

Strategy Paper



Commercial Mortgage Lending

Understanding the Current Market Opportunity

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Executive Summary

- USAA Real Estate Company (USAA RealCo) believes commercial mortgage lending offers strong risk-adjusted returns over a long-term investment horizon, and the sector is particularly attractive given the current liquidity shortage and rising demand from borrowers.
- Stringent regulatory conditions have forced banks and CMBS originators, which make up over 60.0% of loans outstanding, to reduce exposure to certain types of loans. This situation has created pockets of opportunity for other Commercial Real Estate (CRE) lenders, such as life insurance companies.
- Commercial mortgages have historically offered an attractive risk/return proposition relative to other asset classes, in addition to providing diversification to multi-asset portfolios throughout economic and real estate cycles.
- This strategy paper will highlight current market conditions while making the case for increasing investment exposure to the commercial mortgage lending sector.

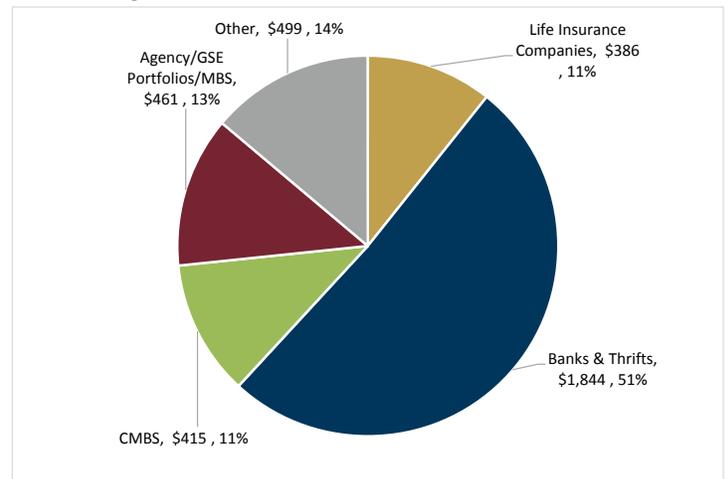
Investment Opportunity

Product Overview

The commercial real estate (CRE) debt market is an approximately \$4 trillion investment universe (see *Exhibit 1*), roughly one-fifth the size of U.S. GDP, and offers a vast array of products and investment strategies. This paper will focus on market conditions, portfolio attributes, and investment opportunities associated with senior mortgages, also known as whole loans. These mortgages are in a first lien position on the underlying property, occupying the most senior level in the capital stack. As a result, first mortgages generally carry lower risk than other debt sources, having priority over all other liens or claims on a property in the event of default.

The quality of the underlying real estate pledged as collateral plays a crucial role in determining the level of risk associated with a mortgage. Following the Great Recession, however, many traditional lenders were hesitant to extend credit, even on relatively high-quality properties. Consequently, the industry slowed production in light of tighter underwriting standards, strict regulatory requirements (primarily for banks and CMBS), and a somber economic outlook. These sluggish conditions have created an opportunity for other capital sources, such as life insurance companies, to move into this space and capitalize on attractive risk-adjusted returns in the commercial mortgage sector.

Exhibit 1: U.S. Commercial/Multifamily Mortgage Debt Outstanding (Billions)¹



Source: Federal Reserve Flow of Funds

Market Structure

The majority of CRE loans are concentrated across four sectors (office, multifamily, industrial, and retail), while smaller niche segments have gained traction in recent years such as hotels, medical office, student housing, self-storage properties, and senior housing. Underwriting an asset is a critical step in the investment

¹ Note this does not include private debt funds, which are not tracked by the Federal Reserve or other public sources.

process because the lender must evaluate a number of risk factors including tenant mix, location, durability of cash flows, and income potential. Borrowers typically pursue capital for three functions: acquisitions, development, or refinancing. While credit demand tends to shift in response to economic conditions, real estate loans typically have a built-in refinancing requirement within 10 years, creating a relatively consistent level of demand. As markets evolve, however, lenders must be cognizant of macro-economic factors (e.g., interest rates, labor conditions, and regulatory requirements), while also monitoring the underlying real estate fundamentals.

Why Now?

Favorable Demand Drivers

Conditions are in place for the commercial mortgage industry to continue its relatively strong performance. For now, the Federal Reserve (Fed) seems poised to maintain low interest rates due to increasing global economic uncertainty. The medium term outlook, however, calls for a gradual rate hike, which would allow lenders to deploy capital in a rising interest rate environment for the first time in nearly a decade. To the extent interest rates begin to rise in conjunction with a strengthening economy, real estate and mortgage fundamentals should improve, as loan performance tends to correlate closely with GDP growth.

Commercial real estate continues to exhibit strong fundamentals. Although new deliveries are down 10.0% to 60.0% from historical averages across major property sectors (perhaps with multifamily being the exception), construction pipelines are accelerating and have plenty of runway given the low supply levels since the Financial Crisis. Core properties garner higher rents, stronger occupancy, and healthy underwriting fundamentals, while existing real estate stock has become increasingly obsolete in several markets. Although gateway markets have received a disproportionate share of institutional investors' focus of late, an increasing level of capital is flowing to primary and secondary cities as transaction volumes have risen by 44.0% in these markets over the last two years – indicative of a broadening demand for real estate and lending opportunities across the entire sector.

Lingering Credit Constraints

Credit constraints continue to create opportunities for commercial mortgage lenders. Loans originated prior to the Great Recession are approaching maturity and by some estimates will top \$2 trillion in refinancing and recapitalization over the next five years. While conditions have improved in recent years, it remains a challenging environment for many lenders to juggle regulatory scrutiny and

profitability issues. Capital requirements, including HVCRE², have reduced bank proceeds for both stabilized and non-stabilized assets, potentially disrupting credit availability in the real estate sector.

CMBS Slowdown

The CMBS market continues to face headwinds due to market volatility, heightened investor scrutiny, and pending regulatory changes. CMBS loans are a type of mortgage-backed security (an aggregation of loans secured by commercial property). This product generally serves as an alternative capital source for non-standard investments, or assets in small or tertiary markets, and/or transactions requiring proceeds greater than what is available from other traditional lenders. In 2015, CMBS origination eclipsed the \$100 billion mark for the first time since 2007. This accomplishment may be short lived as interest rate volatility decreased investor appetite recently, and slowing global growth caused lending volumes to decline significantly in the first half of 2016. Starting in late 2016, a new risk-retention rule will require CMBS originators to retain a 5.0% slice of every new deal, or designate another buyer to take on that risk. When considering these issues in conjunction with a slowing global economy and ongoing interest rate uncertainty, it is no wonder the near-term CMBS outlook seems bleak.

Relative Value for Life Insurance Lending

Life insurance companies have seen a substantial increase in commercial real estate loan activity since the Great Recession. These companies tend to view real estate as a portfolio diversifier, often willing to provide up to 30-year fixed-rate loans (the vast majority of bank and CMBS loans have terms of 10 years or less), which are attractive to borrowers looking to take advantage of today's historically low interest rate environment. Life insurer loans outstanding rose by over \$28 billion in 2015, eclipsing the previous high of \$24 billion in 2007. Opportunities should remain abundant over the near-term given the significant wave of CRE loan refinancing and recapitalization (approximately \$2 trillion) occurring over the next several years. Additionally, commercial real estate loans are an attractive fixed-income option because they have historically offered a stronger risk-adjusted return versus comparable corporate bonds, which we will discuss further in Appendix 1.

² High Volatility Commercial Real Estate; imposes higher capital requirements on higher-risk commercial real estate loans.

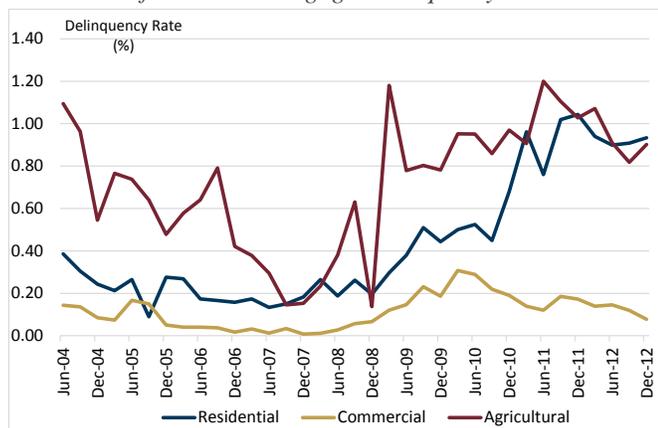
Market Risks

As with most investment opportunities, commercial mortgage lending has a certain level of embedded risk. It is important to mitigate these concerns, while also being aware of how mortgage investments respond to broader economic challenges. The following questions and responses echo investor concerns given recent economic conditions and highlights USAA RealCo's outlook regarding these issues:

- ***Given the prospects of an economic downturn, why is now a good time for this strategy?***

The U.S. economy is now in its seventh year of economic expansion without a recession, which is past the six-year average of the last seven cycles. Some would suggest a downturn is overdue, and in fact, our forecasts call for a recession between 2017 and 2019. So why is it an appropriate time to pursue this strategy? To begin, this strategy (when executed properly) enables investment through all cycles. Furthermore, a modest downturn would exacerbate an already challenging lending environment, as banks and CMBS lenders would likely tighten credit standards and increase spread levels, creating even more opportunities for life insurance lenders. Moreover, commercial real estate mortgages are defensive assets and the conservative LTV ratios enable the sector to withstand significant value declines during recessionary periods. In fact, delinquency rates for life company mortgages were well below other asset classes during the height of the Great Recession, as shown in *Exhibit 2*.

Exhibit 2: Life Insurer Mortgage Delinquency Rates



Sources: ACLI

- ***How could rising interest rates impact commercial mortgages?***

As monetary policy continues to evolve, the impact to the economy and the commercial mortgage sector will depend largely on why the Fed raises interest rates. As previously mentioned, if the economy is growing at a healthy pace, then landlords can increase rents and Net Operating Income (NOI), which helps improve debt service coverage in a rising interest rate environment. Of course, performance will vary by market and property type, but given that interest rates are likely to remain accommodative in the near term, the sector should be able to absorb a modest rate increase. Furthermore, foreign investors will likely continue to favor U.S. real estate, resulting in a relatively healthy level of credit demand.

Conclusion

Commercial mortgages are an attractive investment option, particularly in an environment where credit standards remain somewhat constrained, borrower demand is significant, and underlying real estate fundamentals are healthy. With banks and CMBS lenders struggling to manage an onerous regulatory environment, a gap remains between borrower needs and credit availability. Consequently, there is an opportunity for life insurance lenders to fill this void and capitalize on the increasing demand in the commercial mortgage sector.

APPENDIX 1

Portfolio Enhancement

The following analysis compares the historical performance of commercial mortgages to several major asset classes, and the results suggest commercial mortgage investments are capable of enhancing a multi-asset portfolio by providing strong returns, low volatility, and a low correlation with other asset classes.

Strong Returns

For more than 25 years, the Giliberto-Levy Index has collected commercial mortgage data and published returns for the sector. Over the 25-year period ending in the fourth quarter of 2015, commercial mortgages total return was an attractive 6.8% per annum, on par with investment grade bonds and slightly below value-add real estate performance. Across economic cycles, commercial mortgages delivered relatively consistent returns, which are especially valuable to investors with a long-term investment approach. More recently (over the last 10 years), commercial mortgages had solid returns of 5.4%, topping both value-add and opportunistic real estate, in addition to investment-grade bonds (see *Exhibit 3*). This period included the Great Recession, in which the average stock fund lost nearly 40.0%, yet commercial mortgages outperformed several fixed-income and real estate indices.

Exhibit 3: Historical Performance of Commercial Mortgages vs. Other Asset Classes, Through Q4 2015³

Average Annual Returns	Last 10 years	Last 15 Years	Last 20 years	Last 25 Years
	Commercial Mortgages	5.4%	6.2%	6.6%
Core	6.5%	7.9%	9.5%	7.6%
Value-Add	4.2%	7.4%	9.1%	7.3%
Opportunistic	4.3%	10.0%	12.9%	9.9%
NAREIT Equity Index	7.4%	11.2%	10.9%	12.1%
S&P 500	6.7%	4.6%	7.9%	9.6%
Barclay's US Agg	4.5%	5.0%	5.3%	6.2%
Barclay's US Inv Grade Credit	5.2%	5.8%	5.8%	6.9%
Barclay's US HY	7.0%	7.6%	6.7%	9.0%

Sources: Giliberto-Levy, NCREIF, Townsend, NAREIT, Barclay's Capital, Dow Jones

Low Volatility

Commercial mortgage investments have low volatility, which creates strong risk-adjusted returns that tend to outperform most other asset classes. We calculated volatility by comparing the standard deviation of each asset class. The analysis concluded that over the last 10-, 15-, 20-, and 25-year periods, commercial mortgage volatility has been among the lowest of any asset class; with the exception of institutional-grade bonds (see *Exhibit 4*).⁴ Low volatility, combined with robust returns, allows commercial mortgages to achieve an attractive risk-adjusted return, which suggests these investments are appropriate vehicles for investors with a mandate to limit volatility within their portfolio.

³ Commercial mortgage performance comes from the Giliberto-Levy index. Core reflects the fund performance using the NCREIF Open-End Diversified Core (ODCE) index. Value-Add and Opportunistic benchmarks reflect the performance of funds pursuing these strategies, using the NCREIF/Townsend Value-Add and Opportunistic indices from 1990 through the third quarter of 2013. From the fourth quarter of 2013 to the end of 2014, we use the NCREIF Closed-End Value-Add (CEVA) index for Value-Add returns. Note: Opportunistic performance is only reflected through the third quarter of 2014.

⁴ We recognize that the private real estate indices are appraisal-based, and thus returns are smoothed and may understate volatility, best outlined in: Pedersen, Page, and He; "Asset Allocation: Risk Models for Alternative Investments"; Pimco Quantitative Research; May 2013 and Pedersen, He, Tiwari, Hoffman; "Modeling the Risk Characteristics of Real Estate Investments"; Pimco Quantitative Research; January 2012. However, these are reflective of how these asset classes are reported on financial statements, in line with accounting rules. Thus, in this sense, the lower volatility is "real."

Exhibit 4: Historical Volatility of Commercial Mortgages vs. Other Asset Classes, Through Q4 2015

Standard Deviation	Last 10 years	Last 15 Years	Last 20 years	Last 25 Years
	Commercial Mortgages	4.3%	4.9%	4.7%
Core	15.0%	12.6%	11.2%	11.0%
Value-Add	20.3%	17.0%	14.9%	14.4%
Opportunistic	28.7%	23.8%	20.7%	20.3%
NAREIT Equity Index	27.8%	24.2%	22.9%	21.2%
S&P 500	18.0%	18.7%	18.9%	17.6%
Barclay's US Agg	3.0%	3.4%	3.6%	4.5%
Barclay's US Inv Grade Credit	5.9%	5.6%	5.3%	6.0%
Barclay's US HY	15.3%	13.8%	12.4%	12.6%

Sources: Giliberto-Levy, NCREIF, Townsend, NAREIT, Barclay's Capital, Dow Jones

Attractive Risk-Adjusted Returns

Commercial mortgages delivered stronger returns per unit of risk than most other asset classes over all four periods observed (10-year, 15-year, 20-year, and 25-year). As shown in *Exhibit 5*, utilizing Sharpe ratios, commercial mortgages outperformed all asset classes on a risk-adjusted basis over the 20-year and 25-year historical periods.

Exhibit 5: Historical Sharpe Ratios of Commercial Mortgages vs. Other Asset Classes, Through Q4 2015⁵

Sharpe Ratio	Last 10 years	Last 15 Years	Last 20 years	Last 25 Years
	Commercial Mortgages	0.63	0.62	0.58
Core	0.26	0.38	0.50	0.28
Value-Add	0.07	0.25	0.35	0.20
Opportunistic	0.06	0.29	0.44	0.27
NAREIT Equity Index	0.17	0.33	0.31	0.36
S&P 500	0.22	0.08	0.21	0.29
Barclay's US Agg	0.75	0.64	0.50	0.45
Barclay's US Inv Grade Credit	0.42	0.47	0.36	0.40
Barclay's US HY	0.31	0.35	0.26	0.39

Sources: Giliberto-Levy, NCREIF, Townsend, NAREIT, Barclay's Capital, Dow Jones

Correlation Attributes

When composed correctly, a diversified portfolio protects capital during economic downturns, and assets with low or negative correlation relative to the broader portfolio are critical to maintaining diversification benefits. From 1998 to 2015, commercial mortgages had a low or negative correlation (between -0.11 and +0.03) with stocks and institutional commercial real estate (see *Exhibit 6*). Generally, commercial mortgages have maintained a low correlation to equity markets and commercial real estate throughout both of the most recent economic downturns. Not only does this validate commercial mortgages' role as a portfolio diversifier, it reinforces the notion that real estate equity and debt are not redundant and both strategies can play an important role within a multi-asset portfolio.

⁵ Note that all indices use the 10-year Treasury as the risk-free rate to calculate the Sharpe Ratio, except for the bond indices, which are linked to their closest average duration (5-year Treasury for the US Agg and US High Yield, 7-year Treasury for the US Investment Grade credit).

Exhibit 6: Correlation of Commercial Mortgages vs. Other Asset Classes, 1998-2015

Correlation	Commercial Mortgages	Core	Value-Add	Opportunistic	NAREIT Equity Index	S&P 500	Barclay's US Agg	Barclay's US Inv Grade Credit	Barclay's US HY
Commercial Mortgages	1.00	(0.03)	(0.07)	0.03	0.44	(0.11)	0.71	0.71	0.31
Core	(0.03)	1.00	0.97	0.90	0.22	0.29	(0.24)	(0.31)	(0.23)
Value-Add	(0.07)	0.97	1.00	0.91	0.23	0.24	(0.23)	(0.30)	(0.25)
Opportunistic	0.03	0.90	0.91	1.00	0.40	0.41	(0.23)	(0.17)	0.01
NAREIT Equity Index	0.44	0.22	0.23	0.40	1.00	0.54	0.08	0.44	0.66
S&P 500	(0.11)	0.29	0.24	0.41	0.54	1.00	(0.44)	0.07	0.66
Barclay's US Agg	0.71	(0.24)	(0.23)	(0.23)	0.08	(0.44)	1.00	0.78	0.05
Barclay's US Inv Grade Credit	0.71	(0.31)	(0.30)	(0.17)	0.44	0.07	0.78	1.00	0.61
Barclay's US HY	0.31	(0.23)	(0.25)	0.01	0.66	0.66	0.05	0.61	1.00

Sources: Giliberto-Levy, NCREIF, Townsend, NAREIT, Barclay's Capital, Dow Jones

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