nature of a bond default to salvage funds, instead agreed to modify the waterfall structure of the transaction itself. This restructuring is critical to resolution and price discovery if handled quickly, and before the default gets entrenched in litigation which could further distress the property. In another case, bond holders from the Fleet Street Finance\(^7\) (2) CMBS transaction, agreed to an extension to the bond, rather than face an unwinding scenario in the face of default (Shenn, 2010). In fact, this agreement, which took place at the end of February of 2010, was the first time that a European CMBS transaction had been subject to an extension. The pressing extent of devaluation was so compelling, that even the more senior tranches of investors were likely to face losses, and this lending to the notion that in such situations, where bond holders of every class are at risk, a restructuring option may be the easiest resolution to the impending default.

\(^6\) A defaulted European CMBS deal backed by Syrian-born real estate magnate Simon Halabi

\(^7\) European CMBS sourced by loans from Goldman Sachs with real estate leased to a single tenant: Arcandor.
**Financial Advisory**

Though not strictly a solution, financial advisors with no direct financial stake in the CMBS structure, and thus likely a more unbiased viewpoint, may be viable accommodators during the onset of CMBS default. Advisers can bring in an array of skill-sets, helping evaluate various restructuring options, evaluating and implementing action, and assisting in valuation and coordination activities. Having a knowledgeable third party can be especially prudent when dealing with divergent interests of the various stakeholders, and can have material implications for the bondholders. These advisers can work towards gathering consent on decision-making if required, and garner valuable insight into intentions and motives of the decision-makers.

In hiring advisers, it is important to consider fees and payment structure, as this allocation may fall outside the realm of any indemnity provided by the securitized vehicle. Alternate sources of funding financial advisers could be through transaction cash flows, or from bondholders themselves. However, a change in these cash flows to benefit additional parties would likely require the approval of a bondholder resolution, to work.

**Self-managed committees**

As in the case of corporate restructurings, self-managed committees comprising of the realm of stakeholders to the CMBS can be formed during the onset of default in order to better handle and manage the process. Investors from Fleet Street Finance (2), described earlier, managed to effectively work-out a restructured extension on the CMBS issues through a self-managed bondholder committee. In fact, in the interest of further erosion of capital, the bondholders were quickly and jointly able to assess risk, and actually self-finance the costs of the committee, in order to reach consensus on pacing the way for Europe’s first CMBS loan extension.

Since various stakeholders can be geographically diverse and until the point of default, may not necessarily have been in communication, having a readily accessible group of people, who at the very least serve as a point of communication, may be a more feasible way to administer the various parties involved in a default (An X. Y., 2006). This way consents, information exchange, and a sharing of ideas can be organized and streamlined in a methodical and more efficient way.
Since the interests and resources of the self-managed committee are directly in-line with the success and outcome of the CMBS default process or resolution, financial costs may not have to be allocated directly from the CMBS structure. Furthermore, a self-manage committee can be accommodated in conjunction with other solutions, such as a financial adviser and a restructuring process.

Policy

As the life-cycle of a financial product reaches maturity, as is now the case with the CMBS asset class, policy is likely to evolve towards a more robust and time-tested structure. The SEC issued a Final Rule relating to the disclosure of information involving registered offerings of asset-backed securities in 2005, and as such, the CMBS product continues to garner policy changes. This includes disclosure of information about servicers with regards to experience, financial condition, outsourcing, and the servicing agreement (which is now incorporated and filed as an exhibit of the prospectus).

Addressing B-Piece Buyer Concerns

A description of the B-Piece buyer and its role in the CMBS transaction is described earlier in this paper, though given its significant influence as part of the default process; this relationship is expounded here.

Since the first-loss investors, i.e. the B-Piece buyers have potentially the most to lose during a distressed sale of the asset, they tend to be the most rigorous in the scrutiny of the loans and consequently yield significant power of the CMBS transaction.

As part of the securitization process, the collections of loans to be included in a particular CMBS are placed in a trust which subsequently issues bonds secured by the collateral of real estate assets. The various tranche investors receive cash through a waterfall structure which takes the seniority of the investor class into account during disbursement. Therefore, the B-Piece buyers will only receive payment after all of the more senior class of investors are paid off. Typically, the AAA-rated tranche is the highest priority investor, then the AA, and so on till the BBB-rated tranches are accounted for. Any further subordination comprises of the unrated class, or below investment grade, and is known collectively as the B-Piece buyer.
Since the B-Piece buyers are the first to take the haircut from any losses on loans, they protect themselves through more rigorous underwriting standards and meticulous due diligence than any of the other investors would typically conduct. In fact, given this rigorous due diligence process, the original lenders may likely not include a particular loan in a CMBS pool (or not initiate the loan in the first place) for fear of it being rejected during the B-Piece buyer's due diligence process. Furthermore, if any loans are rejected from the initial pool, the lender will have to warehouse the loan on their own balance sheet. Therefore, it is in their best interest to consider the requirements of the B-Piece Buyers, some of which are discussed here.

Since the B-Piece buyers are likely to be impacted by any unplanned shortfalls in expected cash flows, it is important for them to establish an escrow reserve to buffer loses in the event of a delinquency. These escrows also serve as reserves for regular tax and insurance contributions to ensure that there are adequate checks and protection in the case of a force majeure (Archer, 2002). Though cash flows fluctuate through the life cycle of the loans, industry bench marks can be used to buffer the impact of structural expenses, tenant improvements, and leasing commissions which underlying assets will undergo. However, despite impacting overall investor returns, escrow accounts may still not amply protect the B-Piece buyer during particularly volatile economic or real estate market climates. In fact, certain studies have indicated that almost all default loans are a result of a lack of leasing activity because of a shortage of re-tenanting funds, or tardy structural maintenance.

The B-piece buyers are also concerned with the borrowers themselves, and even though the real estate may have strong performance, a weak borrower who neglects the property may eventually impact the real estate fundamentals. Aside from lackluster interest in structural maintenance, B-Piece buyers would also be concerned with poor or troubled partnership structures such as foreign buyers, tenants-in-common, or over-leverages or inexperienced sponsors.

The quality of tenants is another source of concern, which in the case of a deteriorating economy, are of particular concern. Steps must be taken to look into tenant historical performance, financial and economic indicators of potential future issues (maturity schedules, debt levels, recurring cash flows, etc.), and any changes in competition which could impact the performance of the tenant in a particular property.
As such, B-piece buyers are likely to be more interested in true fundamentals of the property, rather than simply at what value the property appraises for (An X. a., 2007). These performance metrics can include the relative performance of the property with respect to the competitive subset of other properties in the given market. Of particular importance are rental and sales comparables, absorptions rates, and supply and demand factors which indicate future performance.

Subsequently, the more rigorous due diligence process may appear to be more time consuming and costly than investment-grade security holders may need, but focusing on the requirements of the B-piece would ultimately lead to a more robust and efficient CMBS structure.

**Conclusion**

As defaults on loans pooled into commercial mortgage securities continue to climb to record numbers, investors are increasingly faced with steeper losses as administrators struggle to find viable and timely solutions to resolving conflict. Prior to the bursting of the real estate bubble, the default rate had been less than 1%; whereas now these numbers are drawing closer to the 10% mark with more than $70 billion in loans in the hands of special servicers. Myopic and often ambiguous policy has marred the efficient handling of CMBS default, thus creating an unclear means of price discovery and dispute resolution, and it is imperative that the industry apply robust policy with correctly aligned incentives which can help resolve and rectify the crisis in an efficient and engaging manner.

Restructuring the CMBS instrument, through loan extensions, or changes in the payment structure may improve the long-term returns to investors, though is restricted by policy and statutes governed by the PSA. If coupled with other resources, such as the formation of a self-managed committee, information exchange, and a sharing and consensus of ideas can be organized and streamlined in a methodical and more efficient way, and thus a structural change can be carried out before asset valuations are further eroded. Financial advisors with no direct financial stake in the CMBS structure, and thus likely to offer an unbiased
viewpoint, may be viable accommodators during the onset of CMBS default, and may also
help manage conflicts of interest that unclear policy and structure creates. In the longer run,
effective implementation of policy changes will be critical to the continued success of the
CMBS asset class, and will greatly help bolster a once booming industry. At the heart of
addressing concerns, there should be a move towards correctly aligning and incentivizing
the interests of the special servicers and B-piece buyers who play the unique role of
controlling and managing the interests of the CMBS during the onset of default.

Improving upon these fundamental problems of poor originator underwriting standards,
lack of ample disclosure, and a misalignment of interest between stakeholders, is a work in
progress. However, the longer the market suffers from a lack of new CMBS issues; it
becomes increasingly more difficult to do so, given the fact that a lack of activity mars the
price discovery process in the first place. However, despite the challenging task of resolving
the CMBS crisis, an appreciation for the issues surrounding these challenges, will greatly
help in minimizing current loses and in preparing the industry for a less blighted future for
a financial product which otherwise provides liquidity, diversity, and risk alignment to
investors, as well as a source of readily available and inexpensive capital to borrowers.
References


Ernst & Young LLP. (1994). *A Primer on Securitization in the Commercial Mortgage Market*. Ernst and Young LLP.


### Appendices

**Appendix 1: List of national servicers**

<table>
<thead>
<tr>
<th>Master Servicing Firms</th>
<th>Special Servicing Firms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allied Capital Corporation</td>
<td>Aetna Life Insurance</td>
</tr>
<tr>
<td>Amresco Services</td>
<td>Allied Capital Corporation</td>
</tr>
<tr>
<td>Banc One Mortgage Capital Markets</td>
<td>Amresco Management</td>
</tr>
<tr>
<td>Bank Of America</td>
<td>ARCAP Special Servicing</td>
</tr>
<tr>
<td>Bank United Of Texas FSB</td>
<td>Archon Group</td>
</tr>
<tr>
<td>Bankers Trust Company</td>
<td>Banc One Mortgage Capital Markets</td>
</tr>
<tr>
<td>BNY Asset Solutions</td>
<td>Bank Of America</td>
</tr>
<tr>
<td>Capmark Services</td>
<td>BEI Management</td>
</tr>
<tr>
<td>Capstone Realty Advisors</td>
<td>BNY Asset Solutions</td>
</tr>
<tr>
<td>Conning Asset Management Company</td>
<td>Capmark Services</td>
</tr>
<tr>
<td>Criimi Mae Services</td>
<td>Cigna Investments</td>
</tr>
<tr>
<td>Dynex Commercial</td>
<td>Clarion Partners</td>
</tr>
<tr>
<td>First Union National Bank</td>
<td>Conning Asset Management Company</td>
</tr>
<tr>
<td>GE Capital Loan Services</td>
<td>Crico Mortgage Company</td>
</tr>
<tr>
<td>Gemsa Loan Services</td>
<td>Criimi Mae</td>
</tr>
<tr>
<td>GESPA CDPQ</td>
<td>Dynex Commercial</td>
</tr>
<tr>
<td>GMAC Commercial Mortgage Corp</td>
<td>First Union National Bank</td>
</tr>
<tr>
<td>Heller Financial</td>
<td>Fleet Real Estate Capital</td>
</tr>
<tr>
<td>Hudson Advisors (Originally Brazos Advisors)</td>
<td>GE Capital Realty Group</td>
</tr>
<tr>
<td>Key Commercial Mortgage</td>
<td>GESPA CDPQ</td>
</tr>
<tr>
<td>Keycorp Real Estate Capital Markets</td>
<td>GMAC Commercial Mortgage Corp</td>
</tr>
<tr>
<td>Lutheran Brotherhood</td>
<td>Hanford/Healy Asset Management Company</td>
</tr>
<tr>
<td>Midland Loan Services (Originally Boatsmans National Mortgage)</td>
<td>Hatfield Philips</td>
</tr>
<tr>
<td>Orix Capital Markets</td>
<td>Hudson Advisors Canada Inc.</td>
</tr>
<tr>
<td>Pacific Life Insurance Company</td>
<td>JE Robert Company</td>
</tr>
<tr>
<td>PMLS</td>
<td>Key Commercial Mortgage</td>
</tr>
<tr>
<td>Protective Life Insurance Company</td>
<td>Keycorp Real Estate Capital Markets</td>
</tr>
<tr>
<td>Prudential Asset Resources / Wells Fargo Bank</td>
<td>Laurentian Bank Of Canada</td>
</tr>
<tr>
<td>Southtrust Capital Funding</td>
<td>Lend Lease Asset Management</td>
</tr>
<tr>
<td>Starwood Asset Services</td>
<td>Lennar Partners</td>
</tr>
<tr>
<td>Sun Life Assurance</td>
<td>LTC Properties</td>
</tr>
<tr>
<td>Wachovia Bank</td>
<td>Lutheran Brotherhood</td>
</tr>
<tr>
<td>Wells Fargo Bank</td>
<td>Midland Loan Services</td>
</tr>
<tr>
<td></td>
<td>National Health Investors</td>
</tr>
<tr>
<td></td>
<td>Ocwen Federal Bank / JE Robert Company</td>
</tr>
<tr>
<td>Participant</td>
<td>Role in the Securitization Process</td>
</tr>
<tr>
<td>-------------------------------------</td>
<td>-----------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Borrower:</td>
<td>Owns the property, has repayment and performance obligations</td>
</tr>
<tr>
<td>Mortgage Banker:</td>
<td>Intermediary between borrower and loan originators/loan sellers</td>
</tr>
<tr>
<td>Loan Originators/Loan Sellers</td>
<td>Lends money to the borrower, secured by a first priority lien, enters into a mortgage loan purchase agreement (&quot;MLPA&quot;) to sell the loan to the securitization depositor</td>
</tr>
<tr>
<td>Depositor:</td>
<td>An entity set up by the investment bank sponsoring the securitization purchases commercial mortgage loans and immediately sells loans to a trust.</td>
</tr>
<tr>
<td>Investment Banker:</td>
<td>Overall responsibility for structuring the securitization, selling the bonds/certificates to investors, helps maintain a liquid secondary market for trading the bonds/certificates.</td>
</tr>
<tr>
<td>Issuer:</td>
<td>The trust is the record owner of the commercial mortgage loans, formed by the depositor pursuant to a pooling and servicing agreement (&quot;PSA&quot;).</td>
</tr>
<tr>
<td>Trustee:</td>
<td>Responsible for administering the trust on behalf of and making payments to the investors.</td>
</tr>
<tr>
<td>Investors:</td>
<td>Different investors with varying risk appetites purchase certificates rated from AAA/Aaa to B/B to and unrated certificates.</td>
</tr>
<tr>
<td>Master Servicer:</td>
<td>Responsible for servicing all mortgage loans owned by the trust.</td>
</tr>
<tr>
<td>Primary or Sub Servicer:</td>
<td>May be the originating mortgage bankers, often the initial point of contact for the borrower.</td>
</tr>
<tr>
<td>Special Servicer:</td>
<td>Named at the issuance of the CMBS to be responsible for servicing any mortgage loans that may default in the future.</td>
</tr>
<tr>
<td>Rating Agencies:</td>
<td>Assigns risk of loss ratings on certain bonds/certificates issued for a securitization transaction, monitors performance after securitization funds.</td>
</tr>
</tbody>
</table>

Source: (Brent W. Ambrose, 2008)
* Please note that this is an evolving list given current market conditions during which the industry is in flux and this list is subject to change
## Appendix 3: CMBS Servicing Duties

<table>
<thead>
<tr>
<th><strong>Servicing Function</strong></th>
<th><strong>Description</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash Management</td>
<td>Payment processing and custodial account management</td>
</tr>
<tr>
<td>Servicer Advancing</td>
<td>Master Servicer’s advancing capabilities and financial strength.</td>
</tr>
<tr>
<td>Property Protection</td>
<td>Pay property protection expenses (taxes, insurance) on time from escrow accounts.</td>
</tr>
<tr>
<td>Investor Remittance</td>
<td>Ensure that the CMBS trustee receives accurate monthly remittances to be able to make correct distributions to CMBS bondholders.</td>
</tr>
<tr>
<td>Investor Reporting</td>
<td>Provide the trustees with updated data files and other required reports.</td>
</tr>
<tr>
<td>Bondholder Calculations</td>
<td>Calculate the amount allocated to bondholders for all classes of the transaction.</td>
</tr>
<tr>
<td>Bond/Collateral Analysis</td>
<td>Provide monthly updated data files to CMBS analytic providers.</td>
</tr>
<tr>
<td>Risk Management</td>
<td>Monitor maturing loans, and loans that have been placed on watch list.</td>
</tr>
<tr>
<td>Event Risk</td>
<td>Answering investors’ ad hoc requests for information about event risk i.e. deals with loan level exposure to terrorist activities, natural disasters, etc.</td>
</tr>
</tbody>
</table>