

THE REFINANCING CRISIS IN COMMERCIAL REAL ESTATE: DODD-FRANK THREATENS TO CURTAIL CMBS LENDING

TYLER R. MORGAN*

I. INTRODUCTION

In 2008, in the midst of the financial crisis, General Growth Properties, Inc. (“GGP”), the second-largest owner and operator of shopping centers in the country, was ostensibly a successful and profitable enterprise.¹ In fact, GGP’s net operating income (“NOI”), the standard measurement of financial performance in the commercial real estate industry, totaled \$2.59 billion in 2008, a four and one-half percent increase from 2007.² As of December 31, 2008, GGP held \$29.6 billion in assets, including more than 200 shopping centers in forty-four states.³ However, by April 2009, GGP had defaulted on eight mortgage loans in an aggregate amount of more than \$670 million.⁴ On April 16, 2009, GGP filed a voluntary Chapter 11 petition,⁵ commencing the “biggest real estate bankruptcy in U.S. history.”⁶

GGP’s dire financial straits may represent the next crisis in the U.S. economy—refinancing commercial real estate.⁷ Like many commercial real estate

* J.D., University of Tennessee College of Law.

¹ Steven Seidenberg, *The Pain Spreads*, A.B.A. J. MAG. (Jan. 2, 2010, 12:20 AM), http://www.abajournal.com/magazine/article/the_pain_spreads/.

² *In re Gen. Growth Props., Inc.*, 409 B.R. 43, 55 n.23 (Bankr. S.D.N.Y. 2009).

³ *Id.* at 47-48.

⁴ *Id.* at 54 n.22.

⁵ *Id.* at 54. GGP is a real estate investment trust (“REIT”) and the parent company of 750 wholly-owned subsidiaries and affiliates, 388 of which comprised the eventual debtors in the Chapter 11 proceeding. *Id.* at 47, 54.

⁶ Seidenberg, *supra* note 1.

⁷ *See id.*

ventures, GGP leveraged itself to finance its expansion.⁸ Prior to the credit market freeze, GGP financed its capital needs through conventional and mezzanine mortgage loans from banks and institutional lenders and increasingly through the commercial mortgage-backed securities (“CMBS”) market.⁹ The mortgage loans were typical of the commercial setting insofar as the loans were secured by the underlying commercial properties and were structured over three to seven-year terms, with low amortization rates and balloon payments due at maturity.¹⁰ In its bankruptcy proceeding, GGP did not dispute that its business model relied upon its ability to refinance its debts at maturity.¹¹ Furthermore, the President and Chief Operating Officer of GGP testified that “[t]his approach was standard in the industry, so for many years, it has been rare to see commercial real estate financed with longer-term mortgages that would fully amortize.”¹²

This model worked well until the credit crisis invaded the commercial real estate market, reducing available credit and making it more difficult for GGP to refinance its maturing debt on commercially viable terms.¹³ Moreover, the legal structure of the real estate mortgage investment conduit (“REMIC”) stymied GGP’s efforts to negotiate modifications to the terms of the loans financed through the CMBS market.¹⁴ As a result of its inability to refinance, GGP applied more of its NOI towards payment of its debts, which in turn left it with insufficient cash to meet prior development and redevelopment commitments.¹⁵ As additional mortgage

⁸ *Id.*; *Gen. Growth Props., Inc.*, 409 B.R. at 48 (stating that, as of December 31, 2008, GGP’s assets and liabilities totaled \$29.6 billion and \$27.3 billion, respectively).

⁹ *Gen. Growth Props., Inc.*, 409 B.R. at 48-53.

¹⁰ *Id.* at 53.

¹¹ *Id.*

¹² *Id.* (alteration in original).

¹³ *Id.*

¹⁴ *See id.* at 53-54. *See also* Seidenberg, *supra* note 1 (Under the Tax Reform Act of 1986, REMICs benefit from pass-through tax status. However, if a REMIC makes a significant modification to a loan that it owns, the entity risks losing this favorable tax treatment, and any gain realized from the modification may be subject to a 100% penalty tax. As a result, special servicers, who must approve any loan modification, are reluctant to do so unless the loan is in default or in imminent risk of default.).

¹⁵ *Gen. Growth Props., Inc.*, 409 B.R. at 54.

loans matured, GGP's liquidity problems worsened, and it defaulted on several of its loans.¹⁶ After one lender initiated foreclosure proceedings, GGP published the following press release: "The collapse of the credit markets has made it impossible for GGP to refinance our maturing debt outside of Chapter 11."¹⁷

Over the next five years, nearly \$1 trillion of U.S. commercial real estate mortgage loans are scheduled to mature,¹⁸ and, unless the credit market quickly recovers, many commercial real estate firms may encounter refinancing troubles similar to those of GGP. To make matters worse, commercial real estate values have fallen twenty-five to thirty percent since 2007.¹⁹ Furthermore, due to more rigorous underwriting standards, lenders will demand additional equity from borrowers seeking to refinance, many of whom will be unable or unwilling to take on more debt for properties that are already underwater.²⁰ Consequently, one report estimates that by 2020, "hundreds of billions of dollars, [and] perhaps more than a trillion dollars, of commercial mortgages . . . are unlikely to qualify for refinancing . . ."²¹ The same report predicts that "the scale of [the commercial mortgage refinancing crisis] is virtually unprecedented in commercial real estate, and its impact is likely to dominate the industry for the better part [of] a decade."²²

Recent reforms to the nation's financial system purport to safeguard the U.S. economy from future financial crises.²³ However, in the short-term, the new regulations may further reduce the availability of credit and increase the cost of borrowing, thereby exacerbating the refinancing crisis in the commercial real estate

¹⁶ *Id.*

¹⁷ Seidenberg, *supra* note 1.

¹⁸ RICHARD PARKUS & JING AN, DEUTSCHE BANK, THE FUTURE REFINANCING CRISIS IN COMMERCIAL REAL ESTATE 7 (2009), available at <http://www.azcommercial.biz/Pdf/articles/Deutsche-Bank-The-Future-Refinancing-Crisis-in-CRE.pdf>.

¹⁹ *Id.* at 3.

²⁰ *See id.*

²¹ *See id.*

²² *Id.*

²³ *See, e.g., Oversight of Dodd-Frank Implementation: Monitoring Systemic Risk and Promoting Financial Stability: Hearing Before the S. Comm. on Banking, Hous., and Urban Affairs, 112th Cong. 42-44 (2011) (Prepared Statement of Ben S. Bernanke, Chairman, Bd. of Governors of the Federal Reserve System).*

market.²⁴ The securitization of residential mortgage-backed assets is generally cited as the catalyst of the subprime mortgage crisis and the subsequent collapse of the financial markets.²⁵ In reaction to the devastated U.S. economy, Congress passed the Dodd-Frank Wall Street Reform and Consumer Protection Act (“Dodd-Frank”) to overhaul the regulatory framework of the financial services industry.²⁶ With respect to mortgage-backed securities, Dodd-Frank requires issuers to retain five percent of the credit risk of any non-qualified assets²⁷ and to provide loan or asset-level disclosures to investors.²⁸ Although ultimate rulemaking authority is delegated among various federal agencies,²⁹ Dodd-Frank itself fails to adequately differentiate between the residential mortgage-backed securities (“RMBS”) and CMBS markets.³⁰ Accordingly, the Federal Reserve has warned that “a single approach to credit risk retention could curtail credit availability in certain sectors of the securitization market . . . [and] is unlikely to be effective in achieving [greater investor protections] across a broad spectrum of asset categories where securitization practices differ markedly.”³¹

Approximately \$800 billion of commercial mortgage loans are currently financed through the CMBS market,³² comprising over fifteen percent of all

²⁴ See BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM, REPORT TO THE CONGRESS ON RISK RETENTION 84 (2010), available at <http://www.federalreserve.gov/boarddocs/rptcongress/securitization/riskretention.pdf>; see also Robert A. Brown, *Financial Reform and the Subsidization of Sophisticated Investors' Ignorance in Securitization Markets*, 7 N.Y.U. J.L. & BUS. 105, 121 (2010) (“[I]ncreased regulation of securitized products may have unintended negative consequences . . .”).

²⁵ See MICHAEL LEWIS, *THE BIG SHORT: INSIDE THE DOOMSDAY MACHINE* *passim* (2011).

²⁶ See Dodd-Frank Wall Street Reform and Consumer Protection Act, Pub. L. No. 111-203, 124 Stat. 1376 (2010).

²⁷ 15 U.S.C. § 78o-11(c)(1)(B)(i) (2010).

²⁸ 15 U.S.C. § 77g(c) (2010).

²⁹ These federal agencies include the Securities and Exchange Commission (“SEC”), the Office of the Comptroller of the Currency (“Treasury”), the Board of Governors of the Federal Reserve System (“Federal Reserve”), the Federal Deposit Insurance Corporation (“FDIC”), the Federal Housing Finance Agency (“FHFA”), and the Department of Housing and Urban Development (“HUD”). See, e.g., 15 U.S.C. § 78o-11(e)(4)(A) (2010).

³⁰ Brown, *supra* note 24, at 114.

³¹ BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM, *supra* note 24, at 84.

³² Brown, *supra* note 24, at 108.

commercial real estate financing in the U.S.³³ By 2018, roughly \$685 billion of commercial mortgage loans in the CMBS market are scheduled to mature.³⁴ As a sudden and full recovery in the credit market is not expected,³⁵ the pressing question is not whether there will be a refinancing crisis in the commercial real estate market but how to contain it. This daunting task falls squarely on the federal agencies that are charged with promulgating the new regulations under Dodd-Frank. To prevent another collapse in the recovering economy, these agencies must not impute the failures of RMBS to CMBS but must, instead, recognize the significant structural differences between the two products that account for greater investor protections in the CMBS market.³⁶

This article argues that the policy concerns behind the risk retention and mandatory disclosure requirements under Dodd-Frank do not exist in the CMBS market because the product structure of CMBS currently provides sufficient investor protections. Part II describes mortgage-backed securities, including the origins of mortgage-backed securities and the features of the modern secondary mortgage market. Part III summarizes the events that culminated in the subprime mortgage crisis and, ultimately, in the collapse of the financial markets. Part IV presents a behavioral economics perspective on the subprime mortgage and financial crises that largely shaped Dodd-Frank. Part V discusses the performance of the CMBS market both prior to and throughout the financial crisis. Part VI explains why the policy justifications offered for risk retention and enhanced disclosure do not apply to the CMBS market.

³³ *Id.* at 124.

³⁴ PARKUS & AN, *supra* note 18, at 5 (listing CMBS figures excluding commercial mortgage loans in collateralized debt obligations (“CDO”)).

³⁵ See Joseph Philip Forte, *Risk Retention in CMBS Lending—Reality or Illusion*, SS047 ALI-ABA 1255 (2011) (“[R]eal estate investors remain skeptical, despite the . . . recovery of capital markets in recent months, whether commercial mortgage-backed securities can restart with sufficient volume to finance the recovery of the commercial property markets . . .”).

³⁶ See Brown, *supra* note 24, at 116; see also Thomas E. Plank, *Regulation and Reform of the Mortgage Market and the Nature of Mortgage Loans: Lessons from Fannie Mae and Freddie Mac*, 60 S.C. L. REV. 779, 780-81 (2009) [hereinafter Plank, *Regulation and Reform*] (“It is a truism . . . that any regulatory regime should reflect the nature of the property and transactions being regulated.”).

II. MORTGAGE-BACKED SECURITIES

The securitization of mortgage-backed assets developed as a solution to a historic challenge in mortgage financing: balancing long-term assets with long-term liabilities.³⁷ Indeed, “[s]ound financing of any viable enterprise requires that the enterprise match its assets and its liabilities, and the history of the mortgage finance market . . . has demonstrated the unhappy results for enterprises that attempt to finance long-term assets with short-term liabilities.”³⁸ The problem inherent in the mortgage loan is the disconnect between the life of the mortgage debt and the life of the underlying property.³⁹ The following scenarios illustrate this problem. For the homeowner, the property that secures a mortgage debt is a long-term asset.⁴⁰ A change in market conditions, such as a decline in property values, engenders the risk that the homeowner will be unable to refinance a short-term mortgage debt—the liability—without investing additional equity into the property.⁴¹ However, a longer-term mortgage debt allows the homeowner to spread this risk over the life of the home ownership.⁴² On the other hand, for the owner of a long-term fixed-rate mortgage loan—the asset—an increase in short-term market interest rates results in a reduction in value of the mortgage loan.⁴³

A. *The Origins of Mortgage-Backed Securities*

Securitization is a product of the history of the mortgage finance market in the U.S. and, in particular, the two scenarios described above, each of which resulted in market dislocations during the twentieth century.⁴⁴ Prior to the 1930s, the typical residential mortgage loan was structured over three- to six-year terms with low amortization, if any, and balloon payments due at maturity – the point at which

³⁷ See Thomas E. Plank, *Crisis in the Mortgage Finance Market: The Nature of the Mortgage Loan and Regulatory Reform*, 12 TRANSACTIONS: TENN. J. BUS. L. 135, 137 (2011) [hereinafter Plank, *Crisis in the Mortgage Finance Market*].

³⁸ Plank, *Regulation and Reform*, *supra* note 36, at 781.

³⁹ See *id.*; see also Plank, *Crisis in the Mortgage Finance Market*, *supra* note 37, at 137-38.

⁴⁰ Plank, *Crisis in the Mortgage Finance Market*, *supra* note 37, at 137.

⁴¹ See *id.* at 137-38; Plank, *Regulation and Reform*, *supra* note 36, at 781.

⁴² See Plank, *Regulation and Reform*, *supra* note 36, at 781.

⁴³ See Plank, *Crisis in the Mortgage Finance Market*, *supra* note 37, at 138.

⁴⁴ See *id.* at 137-39.

homeowners refinanced their debts.⁴⁵ This market functioned until the Great Depression, when property values dropped, credit became scarce, and large numbers of homeowners, who could no longer roll over their debts, went into default.⁴⁶ Congress responded to the mortgage crisis of the 1930s with legislation that created federal savings and loan associations and standardized the use of long-term fixed-rate amortizing mortgage loans.⁴⁷

Long-term fixed-rate mortgage loans reduced the risk of declining property values for the homeowners in the first scenario described above.⁴⁸ Unfortunately, the federal savings and loan associations and their private sector counterparts (“S&Ls”) failed to balance these long-term assets with long-term liabilities, which merely moved the risk up one level on the mortgage finance ladder and produced the second scenario described above.⁴⁹ S&Ls financed these long-term fixed-rate mortgage loans through interest-bearing savings accounts that were vulnerable to short-term market fluctuation. Now described as the “3-6-3” system,⁵⁰ this model functioned while short-term market interest rates remained stable.⁵¹ However, inflation and spikes in market interest rates throughout the 1960s and 1970s eroded the value of long-term fixed-rate mortgage loans, and, by the early 1980s, many S&Ls were insolvent.⁵² Moreover, the Tax Reform Act of 1986 removed advantageous tax shelters for real estate investment vehicles, causing real estate prices to fall, further devaluing long-term fixed-rate mortgage loans.⁵³ The effect of the Savings and Loans Crisis was the closing in the early 1990s of thousands of S&Ls, which had

⁴⁵ Plank, *Regulation and Reform*, *supra* note 36, at 781.

⁴⁶ Plank, *Crisis in the Mortgage Finance Market*, *supra* note 37, at 137-38.

⁴⁷ *Id.* at 138.

⁴⁸ *See id.*

⁴⁹ *Id.*

⁵⁰ The system earned its name from the expression that “[S&Ls] would borrow from depositors at 3%, lend to mortgagors at 6%, and the [loan] officers were on the golf course by 3 pm.” *Id.*

⁵¹ *Id.*

⁵² *Id.*

⁵³ *See* Brown, *supra* note 24, at 122-23.

been a major source of financing for both the residential and commercial real estate markets.⁵⁴

Recognizing the need to balance long-term assets with long-term liabilities, beginning in the 1970s, Congress authorized Fannie Mae and Freddie Mac to purchase residential mortgage loans from originators and issue securities backed by the mortgage loans and guaranteed by the federal government against default.⁵⁵ Fannie Mae and Freddie Mac then sold these securities to institutional investors such as banks and insurance companies that could spread the risk of market interest rate fluctuation across diverse portfolios.⁵⁶ Following suit, the private sector created a market for RMBS loans that did not conform to the Fannie Mae and Freddie Mac underwriting standards.⁵⁷

The CMBS market has a shorter but similar history.⁵⁸ In 1989, in response to the Savings and Loans Crisis, Congress established the Resolution Trust Corporation (“RTC”) to securitize commercial real estate mortgage loans held by insolvent S&Ls.⁵⁹ Between 1991 and 1995, the RTC issued \$18 billion in CMBS.⁶⁰ Discerning a high demand for commercial real estate financing following the collapse of the S&L industry, the private sector created the CMBS market.⁶¹

B. *The Secondary Mortgage Market*

Although the secondary mortgage market is complex, the primary function of mortgage-backed securities is fairly straightforward.⁶² A mortgage represents the right to repayment of a loan. The loan itself is, therefore, an asset. Originators of

⁵⁴ *Id.* at 123.

⁵⁵ Plank, *Crisis in the Mortgage Finance Market*, *supra* note 37, at 139.

⁵⁶ *Id.*

⁵⁷ *Id.*

⁵⁸ *See* Brown, *supra* note 24, at 124-25.

⁵⁹ Georgette Chapman Phillips, *The Paradox of Commercial Real Estate Debt*, 42 CORNELL INT’L L.J. 335, 339 (2009).

⁶⁰ *Id.*

⁶¹ *See id.*

⁶² *See* Thomas E. Plank, *The Security of Securitization and the Future of Security*, 25 CARDOZO L. REV. 1655, 1656 (2004) [hereinafter Plank, *The Security of Securitization*].

mortgage loans are in the business of lending to consumers, and, in order to do so, they must raise capital.⁶³ Securitization provides originators of mortgage loans a cost-effective means of raising capital by converting relatively illiquid mortgage loans into highly liquid assets that can be sold to investors in the secondary mortgage market, ultimately resulting in a lower overall cost of credit to end consumers.⁶⁴ The securities, which are backed solely by the mortgage loans themselves, represent the investors' rights to repayment from the income stream of principal and interest on the underlying mortgage debt.⁶⁵

Investors in the secondary mortgage market also enjoy a distinct benefit from investments in mortgage-backed securities in terms of lower transactional risk.⁶⁶ To illustrate, in U.C.C. Article 9 transactions, secured lenders invariably assume two risks: first, the value of the collateral used to secure a debt will be insufficient to repay the full amount of the debt; and, second, for reasons unrelated to the collateral, that the debtor will become insolvent and seek relief in bankruptcy.⁶⁷ However, a properly structured sale of mortgage-backed securities transfers the right to repayment away from the originator and thereby makes the second risk—that of bankruptcy—irrelevant.⁶⁸ Stated differently, the investor's return is unrelated to the creditworthiness of the originator.⁶⁹ Thus, the risk to investors in the secondary mortgage market is limited to the underperformance of the underlying mortgage loans.⁷⁰ This reduction in risk to investors lowers overall financing costs for originators, further reducing the cost of credit to end consumers.⁷¹

Removing the credit risk of the originator qualifies the mortgage-backed securities to receive a credit rating from a rating agency such as Moody's or Standard

⁶³ *Id.* at 1660.

⁶⁴ *Id.* at 1656-57.

⁶⁵ *See id.* at 1661.

⁶⁶ *See id.* at 1662.

⁶⁷ *Id.* at 1661-62.

⁶⁸ *See id.* at 1662.

⁶⁹ *Id.*

⁷⁰ *Id.*

⁷¹ *Id.*

and Poor's ("S&P").⁷² To obtain a credit rating, the issuer⁷³ of mortgage-backed securities pays a fee and provides information about the underlying mortgage loans to a rating agency, which assesses the risk of the securities to be issued.⁷⁴ The particular credit rating assigned corresponds to the likelihood of timely payment on the securities.⁷⁵ To use S&P's rating scale as an example, the highest investment-grade credit rating available is AAA, with ratings descending to AA, then to A, and then to BBB, and BBB-.⁷⁶ "Ratings below BBB- are deemed non-investment grade, and indicate that full and timely repayment on the securities may be speculative."⁷⁷ By comparison, a rating of AAA indicates an "[e]xtremely strong capacity to meet financial commitments."⁷⁸

After origination but prior to issuance, the mortgage loans are pooled together and the payments on the loans are divided into senior and subordinate tranches, creating a diversity of risk across the lot.⁷⁹ The subordinate tranches have higher interest rates but absorb any losses before the senior tranches are impaired.⁸⁰ Accordingly, rating agencies typically assign AAA ratings to the senior tranche securities.⁸¹ Furthermore, issuers may create multiple classes of securities within a

⁷² *Id.* at 1667.

⁷³ *See id.* at 1662-64 (describing the primary issuers of mortgage-backed securities). Mortgage-backed securities are issued in two forms: pass-through certificates and debt securities. In the case of pass-through certificates, the issuer is an affiliate of the originator of the mortgage loans. In the case of debt securities, the issuer is a bankruptcy remote special purpose entity ("SPE"). Both are structured to remove the credit risk of the originator and the parent company of the SPE, respectively. *Id.*

⁷⁴ *See* Steven L. Schwarcz, *Private Ordering of Public Markets: The Rating Agency Paradox*, 2002 U. ILL. L. REV. 1, 7, 12 (2002) [hereinafter Schwarcz, *Private Ordering of Public Markets*].

⁷⁵ *Id.* at 6.

⁷⁶ *Id.* at 7-8; *see also* *Credit Ratings Definitions & FAQs*, STANDARD & POOR'S RATINGS SERVICES, <http://www.standardandpoors.com/ratings/definitions-and-faqs/en/us> (last visited Mar. 15, 2012).

⁷⁷ Schwarcz, *Private Ordering of Public Markets*, *supra* note 74, at 7 (quoting Steven L. Schwarcz, *The Universal Language of Crossborder Finance*, 8 DUKE J. COMP. & INT'L L. 235, 253 (1998)).

⁷⁸ *Credit Ratings Definitions & FAQs*, *supra* note 76.

⁷⁹ Plank, *Crisis in the Mortgage Finance Market*, *supra* note 37, at 139.

⁸⁰ *Id.*

⁸¹ *Id.*

single tranche to appeal to different investor appetites for market-value risk.⁸² In this scenario, the senior-most class would receive all income from the mortgage pool until repaid in full, at which point additional income would cascade down to each lower class in order of seniority.⁸³ Thus, issuers can structure the payments on the mortgage loans to devise securities with short, medium, and long-term market-value risks,⁸⁴ which a rating agency might distinguish with credit ratings such as AA+, AA, and AA-, respectively.⁸⁵ Not surprisingly, lower-rated securities are typically purchased by investors with investment strategies for both higher risk and higher yield.⁸⁶

After issuance, the securities themselves may then be repackaged and issued a second time through a collateral debt obligation (“CDO”), adding a layer of complexity to the secondary mortgage market.⁸⁷ The basic logic of a CDO is the same as that of the original lot of securities—to diversify risk. However, in the case of a CDO, the risk that is spread derives from the subordinate securities, not from the underlying mortgage loans.⁸⁸ In a typical CDO, the income on a pool of subordinate securities is divided into senior and subordinate CDO tranches, diversifying risk, however artificially, across the lot of repackaged subordinate securities.⁸⁹ Similar to the original senior tranche securities, the senior CDO tranche securities are repaid before those in subordinate CDO tranches, which have higher interest rates but bear greater risk.⁹⁰ Accordingly, in the case of a CDO with a senior tranche and two subordinate tranches, a rating agency might assign a credit rating of

⁸² *Id.*

⁸³ *See id.*

⁸⁴ *Id.*

⁸⁵ *Credit Ratings Definitions & FAQs*, *supra* note 76 (“Ratings from ‘AA’ to ‘CCC’ may be modified by the addition of a plus (+) or minus (-) sign to show relative standing within the major rating categories.”).

⁸⁶ Plank, *Crisis in the Mortgage Finance Market*, *supra* note 37, at 139.

⁸⁷ *See* LEWIS, *supra* note 25, at 72-73; *see also* John C. Kelly, *An Introduction to Commercial Real Estate CDOs (Part I)*, 21 PROB. & PROP. 38, 38 (2007) (A CDO is technically “a form of debt security, [but] the term is now commonly used to describe a particular type of capital markets transaction.”).

⁸⁸ *See* LEWIS, *supra* note 25, at 72-73.

⁸⁹ *See id.* at 73.

⁹⁰ *See id.* at 161 n.*.

AA, BBB+, and BBB-, respectively, despite the fact that many of the repackaged securities were initially rated BBB-.⁹¹ Sophisticated investors, cognizant of the greater risk inherent in CDO securities, developed the credit-default swap (“CDS”) to hedge their investments, adding yet another layer of complexity to the secondary mortgage market.⁹² For the purposes of this article, CDS may simply be understood as insurance against the risk of default of payments on the CDO securities.⁹³

III. THE SUBPRIME MORTGAGE CRISIS AND COLLAPSE OF THE FINANCIAL MARKETS

The events that culminated in the subprime mortgage crisis and, ultimately, in the collapse of the financial markets occurred over the course of more than a decade.⁹⁴ During the late 1990s and most of the 2000s, low interest rates and readily available credit contributed to the formation of a housing bubble in the U.S. economy characterized by inflated home prices.⁹⁵ Market optimism in the appreciation of home values led originators to finance higher-risk, adjustable-rate mortgages that were frequently beyond the wherewithal of borrowers, who often did not adequately understand the repayment terms to make prudent budgetary decisions.⁹⁶ As these higher-risk, subprime mortgages were packaged into RMBS, the models used by rating agencies to assign credit ratings did not evaluate the underlying mortgages individually but, instead, interpreted general characteristics across entire pools of mortgages.⁹⁷ Consequently, vast numbers of RMBS issued from pools comprised substantially of subprime mortgages were overrated as safe

⁹¹ See *id.* (“In practice . . . a CDO might have fifteen different tranches, each with a slightly different rating, from triple-B-minus all the way up to triple-A.”).

⁹² See, e.g., *id.* at 74-75.

⁹³ In fact, CDS are more complex. For a thorough discussion of CDS, see LEWIS, *supra* note 25, *passim*.

⁹⁴ See FIN. CRISIS INQUIRY COMM’N, THE FINANCIAL CRISIS INQUIRY REPORT, 419-24 (2011), available at <http://www.gpo.gov/fdsys/pkg/GPO-FCIC/pdf/GPO-FCIC.pdf>.

⁹⁵ See *id.*

⁹⁶ See *id.* at 425-26.

⁹⁷ See LEWIS, *supra* note 25, at 99-100 (For example, one model was based on FICO scores, which measure the creditworthiness of individual borrowers. Rather than evaluating the FICO score of each homeowner, Moody’s and S&P interpreted the average FICO scores across pools of mortgages, which were susceptible to manipulation by packaging a correspondingly high FICO score to offset each low FICO score.).

investments and disseminated throughout the financial markets.⁹⁸ Relying on the credit ratings, financial institutions that invested in the secondary mortgage market failed to conduct their own independent due diligence on the underlying mortgages and became significantly exposed to subprime risk.⁹⁹

The U.S. housing bubble burst in 2006, and home prices declined in housing markets across the country.¹⁰⁰ In 2007, the low teaser rates for the 2005 vintage of adjustable-rate subprime mortgages reset at higher market interest rates.¹⁰¹ Borrowers who could not afford the higher mortgage payments and could not refinance their debts through home appreciation defaulted in historic numbers.¹⁰² Others who could afford the higher mortgage payments abandoned homes that were underwater.¹⁰³ Defaults on the subprime mortgages in turn caused the lowest-tranche RMBS to default and the higher-tranche triple-A rated RMBS to be downgraded.¹⁰⁴ As a result, the market value of all RMBS plummeted.¹⁰⁵ By the end of the subprime mortgage crisis, financial institutions heavily leveraged with concentrations of highly correlated housing risk had suffered hundreds of billions of dollars of losses in subprime mortgages and RMBS.¹⁰⁶ In 2008, the failure, near failure, or corporate restructuring of several of the major firms in quick succession precipitated shock and panic throughout the financial system as the health of every large and midsize financial institution came into question.¹⁰⁷ In the aftermath, the

⁹⁸ FIN. CRISIS INQUIRY COMM'N, *supra* note 94, at 426.

⁹⁹ *Id.*

¹⁰⁰ LEWIS, *supra* note 25, at 95, 126; Steven L. Schwarcz, *Understanding the Subprime Financial Crisis*, 60 S.C. L. REV. 549, 551-52 (2009) [hereinafter Schwarcz, *Understanding the Subprime Financial Crisis*].

¹⁰¹ See LEWIS, *supra* note 25, at 180, 197-98.

¹⁰² *Id.* at 180; Schwarcz, *Understanding the Subprime Financial Crisis*, *supra* note 100, at 551-52.

¹⁰³ Schwarcz, *Understanding the Subprime Financial Crisis*, *supra* note 100, at 552.

¹⁰⁴ *See id.*

¹⁰⁵ *See id.*

¹⁰⁶ Steven L. Schwarcz, *Protecting Financial Markets: Lessons from the Subprime Mortgage Meltdown*, 93 MINN. L. REV. 373, 379 (2008) [hereinafter Schwarcz, *Protecting Financial Markets*]; see FIN. CRISIS INQUIRY COMM'N, *supra* note 94, at 428-29 (stating that "every \$35 of assets was financed with \$1 of equity capital and \$34 of debt . . . [and a] 3 percent decline in the market value . . . would leave them technically insolvent").

¹⁰⁷ *Id.* at 435-36.

financial markets collapsed, the credit market severely contracted, and the economy plunged into a deep recession.¹⁰⁸

IV. BEHAVIORAL ECONOMICS PERSPECTIVE ON THE SUBPRIME MORTGAGE AND FINANCIAL CRISES

According to behavioral economists, three fundamental failures in the securitization of residential mortgage-backed assets caused the subprime mortgage crisis and the subsequent collapse of the financial markets.¹⁰⁹ First, behavioral economists suggest that securitization facilitated a failure in residential mortgage lending standards.¹¹⁰ The originate-to-distribute model of mortgage lending, which refers to the practice of selling off mortgages as the loans are closed, enabled mortgage originators to remove the credit risk of the loans from their balance sheets and transfer that risk to the investors that purchased RMBS in the secondary mortgage market.¹¹¹ This model allegedly engendered moral hazard¹¹² and fraud to the extent that the interests of originators, with respect to the risk on the mortgages, were not aligned with the interests of investors, resulting in lax mortgage lending standards.¹¹³

Second, behavioral economists claim that securitization produced investments that were too complex for investors to comprehend.¹¹⁴ Prior to any offering of RMBS, issuers provide investors a prospectus disclosing detailed information on the loans that comprise the pools from which the securities are to be issued.¹¹⁵ Behavioral economists acknowledge that, except for the extent to which

¹⁰⁸ *Id.* at 437-38.

¹⁰⁹ Schwarcz, *Understanding the Subprime Financial Crisis*, *supra* note 100, at 561.

¹¹⁰ Steven L. Schwarcz, *Regulating Complexity in Financial Markets*, 87 WASH. U. L. REV. 211, 218 (2009) [hereinafter Schwarcz, *Regulating Complexity in Financial Markets*].

¹¹¹ *See id.*

¹¹² Moral hazard refers to the greater tendency of actors that are protected from the consequences of risky behavior to engage in that behavior. *See id.* at 218 n.34.

¹¹³ *Id.* at 218.

¹¹⁴ Schwarcz, *Understanding the Subprime Financial Crisis*, *supra* note 100, at 563-64.

¹¹⁵ *See* Schwarcz, *Regulating Complexity in Financial Markets*, *supra* note 110, at 222; *see also* LEWIS, *supra* note 25, at 27 (indicating that prospectuses disclosed the interest rates on adjustable-rate mortgages and the borrowers FICO scores).

home prices declined, “virtually all of the risks giving rise to the collapse of the market for securities backed by subprime mortgages appear to have been disclosed.”¹¹⁶ However, many investors reportedly failed to appreciate these risks because the complexity of RMBS made the risks very difficult to understand.¹¹⁷ Alternatively, the complexity of RMBS increased the amount of information that had to be analyzed, and certain investors determined that the costs to analyze this information outweighed the benefits of performing the analysis.¹¹⁸

Third, behavioral economists argue that the inability of investors to comprehend the complexity of the securities caused them to be overly reliant on credit ratings.¹¹⁹ Because the risks of RMBS were difficult to understand and the costs of conducting an independent due diligence analysis were high, investors resorted to credit ratings to simplify and economize their investment decisions instead of attempting to fully grasp the complexity of the securities.¹²⁰ Consequently, overreliance on the credit ratings exposed investors to the subprime risk that the flawed models of the rating agencies failed to detect and that independent due diligence would have identified.¹²¹

In light of these failures in the RMBS market, legal commentators called for reforms to the secondary mortgage market.¹²² Specifically, behavioral economists advocated for increased mandatory disclosure on mortgage-backed securities and

¹¹⁶ Schwarcz, *Regulating Complexity in Financial Markets*, *supra* note 110, at 222.

¹¹⁷ *Id.*; see also Schwarcz, *Protecting Financial Markets*, *supra* note 106, at 382 (mentioning the theory that investors’ actions were the result of “bounded rationality imposed by human cognitive limitations”).

¹¹⁸ Schwarcz, *Regulating Complexity in Financial Markets*, *supra* note 110, at 221 (stating that, under the rational ignorance theory, “there is a point at which the benefit obtained from additional analysis can be outweighed, or at least appear to be outweighed, by the costs of performing that analysis”).

¹¹⁹ Schwarcz, *Understanding the Subprime Financial Crisis*, *supra* note 100, at 563.

¹²⁰ Schwarcz, *Regulating Complexity in Financial Markets*, *supra* note 110, at 222; see also Christine Jolls et al., *A Behavioral Approach to Law and Economics*, 50 STAN. L. REV. 1471, 1477 (1998) (To compensate for limited cognitive ability, humans employ simplifying heuristics to economize thinking time and minimize decision costs.).

¹²¹ See Schwarcz, *Regulating Complexity in Financial Markets*, *supra* note 110, at 223 (“Although the use of heuristics might be efficient overall in certain applications, heuristic reasoning can sometimes expose analysis to bias and systematic error.”).

¹²² Brown, *supra* note 24, at 112-13; Schwarcz, *Understanding the Subprime Financial Crisis*, *supra* note 100, at 564.

reallocation of risk from investors to issuers by requiring issuers to retain a risk of loss.¹²³ Acting on calls for reform to the financial services industry, Congress enacted these proposals in the Dodd-Frank legislation.¹²⁴ Regarding mortgage-backed securities, Dodd-Frank requires issuers to provide loan or asset-level disclosures to investors¹²⁵ and retain the first five percent of credit risk of any non-qualified assets.¹²⁶

V. PERFORMANCE OF THE CMBS MARKET BEFORE AND DURING THE FINANCIAL CRISIS

In contrast to the mortgage loans underlying RMBS, commercial mortgage loans did not materially change with respect to repayment terms or underwriting standards prior to the financial crisis.¹²⁷ In fact, until recently, defaults on commercial mortgages did not significantly deviate from the default levels observed in the commercial real estate market over the forty-year period preceding the financial crisis.¹²⁸ Moreover, the recent rise in default rates on commercial mortgages is attributable to the decline in commercial property values and the growing phenomenon in the current credit market of “maturity defaults,” which refers to the inability of commercial real estate borrowers to refinance the outstanding balances on their maturing debt.¹²⁹ As a result, from 2007 to 2009, the performance of CMBS was relatively strong compared to RMBS and other asset-backed securities.¹³⁰

CMBS offerings have slowed dramatically since the financial crisis.¹³¹ Nevertheless, the relatively strong performance of the CMBS market from 2007 to

¹²³ Brown, *supra* note 24, at 113; Schwarcz, *Understanding the Subprime Financial Crisis*, *supra* note 100, at 562.

¹²⁴ Brown, *supra* note 24, at 114.

¹²⁵ 15 U.S.C. § 77g(c) (2010).

¹²⁶ 15 U.S.C. § 78o-11(c)(1)(B) (2010).

¹²⁷ Richard Stanton & Nancy Wallace, *CMBS Subordination, Ratings Inflation, and the Crisis of 2007-2009* 42 (Nat'l Bureau of Econ. Research, Working Paper No. 16206, 2010).

¹²⁸ *Id.*

¹²⁹ *Id.* at 2; *see also* PARKUS & AN, *supra* note 18, at 3.

¹³⁰ *See* Stanton & Wallace, *supra* note 127, at 2-3.

¹³¹ *See* Brown, *supra* note 24, at 108-11.

2009 presents an unresolved counterpoint to the policy justifications offered by behavioral economists for enhanced disclosure and risk retention by issuers of asset-backed securities.¹³² The elephant in the room that behavioral economists have yet to address is why issuers would have more information about investment quality and risk than investors themselves.¹³³ In the CMBS market, for example, issuers have traditionally performed the role of broker, finding and matching investors with commercial mortgage originators in real estate markets throughout the country.¹³⁴ On the other hand, investors in the CMBS market are large, sophisticated institutional investors that are often also originators of commercial mortgages and, therefore, are familiar with conditions across commercial real estate markets.¹³⁵ Accordingly, investors are better equipped to evaluate the investment quality and risk of CMBS than issuers.¹³⁶

VI. THE CMBS MARKET OFFERS GREATER INVESTOR PROTECTIONS THAN THE RMBS MARKET

The CMBS market has been a crucial source of commercial real estate financing in recent years, supplying credit for approximately one-half of all commercial real estate acquisitions in the U.S.¹³⁷ Given the austerity of the current credit market, revived CMBS lending would offset the shortfall in credit necessary to refinance the billions of dollars of commercial real estate debt maturing over the next several years.¹³⁸ Unfortunately, the risk retention and mandatory disclosure

¹³² *See id.* at 116.

¹³³ *Id.* at 117.

¹³⁴ *Id.* Many of the largest commercial mortgage originators are affiliates of CMBS issuers; however, “the skillset required to evaluate the market for a CMBS loan is different than that of knowing the market of a CMBS security.” *Id.* at 117 n.58.

¹³⁵ *Id.* at 117.

¹³⁶ The reallocation of risk from sophisticated investors to issuers of securities overlooks the possibility that investors have more experience in the underlying asset class than issuers who are mere brokers. *See id.* at 154.

¹³⁷ *Id.* at 108; Ken Miller, *Using Letters of Credit, Credit Default Swaps and Other Forms of Credit Enhancements in Net Lease Transactions*, 4 VA. L. & BUS. REV. 45, 46 (2009).

¹³⁸ *See In re Gen. Growth Props., Inc.*, 409 B.R. 43, 60 (Bankr. S.D.N.Y. 2009) (finding that the CMBS market was “dead” and that “there is no evident means of refinancing billions of dollars of [commercial] real estate debt coming due in the next several years”).

requirements under Dodd-Frank would result in unintended consequences that could reduce already scarcely available credit.¹³⁹ By mechanically forcing issuers to absorb the first losses on CMBS, the risk retention requirements would drive up the price of CMBS, as issuers pass on the additional costs of risk to investors.¹⁴⁰ Likewise, issuers would demand recompense from investors for the additional due diligence costs incurred in providing enhanced disclosure on the underlying mortgage loans.¹⁴¹ As prices rise, investors would purchase fewer CMBS, mortgage originators would have less capital to extend new loans, and the cost of credit would increase for end consumers.¹⁴² However, the new regulations under Dodd-Frank are unnecessary because securitization in the CMBS market currently offers sufficient investor protections.¹⁴³

A. CMBS Lending Practices Prevent Fraud and Weak Underwriting Standards

Commercial mortgage loans contain terms that seldom appear in residential mortgage loans and that have largely prevented fraud and weak underwriting standards as observed in the RMBS market.¹⁴⁴ For instance, in contrast to the standard residential mortgage loan, commercial mortgage loans typically include prepayment penalties that deter borrowers from accelerating their loans prior to maturity.¹⁴⁵ As a result, commercial borrowers and lenders alike tend to finance only those properties that will generate sufficient NOI to meet the debt service over the life of the loans and are, therefore, more default remote.¹⁴⁶ Furthermore, due to the size of the loans,¹⁴⁷ commercial mortgage originators conduct more extensive due diligence on the underlying properties and contract for additional protections from

¹³⁹ BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM, *supra* note 24, at 84.

¹⁴⁰ Brown, *supra* note 24, at 173.

¹⁴¹ *Id.*

¹⁴² *See id.*

¹⁴³ *Id.* at 126.

¹⁴⁴ *Id.* at 126-27.

¹⁴⁵ *Id.* at 127.

¹⁴⁶ *Id.* at 127-28.

¹⁴⁷ *Id.* at 137 (“[T]he average size of a loan in a CMBS transaction is close to \$6 million[, and] several loans larger than \$30 million [are] contributed to most securitizations.”).

borrowers in the form of representations and warranties.¹⁴⁸ Originators, in turn, extend these protections to investors and may be bound to repurchase CMBS loans in the event that a representation or warranty is violated.¹⁴⁹ In addition to prophylactic loan terms, commercial mortgage lending generally involves repeat players that have a prior history or stand to benefit from future business relationships.¹⁵⁰ Consequently, unlike residential lending, reputational mechanisms exist in commercial real estate transactions that prevent fraud at the initial origination of CMBS.¹⁵¹

B. CMBS Transactions Involve Fewer Loans and Sophisticated Investors

Compared to RMBS transactions, CMBS transactions involve fewer loans, which allows B-piece investors to conduct more careful and thorough due diligence on the pools of loans on a loan-level basis.¹⁵² For example, in an average CMBS transaction, there are only 300 loans per loan pool.¹⁵³ As a result, prior to any CMBS offering, the B-piece investor can review the loan documents for each loan and have its agents inspect each underlying property.¹⁵⁴ Furthermore, the B-piece investor in CMBS may even remove a negotiated number of CMBS loans from the loan pool that are deemed substandard.¹⁵⁵ On the other hand, because senior tranche CMBS are repaid before any subordinate tranche CMBS, senior investors need only evaluate the ability of the B-piece investor to accurately assess the risk of the lower tranche CMBS.¹⁵⁶ Where the risk assessment of the B-piece investor is correct, senior investors will not experience any losses on senior tranche CMBS.¹⁵⁷ Moreover, unlike the RMBS market, CMBS investors are exclusively large, sophisticated firms

¹⁴⁸ *Id.* at 136-37, 156.

¹⁴⁹ *Id.* at 156 (Rather than risk retention, “one method to improve investor protection [would] simply be to enforce the existing agreements . . . that the parties have entered into.”).

¹⁵⁰ *Id.* at 134.

¹⁵¹ *Id.*

¹⁵² *See id.* at 133.

¹⁵³ *Id.* at 140.

¹⁵⁴ *Id.*

¹⁵⁵ *Id.* at 153; Forte, *supra* note 35, at 1259-60.

¹⁵⁶ Brown, *supra* note 24, at 154.

¹⁵⁷ *Id.*

that are familiar with both the product structure of CMBS and conditions in the commercial real estate market.¹⁵⁸ In particular, “the [B-piece investor in CMBS] is usually a real estate specialist with extensive knowledge about the underlying [properties] and mortgages in the pools.”¹⁵⁹ Thus, CMBS are not inherently so complex that sophisticated investors cannot accurately determine investment quality and price the risk accordingly.¹⁶⁰

C. CMBS Losses Correlate with Rating Agencies’ Reduction to Subordination Levels

A recent study finds that, prior to the financial crisis, the only significant change in the CMBS market was a reduction in the subordination levels¹⁶¹ of CMBS by rating agencies.¹⁶² Otherwise, CMBS loans did not materially change, and defaults did not significantly deviate from historic levels.¹⁶³ Furthermore, unlike the RMBS market, where losses were suffered across all tranches of RMBS, the CMBS market has not observed significant devaluation of the highest tranche CMBS.¹⁶⁴ Consequently, the losses experienced on lower tranche CMBS—resulting from defaults on CMBS loans substantially in line with historic levels—correlate with the reduction in subordination levels by rating agencies and “would have been completely avoided had subordination levels remained at their [previous] levels.”¹⁶⁵ Moreover, the study does not indicate that the losses on lower tranche CMBS were the result of the complexity of CMBS as investments or that sophisticated investors misunderstood the risks involved.¹⁶⁶ However, even assuming that the complexity of CMBS caused investors to be overly reliant on rating agencies, the mere fact that investors in the CMBS market are large, sophisticated firms implies that fewer

¹⁵⁸ See *id.* at 117, 149-50; Stanton & Wallace, *supra* note 127, at 2.

¹⁵⁹ Stanton & Wallace, *supra* note 127, at 2 n.5.

¹⁶⁰ Brown, *supra* note 24, at 155-56.

¹⁶¹ The subordination level of a mortgage-backed asset is “the maximum amount of principal loss on the underlying mortgage that can occur without a given security suffering any loss.” Stanton & Wallace, *supra* note 127, at 3 n.7.

¹⁶² *Id.* at 42.

¹⁶³ *Id.* at 43.

¹⁶⁴ See Brown, *supra* note 24, at 116.

¹⁶⁵ Stanton & Wallace, *supra* note 127, at 43.

¹⁶⁶ See Brown, *supra* note 24, at 148-52 (arguing that sophisticated investors were aware of the risks associated with CMBS).

protections are necessary.¹⁶⁷ Thus, the policy justifications for the risk retention and mandatory disclosure requirements do not apply to the CMBS market because the product structure of CMBS currently provides sophisticated investors with sufficient protections.¹⁶⁸

VII. CONCLUSION

The next crisis in the U.S. economy may be a refinancing crisis in the commercial real estate market. Securitization in the CMBS market has been an increasingly significant source of commercial real estate financing, and revived CMBS lending would mitigate the shortfall in available credit in the coming years. Unfortunately, the risk retention and enhanced disclosure requirements under Dodd-Frank would hinder recovery in the CMBS market without meaningfully improving investor protections. Moreover, these regulations are unnecessary because the greater CMBS market has not experienced the failures that occurred in other markets, and the product structure of CMBS currently provides sufficient investor protections. In conclusion, to avoid the unintended, negative consequences of Dodd-Frank, which would further curtail already scarcely available credit, the first loss position should remain with the B-piece investors in CMBS who are far better suited than issuers to evaluate investment quality and risk of CMBS.

¹⁶⁷ *Id.* at 150.

¹⁶⁸ *Id.* at 116.