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Assessing the Risks of Mortgage REITs

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Regulators have expressed concern about the growth of a category of real estate investment trusts (REITs) that today invest primarily in mortgage-backed securities (MBS). These companies, known as mortgage REITs, or mREITs, have increased both in number and in asset size since the financial crisis, benefiting from federal guarantees and other support for MBS and from favorable regulatory treatment that allows high levels of leverage. While mREIT investors face significant risks, the level of risk that mREITs present to the financial system as a whole is unclear.

A class of investments known as mREITs—real estate investment trusts that invest primarily in mortgage-backed securities (MBS)—has grown substantially during the period of low interest rates since the 2007–08 financial crisis. Regulators and other observers increasingly have expressed concern in recent months about risks to the financial system from the growth of mREITs.[1] This concern is rooted in a number of characteristics of mREITs, including high leverage, a high degree of maturity mismatch (investments in long-term assets funded by short-term liabilities), and a relatively low degree of regulatory supervision. At the same time, however, policymakers may be reluctant to place too heavy a hand on mREITs, given the desirability of an active, liquid market for MBS. An examination of the role of mREITs suggests that although investors in mREITs do face significant risks on a number of fronts, the extent of the risks to the financial system as a whole is uncertain.[2]

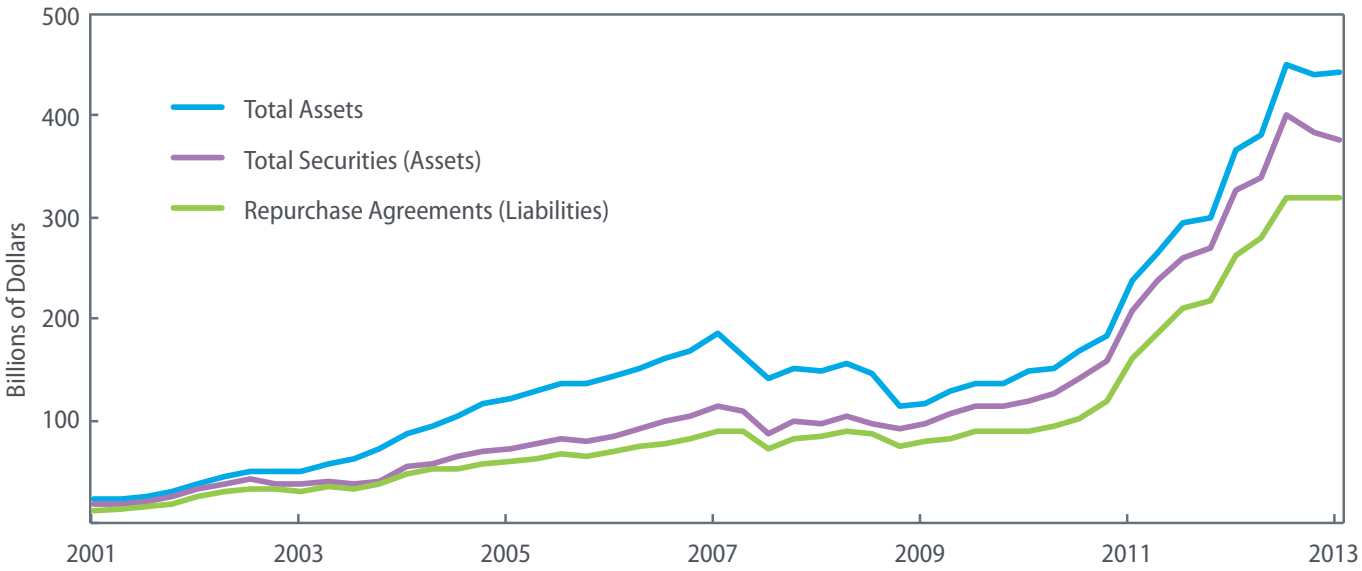
Emergence of mREITs

Unlike traditional REITs, or equity REITs, which invest in portfolios of real estate, mREITs make mortgage loans, buy existing mortgages from lenders on the secondary market, or buy MBS. Of these activities, the mREITs that exist today predominantly buy MBS (and fund themselves mostly with short-term debt).

mREITs have enjoyed significant growth in recent years, both in number and in asset size. Although some mREITs emerged as early as the 1990s, the mREIT sector has had its greatest period ofgrowth since the financial crisis. The peak years of mREIT formation were 2009 and 2011. Of today's 42 listed and unlisted mREITs, 19 debuted between 2008 and 2012. Since 2006, before the crisis, total assets of mREITs have grown by 210 percent to a current size of $443 billion. (See Figure 1 on the following page.)

This growth likely has been driven by a number of factors. To the extent mREITs invest in agency MBS, their assets are effectively free of credit risk thanks to the implicit or explicit federal guarantee associated with those securities. Moreover, mREITs have benefited since the financial crisis from a large amount of federal support for MBS. The U.S. Treasury and the Fed took actions that stabilized the MBS market and supported MBS

Figure 1: Mortgage REITs: Total Assets, Securities, and Repos



Sources: SNL Financial and the Richmond Fed

prices, including large-scale purchases of MBS by the Fed. As of October 30, 2013, the Fed's holdings of MBS totaled $1.4 trillion.

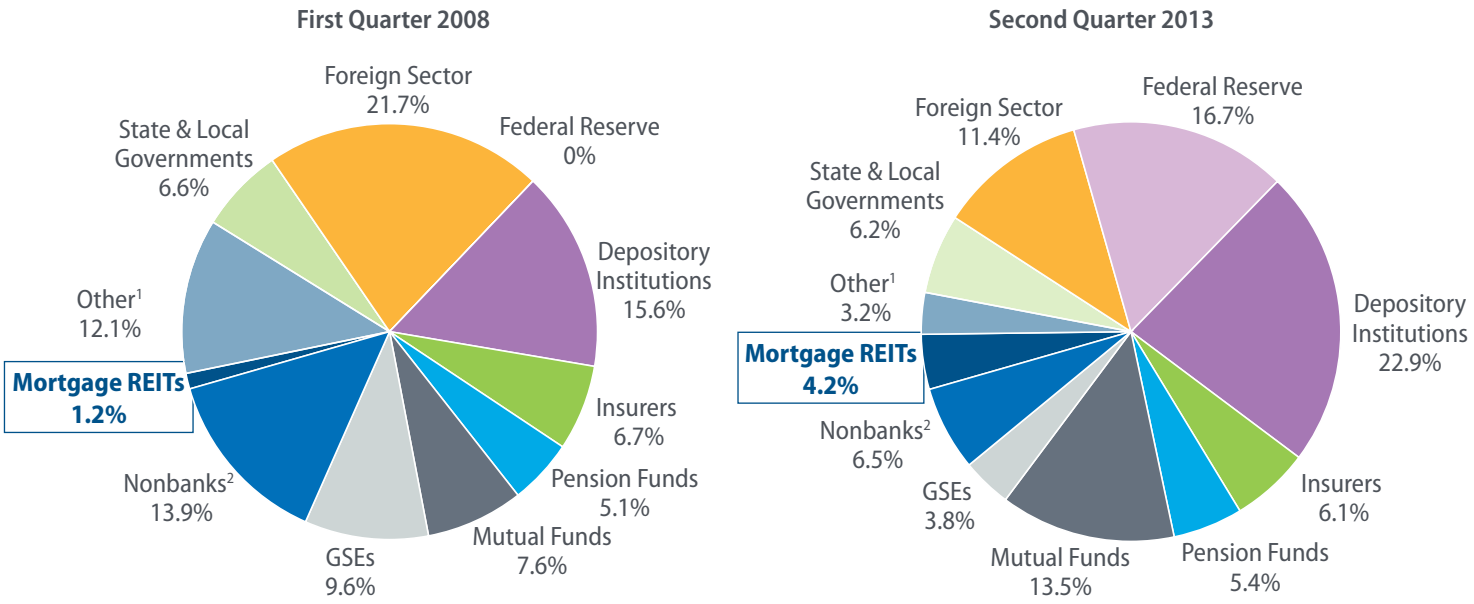
Another likely source of mREIT growth is that they—like all REITs—receive favorable legal treatment. As long as REITs meet a set of requirements established by Congress in 1960, they are not taxed at the corporate level. Instead, their earnings are taxed only when paid to owners as dividends. In addition, and more importantly in the current environment, mREITs are structured in a manner that minimizes their regulatory oversight. While publicly traded mREITs must comply with Securities and Exchange Commission (SEC) disclosure and reporting requirements, as well as the rules of the exchange where they are traded, they avoid SEC requirements applicable to investment companies under the Investment Company Act of 1940. The SEC historically has allowed mREITs to take advantage of an exception in the Act that exempts companies from regulation as an investment company if they are primarily involved in "purchasing or otherwise acquiring mortgages and other liens on and interests in real estate."[3] In effect, the SEC has treated mREITs like equity REITs for regulatory purposes. In August of 2011, the SEC invited comments on a possible reconsideration of that approach, but it has taken no further public action since then.[4]

Despite the growth of mREITs, they remain a minor factor, in most respects, within the MBS market—let alone within the financial system as a whole. They hold a small share of agency MBS compared to other investor groups, such as banks, mutual funds, and the Fed. But mREITs provide a significant amount of agency MBS collateral, a highly demanded type of collateral, to the tri-party repo market (a mechanism that aids short-term borrowers).[5] Also, while they hold only a small share of total MBS, their share has grown rapidly, especially compared to that of other major MBS holders. As a share of agency MBS and agency debt, mREIT holdings have increased from 1.2 percent in early 2008 to 4.2 percent this year. (See Figure 2 on the following page.) With regard to agency MBS alone, mREITs in 2008 held a 2.0 percent share, but by 2013, they held 5.6 percent.[6]

Role of Leverage

The business model of mREITs is closely tied to their exemption from SEC regulation under the Investment Company Act of 1940. In particular, they rely on being exempt from statutory leverage limits. As of June 30, 2013, the two largest mREITs by asset size, Annaly Capital Managment and American Capital Agency, reported debt-to-equity ratios of 6.2 to 1 and 7.1 to 1, respectively.[7] These levels of leverage, far higher than SEC limits for investment companies, are not

Figure 2: Holders of Agency MBS and Agency Debt in 2008 and 2013



[1] Other includes Nonfinancial Corporations, Households, Credit Unions, and the U.S. Government.
[2] Nonbanks include security brokers and dealers, ABS issuers, holding companies, and money market mutual funds.

Note: As of the second quarter of 2013, total agency MBS and agency debt equals $7.6 trillion, according to Z.1 data. Of this total, $5.8 trillion is agency MBS, according to Securities Industry and Financial Markets Association data.

Source: Board of Governors of the Federal Reserve System, Financial Accounts of the United States, Table L.210, Second Quarter 2013 (See footnote 1 of Table L.210 for further details on the types of debt included in this figure.)

unusual for mREITs. Indeed, they are essential to the mechanism through which mREITs generate favorable returns during certain economic conditions.

In essence, mREITs make money for their investors by taking out short-term loans at low interest rates and holding long-term assets—MBS—that yield higher interest rates. mREITs obtain their short-term financing from the repo market, which offers among the lowest interest rates in the funding markets. Interest rates charged by repo lenders are low not only because repos are short-term, but also because they are backed by desirable liquid collateral (here, MBS) and because the Bankruptcy Code gives repo borrowing preferential treatment in the event of default in that repo lenders can immediately seize their collateral. This special treatment has existed for repos backed by MBS since 2005. (Strictly speaking, a repo, or repurchase agreement, is an agreement for the sale of an asset and its subsequent repurchase, but it is economically equivalent to lending.)

mREITs multiply the difference between their short-term borrowing rates and long-term lending rates through a process known as "levering up." In this process, the mREIT initially takes the cash it raises from investors and purchases MBS. Then it uses that MBS as collateral to borrow money to purchase more MBS—a process that it repeats multiple times. The number of rounds is limited by the fact that the repo lender will require a "haircut" on each loan; that is, the loan payout is perhaps 3 percent to 5 percent less than the value of the collateral, a gap that serves as a buffer for the lender's protection.

Beyond the constraint of the haircut, mREIT managers face other limitations on levering up: the repo lender may impose covenants with regard to leverage, and managers have an incentive to reflect the risk preferences of their investors. But in theory—assuming no transaction costs, no relevant covenants in the repo agreements, a sufficient supply of repo financing, and a preference for maximum risk (and thus for the most

leveraged portfolio)—an mREIT facing a 5 percent haircut could lever up the original equity by twenty-fold (1/0.05).

Risks Faced By mREITs

Although mREITs are effectively free of credit risk, the mREIT model does present investors with a number of other risks, which are heightened by the use of leverage. Perhaps the most obvious is interest rate risk. If interest rates were to increase rapidly, the prices of outstanding MBS would fall. This would reduce the value of mREITs' MBS assets, both those MBS that are used as collateral for repo loans (encumbered MBS) and those that are not (unencumbered MBS). The significance of the former arises from a feature of repo contracts, namely, that if the value of the collateral falls more than a specified amount, the lender can issue a margin call requiring the borrower to put up additional collateral to get back to the haircut percentage. If MBS values decline enough that margin calls exceed an mREIT's unencumbered assets, the mREIT likely would default.

mREITs are also vulnerable to rising interest rates due to their reliance on rollovers of short-term funding because maturing repos would have to be rolled over into higher-interest repos. In addition, if repo lenders became concerned about the value of MBS as collateral, for whatever reason, the result likely would be both an increase in interest rates on repo financing and increased haircuts. Thus, a negative shock, or the perception of one, leaves mREITs exposed to the risk that their cost of funding could rise to levels that could fairly quickly make them insolvent, or at which their creditors might simply refuse to lend.

In the event of rising interest rates, the stress placed on mREITs would be further increased by their structure. To maintain their favorable tax treatment, mREITs (like REITs in general) must, among other requirements, distribute at least 90 percent of each year's income to their owners. Otherwise, they would be subject to federal corporate income taxation. As a result, mREITs have, at best, modest buffers against stress apart from whatever equity that they keep outside the levering-up process.

mREITs also incur regulatory and government-policy risks, such as a loss of federal support for MBS, the withdrawal of federal guarantees of agency MBS, or an end to the administrative exemption of mREITs from the Investment Company Act of 1940. Clearly, abrupt policy changes in these areas would be highly destabilizing to mREITs. If such changes were to take place, however, policymakers might tend to phase them in gradually.

Assessing Systemic Effects

While mREITs are susceptible to various risks, it is less clear whether these risks are systemic. To what extent, if at all, would mREIT failures threaten the stability of the financial system?

The primary rationale in the literature for hypothesizing that mREITs present systemic risk, not just privately internalized risk, is that spillover effects of mREIT deleveraging could drive down MBS valuations.[8] That, in turn, could have several systemic effects. It would affect the balance sheets of commercial banks and other MBS investors, cause repo lenders to pull back funding or raise rates where MBS collateral is involved, and drive up mortgage interest rates.

The question, however, is how repo lenders—who would take possession of the mREITs' collateral—would respond to mREITs' rapid deleveraging. If they continued to hold the MBS collateral, the failure of even the entire mREIT sector likely would have little effect on MBS prices. On the other hand, if they were to quickly liquidate the collateral, it is possible that major failures of mREITs would have a material effect on MBS prices (with a further possibility of macroeconomic effects by way of mortgage markets).

Intuitively, the relatively modest amount of MBS holdings by mREITs might seem to make it improbable that mREITs pose systemic risk. On the other hand, in May of 2007, shortly before the financial crisis, subprime first mortgages accounted for only about 14 percent of all first mortgages, and near-prime loans accounted for only an additional 8 percent to 10 percent—yet subprime and near-prime mortgages were a major factor in triggering the crisis.[9] To be sure,

those shares are markedly higher than the 5.6 percent share of agency MBS held by mREITs. But a lesson of the crisis, arguably, is that the possibility of systemic risk from an asset class cannot be dismissed on the basis of its scale alone. The contingencies involved, however, make it challenging to assess the potential systemic effects of large-scale mREIT failures.

Conclusion

The mREIT sector has mushroomed since the financial crisis, thanks to a yield curve that favors the mREIT business model and a low interest rate environment that fosters "reaching for yield" on the part of investors despite the associated risks. While mREITs clearly present risks to investors, it is not yet clear where mREITs fall relative to other financial institutions in terms of their systemic risk. The financial crisis, however, highlighted the potential hazards that leverage and maturity transformation may present to overall financial stability, particularly where less-regulated institutions are involved. ■

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Endnotes

[1] See, for example, Financial Stability Oversight Council, *2013 Annual Report*, pp. 7, 87–90, and *Global Financial Stability Report: Transition Challenges to Stability*, Washington, D.C.: International Monetary Fund, October 2013, pp. 10–14.

[2] The issues addressed in this *Economic Brief*, as well as other issues related to mortgage REITs, are discussed in greater detail in Pellerin, Sabrina R., Steven J. Sabol, and John R. Walter, "mREITs and Their Risks," Federal Reserve Bank of Richmond Working Paper No. 13-19, November 2013.

[3] 15 U.S.C. § 80a-3(c)(5)(C).

[4] Securities and Exchange Commission, "Companies Engaged in the Business of Acquiring Mortgages and Mortgage-Related Instruments," 76 Fed. Reg. 55300, (September 7, 2011).

[5] See Copeland, Adam, Darrell Duffie, Antoine Martin, and Susan McLaughlin, "Key Mechanics of the U.S. Tri-Party Repo Market," Federal Reserve Bank of New York *Economic Policy Review*, November 2012, vol. 18, no. 3, p. 17.

[6] Board of Governors of the Federal Reserve System, Financial Accounts of the United States, Table L.210, and Securities Industry and Financial Markets Association, "U.S. Agency MBS Outstanding." While mREITs grew significantly after the financial crisis, they shrank somewhat during the first half of 2013, likely due to increasing interest rates and expectations of such increases.

[7] Annaly Capital Management Inc. Form 10-Q for the quarter ending June 30, 2013, p. 46, and American Capital Agency Corp. Form 10-Q for the quarter ending June 30, 2013, p. 38.

[8] Financial Stability Oversight Council, *2013 Annual Report*, p. 90, and *Global Financial Stability Report: Transition Challenges to Stability*, Washington, D.C.: International Monetary Fund, October 2013, p. 10.

[9] Bernanke, Ben S., "The Subprime Mortgage Market," Speech at the Federal Reserve Bank of Chicago's 43rd Annual Conference on Bank Structure and Competition, Chicago, May 17, 2007.