

The Effect of Real Estate Mortgage Investment Conduit Regulations and Standard Pooling & Servicing Agreements on Commercial Mortgage Backed Security Work Out Success and Profitability

by

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ABSTRACT

This paper examines REMIC regulations and Pooling and Servicing Agreements in an effort to ascertain if either the REMIC regulations or standard Pooling and Servicing Agreements are unnecessarily restrictive in the context of maximizing the profitability and minimizing losses associated with CMBS workouts, with particular attention given to the current real estate climate. The paper begins with a brief history of REMICs and moves on to an examination of the statutory requirements governing the creation and maintenance of REMIC status. Next, an examination of standard Pooling and Servicing Agreements is performed followed by attempts to identify weaknesses in REMIC regulations, which are illustrated by hypothetical examples. Potential modifications to REMIC regulations are divided into two categories: Preemptive Default and Actual Default. The paper concludes that, excepting for the discretionary short term allowance of balloon payment extensions, preemptive default modifications are unwarranted and impractical. However, the author also draws the conclusion that improvements to PSA's might be met through better integration of master and special servicers in certain scenarios and that REMIC regulations might be improved by allowing for certain material changes to collateral as well as carve outs in default scenarios as well as short run stop gap measures including REO Debt lending and an increase to the allowable length of the REO hold period.

Thesis Supervisor: Lynn M. Fisher

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Introduction, Relevance, and Overview

As legions of toxic securities begin to reach maturity tensions between CMBS bondholders, borrowers and special servicers will continue to mount. With the recent implementation of the Housing Affordable Modification Program designed to ease restrictions on loan modifications for Real Estate Mortgage Backed Securities backed by single family real estate assets, the commercial real estate industry is abuzz with talk of the need for similar modifications for commercial real estate. To date, numerous advocacy groups have written white papers and released statements asserting that Real Estate Mortgage Investment Conduits (REMIC's) are significantly handicapped by existing REMIC legislation, relative to whole loan lenders, in their ability to modify the terms of a given loan within a securitized pool leading to unnecessary and otherwise avoidable losses for both borrowers and bondholders. The purpose of this thesis is to investigate these claims and ascertain if, how, and to what extent REMIC regulations and boiler plate Pooling and Servicing Agreements do hinder optimal returns for CMBS bondholders when qualified mortgages enter default.

To this end, we will begin by briefly examining the history of REMICs followed by an outline of their structure and legal qualifications. Next, we will examine standard Pooling and Servicing Agreements and draw conclusions regarding their potential to unnecessarily limit bondholder returns. Finally, we will examine draw similar conclusions regarding REMIC regulations and their limitations on both preemptive modification and modification during an actual default.

The topic at hand is one that explores the marriage between finance and policy as is pertinent to CMBS and is, rather obviously, highly relevant in its own way to the current mortgage crisis.

Given the severity of the current real estate downturn and this study's relative positioning at the

forefront of what will, unfortunately, be a rising quagmire of CMBS defaults, it is the author's sincere and humble hope that the conclusions drawn in this paper will help play a small role in the ongoing debate regarding best practices in the current market environment while simultaneously making a modest, but relevant, contribution to the body of work necessary to adapt, improve, or affirm prevailing REMIC policy and Pooling and Servicing Agreements in both the long and short run.

Chapter 1: History and Purpose of Real Estate Mortgage Investment Conduits

Real Estate Mortgage Investment Conduits, commonly referred to as REMICs, are securities primarily comprised of dozens and even hundreds of mortgages which are agglomerated into a single “pool” of mortgages, whose aggregate expected cash flow is sold as bonds backed by the expected cash flow of the principle and interest mortgage payments as well as the value of the real property itself.

The focus of this treatise will be Commercial Mortgage Backed Securities (CMBS), which, in the modern era, are nearly always qualified as REMICs. CMBS are essentially bonds that provide cash flow to investors from mortgages which utilize commercial properties as their collateral. This cash flow is prioritized into various tranches, which are separated by a sequential order of payment and are each rated individually by various rating agencies and assigned a return commensurate with that rating. For example, an AAA rated tranche will offer less risk and a lower rate of return than an AA rated tranche because the AAA will be paid in full first in the event of a cash shortfall.¹ Thus, the risk profile for the bondholders is contingent on their priority in the payout structure, which is almost always a recoument by position, otherwise known as sequential pay classes or a waterfall structure, as opposed to *pari passu*, with the AA rated tranche being fully subordinate to the AAA rated tranche and the A rated tranche being fully subordinate to the AA rated tranche and so on.²

Nearly all CMBS are structured under REMIC regulations, which were created with the intention of eliminating taxation at the entity level so as to avoid double taxation of the bondholders. In order to prevent the abuse of this tax relief, rigid guidelines govern the formation and maintenance of REMICs with severe fiscal consequences for their violation. With a few notable

¹ Typically caused by a default of one of the many mortgages that produce the cash flow for the CMBS pool

² Or otherwise known as “pro rata”

exceptions, REMICS are designed to be static securities with minimal change to their underlying assets. This inflexibility is intended to prevent abuse of the tax preferred status of REMICs as well as to provide bondholders with a reasonable measure of certainty regarding the underlying assets backing the stream of cash flows they are purchasing.

Commercial Mortgage Backed Securities allow for enhanced profits and increased liquidity and thus improve the depth of reach of the capital markets. Additionally, they act as a buffer against rising interest rates and help to maintain healthy credit levels. Aside from those advantages offered to securitizers and lenders, CMBS offer the advantage of being an alternative asset with historically low default rates³ and a significant yield premium over comparable term treasuries to bondholders.

Background

In 1968 Ginnie Mae issued the first Mortgage Backed Security using a pool of government-ensured home loans as well as the first Mortgage Backed Security using a pool of conventional mortgages as collateral. Left to follow suit, Freddie Mac issued its own version of a pass-through security, dubbed a Participation Certificate, soon after.

Nearly a decade later, 1977 saw the private sector begin to enter the real estate mortgage backed security arena as Bank of America issued the first whole-loan pass-through security. Whole loan pass through securities were comprised of credit worthy loans that exceeded the conforming loan size limitations set forth by Fannie Mae and were thus designated as jumbo loans.

³ Or at least this was the common point of view until the summer of 2007

In 1983 the GSE's were first to issue a new security product known as a collateralized mortgage obligation, which was sold by Freddie Mac and backed by individual whole loan mortgages as well as mortgage pass-through securities.⁴ One drawback to these CMO's was that investor profits were diluted by double taxation.⁵ Furthermore, these straightforward CMO's still exposed investors to prepayment risk. In response to concerns over prepayment risk, CMO's began to separate the core of their cash flows by distinguishing between Principle Only (PO) and Interest Only (IO) strips, which allows bondholders to trade on prepayment risk as the PO and IO strips react to interest rate fluctuations with opposite duration effects. Do note that although very similar, the qualifying difference between a CMO and REMIC is that a CMO consists of a sale of debt *backed* by mortgage assets where as a REMIC constitutes a sale of assets⁶.

In 1982 the Regan administration passed new tax laws allowing for significant depreciation increases for the owners of commercial real estate, which in turn fueled a dramatic conversion of capital into physical real estate by investors eager to escape the high income taxes of this period.⁷ 1984 saw further developments in the innovation of mortgage backed securities wherein the underlying assets of the security instrument were Adjustable Rate Mortgages. Later that same year Fannie Mae began to issue pass-through mortgage backed securities whose underlying assets were multifamily mortgages and the pattern of offering new sources of cash flow continued. According to Laurence Taff, the impetus for the impending innovations that began in 1984 within the mortgage securities market was the dramatic fall in mortgage interest rates during the early part of 1983 and the consequent market exposure to the negative convexity⁸ of

⁴Taff, *Investing in Mortgage Securities*, pg 168,

⁵ Double Taxation refers to profits being taxed at both the entity level and then again at the individual level

⁶ Note that CMO's are also bound by a different subset of regulations, which are outside the scope of this thesis

⁷ Geltner and Miller, *Commercial Real Estate Analysis and Investment*, pg 143

⁸ Typically, bonds to rise in value as interests decline because they return a higher interest rate than the market. Negative convexity occurs when bonds decrease in value as interest rates fall. In the case of MBS, this is because borrowers will likely refinance their loan and prepay the

mortgage debt.⁹ In order to continue attracting investors, the market responded by creating these more versatile offerings to improve upon the simple pass through interest model by offering securities with inherently different risk profiles.

In 1986, congress passed the now legendary 1986 Tax Reform Act (1986 TRA) which, among other dramatic revisions, significantly reduced the earlier depreciation based tax advantages granted to commercial real estate by the Reagan administration. However, the 1986 TRA did allow for the creation of the trust vehicle known as a Real Estate Mortgage Investment Conduit (REMIC).¹⁰ As previously noted, the hallmark of the REMIC structure was its elimination of double taxation. REMICS immediately employed subordinate class structures via tranche separated waterfall payouts, which helped increase the appeal of real estate mortgage backed securities to investors by effectively redistributing prepayment risk and reward to those investors with a higher risk tolerance. Similarly, issuers were now able to provide a low risk tranche that was desirable to risk averse investors with strong preferences for stable cash flow.

Concordantly, in 1986 Fannie Mae introduced the first Stripped Mortgage Backed Security (SMBS).¹¹ Stripped mortgage backed securities are mortgage backed security instruments that have been broken into two functional components: Interest Only and Principle Only stripped securities. The interest only security is a bond that is backed by the interest component of various property owner's mortgage payments whereas the principle only stripped mortgage backed component is backed by the principle repayment portion of a mortgage obligation.

principle back sooner than anticipated, leaving the bondholder to reinvest the principle in a climate that now offers lower interest rates and thus lower yields than their original MBS investment

⁹Taff, Investing in Mortgage Securities, pg 168,

¹⁰ Geltner and Miller, Commercial Real Estate Investment and Analysis, pg143

¹¹ Taff, Investing in Mortgage Securities, pg 168

This period also saw the implementation of new varieties of REMIC securities. Floating Rate classes of REMICS made their debut in late 1986¹² and in 1987 the first Planned Amortization Class (PAC) REMIC was introduced¹³ According to Fannie Mae:

PACs are designed to produce more stable cash flow by directing prepayments from the underlying mortgage-related collateral to other classes, called companion or support classes. The PAC investor is scheduled to receive fixed principal payments (the PAC "schedule") over a predetermined period of time (the PAC "window") through a range of prepayment scenarios (the PAC "band"). The schedule will be met only if the underlying mortgage-related collateral prepays at a constant rate within the range assumed for the structuring of the PAC. The initial or "stated" PAC band, principal payment schedule, and PAC window are set out in the prospectus or prospectus supplement.

Cash flow variability from changes in the prepayment speed of the underlying mortgage-related collateral is distributed among other classes, but it is not eliminated from the underlying mortgage-related collateral as a whole. The integrity of the PAC schedule is directly influenced by the amount and structure of the support classes, so it is essential to understand the nature of the support classes in a particular transaction when evaluating a PAC.

While the REMIC innovation created by congress via the the Tax Reform Act offered new incentives for investing in commercial real estate securities, much of the recent real estate investment was based on a desire to generate a tax loss and increase the property owners aggregate tax savings rather than the explicit desire to generate profit. Thus, the market still favored direct asset ownership. This perverse incentive structure helped to inflate the values of real assets that might otherwise falter. It was in this manner that the Reagan depreciation expenses helped lead the way to a general overvaluation of real estate spurred forth by overinvestment. Eventually, the combination of the erosion of property level tax benefits and poor market fundamentals led to a sharp pullback in real estate investment in the late 1980's and commercial real estate quickly entered into decline, which was among the fundamental causes of

¹²Taff, Investing in Mortgage Securities, pg 171

¹³Taff, Investing in Mortgage Securities, pg 171

the now infamous Savings and Loan (S&L) crisis.¹⁴ Concordantly, congress passed the Financial Institutions Recovery, Reform, and Enforcement Act (FIRREA) of 1989 in an attempt to bail out the largely insolvent Savings and Loan Industry, which bore the brunt of losses associated with the domestic real estate decline post 1986. In reaction to this, FIRREA setup the Resolution Trust Corporation (RTC) which was tasked with the purchasing and subsequent selling of the underperforming loans underwritten by the various savings and loan corporations. In an effort to improve regulation, FIRREA imposed risk-adjusted capital requirements on financial institutions, which offered increased incentives for the holding securitized debt as opposed to loans held on balance sheet, known as “whole loans”. These new capital requirements helped to fuel the dramatic increase in CMBS.

In 1991, further modifications were made and the Tax Reform Act of the same year provided that an entity could only issue multi-class mortgage backed securities if it held REMIC status. This new legislation also established an entity known as a Taxable Mortgage Pool and was written in such a manner as to prompt any new mortgage backed security issues to choose between REMIC or TMP status as part of an either or proposition. TMP guidelines imposed an entity level tax that could only avoided by opting for REMIC status:

Congress decided in 1986 that any entity formed after 1991 that offered real-estate mortgage debt-backed securities with two or more maturities and that did not elect REMIC status was to be taxed as a corporation and would not be eligible to join in filing a consolidated return. Under Sec. 7701(i), a TMP is an entity - "substantially all" of whose assets are debt obligations (or interests therein), more than 50% of which are real estate mortgages (or interests therein); - that is the obligor under debt obligations with two or more maturity dates (or with the same maturity but different rights relating to acceleration of maturity); and - whose payments on the debt obligations are required (or are arranged) to bear a relationship to payments on the underlying debt-obligation assets.¹⁵

¹⁴ 745 banks failed during the S&L crisis, in part as a result of overextension and the devaluation associated with real estate. The real estate overinvestment was largely a result of the Reagan tax policies and its subsequent devaluation was largely a result of the Tax Reform act of 1986.

¹⁵ Culb, The Tax Advisor, Monday, June 1, 1992

The purpose of this legislation seems to have been to offer external incentive for securitizers to utilize the REMIC legal structure as the only alternative, TMP classification, has severe impacts on the profitability of the security. It is then no surprise that the utilization of REMIC classification has dominated the mortgage backed securities market to present day.

Despite the downturn of real estate in the late 1980's and early 1990's, market stability eventually returned and an unprecedented real estate recovery was led by the long economic boom of the mid to late 1990's. A mild slow down occurred in 1998, but the bursting of the dot.com bubble in 2001 increased real estate investment as the tangible assets of real estate came into fashion after the crash of the more ephemeral dot.com firms.¹⁶

Real Estate investment continued to soar well into the mid 2000's with capitalization rates¹⁷ reaching all time lows. Property values reached all time highs during this period, primarily as a result of a strong economy, sustained investment, and increasing rents in conjunction with the aforementioned historically low cap rates.¹⁸ The stellar performance of this period led to an irrational exuberance that, combined with aggressive prime rate cuts, excess global liquidity and ever decreasing lending standards,¹⁹ created a tidal wave of real estate investment. A housing bubble, largely based on single family speculation and inflated demand, ensued and continued to grow until the summer of 2007, when it unceremoniously burst. The bursting bubble was led by subprime mortgages backed by single family residences wherein the determination was made

¹⁶ Geltner and Miller, Commercial Real Estate Investment and Analysis, pg. 144

¹⁷ A Capitalization Rate, or Cap Rate, is the unlevered return on an asset as calculated by dividing the property's first year Net Operating Income by the purchase price. Cap Rates can be thought of, in part, as a measure of perceived riskiness for a property by comparing cap rates to the risk free rate.

¹⁸ Geltner and Miller, Commercial Real Estate Investment and Analysis, pg. 145

¹⁹ Such as lower Loan to Value and Income/Debt Service Coverage Requirements as well the proliferation of exotic products such as negative 5 and 10 year interest only loans and 5 year option arms with negative amortization payments.

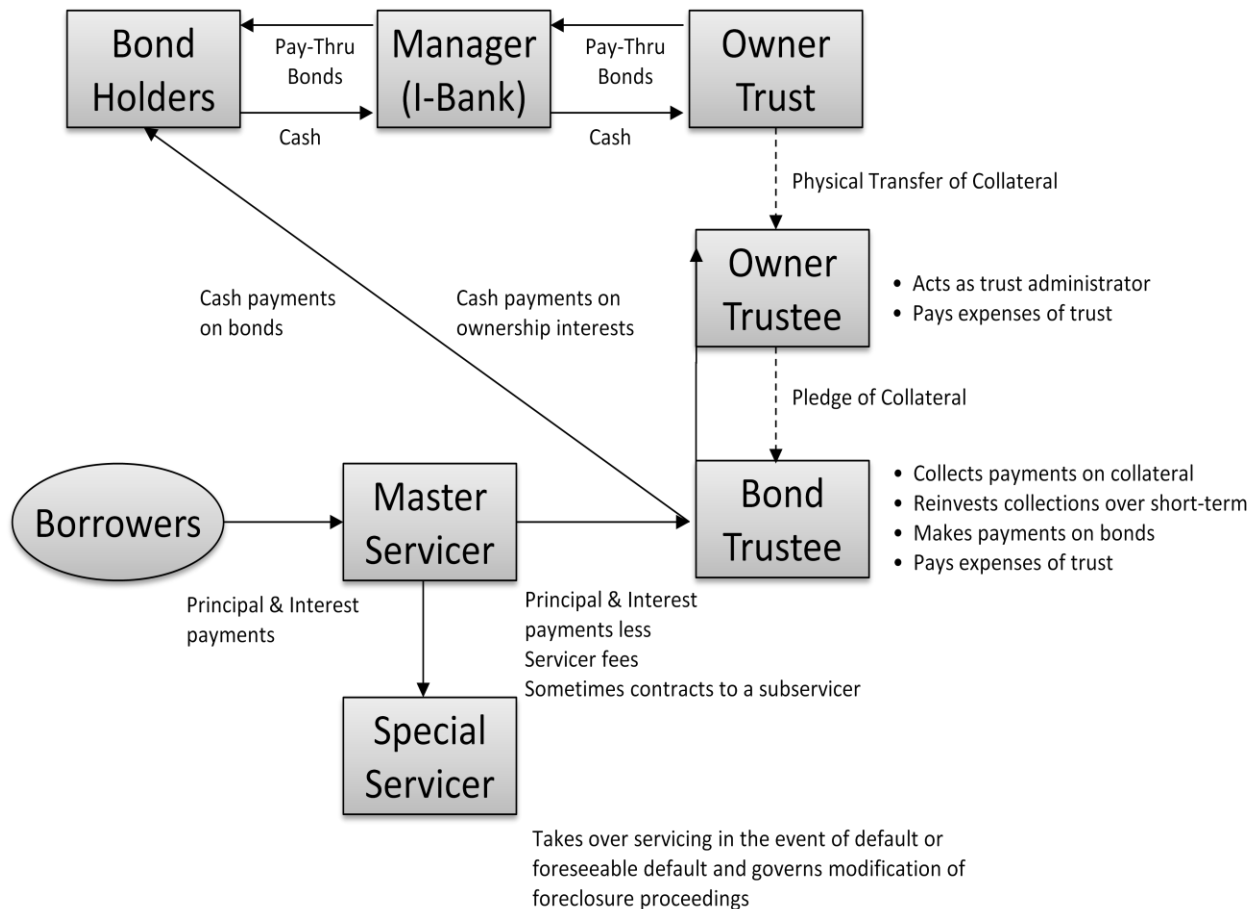
that the various tranches carried higher levels of risk than first thought. This led to the re-rating and re-pricing of the instruments, which effectively priced the securities at a loss for the issuers, which had insufficient capital to cover these losses. Further deterioration of property fundamentals ensued and confidence continued to wane in the rating agencies ability to effectively estimate the risk associated with the various mortgage backed securities (MBS). Once the inability to effectively predict the risk associated with the securities became widespread, investors lost the ability to determine the appropriate risk premium²⁰ for MBS and they became toxic securities. This lack of confidence in risk metrics soon spilled over into CMBS and all of the primary securitizers either became insolvent or voluntarily ceased their MBS operations.

²⁰ A risk premium is the amount of interest offered for an investment above the current risk free rate

Chapter 2: REMIC Role Distinctions

REMICs are host to several distinct parties, each with their own incentives, risks, and function within the modern REMIC structure. This section is intended to provide a primer on the various roles and functions within a REMIC in order to allow the reader to better familiarize herself with primary parties involved with the creation and management of REMICs. Figure RD-1 identifies and illustrates the basic function of these parties.²¹

Figure RD-1²²



²¹ This section was strongly influenced by the excellent work done in Laurence G Taff's book, Mortgage Securities

²² Largely derived from a similar untitled model created by Washington Mutual Bank

The Issuer

Commercial mortgage backed securities allow issuers to convert otherwise relatively illiquid assets into liquid, off balance sheet, tradable instruments. This has the added value of allowing banks to trade actively while maintaining federally mandated capital ratio requirements. CMBS also allows investment and portfolio managers to better manage risk by allowing them to buy and sell specific investor classes and to hedge their bets through the use of mortgage swaps. However, there are additional benefits to issuers including a lower cost of capital, greater diversification through funding sources, more efficient use of capital and enhanced financial performance. Finally, by moving the loans off balance sheet and passing the cash flow through to the certificate holder, the issuer effectively passes default risk on to the bondholder. Issuers are primarily investment banks and, to a lesser extent, life insurance companies.

However, as recent events have poignantly indicated, CMBS issuers do not issue securitizations without a certain measure of risk.²³ Specifically, these risks are known as Interest Rate Risk and Product Risk.

Interest rate risk is a fundamental risk to which no fixed-income instrument is immune. As market interest rates fluctuate, so too does the price of a given fixed-income security. This price fluctuates in an inverse manner such that if interest rates rise, the price of the security falls.

Because CMBS pools are formed from individual loans that each take time to close and originate, an aggregate mispricing can also occur as market rates fluctuate over the course of the time lag that exists between the oldest and newest mortgages within the pool prior to the securitization date, effectively lowering the aggregate interest rate and diluting the issuers profits.

²³ i.e. The collapse of many notable investment banks, such as Lehman Brothers, as a result of holding toxic CMBS and RMBS

Product risk is a less common risk wherein certain concessions or structures may be necessary to complete a specific loan transaction which renders the loan less liquid because of its nonstandard nature. This risk is often the result of the tensions between originators who must compete to offer competitive deal structures to borrowers and securitizers, who sell the security instruments to a largely risk averse clientele that prefer standard “vanilla” transactions.

The Bondholders

The CMBS mechanism provides liquidity for bondholders who may wish to invest in real estate without acquiring the illiquidity associated with direct investment. CMBS also offers bondholders an explicit diversification factor via the mixture of product type, geography, and asset class that is aggregated within any given pool. The CMBS structure also allows the borrower a measurable degree of control over the risk and return profile they wish to gain exposure to through the availability of a large variety of yield diverse tranches within the mortgage pool. Furthermore, a wide variety of retail products exist spread across multiple expected return horizons offering a further degree of diversification. Finally, AAA rated CMBS offer a historically low default rate of less than 1 percent with a return typically 50 – 100 bps²⁴ over comparable term treasuries.²⁵

The Borrowers

CMBS borrowers are typically developers seeking to “take out” their construction financing or property owners looking to acquire or refinance asset level debt. The primary advantage of

²⁴ Morgan Stanley Fixed Rate AAA 10 year Treasuries CMBS Spread Historical Chart

²⁵ Costar CMBS report, June 11th, 2008

CMBS based financing for borrowers is the reduced cost of capital via mortgages with lower interest rates relative to traditional portfolio lenders and life insurance companies, which tend to hold whole loans on their portfolio. The higher interest rate for whole loan lenders relative to securitized loans is the natural effect of retaining the default risk of their loans by holding them on their balance sheets. By contrast, CMBS issuers pass this risk on to the bondholders, hence their slightly lower interest rates.

Conversely, the primary disadvantage of borrowing through the CMBS mechanism is the lack of flexibility endemic to securitized transactions. While a portfolio lender may be willing to make mutually beneficial adjustments to the term, rate, or conditions of a mortgage obligation at some period after the mortgage has signed, the static nature of a REMIC prohibits such changes except in the case of actual, technical, or reasonably foreseeable default and even in this instances the limitations for modification can still be unwieldy.²⁶ Additionally, borrowers typically agree to lock-out periods and methods for the defeasement of existing loans in lieu of prepayment. Thus, borrowers that wish to refinance their loan early due to a favorable change in market interest rates must typically engage the defeasement process in order to refinance their existing loan or sell their property ahead of schedule.

Defeasement is a substitution of collateral performed by exchanging the expected cash flow from the borrower's existing loan for an equal cash flow derived from a portfolio of US securities with a maturity date equal to the remaining term of the borrower's original loan obligation.²⁷ The substitution security is usually paid for out of proceeds from the refinance. The obligation to

²⁶ See the later discussion in this paper for more details on the static requirements of REMICs

²⁷ This is required by REMIC regulations, again, see the later discussion on REMIC qualifications and maintenance for more detail

finance the replacement of the mortgage security decreases the potential savings for a borrower and raises the “in the money” interest rate threshold for refinance savings due to the additional costs of defeasance. Thus, an important drawback for CMBS loans is the additional limitations imposed on the borrower’s ability to capitalize on favorable interest rate adjustments due to defeasance costs that is often not present with a traditional portfolio lender.

The Trustees

The Bondholder Trustee acts on behalf of the bondholders in relaying information between the bondholders and the master servicer. In the event of a default and subsequent modification, loan sale, REO disposition, the Trustee will also ensure that the required fair value determination is accurate and that the special servicer’s recommended course of action is in the best interest of the bondholders. The Owner Trustee acts as the administrator of the trust and pays any associated expenses.

The Master Servicer

The Master Servicer may be, rather simply, thought of as the general manager of the REMIC once the mortgages have been acquired, securitized, and sold to bond holders by the issuer. A master servicer’s primary responsibility is the collection and distribution of the principle and interest income. In short, the master servicer effectively serves as the bridge between the borrowers and bondholders for which payment distributions “pass through”²⁸. Their primary responsibilities are reporting to the trust and general oversight. Reports are compiled and sent to the trustee on the remittance date mandated by the Pooling and Servicing Agreement (PSA). In order to ensure a continuity of cash flows, master servicers will typically be required to advance

²⁸ Although, technically, the funds will be passed through to the trustee for deposit and may also be collected by a sub-servicer

scheduled payments to the bond certificate holders and as such convention requires that they maintain a credit rating equal to the second highest tranche within the REMIC they are servicing. By advancing payments, master servicers ensure the uninterrupted and timely payment of interest to the certificate holders.

Master servicers have little to no discretionary power and are tightly bound by the Pooling and Servicing Agreement, which contains the principle REMIC provisions that apply to the Master Servicer.²⁹ Master Servicers are compensated via a fixed basis point spread, typically 5bps, on the aggregate size of the loan pool.³⁰ Master servicers can also earn income on the float associated with principle, interest, and tax payments as well as through late fees associated with the accounts. Float income is generated by investing the payments received by borrowers in very short term instruments during in the interim between receipt of the payment and the dispersion of funds.

Because of the inherent inflexibility in the REMIC regulations and their direct liability for maintenance of the preferred REMIC tax treatment, master servicers can be expected to rigidly follow the provisions agreed upon within the governing Pooling and Servicing Agreement. Do note that while master servicers retain some level of responsibility for analyzing pertinent market trends and tracking notable data points within the REMIC, including the generation of watch lists for loans meeting certain quantitative criteria that are indicative of potential future default,³¹ the practical reality of their low margin/high volume compensation and relatively limited human capital is that master servicers have powerful incentives to always follow the letter of the law.

²⁹ The Master Servicer is held accountable by the bondholders and the Trustee

³⁰ Information provided by Wells Fargo

³¹ Such as rapidly declining NOI or the unexpected loss of a major tenant

Some of the typical provisions governing Master Servicers include furnishing all necessary information to the trustee, payment of prohibited transaction taxes³², management of foreclosure property, and general compliance with REMIC regulations. A more detailed listing may be found in Appendix A-1.³³

In general, a breach by the master servicer of any of the relevant REMIC provisions will result in either a loss of the REMIC's status and a subsequent reversion to TMP status or the imposition of severe taxes on the REMIC, which would then be the financial responsibility of the servicer, which is a substantial risk depending on the severity of such a breach and the results thereof. For this reason in part, master servicers are usually required via the PSA to hold a high credit ratings. Most significant within this agglomeration of provisions is the tension between the No Modifications clause, wherein the master servicer agrees to ensure that no modification, waiver, or amendment shall be allowed which will allow the REMIC to lose its status as a pass through entity and the No Disposition of Assets clause, the latter of which allows for the disposition of assets during "default, imminent default or foreclosure of a mortgage loan, including but not limited to properties acquired or sold by deed in lieu of foreclosure".

The Sub-Servicer

While it is by no means a universal practice, often times master servicers will outsource certain functions to a secondary servicer, known as a sub-servicer. In this arrangement, the sub-servicer will typically take over the role as primary borrower contact and will perform the most basic

³² This responsibility serves as a substantial incentive for the master servicer never to violate REMIC regulations because these taxes are paid out of pocket by the master servicer.

³³ Vesco vaci, Servicing Real Estate Mortgage Investment Conduits in U.S. Mortgage Securitizations

services, such as: billing and payment collection, account monitoring, scheduled interest rate adjustments, basic property inspection, and general customer service.

While master servicers are sometimes financially motivated to outsource certain activities to sub-servicers, this is not the sole reason for their existence. The individual loans that comprise a CMBS issue are often originated by many different mortgage brokers and boutique investment banks. These firms are highly incentivized to retain contact with their books of business and will frequently offer subservicing through specialized divisions of their firm as a marketing tool that allows originators to present themselves as providing borrowers with a holistic service package that allows them a single point of contact for the life of the loan. Furthermore, mortgage brokers also gain the competitive advantage of receiving early notification when a borrower considers defeasing an existing loan. This allows them to contact their borrower before they potentially seek out an alternative source of capital, creating unwanted competition that is likely to detract from the brokerages profits. Finally, subservicing offers fee based origination firms an opportunity for a stable cash flow value add through the 5 – 10 bps typically associated with subservicing. As a result, there are often numerous sub-servicers associated with the single master servicer that will govern the administration of any given REMIC.

The Special Servicer

In the event of a delinquency, default, or reasonably foreseeable default the special servicer is responsible for ensuring that a given loan returns to performing status. A special servicer's fiduciary duty lies with the bondholder and not the borrower, so the special servicer has a moral obligation to consider the returns to the pool's certificate holders as they work to find cures for

defaults. Furthermore, the special servicer should consider the best interests of certificate holders within various tranches equally, with no special consideration given to superior or subordinated classes. Typically, special servicers will attempt to resolve a default via loan modification, loan sale or foreclosure. Special servicers traditionally receive 25 – 50 basis points based on the loan volume that enters special servicing as well as bonus fees for an REO or loan sale of or the successful modification of a loan in arrears.

The Controlling Class

The controlling class is defined as the most subordinate class possessing a remaining certificate balance equal to at least 25% of the initial principal balance of such class. Presumably, this language is intended to account for the elimination of tranches in the event of credit support loss. This controlling class is afforded the right to designate a Controlling Class Representative (CCR) which makes recommendations to the special servicer as to how to best cure a given default on behalf of the controlling class. The controlling class also has the right to receive Asset Status Reports from the special servicer, which provide updates on the current performance and market data pertinent to any troubled assets in the mortgage pool.

Chapter 3: Qualifications for REMIC Status

REMICs are governed by a strict set of qualifying guidelines, which are primarily enforced by the IRS. In order to engage the potential limitations of these requirements as is our purpose, it is first prudent to provide an overview of the salient regulations in their current form. These regulations set forth the basic legal requirements for a security to qualify for REMIC status.

The basic qualifications for REMIC status are as follows:³⁴

1. It has elected to be a REMIC for the year it was organized and all subsequent years through the current year.
2. It is wholly owned by holders of regular and residual interests.
3. It has only one class of residual interests.
4. All distributions to holders of residual interests must be pro rata.
5. Substantially all of its assets are “qualified mortgages and permitted investments” at the close of the third month beginning after the startup day and at all times thereafter.
6. It uses the calendar year as its taxable year.
7. It makes “reasonable arrangements” to ensure that residual interests are not held by a “disqualified organization” (i.e., the government, a governmental agency, or a tax-exempt organization that is not subject to the unrelated business income tax (UBIT)).
8. It makes “reasonable arrangements” to make “available...information necessary for the application of” a tax on transfers of residual interests to disqualified organizations.³⁵

³⁴ Reg. § 1.860D-1(c)

³⁵ § 860D(a) . See IRC § 860E(e)(5) (defining “disqualified organization”)

Because the depth and breadth of the rules governing REMICS, many industry professionals cognitively simplify the regulations governing REMICS into two, more practical tests of qualification: First, The Asset Test, which seeks to ensure that only permitted assets are used as collateral to secure the cash flow due the bondholders, and second, the Interest Test³⁶, which seeks to reconcile the type and distribution of profits for the mortgage pool into numerous regular interest classes as well as a single residual interest class.

The Asset Test

The fundamental intent of the asset test is to determine whether or not a given REMIC's assets are comprised of either qualified mortgages or permitted investments as governed by IRS Revenue Procedures. To satisfy this requirement, a REMIC may not hold more than a de minimis³⁷ amount of assets other than qualified mortgages or a select few assets deemed to be permitted.³⁸ It is worth noting that the majority of REMICs are comprised almost exclusively of qualified mortgages.

Asset Test - Qualified Mortgages³⁹

The definition of a qualified mortgage is vague enough to allow for REMICs to include nearly any debt obligation utilizing real property as collateral so long as it is secured within three months of the REMIC startup. Examples of the aforementioned obligations include deeds of trust, installment land contracts, and mortgages. For the purposes of a REMIC “real property” mirrors the definitions that govern REITS, under which land and its improvements are considered real property. “Interests” in said real property include fee ownership, co-ownership, or options to

³⁶ Which refers to the bondholders claims in general and should not be confused as interest being paid by borrowers on the underlying assets,

³⁷ Assets are considered de minimis if they account for less than one percent of the adjusted basis of all of a REMIC's assets

³⁸ Reg. § 1.860D-1(b)(3)(i) .

³⁹ B&L Chapter 58.3.2, REMICS

acquire land or leaseholds of land or improvements thereon.⁴⁰ A qualified mortgage can also include interest in another REMIC or Financial Asset Securitization Investment Trust (FASIT), so long as 95% of the FASIT assets would meet the conditions of a REMIC qualified mortgage. Note that various credit enhancement techniques, such as excess spread or overcollateralization, are viewed as part of the mortgage and not as a separate instrument. A detailed definition of a qualified mortgage can be found in Appendix A-2.

Asset Test - Permitted Investments

As previously mentioned, although qualified mortgages constitute the majority of REMIC assets, additional allowable profits can be taken from assets which are deemed, “Permitted Investments.” These investments are comprised of one of three primary categories: Cash Flow Investments, Qualified Reserve Assets, and Foreclosure Property.⁴¹

Cash Flow Investments

A cash flow investment is defined as, “a temporary investment of amounts received under qualified mortgages, pending distribution of these amounts to holders of interests in the REMIC.” Cash flow investments typically take the form of short term investments in passive assets that earn interest, such as high yield money market accounts. This type of investment often takes place in the time between receipt of a mortgage payment and the distribution of funds and this temporary period may not exceed thirteen months. As the custodians of the cash flow, both master servicers and sub-servicers will frequently utilize this technique to provide a boost to their expected compensation.⁴² Examples of qualifying payments include mortgage payments,

⁴⁰ Fabozzi and Jacon, Commercial Mortgage-Backed Securities

⁴¹ B&L Chapter 58.3.2 REMICS

⁴² For more information on servicers please see the Master Servicer section in REMIC Role Distinctions

principal or interest, payments on credit enhancement contracts, profits from disposing of mortgages, funds from foreclosure properties, payments for warranty breaches on mortgages, and prepayment penalties.⁴³

Qualified Reserve Assets and Funds

A qualified reserve asset is, “intangible property held for investment and as part of a ‘qualified reserve fund’” while a qualified reserve fund is defined as a “reasonably required reserve” for the payment of expenses of the REMIC and “amounts due on regular interests in the event of defaults on qualified mortgages or lower than expected returns on cash flow investments.” These reserve funds are a form of credit enhancement often maintained by the master or sub-servicer in the event of a shortfall.

Foreclosure Property

Foreclosure property is real property and incidental personal property that is acquired by the REMIC as the result of default or the reasonably foreseeable default of a mortgage within the mortgage pool. The REMIC may only hold foreclosed property for three years⁴⁴ A REMIC is taxed at 35 percent on the net income from the disposition of foreclosure property.

The Interest Test

The second basic test a REMIC must pass is the Interest Test. Every REMIC is comprised of multiple regular interests and a singular residual interest.

The Interest Test - Regular Interests

⁴³ Peasle and Nirenberg, ,Federal Income Taxation of Securitization Transactions

⁴⁴ According to David Iannarone, director of Special Servicing at CW Asset Management, the IRS will almost always grant an additional three year extension to this initial three year hold period.

The Regular Interest component of the REMIC is the “pass through” component that is the heart of the REMIC structure. It is comprised of the principle and interest payments which are made by the borrower and passed through directly to the bondholder by the master servicer. The regular interests comprise the components of the mortgage pool that are carved into various tranches, which are the hallmark of the CMBS structure. A regular interest is an interest in a REMIC that is issued on the REMIC's startup day; has “fixed terms”; is designated as a regular interest; and “unconditionally entitles the holder to receive a specified principal amount or other similar amount.”

As they pertain to a REMIC, the IRS defines a regular interest as one that:

1. Must generally entitle the holder to a principal amount and is treated for federal tax purposes as a debt instrument.
2. I is treated as a debt instrument for all federal income tax purposes, regardless of its form, including the determination of the taxable incomes of both the holder and the REMIC.⁴⁵
3. Is an interest bearing interest that is “disproportionately high relative to the principal amount” can qualify as a regular interest only if it consists of an entitlement to a specified portion of the interest payments on qualified mortgages⁴⁶

The Interest Test - Residual Interests

A residual interest is an interest in a REMIC, “that is issued on the startup day, is not a regular interest, and is designated as a residual interest.”⁴⁷ A holder of a residual interest in a REMIC

⁴⁵ IRC §§ 860B(a) , 860C(b)(1)(A) ; Reg. § 1.860G-1(b)(6)

⁴⁶ Reg. § 1.860G-1(b)(5) . Interest is considered disproportionately high if the issue price exceeds 125 percent of the principal amount.

⁴⁷ IRC § 860G(a)(2) ; Reg. § 1.860G-1(c) . A REMIC designates an interest as a residual interest in its initial income tax return on Form 1066. Reg. §§ 1.860D-1(d)(2) , 1.860G-1(c) .

must annually recognize ordinary income equal to its pro rata share of the REMIC's taxable income using the accrual method of accounting.⁴⁸

The residual interest, as its name would indicate, is an ownership interest in the residual assets of the REMIC which is almost universally held by the issuer. Residual interest classes typically earn income through a rate differential between the average weighted interest of the REMIC minus the servicing fees and the average weighted paid interest to the bondholders. This difference in interests is commonly referred to as the “juice” in the deal for the securitizer. Residual Interests may also earn income through overcollateralization. REMIC regulations are very rigid in that the REMIC must have one, and only one, residual interest class.

⁴⁸ An accrual basis taxpayer receives income when (1) the required performance occurs, (2) payment therefore is due, or (3) payment therefore is made, whichever happens earliest.

Chapter 4: REMIC Maintenance and Modification

Just as the requisite qualifications for achieving REMIC status are rather stringent, so too are the rules and regulations governing the maintenance of said status.

Permitted Loan Modifications

The four types of loan modifications expressly permitted under section 1.860G-2(b) (3) are⁴⁹:

1. Changes in the terms of the obligation occasioned by default or a reasonably foreseeable default
2. Assumption of the obligation
3. Waiver of a due-on-sale clause or a due on encumbrance clause
4. Conversion of an interest rate by a mortgagor pursuant to the terms of a convertible mortgage.

All other modifications are prohibited, with the REMIC regulations specifically disallowing for the transferring of mortgage loans after the startup date and expressly forbidding any significant modifications except in connection with a default or reasonably foreseeable default. Specific details can be found in Appendix A-3 and A-4.

The rules governing permitted loan modifications create a basis for wide ranging methods of modification under default and “reasonably foreseeable” default⁵⁰ scenarios, while also establishing criteria for the very limited types of modifications that can occur in the absence of the aforementioned default scenarios. The natural result of this legislation is that the vast majority of modifications happen once the property is in actual or reasonably foreseeable duress.

If a REMIC makes modifications to a qualified mortgage that are not permissible, such

⁴⁹ Real Estate Round Table White Paper on REMIC Modification

⁵⁰ See the section on reasonably foreseeable default in this paper for more detail

modifications will be deemed “significant” and the profit from the event will be subject to a one hundred percent tax. Additionally, the REMIC would be in danger of losing its tax preferred status and could potentially revert from REMIC classification to that of TMP, an event that would be disastrous to bondholder returns due to the double taxation that accompanies TMP status.

The saving grace for REMICs lies in their relatively flexible nature at default as most of the restrictions governing permitted modifications are lifted when a loan enters arrears.

Concordantly, special servicers will engage in a myriad of reconciliatory measures once the default has occurred or is reasonably foreseeable. This flexibility was intended by the architects of the REMIC regulations so as to offer the bondholders a reasonable mechanism to engage in loss mitigation without compromising the inherently static nature of REMICS.

Defeasance

As capital needs and interest rates fluctuate, it is often times in the best interest of the borrower for a given loan within a REMIC pool to refinance their debt. Refinancing of the debt is usually permissible if the borrower agrees substitute the expected cash flow with equal term and value government security. Upon doing so, the REMIC may release their lien on the originally encumbered real property and subsequently qualify the new security instrument as a qualified mortgage. While defeasance is allowable under REMIC regulations it is not obligatory. However, it is usually a requirement of the Pooling and Servicing Agreement.

Qualified Liquidations

REMICs typically terminate their existence through a plan of liquidation wherein the REMIC adopts a plan and then liquidates the entirety of its assets and distributes them to both the regular and residual interest holders. Both the liquidation and distribution must take place within ninety days of the establishment of the liquidation plan.⁵¹

⁵¹ See Chapter 25 of *Commercial Mortgage-Backed Securities* by Fabozzi and Jacob

Chapter 5: The CMBS Default Process

Having delved into the background, function, parties, and legal qualifications for REMICs, we will now examine the modification process in greater detail.

Default, in accordance with REMIC regulations, occurs when a given mortgage within the pool enters either actual or “reasonably foreseeable” default. Recall that virtually any substantive modifications to a loan in the absence of an actual or reasonably foreseeable default are expressly forbidden by REMIC regulations and would result in a loss of REMIC status. While REMIC regulations do not precisely define a default, it is standard industry practice to recognize a default scenario as the occurrence of one of the following:⁵²

1. A monthly payment is delinquent, usually for 60 days
2. Determination by the Master Servicer that a payment or other material default is imminent and not likely to be cured within 60 days
3. Decree or order of bankruptcy that has not been discharged or unstayed for a period of 60 days
4. Mortgagor consents to the appointment of a conservator or receiver
5. Mortgagor admits in writing its inability to pay its debts as they become due
6. There is a notice of foreclosure or proposed foreclosure
7. Payment default at maturity

Note that loans entering into technical default are usually cured by the master servicer and do not normatively move to the special servicer. Examples of technical default include assumptions or assignments without approval, insufficient insurance coverage, and other breaches of covenant. A more serious default measure, such as failure to maintain previously agreed upon debt service

⁵² Based on unnamed material provided by the Commercial Mortgage Servicing Association

coverage ratios will, minimally, place the property onto a watch list for continued review by the special servicer.

Once the master servicer has determined that either an actual or reasonably foreseeable⁵³ default has occurred the loan is sent to special servicing. In general, the special servicer has three cures for default: Workout Modifications, Loan Sale, and Foreclosure. While engaging these options, the preeminent concern of the special servicer is the preservation of REMIC status. Secondary to this concern is the desire to obtain maximum NPV for the bondholders while minimizing credit loss severity. In the course of these duties, the special servicer is expected to service and administer the mortgage loans in the best interests and for the benefit of the certificate holders as a collective whole in accordance with applicable law and the terms of the PSA and, to the extent consistent with the foregoing, in accordance with the following standards⁵⁴:

1. With the same care, skill, prudence and diligence as it services and administers comparable mortgage loans and manages real properties on behalf of third parties or on behalf of itself, whichever is the higher standard
2. With a view to the maximization of recovery on such Mortgage Loan to the Certificate holders, as a collective whole, on a present value basis (the relevant discounting of anticipated collections to be performed at a rate determined by the Special Servicer but in no event less than the related Net Mortgage Rate)

In an effort to clearly outline their fiduciary duty and to ameliorate potential agency problems, both the master servicer and the special servicer are required to act without regard to any relationship either party might have with a given mortgager or owner of a certificate.

Furthermore, servicers are expected to remain objective in spite of their right to receive reimbursements as well as any obligations they may hold to repurchase a mortgage loan from the

⁵³ PSA's will often refer to reasonably foreseeable default as "imminent default" but the terms are relatively interchangeable

⁵⁴ Unnamed material provided by the Commercial Mortgage Securities Association and the Mortgage Bankers Association

trust as seller. The special servicer must also remain unmoved by the master servicer's obligations to make advances.

In the event of a default, the controlling class representative will make every effort to ensure that all viable solutions for cure that maintain the integrity of the most subordinate remaining class are pursued. While this input is considered, and some PSA's have provisions allowing for the CCR to at least initially reject default cures, final authority ultimately rests with the Special Servicer.

Workout Modifications

Once a loan has entered default, the special servicer is given wide latitude by both the REMIC regulations and the PSA to make modifications to cure said default. For instance, the special servicer may agree to extend the maturity of the loan and defer or forgive interest, late payment charges, prepayment charges, and yield maintenance charges. As an incentive for positive reconciliatory measures, special servicers receive additional compensation in the form of fees that are earned for loans that remain performing (usually for a period of 3 or more months) after modification. Note that changes to collateral, including additions, substitutions, and releases are not allowed under REMIC regulations regardless of the default designation of an asset, nor is the conversion of a single loan or loans secured by multiple properties into multiple loans each secured by a single property. In short, material changes to the collateral backing a qualified mortgage are generally prohibited in all circumstances.

Risks inherent to loan modification for bondholders include re-default risk and the risk of self-cure. Re-default risk is the risk that borrower will re-enter default after a modification is performed, as the new terms of the loan become untenable due to further deterioration of property fundamentals or some other cause. Concern over re-default risk is especially exacerbated in economic climates where commercial real estate prices are falling and the special servicer runs the risk of merely delaying the inevitable default, only to foreclose on a property that has continued to decline in value in the time between the initial modification and second default. Another concern is the self-cure effect, wherein borrowers have some external means of cure through a preventative or ameliorating action, such as the paying down of principle or the posting of a letter of credit⁵⁵ but are unwittingly afforded the opportunity to utilize the modification process as an unnecessary means to receiving a discount on their loan. Thus, a borrower may aggressively negotiate an ameliorating change of terms for their mortgage obligation when they had the willingness and wherewithal to cure the default without concession from the special servicer.

Loan Sale

In a default scenario, it is customary for both the special servicer and the controlling class to be afforded an opportunity to purchase the loan from the trust, but the purchase must be at Fair Market Value (FMV). FMV is determined by any relevant information including appraisal, market conditions, and third party opinions. Usually, the PSA will insist that the FMV must be determined within 30 days of a completed appraisal. Loan sales typically occur in scenarios

⁵⁵ A letter of credit demonstrates a specified sum held in reserve by a 3rd party, usually a bank, to be utilized by the debt holder in the event of an interest shortfall. It is, essentially, additional collateral. Note that a LOC is not deemed “significant” under REMIC regulations.

where it is desirable for the property to be disposed of quickly. For example, a special servicer may have an information advantage over potential buyers wherein the special servicer is aware of a certain externality that may lower the price of a property in arrears, and this knowledge will soon become public. In this case, the expedience of a loan sale (relative to that of a foreclosure) may be preferred. Note that, per usual, a loan sale will only be permitted if it is in the best interest of the bondholders.

Foreclosure

If there is no other viable alternative the special servicer will bring the loan to foreclosure proceedings in an attempt to sell the property to recoup as much principle balance and lost interest as possible. The special servicer bid on a foreclosed property they have listed, but is bound by the PSA to accept the highest bid. In cases where the special servicer bids on the property, they must receive at least two competing bids in order to determine FMV. The hold period for an REO is three years, though the IRS will almost always grant an additional three year extension upon request. Also note that REMICs cannot extend loans to potential purchasers, who may have difficulty acquiring capital to finance an underperforming property.

Chapter 6: An Overview Pooling and Servicing Agreements

The Pooling and Servicing Agreement (PSA) is the total summation of the contractual obligations between each of the parties involved in a given CMBS transaction. Furthermore, the PSA serves to establish agreed upon procedures and governance in the event of any sort of occurrence that demands some sort of special action. Pooling and Servicing Agreements are complex documents that have evolved into a contract that is typically over 400 pages in length, and each PSA is unique to the transaction which it governs. However, over the course of their evolution a standardized format has developed, in which generalities of format and substance can be gleaned. Accordingly, Pooling and Servicing Agreements almost universally contain twelve basic Articles. Most pertinent for the purposes of this treatise is Article III. In an effort to demonstrate this fact, an outline of the general content of each of the twelve standard PSA articles has been outlined as follows:⁵⁶

Article I: Definitions

This section provides an overview of key definitions within the PSA and primarily serves the function of clarification. Examples of such points of clarification include an explanation of terms and definitions relating to securities structures, class definitions, the transfer of assets, and what constitutes a material breach of contract. This section will also often include pertinent collection, remittance, and reporting dates. Typically, there is also an overview key terms relating to REMIC regulatory definitions and Regulation AB. A listing and description of the various tranches can often be found in this section as well.

⁵⁶ This overview is largely based on review of several Pooling and Servicing Agreements as well as untitled material graciously made available by the Commercial Mortgage Securities Association and the Mortgage Bankers Association.

Article II: Conveyance

Article II focuses on the creation of the Trust and spells out the Trustees duties. It does so by establishing the rules governing the conveyance of the mortgage loans into the trust fund. It specifies which documents must be delivered as part of the Mortgage File⁵⁷, when they must be delivered, and the process for certifying deliver. Article II also describes defaults and potential remedies for wholesalers and secondary purchases who misrepresented their loans, or else have committed a breach of warranty. Finally, Article II usually spells out the corporate entity representations and warranties to the various parties of the PSA.

Article III: Administration and Servicing

This section of the PSA contains the blueprint for the normative ongoing activities of a given CMBS issue. It includes provisions relating to account administration such as collections, escrow, and reserve accounts as well as remittances and servicer reporting duties and obligations. This section also outlines the appropriate process for servicing advances, handling assignments and assumptions. Most importantly, Article III outlines the processes governing the Special Servicer's rights and obligations to manage REO's, foreclosure, and the liquidation process.

Article IV: Payments to the Certificate Holders

This section outlines the waterfall provisions that set forth the normative tranche distribution structure for CMBS issues. This section also contains provisions which instruct the Trustee on the appropriate principle, interest, and prepayment premium distributions for each class of

⁵⁷ A Mortgage File is a collection of documents and instruments. Each loan in a given pool contains a mortgage file.

investors and contains provisions regarding Principle and Interest Advances from the master servicers as well as nonrecoverability⁵⁸ determinations.

Article V: Certificates

Article IV contains the main provisions for the form of certificate, transfers, and restrictions on transfers of certificates and ERISA restrictions.⁵⁹

Article VI: Depositor, Master Servicer, & Special Servicer

Article VI addresses the extent and limits of liability, indemnity, qualification and resignation of both the Master Servicer and Special Servicers. Typically, negligence (note: not gross negligence) is the liability and indemnity standard used to govern this section. This section will also usually lay down provisions wherein the master servicer agrees not to assign or transfer any rights and is also required to afford reasonable access to the depositor, NIMS Insurer and the Trustee access to all records. Herein is usually contained the language allowing for master servicers to assign certain activities to sub servicers.

Article VII: Default

This section contains provisions that define when the master, sub, and special servicers commit an act of default. Typically, this section assigns the assumption of the servicing role to the Trustee in the event of a servicer default. Typically, any breach will cause the termination of the master servicer's rights and obligations.

⁵⁸ A master servicer must continue to make to certificate holders until the funds have been deemed non-recoverable

⁵⁹ The Employee Retirement Income Security Act of 1974 ("ERISA") imposes certain fiduciary requirements on a person who manages the assets of an employee benefit plan.

Article VIII: Trustee, Custodian, & Tax Administrator

Article VIII outlines provisions relating to the Trustee and/or Paying Agent's duties, legal protections, indemnifications as well circumstances wherein the Trustee would be granted the ability to resign. There is often an emphasis on Trustee obligations in the event of a servicer default. Typically, this section also requires that the Trustee have and maintain minimum credit ratings. Article VIII will usually grant the Trustee the right to resign from the position and governs the appropriate procedure for succession of the Trustee.

Article IX: Termination

This section outlines the provisions for the REMIC required 90 day liquidation period in the event of receipt of final payment or by the purchase of a terminating agent. This section also governs the handling of REO property during final liquidation.

Article X: Additional Tax Provisions

Article X outlines the Trustee's duties to maintain accounting records and binds them to all reporting and tax compliance duty in accordance with REMIC regulations while also affirms the Trustee's responsibility to ensure the maintained of REMIC status. Concordantly, this section transforms many of the REMIC regulations, such as prohibited transactions, from rules governing the tax treatment of the CMBS issue into an actual contractual obligation for the Trustee.

Article XI: Regulation AB

This section outlines the necessary provisions to conform to SEC Regulation AB, which requires securities to conform to specific reporting requirements. Examples include Form 8-K for special events, Form 10-D for monthly distributions, and Form 10-K for annual servicer compliance, such as an accountant's attestation report, compliance certificates, and Sarbanes-Oxley certificates.

Article XII: Miscellaneous

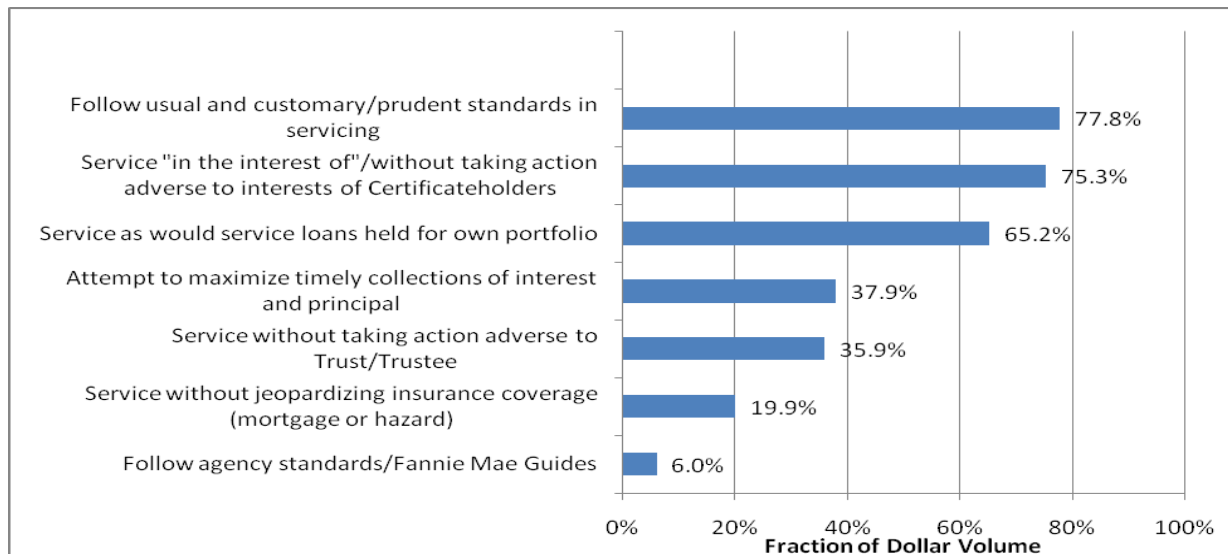
Article XII contains requirements for amending the PSA. These amendments are typically divided by amendments that *do* require investor consent and categories of amendments that *do not* require investor consent. The specific laws governing the contract are also cited in this area (note: PSA's are typically governed by New York law). Finally, Article XII outlines third party rights.

Chapter 7: PSA Limitations on Optimal Loan Default and Modifications

In recent times, much ado has been made of the limitations of Pooling and Servicing Agreements and their effect on the ability of special servicers to optimally modify loans in an effort to obtain the highest returns for the bondholders which they represent. This section offers the reader a sincere effort to investigate these concerns.

Recent research focused on subprime RMBS makes an effort to determine the actual limiting factors of Pooling and Servicing Agreements on the special servicer's ability to modify loans in arrears. While CMBS and RMBS differ substantially with regard to the characteristics of their underlying securities, particularly with regard to prepayment risk, the PSA restrictions and guidelines are very similar with regard to loan modification. Figure PSA-1 illustrates the most commonly occurring restrictions imposed on special servicers at the PSA level.⁶⁰

Figure PSA-1: Primary Restrictions of PSA's on RMBS modification and their rate of occurrence



⁶⁰ Hunt, What Do Subprime Securitization Contracts Actually Say About Loan Modification? *Preliminary Results and Implications*

This information was obtained by the Berkeley Center for Law during research with the explicit intention to ascertain the actual limitations imposed by PSAs on single family subprime mortgage default remedies by conducting a thorough survey of 614 subprime RMBS PSAs. This data demonstrates the most common PSA level restrictions and their frequency of occurrence in PSAs. Because RMBS special servicing modification restrictions closely parallel those governing CMBS⁶¹, this data would seem to be a reasonable proxy for the approximate distribution of CMBS PSA restrictions.

The PSA level restrictions listed in Figure PSA-1 are all efforts to ensure that both the master and special servicers maintain their fiduciary duty to the bondholders at all time. However, these restrictions have no impact on the ability of the special servicer to cure a default except to ensure that such actions are in the best interests of the bondholders, which only serves to explicitly state the implied intention of maximizing bondholder value that occurs in a default event. Note that this information pertains to restrictions made in addition to existing REMIC requirements and regulations as well as common municipal law.

For example, the notion that the servicers must service the loan without jeopardizing hazard insurance⁶² coverage simply serves to ensure that the property does not violate any covenants with their hazard insurance firm and remit their coverage. However, hazard insurance is required by almost every municipality in the country, and so no extraneous limitation is imposed upon the master servicer by this clause. As another example, the requirement to service the loan without

⁶¹ This fact was confirmed through conversations with industry experts

⁶² In this regard, there is the difference between CMBS and RMBS in that CMBS mortgages almost never carry mortgage insurance

taking action adverse to the trust or trustee is simply a restatement of the special servicers role within the REMIC.

This same study notes that outright bans on mortgage modification are rare, and in the dozen or so CMBS PSA's that have been reviewed as part of this thesis, particularly the guidelines covered in Article III of the observed PSA's, nothing that comes even remotely close to an outright ban on mortgage modification was observed.

Based on the strength of the aforementioned research performed at Berkeley⁶³ and interaction with industry leading special servicers⁶⁴ the author concludes that Pooling and Servicing Agreements offer de minimus constraints on the special servicer's ability to optimize bondholder returns relative to their ability to act to cure default or reasonably foreseeable default. Additionally, the author finds that, except as they reflect the limitations already set forth by REMIC regulations or state municipalities; PSA's present no hindrance to the ability of special servicers to engage in loan modification, loan sale, or foreclosure that would impede optimal returns to bondholders.

CMBS Special Servicing Compensation Structure

While the author finds that PSA's do not hinder potential cures to default, the author does find that the hierarchy and compensation structure contained within the PSA's offers potentially unnecessary costs to CMBS bondholders. Pooling and Servicing Agreements allow the master

⁶³ The author of this paper freely admits the relevance of this evidence is directly proportional to the degree of similarity between subprime RMBS and CMBS limitations on Special Servicers and this evidence should be taken accordingly

⁶⁴ See Acknowledgments section for the most prominent contributors – note that information relied on by the aforementioned was not used to determine the similarity between subprime RMBS and CMBS PSA level modification restrictions, but was used as an independent measure of loan modification restrictions occurring at the PSA level.

servicer to cure minor defaults such as assumption or assignment without approval, a lack of insurance, or a minor breach of covenant. However, any major modification involving actual or reasonably foreseeable default must be engaged through the special servicer. When a troubled mortgage is sent to special servicing, this automatically triggers the additional costs associated with special servicing. However, many of the modifications that a special servicer must make in default scenarios turn out to be relatively minor. For instance, a loan may enter arrears due to an unexpected tenant eviction at the property backing the mortgage. Suppose that the borrower could, in this circumstance, demonstrate a newly executed lease with a credit rated tenant due to take possession of the now vacant space in two months at an increased rent per square foot. In this instance, the special servicer may choose to grant forbearance rather than foreclose on the property. However, recall that in order for this to happen, the loan must be transferred to special servicing, thus forcing the bondholders to incur the fees associated with the special servicer. The special servicer receives the same fees for engaging complicated modifications as they do for engaging relatively expedient and simple modifications.

Thus, the author concludes that going forward, PSAs should allow for a class of minor modifications to be made by the master servicer in conjunction with and on the advisement of the special servicer at a reduced fee, while leaving the current fee structure in place for major modification or foreclosure scenarios.⁶⁵

⁶⁵ The Mortgage Bankers Association has released a White Paper entitled, "PSA Article III: Language" which addresses other shortcomings of PSA's that are outside the scope of this paper's specific focus on optimizing bondholder returns in default scenarios but will provide the reader with additional shortcomings of PSA's if so desired.

Chapter 8: Limitations of REMIC Regulations as they Pertain to Preemptive Modification

Much of the current concern over CMBS stems from the statutorily static nature of REMICs and the severe limitations governing the modification of assets within the REMIC absent a default or reasonably foreseeable default. Many advocate groups have called for changes to existing REMIC regulations that would allow for special servicers to engage in preemptive measures to limit losses for both borrowers and bondholders prior to actual or reasonably foreseeable default.⁶⁶ In this section, an attempt shall be made to identify and assess the potential for these changes to provide mutually beneficial scenarios for bondholders and borrowers wherein returns are optimized and losses are minimized for each respective party.

A recent white paper by the Real Estate Round Table succinctly summarizes many of the prior-to-reasonably-foreseeable-default (preemptive) measures which might be used to delay a default occurrence in the absence of the relevant limiting REMIC restrictions and, most importantly, preceding an actual default:⁶⁷

1. Changes to the amount and timing of principal or interest payments (including partial loan forgiveness, amortization modifications and prepayment recalculations, maturity date extensions, and interest accruals in the event of insufficient revenues to support interest payments)
2. Changes to obligors and guarantees (including additions, substitutions and releases).
3. Changes to loan payment options (including additions and deletions).
4. Changes to reserve and escrow requirements.
5. Changes to financial covenants.
6. Changes to or removal of lock-out periods, permitted defeasance dates, etc.

⁶⁶ Such as the Real Estate Round Table, The Mortgage Bankers Association, and The Commercial Mortgage Association to name a few.

⁶⁷ Real Estate Round Table, White Paper, Provide Greater Temporary Flexibility to Modify Securitized Commercial Mortgage Loans

7. Changes to prepayment fees.
8. Changes to permit borrower to obtain additional financing (mortgage or mezzanine).
9. Changes to cash management (including cash traps) and/or use of trapped funds for property-related purposes.
10. Changes to address issues involving required ratings for insurance providers, and concerns with the credit of lenders or banks holding escrows, as a result of the widespread effects of the credit crisis.
11. Property level transfers and loan assumptions.

In short, many are calling for a sweeping paradigm shift wherein the foundational REMIC concept of static pools is, at least temporarily, abandoned in favor of a wide ranging preemptively modifiable approach wherein either the special servicer or master servicer makes the determination to modify even though it is not in default or reasonably foreseeable default with the same credence afforded to default scenarios under the current regulation. While there is no doubt that such a free reign methodology would increase the flexibility afforded to servicers to modify loans, it is not clear that such modifications to the REMIC guidelines will guarantee or even increase the likelihood of improving returns and mitigating losses to bondholders and borrowers as there are several potential shortcomings to such an approach.

Violations of Fiduciary Duty to Bondholders

The first shortcoming of this approach is the implicit failure to maintain the fiduciary duty owed to the investors who had purchased cash flows backed by what they expected to be a fixed pools of assets only modifiable under certain conditions. With preemptive modifications, bondholders might suddenly find themselves receiving a stream of income from a security with a markedly different underlying source of revenue than they had initially purchased, without due cause. This

would entail a fundamental change to the very nature of CMBS securities and investors would be left holding an entirely different instrument than they had initially invested in. The ability to swap assets in and out of the mortgage pool at the whim of the servicers would erode investor confidence in REMICS as there would be no guarantee that new assets backing the cash flows would be superior to those they replaced, again, prior to default. While efforts may be made to guarantee equal or greater value of like kind exchanges within the pool, the latter concern is particularly poignant given the abject failure of risk rating and evaluation in recent times. By contrast, a loan that is in actual or imminent default presents a definitive loss of value as opposed to the hypothetical losses associated with preemptive modification.

The impracticality of Preemptive Modification

This leads us to the second pitfall of the preemptive modification movement, which is an apparent naivety on the part of many borrowers and their advocacy groups concerning both the willingness and ability of servicers to engage in preemptive modification. Master servicers, in their current form, lack the sophistication, experience, and human capital to perform the type of analysis necessary to make qualified determinations of loans likely to require preemptive modification. Additionally, in the short run, this strategy relies on the accurate prognostications of servicers, who are unqualified to offer such forecasts in even the best of times. It would then be highly inappropriate to thrust upon them such a responsibility in the midst of perhaps the most uncertain time in the history of modern real estate.

Of course, borrowers hoping for modification could be the source of notification for potential future default scenarios, but such a model would be rife with agency risk, as borrowers would

potentially engage in aggressive negotiation attempts to receive an unnecessary or overly generation modification en masse. This risk is further elucidated when contrasted against both self-cure and re-default risk. One might find that they have a very difficult time arguing for the bondholder motivations for desiring the provision of discounts to principle and rate for the borrower in the absence of any reasonably foreseeable duress.

One final point for consideration regarding the intractability of preemptive modification proposals lies in the ubiquitous promulgation of PSA level restrictions, which mirror the current REMIC regulations prohibiting preemptive modifications, in that the special servicer may only modify loans in actual or imminent default.⁶⁸ Any changes to the REMIC regulations allowing for modification outside of the currently allowed default scenarios would also require government imposed modifications of the contractual obligations between the parties of the PSA; an act that will almost certainly erode investor confidence in the stability of CMBS and ultimately further dampen attempts to revive the currently languishing real estate securities market.

Reasonably Foreseeable Default

In connection with proposals to allow for preemptive modifications, there often exists a call for a more defined definition of “reasonably foreseeable default.” There are currently grumblings within the commercial real estate community that the lack of clarity in the current governing language is an impediment to successful loan modifications. The theory states that the language causes uncertainty for special servicers as to when a loan is in “reasonably foreseeable” default,

⁶⁸ While most PSA’s use the term “imminent default” it is never-the-less standard industry practice to use “imminent default” and “reasonably foreseeable default” interchangeably

which in turn causes undue hesitancy for preemptive loan modification. If only special servicers were confident of their legal right to make preemptive modifications without fear of litigation, they would surely perform them more often, or so the theory goes.

Despite these claims, the reasonable person standard that governs foreseeable default has been left intentionally vague by legislators in order to allow for maximal flexibility. In American law, the reasonable person standard allows for a wide range of potentially justifiable actions appropriate for complicated and unpredictable scenarios, such as defaults within CMBS. The reasonable person standard accomplishes this flexibility by providing a hypothetical figure by which to objectively judge a culpable agent's actions within a given context. The reasonable person standard also takes into account a person's knowledge, experience, and perceptions when judging their behavior and choices, which would presumably afford some degree of credence to the special servicer's particular brand of discernment. While a more tangible definition of "reasonably foreseeable" default would allow for greater certainty of modification rights going forward, such an act would, ironically, more than likely have the effect of narrowing the scope of the special servicer's options when responding to defaults rather than expanding it. During the course of the author's contact with special servicers, concerns over the definition of reasonably foreseeable default were repeatedly dismissed as unfounded.

The Case for Balloon Extensions

If there is a case to be made for the allowance of preemptive modification, it is one which argues for the granting of preemptive extensions on performing assets with impending balloon payments in the short run. The current lack of liquidity coupled with declining property values will undoubtedly create default scenarios for otherwise performing assets that are simply unable to

refinance or sell their property at a price sufficient to pay off the loan balance when the note resets due to a severe shortage of available capital and dramatically increased lending standards. In instances where this is due to a lack of capital and not the asset fundamentals, there may be a well grounded argument for preemptive modifications in the form of loan extensions. The value of granting a preemptive extension as opposed to waiting for reset induced default lies in the foreknowledge of the modification for both the bondholders and the borrowers.

Furthermore, the argument could be made that declining property values, increased lending standards, and the current lack of liquidity in the capital markets constitute a “reasonably foreseeable default” under existing REMIC regulations and PSA stipulations for performing properties with balloon payments coming due. Such an interpretation would dramatically increase the ease of integrating such an interpretation. Most importantly, the need for extensions are easily identifiable and do not suffer from the potential for borrower abuse that overshadows other preemptive modification measures.

Chapter 9: Limitations of REMIC regulations as they pertain to Actual or Imminent Default

In this section, unnecessary limitations imposed on special servicers by REMIC regulations which limit maximal bondholder returns will be highlighted. In some cases, a hypothetical mini-case will be provided to help elucidate the manner in which the suggested modification to existing regulations would be of benefit to bondholder returns.

In general, REMIC regulations are very permissive when it comes to the modification of a loan that enters into arrears. However, there do seem to be a few specific instances in which modifications to REMIC regulations would help to maximize returns and mitigate losses to CMBS bondholders.

Cross Collateralized Carve Outs

Currently, REMIC legislation does not allow for the conversion of a single loan or loans secured by multiple properties into multiple loans, each secured by a single property.⁶⁹ This restriction prohibits special servicers from isolating and modifying and/or foreclosing on the actual underperforming asset(s) in situations involving cross collateralized properties. Thus, in the event of a foreclosure all fees, costs, and discounts must be taken on a larger sum total while the performing assets are eliminated from the CMBS pool in order to reconcile the underperforming pieces. Allowing special servicers to carve out the underperforming assets while maintaining healthy properties would eliminate this counterproductive quirk in the current legislation and offer further options to mitigate bondholder losses when applicable.

⁶⁹ As this constitutes a “substantial” change, see Appendix A-3

Cross Collateralized Carve Outs – An Example

The Isenguard Investment Group issued a mortgage in the amount of \$480 million with an interest only rate of 6.5% at an 80% Loan to Value ratio that was secured by three cross collateralized assets, Office Property A, Office Property B, and Retail Property C. The underwritten debt service coverage ratio was 1.15 and was expected to rise by approximately .03 per fiscal year. Let us further assume that Properties A and B both offer 300,000 square feet of rentable space while Property C offers 600,000 square feet of rentable space all of which was expected to rent at \$45 per foot on an annual basis and grow at a rate of 3% per year with a standard vacancy factor of 5%. All inclusive operating expenses were predicted to be 30% of Net Operating Income and grow at a rate of 3% per year. Figure CO-1 depicts the pro forma for this scenario.

Now let us assume that the two office buildings, Property A and Property B, both unexpectedly signed marquee tenants and the aggregate rent per square foot actually increases as a result from \$45 to \$50. Meanwhile, Retail Property C lost both of its anchor tenants to bankruptcy and cannot find a replacement. Rents for Property C dropped to an aggregate of \$20 due to rent decreases associated with “dark” clauses in the lease structure as well as the loss of performance rent. Despite the over performance of Properties A and B, they could not compensate for the dramatic revenue and vacancy increases of Property C and the loan entered into default, as demonstrated in Figure CO-2. Let us further assume that the MSA in which the property exists is currently undergoing a recession, with particularly deleterious effects on retail, which is likely to make finding an appropriate anchor tenant a tumultuous task. Thus, these risks provide sufficient

incentive for a quick sale of the property due to fears of an ever worsening retail market. Note that as a reflection of this concern, the longer that Property C is held without an anchor tenant, the higher the cap rates rise as a result of the market perception of riskiness associated with this property.

Figure CO-3 demonstrates the loss associated with a foreclosure if all of the assets are disposed of in Year 1 with a \$71 million loss, with a loss of \$69 million if the assets are sold in Year 2. Figure CO-7 demonstrates the substantial reach of the credit loss across multiple tranches in a foreclosure event for this scenario.

By contrast, if the REMIC regulations were adjusted to allow for the division of the original loan into two separate loans, one governing Properties A and B and one governing Property C, the special servicer would be able to carve out the underperforming asset and utilize the over performance of the office properties to recover the lost funds at reversion. In this case, the loan has been modeled as being split into two halves based on the total square foot of the properties (600,000 total for A and B and 600,000 total for C) with a subordinate lien for the realized loss accompanied by the REO sale of Property C to be placed on Properties A and B as shown in Figure CO-5. The new loan would retain the same interest rate and terms in exchange for the subordinate lien against Properties A and B. All excess before tax profit would go to refund the principle loss incurred by the tranches initially impacted by the interest loss. Although the interest shortfall has been forgiven in this case to demonstrate the assumption of a certain degree of bargaining on the part of the borrower, this would not be necessary to demonstrate the superiority of this approach, for this scenario, if allowed. Figure CO-6 outlines the disposition of

Properties A and B and the final repayment t of the bondholders. Note that this scenario is preferred for both the borrower and the bondholders.

Material Improvements

Once a property has been foreclosed upon, the special servicer can only perform maintenance and restoration, regardless of any functional obsolescence that might be present, or even the root cause of the default. Any additional improvements that constitute a fundamental change are not allowed. Thus, improvements that might bring the property in line with market amenities are not allowed as this would effect a “substantial” change to the collateral⁷⁰. For example, while one could repair a leaky roof of an office building, one could not add a pool to a hotel. Thus, a property that has been foreclosed upon by a REMIC with the underlying asset failing to perform due to obsolescence or rapid changes in market demand will be unable to be repositioned to effectively address the new market realities and the bondholders will suffer for it at disposition. Standard industry practice, which calls for the utilization of capitalization rates to determine asset prices, can be particularly irksome when a special servicer is unable to make the aforementioned material modifications to properties. As a result, such a property will almost certainly underperform the market, resulting in a higher cap rate and lower sale price which will in turn increase the likelihood and depth of credit loss severity.

Material Improvements – An Example

The Isenguard Investment Group issued an interest only mortgage with an effective interest rate of 6.5% in the amount of \$100 million at an 80% Loan to Value ratio. The mortgage was secured by The Antioch Tower, a 300,000 square foot Class B multifamily complex located in Miami, Florida. Rent was expected to be \$35 per square foot on an annual basis with a 5% vacancy rate and a 3% year over year growth factor. Operating expenses were expected to be 30% of Net Operating Income. The borrowing entity is Eastman Private Equity (EPE), a small boutique firm

⁷⁰ See Appendix A-3

looking to diversify their holdings with direct real estate exposure. Figure MC-1 outlines the property pro forma.

Unfortunately for EPE, their due diligence was sloppy and they failed to notice that several superior projects within a quarter mile were due to come online their first year operating The Antioch Tower. Rather than increase rents at a rate of 3% year over year, EPE was forced to lower rents 3% year over year in order to maintain their occupancy levels. By the 3rd year of operation, the property entered into default and with projections for continued decline and was subsequently foreclosed upon as demonstrated by Figure MC-2.

Upon further review, the Special Servicer determined that competing properties all offered a rooftop pool and sunbathing area, which were amenities in high demand with the area's dominant demographic; young upwardly mobile twenty-something's. The special servicer received an estimate of \$10 million to add a rooftop pool to the property, but soon realized that such an improvement would constitute a material change to the collateral securing the mortgage and was thus prohibited by REMIC regulations. The resulting REO disposition under current REMIC regulations would result in losses between \$5.5 million and nearly \$14 million in realized losses contingent on how quickly the special Servicer could secure would be able to secure a buyer for the REO sale. Figure MC-6 illustrates the resulting credit loss to bondholders.

In contrast, Figure MC-4 illustrates the expected performance of The Antioch Tower were it that the rooftop improvements could be made. This scenario assumes that the master servicer will advance a \$10 million interest only loan to cover the cost of the improvements at an interest rate

of 11% with yearly debt service at \$1.1 million. The relatively high interest rate is in keeping with the risk profile of the new loan given the pre-cure performance of the collateral at the time of issue. Figure MC-5 demonstrates the dramatic uptick in rental revenue as the property returns to a market competitive status and immediately begins to perform within the same year pro forma expectations. Any tranche principle erosion could be paid back to the bondholders⁷¹ with the property before tax cash flow and full recovery would be realized upon disposition of the asset, which would presumably occur in Year 4.

⁷¹ Or to the s=master servicer in the event that the interest was forwarded and deemed recoverable.

REO Hold Period

Currently, the maximum hold period for REOs is three years, with an option to obtain an additional three year period of time, which is virtually always granted. However, given the current state of the market as well as the expectations by many of a long tailed recovery, there exists considerable merit for special servicers wishing to assume a hold and wait posture. Yet, current uncertainty about the timeframe for market recovery coupled with the aforementioned restrictions for an REO hold period make this option riskier, and therefore less likely to be enacted, than it otherwise need be. Temporary increases to the allowable hold period would make this default cure option more palatable, as special servicers would have a longer horizon with which to time the market.

REO Hold Period – An Example

Let us assume that once again the Isenguard Investment Group has issued an interest only mortgage with an effective interest rate of 6.5% in the amount of \$100 million at an 80% Loan to Value ratio this time to a self storage building, Scott Storage, in Corona, California in 2006. Buoyed by demand, Scott Storage chose to refinance their existing loan at the end of 2005 in order to receive cash proceeds in an effort to expand their business. The pro forma for their existing property can be seen in Figure REO-1.

Despite the unexpected dawn of the housing crisis at year end 2006, Scott Storage was initially hopeful that the particularly hard hit city of Corona would improve demand for self storage as residents were forced to downgrade or relocate through foreclosure. However, the primary motivation for many Californians to relocate to Corona, which is on the far outskirts of the Los Angeles suburbs, was driven by the opportunity to become home owners. Absent this incentive,

most of the Corona residents chose to relocate back into the heart of Los Angeles and subsequently used storage that would be closer to their new home. While Scott Storage's efficient design and premium positioning allowed them to charge a relatively high rent per square foot for their services, their business suffered from a general lack of demand due to the relocation phenomenon caused by the housing crisis. In order to maintain occupancy levels, they chose to compete on price by adjusting their rents downward. Thus, far from growing at the projected 3% per year, their rents began to decline, as demonstrated in Figure REO-2.

Consequently, Scott Storage entered default at the end of Year 3 and was subsequently foreclosed upon at the beginning of Year 4. Upon due diligence, the Special Servicer concluded that Corona presented an unusually diversified economy that continued to demonstrate positive signs of growth despite the current housing led recession. Corona was also the suburb nearest to Los Angeles able to absorb the continued population increases of Los Angeles County and offered businesses and their employees close proximity to prestigious North Orange County suburbs with similar quality of life at a substantial price discount. Although the current economic crisis was daunting, nearly all economic forecasts predicted that the unusually strong Corona economy would begin to recover within 3 years. The long run economic outlook for Corona was set to outpace area growth by a factor of 300 percent and although Corona had been among the hardest hit cities in the state due to the artificial housing bubble, its fundamentals were still noteworthy.

Thus, the special servicer determined that the highest value to the bondholders would be to foreclose and retain the property for a period of 8 – 10 years in order to allow the cycle of cap

rate expansion and recompression to bring cap rates back in line with historical expectations while Corona's strong fundamentals returned the property to strong performance. However, the special servicer was limited by REMIC regulations that only allowed for a three year hold period, and at best, an additional three year extension. The special servicer could not justify a six year horizon and so foreclosed upon, and sold the asset. Figure REO-3 shows the expected Return to bondholders from foreclosure and disposition across the REO hold period, allowing for a simple year by year comparison of expected returns. By contrast, Figure REO-4 shows the best projected credit loss severity for the bondholders, approximately \$5.25 million, assuming the deposition at the end of the current maximum 6 year hold period.

REO Debt Lending

Under the current REMIC regulations, once a special servicer forecloses on a property the mortgage is deemed to no longer exist. Consequently, a special servicer cannot in turn provide new funds the loan once a property has entered foreclosure, nor can the special servicer use proceeds from the disposition of the foreclosed asset to make a new loan against the asset to the purchaser as this violates the ninety days from startup rule governing qualified mortgages.⁷² Efforts to examine this particular restriction are timely given the current credit crisis which has engulfed the world's capital markets. Presumably, this restriction is in place to prevent a significant alteration to the length of the mortgage. However, a temporary allowance for special servicers to create new mortgages to fund the sale of foreclosed assets would allow for an increase in the number of potential buyers for foreclosed properties, as many willing purchasers are simply without access to funds given the current state of the market. In the long run, this might prove to be a viable permanent modification if care was enacted to ensure that there were no significant and unnecessary alterations to the timing and length of the cash flows.

⁷² See Appendix A-2

Chapter 10: Conclusions

The current troubles in the real estate market are vast, complex, and systemic. There is no simple way to erase the losses associated with poor investment decisions and the global economy has had a bitter pill to swallow. The allowance of preemptive modifications to qualified mortgages would only encourage borrowers to seek modifications en masse, further erode confidence in the system, and rely on the expertise of those unqualified to make forward looking prognostications. Additionally, the author finds that calls for the clarification of “reasonably foreseeable default” in order to embolden special servicers to take preemptive action are largely unfounded.

However, there remain at least a few ways in which we may improve the current REMIC regulations and PSA’s to maximize returns and minimize losses to CMBS bondholders. The first is to modify the structure of PSA’s going forward to allow for greater collaboration between master servicers and special servicers in cases where the default resolution is relatively minor, with a lower fee apportioned to the special servicer so as to avoid excessive fees for bondholders. Second, enact amendments to the restrictions governing material changes to collateral when a qualified mortgage enters default that allow for carve outs as well as material improvements to the asset as needed.

In addition, there are three short run measures that could be enacted to create relief in recognition of the current economic climate. The first is to enact a temporary safe harbor for CMBS issued between 2003 and 2008 to allow for preemptive extensions of balloon payments, at the special servicers discretion, for performing properties with reset payments coming due. The second would be an extension of the expected six year REO hold period to allow sufficient time for

special servicers to wait for stabilization of the commercial real estate market. Finally, as an additional short term stop loss measure, legislators should grant a temporary allowance for the lending of REMIC funds to purchasers of properties foreclosed upon by the REMIC until such a time that healthy levels of liquidity return to the capital markets. This measure could be enacted in the long run if care was taken to ensure that there were no significant and unnecessary alterations to the timing and length of the cash flows.

Exhibits

Figure CO-1: Original Pro Forma for Cross Collateralized Properties A, B, and C

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Property A Market Rent	\$13,500,000	\$13,905,000	\$14,322,150	\$14,751,815	\$15,194,369	\$15,650,200	\$16,119,706	\$16,603,297	\$17,101,396	\$17,614,438
Property A Vacancy	(\$675,000)	(\$695,250)	(\$716,108)	(\$737,591)	(\$759,718)	(\$782,510)	(\$805,985)	(\$830,165)	(\$855,070)	(\$880,722)
Property B Market Rent	\$13,500,000	\$13,905,000	\$14,322,150	\$14,751,815	\$15,194,369	\$15,650,200	\$16,119,706	\$16,603,297	\$17,101,396	\$17,614,438
Property B Vacancy	(\$675,000)	(\$695,250)	(\$716,108)	(\$737,591)	(\$759,718)	(\$782,510)	(\$805,985)	(\$830,165)	(\$855,070)	(\$880,722)
Property C Market Rent	\$27,000,000	\$27,810,000	\$28,644,300	\$29,503,629	\$30,388,738	\$31,300,400	\$32,239,412	\$33,206,594	\$34,202,792	\$35,228,876
Property C Vacancy	(\$1,350,000)	(\$1,390,500)	(\$1,432,215)	(\$1,475,181)	(\$1,519,437)	(\$1,565,020)	(\$1,611,971)	(\$1,660,330)	(\$1,710,140)	(\$1,761,444)
Effective Gross Income	\$51,300,000	\$52,839,000	\$54,424,170	\$56,056,895	\$57,738,602	\$59,470,760	\$61,254,883	\$63,092,529	\$64,985,305	\$66,934,864
Operating Expenses & Taxes	\$15,390,000	\$15,851,700	\$16,327,251	\$16,817,069	\$17,321,581	\$17,841,228	\$18,376,465	\$18,927,759	\$19,495,592	\$20,080,459
Net Operating Income	\$35,910,000	\$36,987,300	\$38,096,919	\$39,239,827	\$40,417,021	\$41,629,532	\$42,878,418	\$44,164,771	\$45,489,714	\$46,854,405
Debt Service	(\$31,200,000)	(\$31,200,000)	(\$31,200,000)	(\$31,200,000)	(\$31,200,000)	(\$31,200,000)	(\$31,200,000)	(\$31,200,000)	(\$31,200,000)	(\$31,200,000)
DSCR	1.151	1.185	1.221	1.258	1.295	1.334	1.374	1.416	1.458	1.502
Property Before-Tax Cash Flow	\$4,710,000	\$5,787,300	\$6,896,919	\$8,039,827	\$9,217,021	\$10,429,532	\$11,678,418	\$12,964,771	\$14,289,714	\$15,654,405

Figure CO-2: Actual Performance of Cross Collateralized Properties A, B, and C

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Property A Market Rent	\$15,000,000	\$15,450,000	\$15,913,500	\$16,390,905	\$16,882,632	\$17,389,111	\$17,910,784	\$18,448,108	\$19,001,551	\$19,571,598
Standard Market Vacancy	(\$750,000)	(\$772,500)	(\$795,675)	(\$819,545)	(\$844,132)	(\$869,456)	(\$895,539)	(\$922,405)	(\$950,078)	(\$978,580)
Property B Market Rent	\$15,000,000	\$15,450,000	\$15,913,500	\$16,390,905	\$16,882,632	\$17,389,111	\$17,910,784	\$18,448,108	\$19,001,551	\$19,571,598
standard Market Vacancy	(\$750,000)	(\$772,500)	(\$795,675)	(\$819,545)	(\$844,132)	(\$869,456)	(\$895,539)	(\$922,405)	(\$950,078)	(\$978,580)
Property C Market Rent	\$12,000,000	\$12,000,000	\$12,000,000	\$12,000,000	\$12,000,000	\$12,000,000	\$12,000,000	\$12,000,000	\$12,000,000	\$12,000,000
Standard Market Vacancy	(\$1,800,000)	(\$1,800,000)	(\$1,800,000)	(\$1,800,000)	(\$1,800,000)	(\$1,800,000)	(\$1,800,000)	(\$1,800,000)	(\$1,800,000)	(\$1,800,000)
Effective Gross Income	\$38,700,000	\$39,555,000	\$40,435,650	\$41,342,720	\$42,277,001	\$43,239,311	\$44,230,490	\$45,251,405	\$46,302,947	\$47,386,036
Operating Expenses & Taxes	\$11,610,000	\$11,958,300	\$12,317,049	\$12,686,560	\$13,067,157	\$13,459,172	\$13,862,947	\$14,278,836	\$14,707,201	\$15,148,417
Net Operating Income	\$27,090,000	\$27,596,700	\$28,118,601	\$28,656,159	\$29,209,844	\$29,780,139	\$30,367,543	\$30,972,570	\$31,595,747	\$32,237,619
Debt Service	(\$31,200,000)	(\$31,200,000)	(\$31,200,000)	(\$31,200,000)	(\$31,200,000)	(\$31,200,000)	(\$31,200,000)	(\$31,200,000)	(\$31,200,000)	(\$31,200,000)
DSCR	0.868	0.885	0.901	0.918	0.936	0.954	0.973	0.993	1.013	1.033
Property Before-Tax Cash Flow	(\$4,110,000)	(\$3,603,300)	(\$3,081,399)	(\$2,543,841)	(\$1,990,156)	(\$1,419,861)	(\$832,457)	(\$227,430)	\$395,747	\$1,037,619

Figure CO-3: Disposition of Properties A, B, and C at Year 1 and Year 2

	Year 1	Year 2
Implied Cap	6.25%	6.35%
Market Asset Value	\$433,440,000	\$434,593,701
Sales Commission	(\$4,334,400)	(\$4,345,937)
Foreclosure Cost	(\$43,344,000)	(\$43,459,370)
Interest Income	\$27,090,000	\$27,596,700
Interest Shortfall	(\$4,110,000)	(\$3,603,300)
Loan Balance	(\$480,000,000)	(\$480,000,000)
Total Return	(\$71,258,400)	(\$69,218,206)

Figure CO-4: Properties A and B Carve Out Performance

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Property A Market Rent	\$15,000,000	\$15,450,000	\$15,913,500	\$16,390,905	\$16,882,632	\$17,389,111	\$17,910,784	\$18,448,108	\$19,001,551	\$19,571,598
Property A Vacancy	(\$750,000)	(\$772,500)	(\$795,675)	(\$819,545)	(\$844,132)	(\$869,456)	(\$895,539)	(\$922,405)	(\$950,078)	(\$978,580)
Property B Market Rent	\$15,000,000	\$15,450,000	\$15,913,500	\$16,390,905	\$16,882,632	\$17,389,111	\$17,910,784	\$18,448,108	\$19,001,551	\$19,571,598
Property B Vacancy	(\$750,000)	(\$772,500)	(\$795,675)	(\$819,545)	(\$844,132)	(\$869,456)	(\$895,539)	(\$922,405)	(\$950,078)	(\$978,580)
Effective Gross Income	\$28,500,000	\$29,355,000	\$30,235,650	\$31,142,720	\$32,077,001	\$33,039,311	\$34,030,490	\$35,051,405	\$36,102,947	\$37,186,036
Operating Expenses & Taxes	\$8,550,000	\$8,806,500	\$9,070,695	\$9,342,816	\$9,623,100	\$9,911,793	\$10,209,147	\$10,515,422	\$10,830,884	\$11,155,811
Net Operating Income	\$19,950,000	\$20,548,500	\$21,164,955	\$21,799,904	\$22,453,901	\$23,127,518	\$23,821,343	\$24,535,984	\$25,272,063	\$26,030,225
Debt Service	(\$15,600,000)	(\$15,600,000)	(\$15,600,000)	(\$15,600,000)	(\$15,600,000)	(\$15,600,000)	(\$15,600,000)	(\$15,600,000)	(\$15,600,000)	(\$15,600,000)
DSCR	1.279	1.317	1.357	1.397	1.439	1.483	1.527	1.573	1.620	1.669
Property Before-Tax Cash Flow	\$4,350,000	\$4,948,500	\$5,564,955	\$6,199,904	\$6,853,901	\$7,527,518	\$8,221,343	\$8,935,984	\$9,672,063	\$10,430,225

Figure CO-5: Property C Carve out and Disposition

	Year 1	Year 2
Property C Market Rent	\$12,000,000	\$12,000,000
Property C Vacancy	(\$1,800,000)	(\$1,800,000)
Effective Gross Income	\$10,200,000	\$10,200,000
Operating Expenses & Taxes	\$3,060,000	\$3,151,800
Net Operating Income	\$7,140,000	\$7,048,200
Debt Service	(\$15,600,000)	(\$15,600,000)
DSCR	0.458	0.452
Property Before-Tax Cash Flow	(8,460,000)	(8,551,800)
	Year 1	Year 2
Market Cap	6.25%	6.35%
Market Asset Value	\$114,240,000	\$110,995,276
Sales Commission	(\$1,142,400)	(\$1,109,953)
Foreclosure Cost	(\$11,424,000)	(\$11,099,528)
Interest Income	\$7,140,000	\$7,048,200
Interest Loss	(\$8,460,000)	(\$8,551,800)
Loan Balance	(\$240,000,000)	(\$240,000,000)
Proceeds from Sale	(\$139,646,400)	(\$142,717,805)

Figure CO-6: Disposition of Carved out Properties A & B and repayment to bondholders

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Market Cap	6.25%	6.35%	6.45%	6.55%	6.55%	6.55%	6.55%	6.55%	6.55%	6.55%
Market Asset Value	\$319,200,000	\$323,598,425	\$328,138,837	\$332,822,956	\$342,807,645	\$353,091,875	\$363,684,631	\$374,595,170	\$385,833,025	\$397,408,016
Sales Commission	(3,192,000)	(3,235,984)	(3,281,388)	(3,328,230)	(3,428,076)	(3,530,919)	(3,636,846)	(3,745,952)	(3,858,330)	(3,974,080)
Loan Balance	(240,000,000)	(240,000,000)	(240,000,000)	(240,000,000)	(240,000,000)	(240,000,000)	(240,000,000)	(240,000,000)	(240,000,000)	(240,000,000)
Proceeds from Sale	\$76,008,000	\$80,362,441	\$84,857,449	\$89,494,727	\$99,379,569	\$109,560,956	\$120,047,784	\$130,849,218	\$141,974,695	\$153,433,935
Realized Loss of Property C	(142,717,805)	(142,717,805)	(142,717,805)	(142,717,805)	(142,717,805)	(142,717,805)	(142,717,805)	(142,717,805)	(142,717,805)	(142,717,805)
Funds Available for repayment	\$1,212,981	\$1,569,721	\$1,985,175	\$2,464,026	\$3,011,279	\$3,632,277	\$4,332,723	\$5,118,705	\$5,996,718	\$6,973,692
Reimbursement Fund	\$1,212,981	\$2,782,702	\$4,767,877	\$7,231,903	\$10,243,182	\$13,875,459	\$18,208,183	\$23,326,888	\$29,323,606	\$36,297,298
Bondholder Loss	(\$65,496,824)	(\$59,572,662)	(\$53,092,479)	(\$45,991,175)	(\$33,095,054)	(\$19,281,390)	(\$4,461,838)	\$11,458,301	\$28,580,496	\$47,013,429

Figure CO-7: Credit Loss Severity of Foreclosure on properties A, B, and C (\$40,997,657)

Tranche	Rating	Subordination	Balance	Credit Support
A-1	Aaa	30.00%	\$7,127,500	\$542,313,850
A-2	Aaa	30.00%	\$51,305,250	\$535,186,350
A-3	Aaa	30.00%	\$7,780,750	\$483,881,100
A-PB	Aaa	30.00%	\$16,517,750	\$476,100,350
A-4	Aaa	30.00%	\$171,858,750	\$459,582,600
A-1A	Aaa	30.00%	\$126,926,500	\$287,723,850
AM	Aaa	20.00%	\$54,502,250	\$160,797,350
AJ	Aaa	14.00%	\$32,701,500	\$106,295,100
B	Aa1	12.75%	\$6,812,750	\$73,593,600
C	Aa2	11.63%	\$6,131,500	\$66,780,850
D	Aa3	10.50%	\$6,131,500	\$60,649,350
E	A1	9.75%	\$4,087,750	\$54,517,850
F	A2	8.88%	\$4,768,750	\$50,430,100
G	A3	7.88%	\$5,450,250	\$45,661,350
H	Baa1	6.63%	\$6,813,000	\$40,211,100
J	Baa2	5.38%	\$6,812,750	\$33,398,100
K	Baa3	4.25%	\$6,131,500	\$26,585,350
L	Ba1	3.50%	\$4,087,750	\$20,453,850
M	Ba2	3.13%	\$2,043,750	\$16,366,100
N	Ba3	2.75%	\$2,043,750	\$14,322,350
O	B1	2.50%	\$1,362,500	\$12,278,600
P	B2	2.25%	\$1,362,750	\$10,916,100
Q	B3	1.88%	\$2,043,750	\$9,553,350
S	NR	0.00%	\$7,509,600	\$7,509,600
WAC IO	Aaa		\$545,023,451	

Figure MC-1: Pro Forma

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Market Rent	\$10,500,000	\$10,710,000	\$10,924,200	\$11,142,684	\$11,365,538	\$11,592,848	\$11,824,705	\$12,061,200	\$12,302,424	\$12,548,472
Standard Market Vacancy	(\$525,000)	(\$535,500)	(\$546,210)	(\$557,134)	(\$568,277)	(\$579,642)	(\$591,235)	(\$603,060)	(\$615,121)	(\$627,424)
Effective Gross Income	\$9,975,000	\$10,174,500	\$10,377,990	\$10,585,550	\$10,797,261	\$11,013,206	\$11,233,470	\$11,458,140	\$11,687,302	\$11,921,048
Operating Expenses & Taxes	(\$2,992,500)	(\$3,052,350)	(\$3,113,397)	(\$3,175,665)	(\$3,239,178)	(\$3,303,962)	(\$3,370,041)	(\$3,437,442)	(\$3,506,191)	(\$3,576,315)
Net Operating Income	\$6,982,500	\$7,122,150	\$7,264,593	\$7,409,885	\$7,558,083	\$7,709,244	\$7,863,429	\$8,020,698	\$8,181,112	\$8,344,734
Debt Service	(\$6,500,000)	(\$6,500,000)	(\$6,500,000)	(\$6,500,000)	(\$6,500,000)	(\$6,500,000)	(\$6,500,000)	(\$6,500,000)	(\$6,500,000)	(\$6,500,000)
DSCR	1.074	1.096	1.118	1.140	1.163	1.186	1.210	1.234	1.259	1.284
Property Before-Tax Cash Flow	\$482,500	\$622,150	\$764,593	\$909,885	\$1,058,083	\$1,209,244	\$1,363,429	\$1,520,698	\$1,681,112	\$1,844,734

Figure MC-2: Actual Performance and Foreclosure

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Market Rent	\$10,500,000	\$10,185,000	\$9,879,450	\$9,583,067	\$9,295,575	\$9,016,707	\$8,746,206	\$8,483,820	\$8,229,305	\$7,982,426
Standard Market Vacancy	(\$525,000)	(\$509,250)	(\$493,973)	(\$479,153)	(\$464,779)	(\$450,835)	(\$437,310)	(\$424,191)	(\$411,465)	(\$399,121)
Effective Gross Income	\$9,975,000	\$9,675,750	\$9,385,478	\$9,103,913	\$8,830,796	\$8,565,872	\$8,308,896	\$8,059,629	\$7,817,840	\$7,583,305
Operating Expenses & Taxes	(\$2,992,500)	(\$3,082,275)	(\$3,174,743)	(\$3,269,986)	(\$3,368,085)	(\$3,469,128)	(\$3,573,201)	(\$3,680,398)	(\$3,790,809)	(\$3,904,534)
Net Operating Income	\$6,982,500	\$6,593,475	\$6,210,734	\$5,833,928	\$5,462,711	\$5,096,744	\$4,735,694	\$4,379,231	\$4,027,031	\$3,678,771
Debt Service	(\$6,500,000)	(\$6,500,000)	(\$6,500,000)	(\$6,500,000)	(\$6,500,000)	(\$6,500,000)	(\$6,500,000)	(\$6,500,000)	(\$6,500,000)	(\$6,500,000)
DSCR	1.074	1.014	0.955	0.898	0.840	0.784	0.729	0.674	0.620	0.566
Foreclosure Cost			(9,937,174.80)							
Property Before-Tax Cash Flow	\$482,500	93,475.00	(10,226,440.55)	(666,072.37)	(1,037,289.33)	(1,403,255.76)	(1,764,305.75)	(2,120,768.67)	(2,472,969.46)	(2,821,228.94)

Figure MC-3: Disposition without Cure

	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Market Cap	6.25%	6.35%	6.45%	6.55%	6.65%	6.75%	6.85%	6.95%
Market Asset Value	\$99,371,748	\$91,872,876	\$84,693,189	\$77,812,889	\$71,213,447	\$64,877,501	\$58,788,767	\$52,931,958
Foreclosure Cost	(\$9,937,175)	(\$9,937,175)	(\$9,937,175)	(\$9,937,175)	(\$9,937,175)	(\$9,937,175)	(\$9,937,175)	(\$9,937,175)
Sales Commission	(\$993,717)	(\$918,729)	(\$846,932)	(\$778,129)	(\$712,134)	(\$648,775)	(\$587,888)	(\$529,320)
Interest Income	\$6,210,734	\$5,833,928	\$5,462,711	\$5,096,744	\$4,735,694	\$4,379,231	\$4,027,031	\$3,678,771
Interest Shortfall	(\$289,266)	(\$666,072)	(\$1,037,289)	(\$1,403,256)	(\$1,764,306)	(\$2,120,769)	(\$2,472,969)	(\$2,821,229)
Loan Balance	(\$100,000,000)	(\$100,000,000)	(\$100,000,000)	(\$100,000,000)	(\$100,000,000)	(\$100,000,000)	(\$100,000,000)	(\$100,000,000)
Total Return	(\$5,637,676)	(\$13,815,172)	(\$21,665,497)	(\$29,208,926)	(\$36,464,473)	(\$43,449,986)	(\$50,182,234)	(\$56,676,995)

Figure MC-4: Asset Performance after Cure of Obsolescence

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Market Rent	\$10,500,000	\$10,185,000	\$9,879,450	\$11,473,634	\$11,817,843	\$12,172,378	\$12,537,549	\$12,913,676	\$13,301,086	\$13,700,118
Standard Market Vacancy	(\$525,000)	(\$509,250)	(\$493,973)	(\$573,682)	(\$590,892)	(\$608,619)	(\$626,877)	(\$645,684)	(\$665,054)	(\$685,006)
Effective Gross Income	\$9,975,000	\$9,675,750	\$9,385,478	\$10,899,952	\$11,226,950	\$11,563,759	\$11,910,672	\$12,267,992	\$12,636,032	\$13,015,113
Operating Expenses & Taxes	(\$2,992,500)	(\$3,082,275)	(\$3,174,743)	(\$3,269,986)	(\$3,368,085)	(\$3,469,128)	(\$3,573,201)	(\$3,680,398)	(\$3,790,809)	(\$3,904,534)
Net Operating Income	\$6,982,500	\$6,593,475	\$6,210,734	\$7,629,966	\$7,858,865	\$8,094,631	\$8,337,470	\$8,587,594	\$8,845,222	\$9,110,579
Debt Service	(\$6,500,000)	(\$6,500,000)	(\$6,500,000)	(\$6,500,000)	(\$6,500,000)	(\$6,500,000)	(\$6,500,000)	(\$6,500,000)	(\$6,500,000)	(\$6,500,000)
Cost to cure obsolescence Debt Service				(\$1,100,000)	(\$1,100,000)	(\$1,100,000)	(\$1,100,000)	(\$1,100,000)	(\$1,100,000)	(\$1,100,000)
DSCR	1.074	1.014	0.955	1.004	1.034	1.065	1.097	1.130	1.164	1.199
Foreclosure Costs			(9,937,174.80)							
Property Before Tax Cash Flow	482,500.00	93,475.00	(10,226,440.55)	29,966.28	258,865.27	494,631.22	737,470.16	987,594.27	1,245,222.09	1,510,578.76

Figure MC-5: Disposition of Asset after Cure of Obsolescence

	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Market Cap	6.25%	6.35%	6.45%	6.55%	6.65%	6.75%	6.85%	6.95%
Market Asset Value	\$99,371,748	\$120,156,949	\$121,842,872	\$123,582,156	\$125,375,491	\$127,223,619	\$129,127,330	\$131,087,464
Cost to cure	(\$10,000,000)	(\$10,000,000)	(\$10,000,000)	(\$10,000,000)	(\$10,000,000)	(\$10,000,000)	(\$10,000,000)	(\$10,000,000)
Foreclosure Cost	(\$9,937,175)	(\$9,937,175)	(\$9,937,175)	(\$9,937,175)	(\$9,937,175)	(\$9,937,175)	(\$9,937,175)	(\$9,937,175)
Sales Commission	(\$993,717)	(\$1,201,569)	(\$1,218,429)	(\$1,235,822)	(\$1,253,755)	(\$1,272,236)	(\$1,291,273)	(\$1,310,875)
Interest Income	\$6,210,734	\$7,629,966	\$7,858,865	\$8,094,631	\$8,337,470	\$8,587,594	\$8,845,222	\$9,110,579
Interest Loss	(\$289,266)	\$1,129,966	\$1,358,865	\$1,594,631	\$1,837,470	\$2,087,594	\$2,345,222	\$2,610,579
Loan Balance	(\$100,000,000)	(\$100,000,000)	(\$100,000,000)	(\$100,000,000)	(\$100,000,000)	(\$100,000,000)	(\$100,000,000)	(\$100,000,000)
Excess Return	(\$15,637,676)	\$7,778,138	\$9,904,999	\$12,098,422	\$14,359,502	\$16,689,396	\$19,089,326	\$21,560,572

**Figure MC-6: Credit Loss Severity Assuming 1 Year for Sale After Foreclosure:
\$13,815,172**

Tranche	Rating	Subordination	Balance	Credit Support
A-1	Aaa	30.00%	\$7,127,500	\$542,313,850
A-2	Aaa	30.00%	\$51,305,250	\$535,186,350
A-3	Aaa	30.00%	\$7,780,750	\$483,881,100
A-PB	Aaa	30.00%	\$16,517,750	\$476,100,350
A-4	Aaa	30.00%	\$171,858,750	\$459,582,600
A-1A	Aaa	30.00%	\$126,926,500	\$287,723,850
AM	Aaa	20.00%	\$54,502,250	\$160,797,350
AJ	Aaa	14.00%	\$32,701,500	\$106,295,100
B	Aa1	12.75%	\$6,812,750	\$73,593,600
C	Aa2	11.63%	\$6,131,500	\$66,780,850
D	Aa3	10.50%	\$6,131,500	\$60,649,350
E	A1	9.75%	\$4,087,750	\$54,517,850
F	A2	8.88%	\$4,768,750	\$50,430,100
G	A3	7.88%	\$5,450,250	\$45,661,350
H	Baa1	6.63%	\$6,813,000	\$40,211,100
J	Baa2	5.38%	\$6,812,750	\$33,398,100
K	Baa3	4.25%	\$6,131,500	\$26,585,350
L	Ba1	3.50%	\$4,087,750	\$20,453,850
M	Ba2	3.13%	\$2,043,750	\$16,366,100
N	Ba3	2.75%	\$2,043,750	\$14,322,350
O	B1	2.50%	\$1,362,500	\$12,278,600
P	B2	2.25%	\$1,362,750	\$10,916,100
Q	B3	1.88%	\$2,043,750	\$9,553,350
S	NR	0.00%	\$7,509,600	\$7,509,600
WAC IO	Aaa		\$545,023,451	

Figure REO- 1: Original Pro Forma

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Market Rent	10,500,000.00	10,710,000.00	10,924,200.00	11,142,684.00	11,365,537.68	11,592,848.43	11,824,705.40	12,061,199.51	12,302,423.50	12,548,471.97
Standard Market Vacancy	(525,000.00)	(535,500.00)	(546,210.00)	(557,134.20)	(568,276.88)	(579,642.42)	(591,235.27)	(603,059.98)	(615,121.18)	(627,423.60)
Effective Gross Income	9,975,000.00	10,174,500.00	10,377,990.00	10,585,549.80	10,797,260.80	11,013,206.01	11,233,470.13	11,458,139.53	11,687,302.33	11,921,048.37
Operating Expenses & Taxes	(2,992,500.00)	(3,052,350.00)	(3,113,397.00)	(3,175,664.94)	(3,239,178.24)	(3,303,961.80)	(3,370,041.04)	(3,437,441.86)	(3,506,190.70)	(3,576,314.51)
Net Operating Income	6,982,500.00	7,122,150.00	7,264,593.00	7,409,884.86	7,558,082.56	7,709,244.21	7,863,429.09	8,020,697.67	8,181,111.63	8,344,733.86
Debt Service	(6,500,000.00)	(6,500,000.00)	(6,500,000.00)	(6,500,000.00)	(6,500,000.00)	(6,500,000.00)	(6,500,000.00)	(6,500,000.00)	(6,500,000.00)	(6,500,000.00)
DSCR	1.07	1.10	1.12	1.14	1.16	1.19	1.21	1.23	1.26	1.28
Property Before-Tax Cash Flow	482,500.00	622,150.00	764,593.00	909,884.86	1,058,082.56	1,209,244.21	1,363,429.09	1,520,697.67	1,681,111.63	1,844,733.86

Figure REO- 2: Actual Performance

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14
					Hold - Year 1	Hold - Year 2	Hold - Year 3	Hold - Year 4	Hold - Year 5	Hold - Year 6	Hold - Year 7	Hold - Year 8	Hold - Year 9	Hold - Year 10
Market Rent	\$10,500,000	\$10,185,000	\$9,879,450	\$9,583,067	\$9,295,575	\$9,481,486	\$9,955,560	\$10,951,116	\$11,279,650	\$11,618,039	\$11,850,400	\$12,087,408	\$12,329,156	\$12,575,739
Rent Growth	-3%	-3%	-3%	-3%	-3%	2%	5%	10%	3%	3%	2%	2%	2%	2%
Standard Market Vacancy	(\$525,000)	(\$509,250)	(\$493,973)	(\$479,153)	(\$464,779)	(\$474,074)	(\$497,778)	(\$547,556)	(\$563,982)	(\$580,902)	(\$592,520)	(\$604,370)	(\$616,458)	(\$628,787)
Effective Gross Income	\$9,975,000	\$9,675,750	\$9,385,478	\$9,103,913	\$8,830,796	\$9,007,412	\$9,457,782	\$10,403,561	\$10,715,667	\$11,037,137	\$11,257,880	\$11,483,038	\$11,712,698	\$11,946,952
Operating Expenses & Taxes	(\$2,992,500)	(\$3,082,275)	(\$3,174,743)	(\$3,269,986)	(\$3,368,085)	(\$3,469,128)	(\$3,573,201)	(\$3,680,398)	(\$3,790,809)	(\$3,904,534)	(\$4,021,670)	(\$4,142,320)	(\$4,266,589)	(\$4,394,587)
Net Operating Income	\$6,982,500	\$6,593,475	\$6,210,734	\$5,833,928	\$5,462,711	\$5,538,284	\$5,884,581	\$6,723,163	\$6,924,858	\$7,132,604	\$7,236,210	\$7,340,718	\$7,446,109	\$7,552,365
Debt Service	(\$6,500,000)	(\$6,500,000)	(\$6,500,000)	(\$6,500,000)	(\$6,500,000)	(\$6,500,000)	(\$6,500,000)	(\$6,500,000)	(\$6,500,000)	(\$6,500,000)	(\$6,500,000)	(\$6,500,000)	(\$6,500,000)	(\$6,500,000)
DSCR	1.074	1.014	0.955	0.898	0.840	0.852	0.905	1.034	1.065	1.097	1.113	1.129	1.146	1.162
Foreclosure Cost				(7,778,570)										
Property Before-Tax Cash Flow	482,500	93,475	(289,266)	(8,444,643)	(1,037,289)	(961,716)	(615,419)	223,163	424,858	632,604	736,210	840,718	946,109	1,052,365

Figure REO-3: Disposition Calculations

		REO Hold - Year 1	REO Hold - Year 2	REO Hold - Year 3	REO Hold - Year 4	REO Hold - Year 5	REO Hold - Year 6	REO Hold - Year 7	REO Hold - Year 8	REO Hold - Year 9	REO Hold - Year 10
	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14
Market Cap	7.50%	8.00%	8.50%	8.25%	8.00%	7.50%	7.25%	7.15%	6.50%	6.25%	6.25%
Market Asset Value	\$77,785,702	\$68,283,883	\$65,156,283	\$71,328,252	\$84,039,537	\$92,331,438	\$98,380,739	\$101,205,739	\$112,934,121	\$119,137,744	\$120,837,844
Foreclosure Cost	(\$7,778,570)	(\$7,778,570)	(\$7,778,570)	(\$7,778,570)	(\$7,778,570)	(\$7,778,570)	(\$7,778,570)	(\$7,778,570)	(\$7,778,570)	(\$7,778,570)	(\$7,778,570)
Sales Commission	(\$777,857)	(\$682,839)	(\$651,563)	(\$713,283)	(\$840,395)	(\$923,314)	(\$983,807)	(\$1,012,057)	(\$1,129,341)	(\$1,191,377)	(\$1,208,378)
Interest Income	\$5,833,928	\$5,462,711	\$5,538,284	\$5,884,581	\$6,723,163	\$6,924,858	\$7,132,604	\$7,236,210	\$7,340,718	\$7,446,109	\$7,552,365
Interest Shortfall	(\$666,072)	(\$1,703,362)	(\$2,665,078)	(\$3,280,497)	(\$3,057,334)	(\$2,632,476)	(\$1,999,872)	(\$1,263,662)	(\$422,944)	\$523,165	\$1,575,530
Loan Balance	(\$100,000,000)	(\$100,000,000)	(\$100,000,000)	(\$100,000,000)	(\$100,000,000)	(\$100,000,000)	(\$100,000,000)	(\$100,000,000)	(\$100,000,000)	(\$100,000,000)	(\$100,000,000)
Total Return	(\$25,602,870)	(\$36,418,177)	(\$40,400,644)	(\$34,559,517)	(\$20,913,599)	(\$12,078,065)	(\$5,248,907)	(\$1,612,341)	\$10,943,983	\$18,137,070	\$20,978,791

REO Figure 4: Credit Support Loss in year 6: (\$5,248,907)

Tranche	Rating	Subordination	Balance	Credit Support
A-1	Aaa	30.00%	\$7,127,500	\$542,313,850
A-2	Aaa	30.00%	\$51,305,250	\$535,186,350
A-3	Aaa	30.00%	\$7,780,750	\$483,881,100
A-PB	Aaa	30.00%	\$16,517,750	\$476,100,350
A-4	Aaa	30.00%	\$171,858,750	\$459,582,600
A-1A	Aaa	30.00%	\$126,926,500	\$287,723,850
AM	Aaa	20.00%	\$54,502,250	\$160,797,350
AJ	Aaa	14.00%	\$32,701,500	\$106,295,100
B	Aa1	12.75%	\$6,812,750	\$73,593,600
C	Aa2	11.63%	\$6,131,500	\$66,780,850
D	Aa3	10.50%	\$6,131,500	\$60,649,350
E	A!	9.75%	\$4,087,750	\$54,517,850
F	A2	8.88%	\$4,768,750	\$50,430,100
G	A3	7.88%	\$5,450,250	\$45,661,350
H	Baa1	6.63%	\$6,813,000	\$40,211,100
J	Baa2	5.38%	\$6,812,750	\$33,398,100
K	Baa3	4.25%	\$6,131,500	\$26,585,350
L	Ba1	3.50%	\$4,087,750	\$20,453,850
M	Ba2	3.13%	\$2,043,750	\$16,366,100
N	Ba3	2.75%	\$2,043,750	\$14,322,350
O	B1	2.50%	\$1,362,500	\$12,278,600
P	B2	2.25%	\$1,362,750	\$10,916,100
Q	B3	1.88%	\$2,043,750	\$9,553,350
S	NR	0.00%	\$7,509,600	\$7,509,600
WAC IO	Aaa		\$545,023,451	

Appendix

Appendix A-1: A selection of typical provisions governing master servicers⁷³

1. **Furnish Necessary Information.** The servicer is required to provide to the trustee upon request any information as the trustee may need with respect to the mortgage loans that the servicer is servicing.
2. **Trustee to Act or Not Act.** The servicer may require the trustee to take certain actions or refrain from taking such actions as to the REMIC assets if the servicer furnishes the trustee an opinion of counsel stating that such actions or inactions may or may not result in an adverse REMIC event.
3. **Payment of Prohibited Transaction Taxes.** The servicer is required to pay any taxes levied on the trust resulting from a Prohibited Transaction caused by a breach in the servicer's obligations under the applicable Pooling and Servicing Agreement or if the servicer, in its discretion, has determined to indemnify the Trust Fund against the imposing of such taxes.
4. **No Contributions of Assets.** The servicer is prohibited from accepting any contributions of assets to the REMIC, except with respect to substitutions for Defective Qualified Mortgages, unless the servicer receives an opinion of counsel from the party seeking to make such contributions stating that such contributions will not cause the REMIC to fail to qualify as a REMIC at any time that the certificates are outstanding or subject the REMIC to any tax under federal, state or local laws.
5. **No Fees or Income Other Than From Qualified Mortgages or Permitted Investments.** The servicer is prohibited from entering into any arrangement by which the REMIC will receive any fees or other compensation and allowing the REMIC to accept any income from assets other than Qualified Mortgages or Permitted Investments.
6. **No Disposition of Assets.** The servicer is prohibited from selling, disposing of or substituting for any of the mortgage loans it services, except in connection with the (i) default, imminent default or foreclosure of a mortgage loan, including but not limited to properties acquired or sold by deed in lieu of foreclosure, (ii) bankruptcy of the REMIC, (iii) termination of the REMIC pursuant to the applicable Pooling and Servicing Agreement and (iv) purchase or repurchase of mortgage loans pursuant to the applicable Pooling and Servicing Agreement. Similarly, the servicer is prohibited from acquiring any assets for the REMIC, selling or disposing of any investments in the collection accounts for gain and accepting any contributions to the REMIC after the closing date, unless the servicer receives an opinion of counsel that such, disposition, substitution or acquisition will not adversely affect the status of the REMIC or unless the servicer has

⁷³ Vescovacci, Servicing Real Estate Mortgage Investment Conduits in U.S. Mortgage Securitizations,

determined, in its discretion, to indemnify the Trust Fund against any taxes imposed on the REMIC as a result thereof.

7. No Modifications, Waivers or Amendments. The servicer agrees to protect the interests of the Trust Fund as it would protect its interests in its own mortgage portfolio and agreed not to make or permit any modification, waiver or amendment of any applicable mortgage loan which would cause the REMIC to fail to qualify as a REMIC or resulting in the imposition of any tax under Section 860F(a) or Section 860G(d) of the IRC.
8. Management of Foreclosure Property. The Master Servicer is required to dispose of any mortgage property acquired by the Trust Fund with respect to a default or imminent default prior to three years after the end of the calendar year of such acquisition unless an opinion of counsel is furnished by the servicer to the trustee to the effect that the holding by the Trust Fund of such mortgage property subsequent to such 3-year period will not result in the imposition of taxes on Prohibited Transactions or cause the REMIC to fail to qualify as a REMIC at any time that any Certificates are outstanding or unless the servicer applied for, prior to the expiration of such three-year period, an extension of such 3-year period in accordance with IRC §856(e)(3). In addition, the servicer is restricted from renting (or allowing to continue to be rented) any mortgage property acquired by foreclosure or otherwise using such property for the production of income in such a manner or pursuant to any terms that would (i) cause such property to fail to qualify as Foreclosure Property or (ii) subject the REMIC to the imposition of any federal, state or local income taxes on the income earned from such property unless the servicer agrees to indemnify the Trust Fund with respect to the imposition of any such taxes. In general, a breach by the servicer of any of the relevant REMIC provisions, as those stated above, that results in a loss of the REMIC's status or imposition of taxes on the REMIC would be the responsibility of the servicer, which can be a significant risk to a servicer depending on the severity of such breach and the results thereof.

Appendix A-2: Legal Definitions for Qualified Mortgages

1. An “obligation” that is “principally secured by an interest in real property” and is either transferred to the REMIC on its startup day in exchange for regular or residual interests in the REMIC or is purchased by the REMIC within three months after the startup day “pursuant to a fixed-price contract in effect on the startup day.”
2. A “participation or certificate of beneficial ownership” in such an obligation.
3. A “qualified replacement mortgage,” which is an obligation, participation, or certificate of beneficial ownership that would be a qualified mortgage if received by the REMIC on the startup day in exchange for a regular or residual interest and is received for (1) another obligation within the three months after the startup day or (2) a “defective obligation” within two years after the startup day.
4. A regular interest in another REMIC if the REMIC receives the interest on its startup day in exchange for a regular or residual interest in the REMIC.
5. A regular interest in a FASIT⁷⁴ if (1) at least 95 percent of the FASIT's assets, by value, are at all times obligations, participations, and certificates that would be qualified mortgages if held by the REMIC and (2) the REMIC receives the interest on its startup day or purchases it within three months after the startup day pursuant to a contract in effect on that day.
6. A “credit enhancement contract” with respect to qualified mortgages held by a REMIC, such as a guarantee, is considered part of the mortgage, rather than a separate asset of the REMIC. Similarly, a purchase agreement with respect to a convertible mortgage is allowable.

⁷⁴ *Financial Asset Securitization Investment Trust: See TR Reg 860 for more detail*

Appendix A-3: Significant Modifications⁷⁵

.06. With limited exceptions, a mortgage loan is not a qualified mortgage unless it is transferred to the REMIC on the startup day in exchange for regular or residual interests in the REMIC.

.08. Section 1.1001-3(c)(1)(i) defines a “modification” of a debt instrument as any alteration, including any deletion or addition, in whole or in part, of a legal right or obligation of the issuer or holder of a debt instrument, whether the alteration is evidenced by an express agreement (oral or written), conduct of the parties, or otherwise. Section 1.1001-3(e) governs which modifications of debt instruments are “significant.” Under § 1.1001-3(b), for most federal income tax purposes, a significant modification produces a deemed exchange of the original debt instrument for a new debt instrument.

.10. Certain loan modifications, however, are not significant for purposes of § 1.860G-2(b)(1), even if the modifications are significant under the rules in § 1.1001-3. In particular, under § 1.860G-2(b)(3)(i), if a change in the terms of an obligation is “occasioned by default or a reasonably foreseeable default,” the change is not a significant modification for purposes of § 1.860G-2(b)(1), regardless of the modification's status under § 1.1001-3.

⁷⁵ *Rev. Proc. 2009-23, 2009-17 IRB 884, 04/10/2009, IRC Sec(s). 860G*

Appendix A-4: Specifically Prohibited Transactions and Penalties⁷⁶

1. The occurrence of any Prohibited Transaction and the realization of net income from Prohibited Transactions: Any net income generated from a Prohibited Transaction is subject to a 100% tax. A Prohibited Transaction can also cause the tax-free status of a REMIC to be lost or suspended. A Significantly Modified Obligation that is not a Qualified Replacement Mortgage will be considered a Prohibited Transaction and thus be subject to a 100% tax;
2. The realization of net income from Foreclosure Property. Any net income realized from the operation of Foreclosure Property is subject to IRC §857(b)(4)(B) as if the REMIC were a real estate investment trust, which is then subject to tax at the highest corporate tax rate
3. The making of unqualified contributions to a REMIC after the Startup Day: Any contributions to a REMIC after its Startup Day is taxed at a rate of 100% unless they are made in cash and are related to: (i) a contribution made to facilitate a Cleanup Call, (ii) a payment in the nature of a guaranty, (iii) a contribution made during the three-month period beginning on the Startup Day, (iv) contribution made to a Qualified Reserve Fund by a Residual Interest holder in the REMIC or (v) a permitted contribution made under the treasury regulations

⁷⁶ Servicing Real Estate Mortgage Investment Conduits in U.S. Mortgage Securitizations *Milton A. Vescovacci, Esq., 2006*

Works Cited

110th Congress of the United States, Committee on Financial Services; “Emergency Mortgage Loan Modification Act of 2008”, May 1st, 2008

Adelino, Manuel; Gerardi, Kristopher; Willen, Paul, S.; “Why Don’t Lenders Renegotiate More Home Mortgages? Redefaults, Self-Cures and Securitization” Public Policy Discussion Papers No. 09-4, Federal Reserve Bank of Boston, July 6th, 2009

Barr, Michael, S.; Feldman, James, A.; “Issue Brief: Overcoming Legal Barriers to the Bulk Sale of At-Risk Mortgages”, Center for American Progress, April, 2008

Berliner, William, S.; Bhattacharya, Anand, K.; Fabozzi, Frank, J.; “Mortgage-Backed Securities: Products, Structuring, and Analytical Techniques, John Wiley & Sons, Inc., 2007

Commercial Mortgage Securities Association and Mortgage Bankers Association, “Borrower Guide to CMBS” © 2004 CMSA and MBA.

Cowan, Cameron; “Statement Before the Subcommittee on Housing and Community Opportunity Subcommittee on Financial Institutions and Consumer Credit, United States House of Representatives”, November 5th, 2003

Davis, C., VanLeer; Forte, Joseph, Philip; “Securitized Mortgage Loans – Tax Basics” April 27th, 2006

Hunt, John P.; “What do Subprime Securitization Contracts Actually Say About Loan Modification: Preliminary Results and Implications”; Berkeley Center for Law Business, and the Economy, March 25th, 2009

Gelpern, Anna; Levitin, Adam, J; “Rewriting Frankenstein Contracts: Workout Prohibitions in Residential Mortgage-Backed Securities” Georgetown University Law Center, Business, Economics, and Regulatory Policy Working Paper Series, Research Paper No. 1323546, May 15th, 2009

Geltner, David, M.; Miller, Norman, G.; “Commercial Real Estate Analysis & Investments”, Cengage Learning, 2007

Levitin, Adam, J.; “Purchasing Mortgage-Backed Securities Does Not Give the Government The Ability To Modify Mortgages Backing The Securities”, 2008

Loubier, Gregg, J.; “Modification And Workouts Of Securitized Commercial Loans” Commercial Mortgage Insight, June 2004

Modukuri, Srinivas; Rashty, David; Reddy, Vikas; “Mortgage Convexity Risk”, Lehman Brothers- Fixed Income Research, June 30th, 2003

Mortgage Bankers Association; “White Paper: Article III Language”, 2008

O’Conner, Marty; “Why Owners Should Care About CMBS Loan Servicing” Shopping Center Business, May 2007 © 2007 France Publications, Inc.

Parks, James, T; “The ABCs of CMOs, REMICs, and IO/POs: Rocket Science Comes to Mortgage Finance”, Journal of Accountancy, April 1991, Vol. 171, Iss. 4; pg. 41, 8 pgs

PriceWaterhouseCoopers – Structured Finance Group, “Revenue Procedures 2008-28 and 2008-47 IRS Guidance on REMICs and Investment Trusts Subject to Mortgage Loan Modification”, October 29th, 2008

Real Estate Round Table, “REMIC Commercial Loan Modification Flexibility – A Letter to the Honorable Henry Paulson, Secretary of the Treasury”, November 20th, 2008

Real Estate Round Table, “White Paper to Provide Greater Temporary Flexibility to Modify Securitized Commercial Mortgage Loans”, 2008

Riddiough, Timothy, J; “Debt and Development”, Journal of Urban Economics 42, 313-338, October 8th, 1996

Seslen, Tracey; Wheaton, William, C.; “Contemporaneous Loan Stress and Termination Risk in the CMBS Pool: How ‘Ruthless’ is Default?”, September, 2005

Sidley Austin LLP, “Revenue Procedure Expands Tax-Safe Modifications for REMIC-Held Residential Loans”, May 20th, 2008

Taff, Laurence, G.; “Investing in Mortgage Securities”, CRC Press, LLC., 2003

Wachovia Securities; “2008 REMIC TAX GUIDE”, 2008