Moody’s US CMBS: Presentation to Hoyt Fellows

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CMBS Credit Risk

» Liquidity and Credit Risk through the Cycle
» How Good is the “V” in Your LTV Ratio
» Commercial Property Price Trends and CMBS Loan Performance
» Boiling Frog Syndrome
Liquidity and Credit Risk Through the Cycle
Pre-Crisis Study of Life Company Commercial Loan Default Rates and Leverage Shows Performance Compression in Good Vintages, Performance Dispersion in Weak Ones

Source: Moody's Investors Service
Commercial Real Estate Debt as a Percentage of U.S. Gross Domestic Product

» CRE debt: seldom in alignment with long term trend

Source: Moody’s, Federal Reserve Board
“Normal” CMBS Issuance $50-75 B ($0-200B Range) Normal for Life Companies is $50 B with Little Variation

Source: Moody’s Investors Service, Trepp LLC. Data includes conduit/fusion CMBS deals only.
CMBS Loan Pricing and Availability Driven by CMBS Bond Spreads

Source: Morgan Stanley (2005-2011 10-yr super senior Aaa (sf) spreads), Trepp all other)
How Good is the “V” in Your LTV Ratio?
The “V” in Moody’s LTV Helps Flag Risk

» Based on sustainable cash flow and through the cycle cap rates, it is a proxy for the “intrinsic” value available to support debt

» The “V” from appraisals reflects point in time value, may not address cyclically high rents or low cap rates from a credit perspective
MLTV Correlated with Expected Losses
Underwritten LTV had Little Explanatory Power

» Each pre-crisis deal is represented by two dots, a green diamond for its average underwritten LTV and an orange square for its average Moody’s LTV.

Source: Moody’s Investors Service
Moody’s Approach to Net Cash Flow

» Uses rents and occupancy deemed sustainable, normalized cap ex and expenses

» Identified increased use of pro forma underwriting at pre-crisis peak

Source: Moody’s Investors Service
Moody’s Cap Rates Help Address Refinance Risk

» Moody’s Value vs. Market Value
   – Moody’s value approaches constant through cycles, differential to market value varies

» Process:
   – **Property grade** assigned: based on number of factors, including location, tenancy, and the construction quality of the building
   – **Moody’s stressed cap rate** assigned: using long-term, historically stable cap rates
   – **Moody’s LTV** = Loan balance / (NCF / Moody’s cap rate)

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Source: Moody’s Investors Service
Moody’s LTV – The Track Record So Far

Source: Moody’s Investors Service
Moody’s DSCR – Indicator of Term Default Risk

» Moody’s DSCR
  – Actual Moody’s DSCR: based on Moody’s Net Cash Flow and actual loan constant (P&I)
  – Default curve has three distinct zones, no “cliff”
Moody’s DSCR – The Track Record so Far

Source: MIS. *Note: Default rate excludes disposed loans with losses <2% of original balance.
Commercial Property Price Trends and CMBS Loan Performance
Post Financial Crisis Employment Recovery

» Each line represents job loss and recovery in post depression era recessions

» Financial crisis recovery the most protracted, only now nearing pre crisis levels

Source: Moody’s Analytics, Federal Reserve Board
CMBS Delinquencies Rose as Property Prices Fell

Source: Moody’s Investors Service, Trepp LLC, Real Capital Analytics, February 2014
Peak-Trough Price Decline Erased Equity Behind 75% Underwritten LTV Loans from 2006-2007 Vintages

» 2002-2003 vintages built substantial cushion during pre-crisis price appreciation

Source: Moody's Investors Service
Outlook for Losses By Vintage

Consistent with peak MLTV and CPPI, 2007-2008 vintages expected to realize biggest losses

Realized Losses & Moody's Base Expected Loss by Vintage (Share of Original Balance)

Source: Moody’s Investors Service and Trepp, LLC
Post Crisis Vintage Loans Built Up Equity Cushions

» Leverage profile of a loan originated at 75% in a given post-crisis year

Source: Moody’s Investors Service, CBRE-EA.
CMBS and Bank CRE Loans Most Impacted By Crisis

Source: Moody's Investors Service, Trepp LLC, Mortgage Bankers Assoc
4

Boiling Frog Syndrome
Boiling Frog Syndrome

- Failure to react to gradual changes until unfortunate circumstances occur
- The MLTV thermometer says the water is hot and getting hotter
- CMBS loans will have pre-crisis peak MLTV in 2017, barring acceleration as in 2007
Boiling Frog Syndrome

» What will CRE capital market participants do THIS time?

» Many intend to jump out just in time, but history suggests that few do

Equity Office/Blackstone

Most everyone else
Moody’s Raising Credit Enhancement Levels in Response to Rising Credit Risk

Source: Moody’s Investors Service