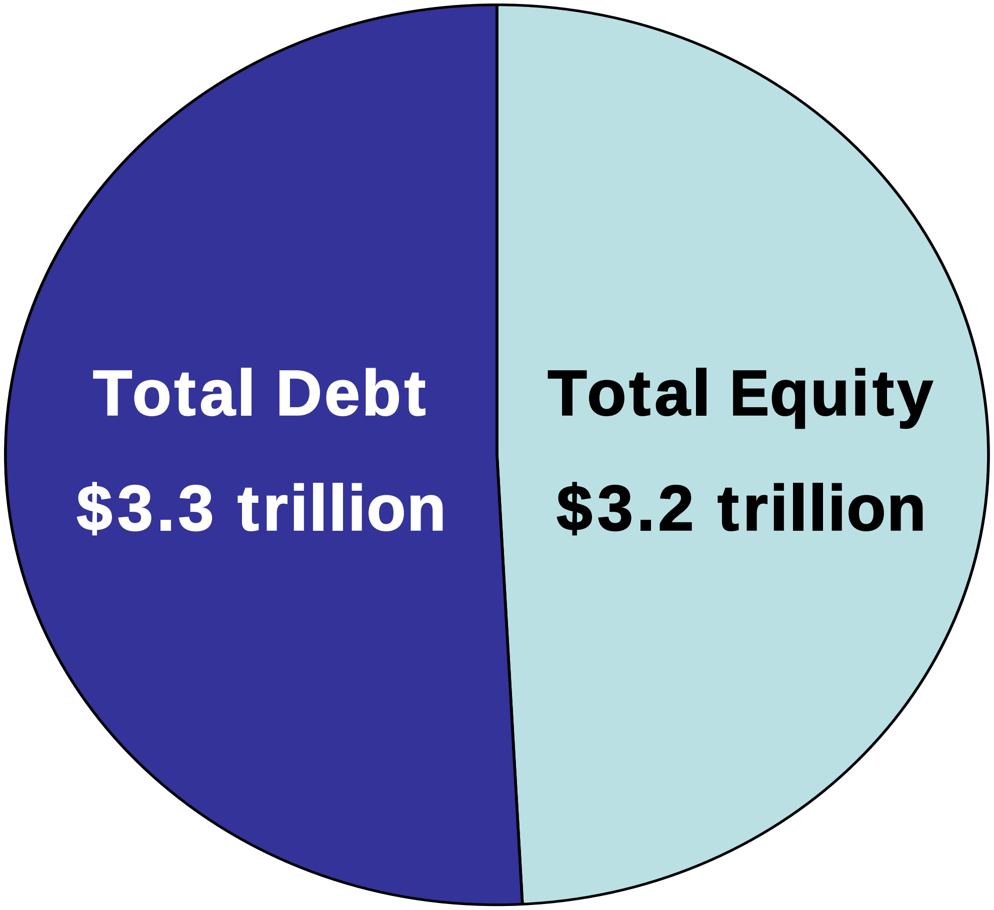
The Credit Crisis in Commercial Real Estate

Summary

- Commercial real estate accounts for a meaningful 6% of GDP
- Commercial real estate entered the downturn reasonably well balanced
- However, $400 billion of CRE debt matures by the end of 2009, and another $800 billion matures in 2010 and 2011
- According to S&P, another $800 billion of corporate debt matures on 2009
- Two largest sources of CRE debt are banks and CMBS
- Banks are not lending, and the CMBS market is closed
- Lending terms, when available, are ruinous and assets cannot be sold
- Performing loans must be refinanced to avoid asset price deflation
- Super-senior AAA-rated debt trades at 15% yields to maturity
- AAA-rated debt requires Treasury support to establish price discovery

Commercial Real Estate Debt and Equity

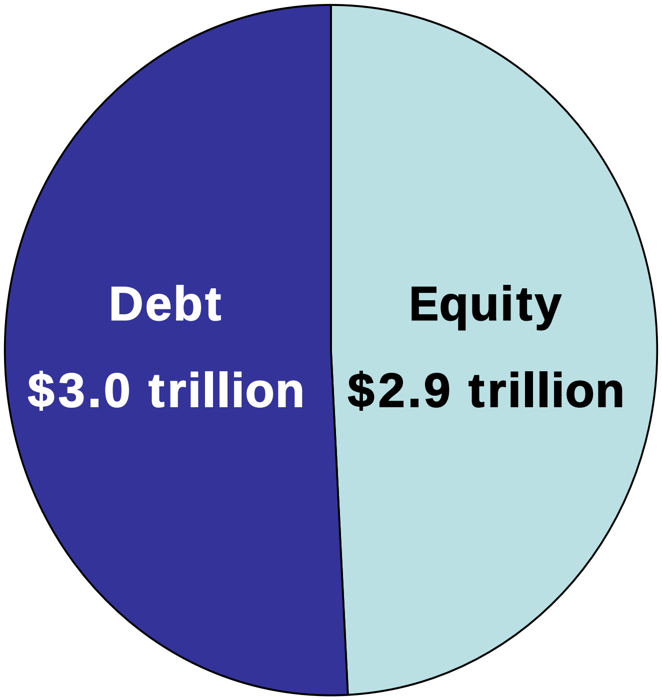
Investment-grade, income-producing real estate
$6.5 trillion as of December 2007



Source: JPMorgan Asset Management

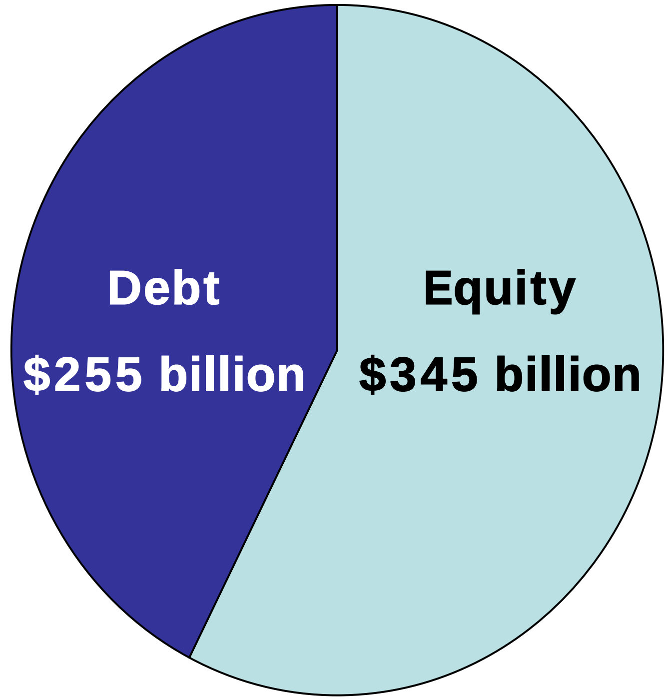
Commercial Real Estate Debt and Equity
Public and Private Ownership as of December 2007

Private Ownership



$5.9 trillion

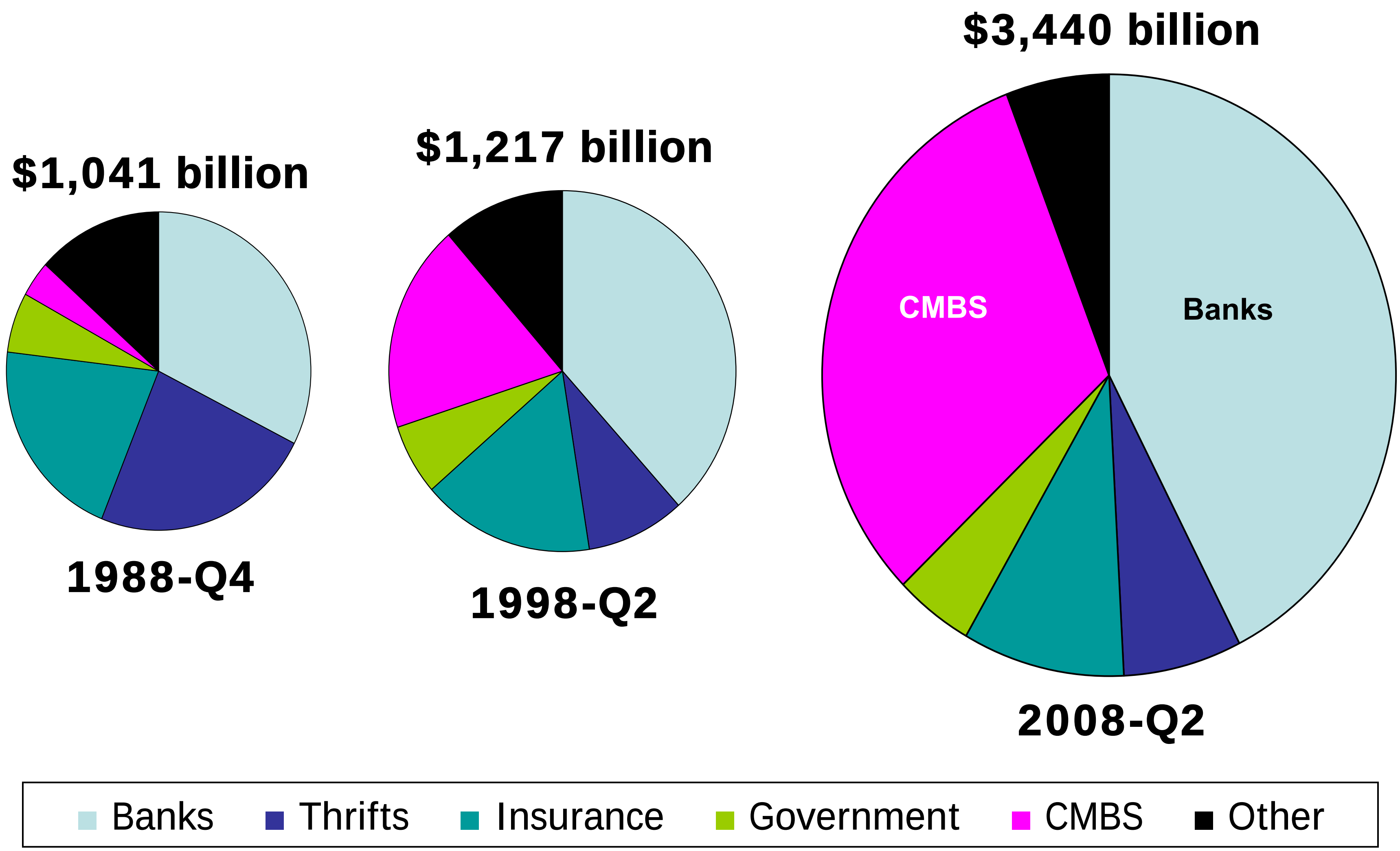
Public Ownership



$0.6 trillion

Source: JPMorgan Asset Management, NAREIT®

Commercial Mortgage Debt Outstanding
By source of funds



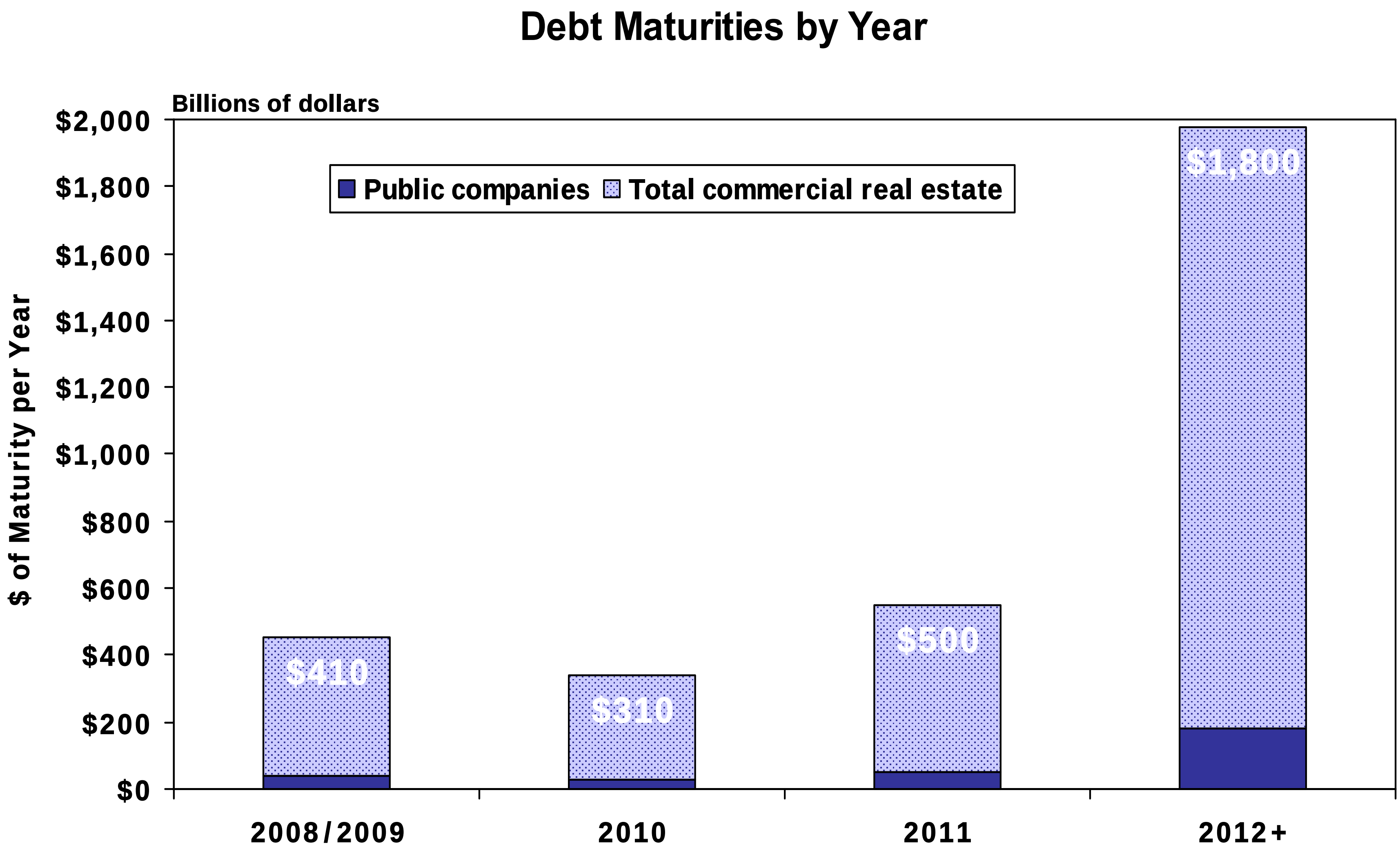
Source: Federal Reserve Flow of Funds Accounts of the United States

Publicly Traded Real Estate Equity (REITs)
A window on commercial real estate equity finance

- 101 companies listed on the NYSE
- 74% investment grade by equity market capitalization
- $600 billion of property owned at year-end 2007
- Leverage ratio of 60% compared with 40% at the end of 2007
- Fixed charge ratio of 2.6
- $19.5 billion of dividends paid to shareholders in 2007
- Average daily trading volume of $5 billion
- Share returns lead measured returns in property markets by 6-18 months
  - Share returns peaked early in 2007 and have since declined 62.8%

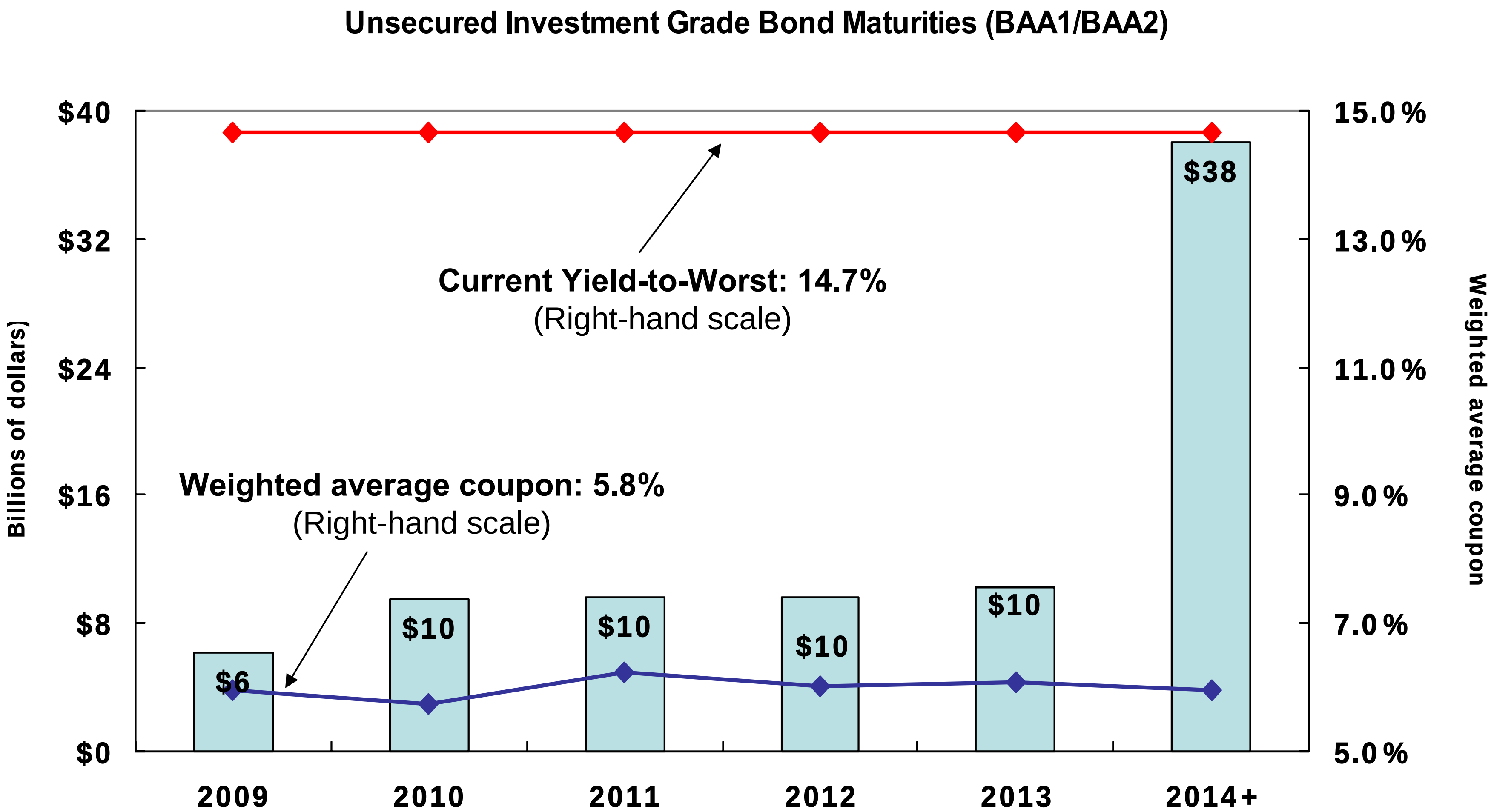
Note: Data as of November 30, 2008
Source: NAREIT®

Commercial Real Estate Debt Maturities
Including secured and unsecured debt



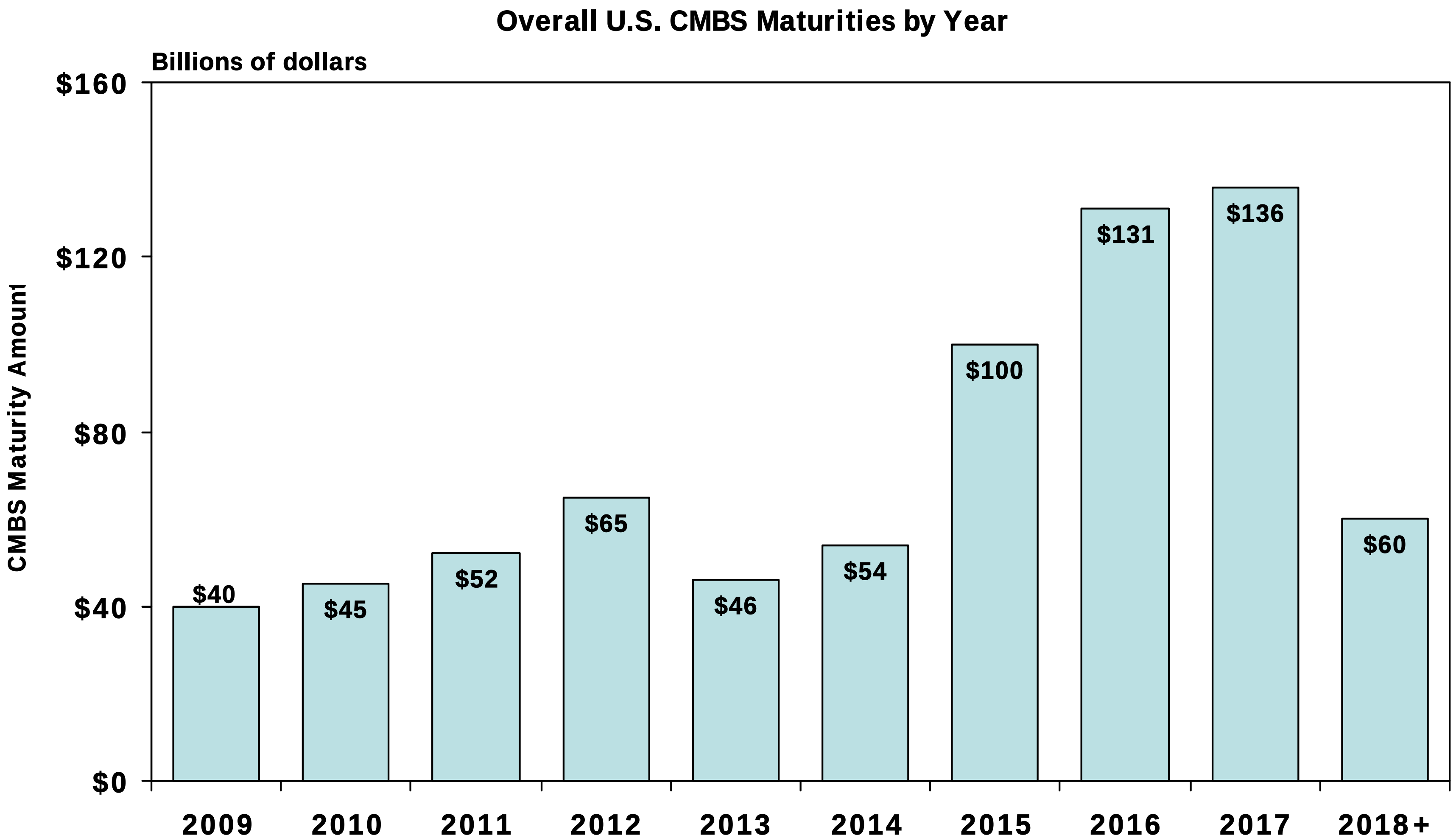
Source: Goldman Sachs and REIT filings

Public Company Debt Maturities
Investment grade unsecured debt



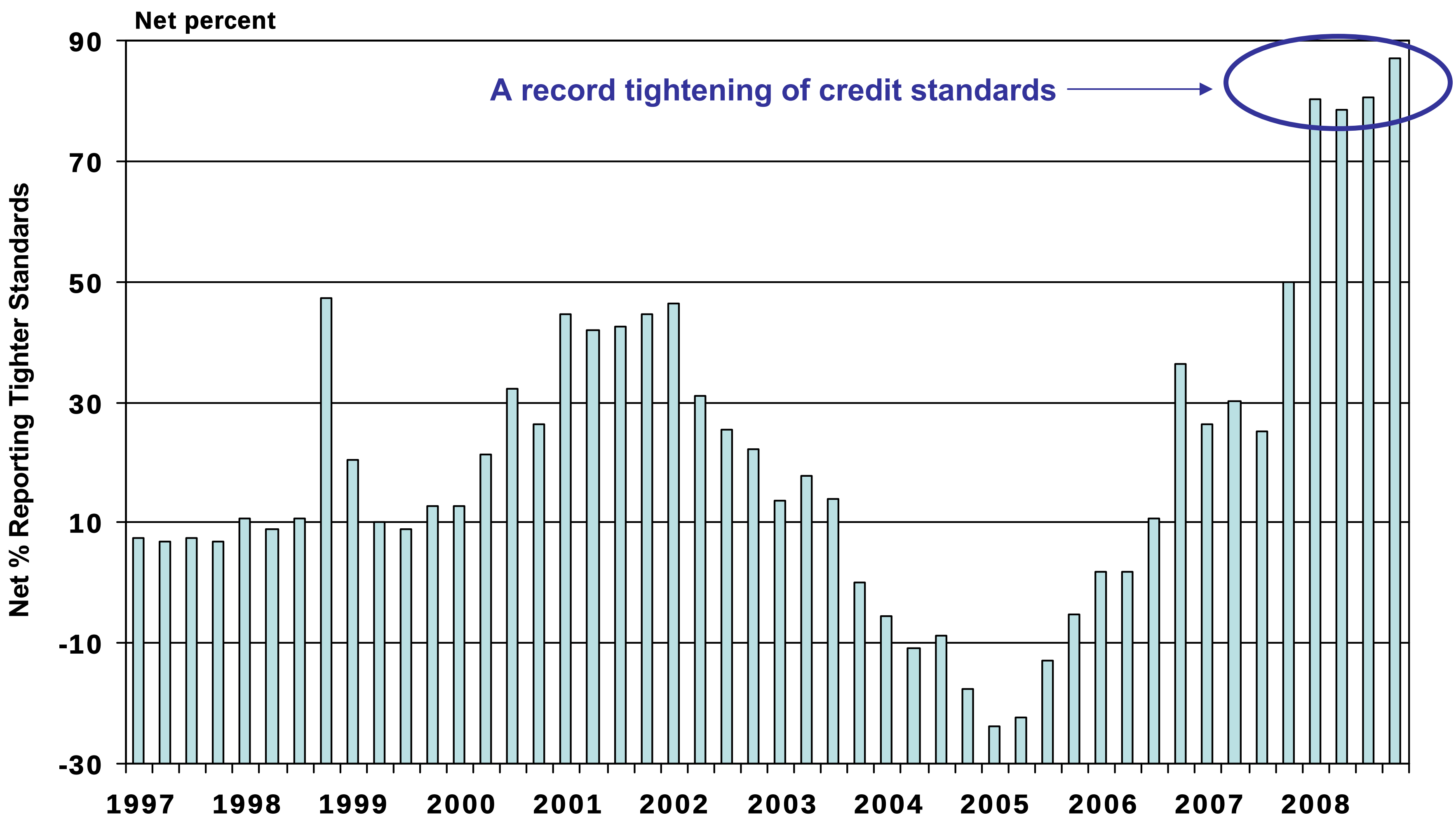
Source: Goldman Sachs, Advantage Data, Barclays and Bloomberg as of November 30, 2008

Publicly Traded Real Estate Debt (CMBS)
A window on commercial real estate debt finance
Annual maturity schedule



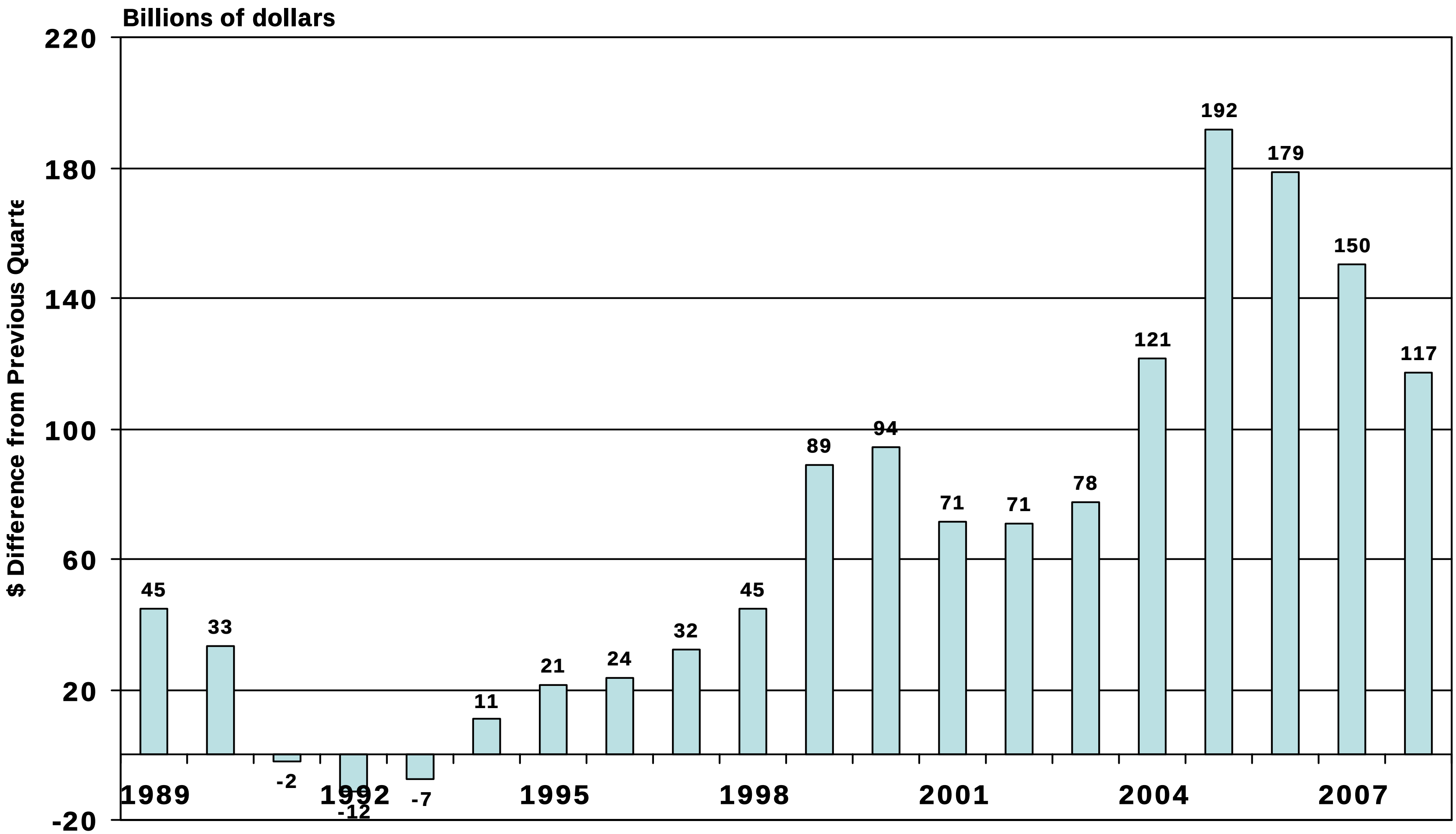
Source: Goldman Sachs and Trepp

Commercial Real Estate Loans at Banks
CRE credit standards: 1997 - 2008



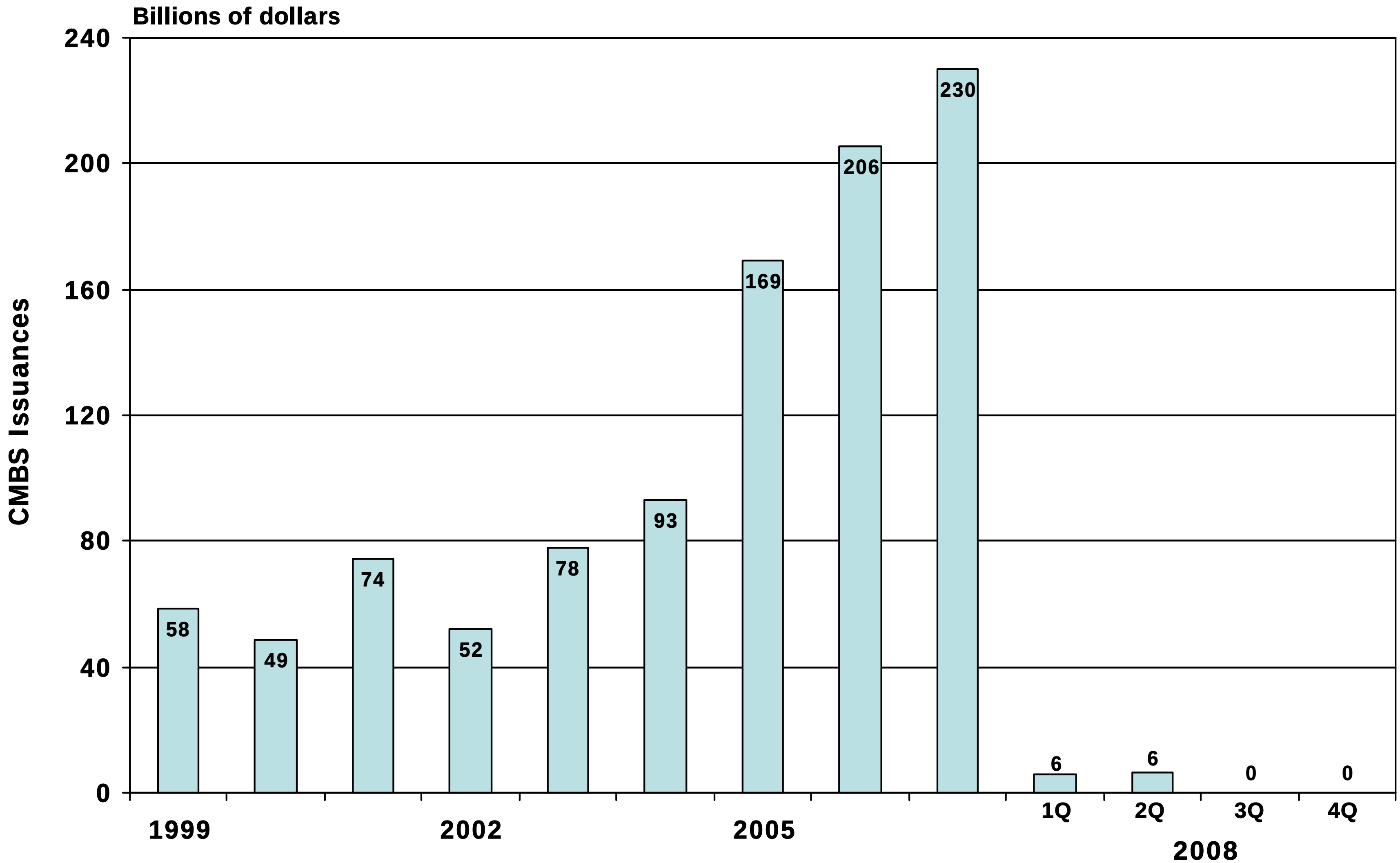
Source: Federal Reserve Board Senior Loan Office Opinion Survey on Bank Lending Practices (October 2008)

Commercial Real Estate Loans at Banks
CRE lending volume: 1989 - 2008



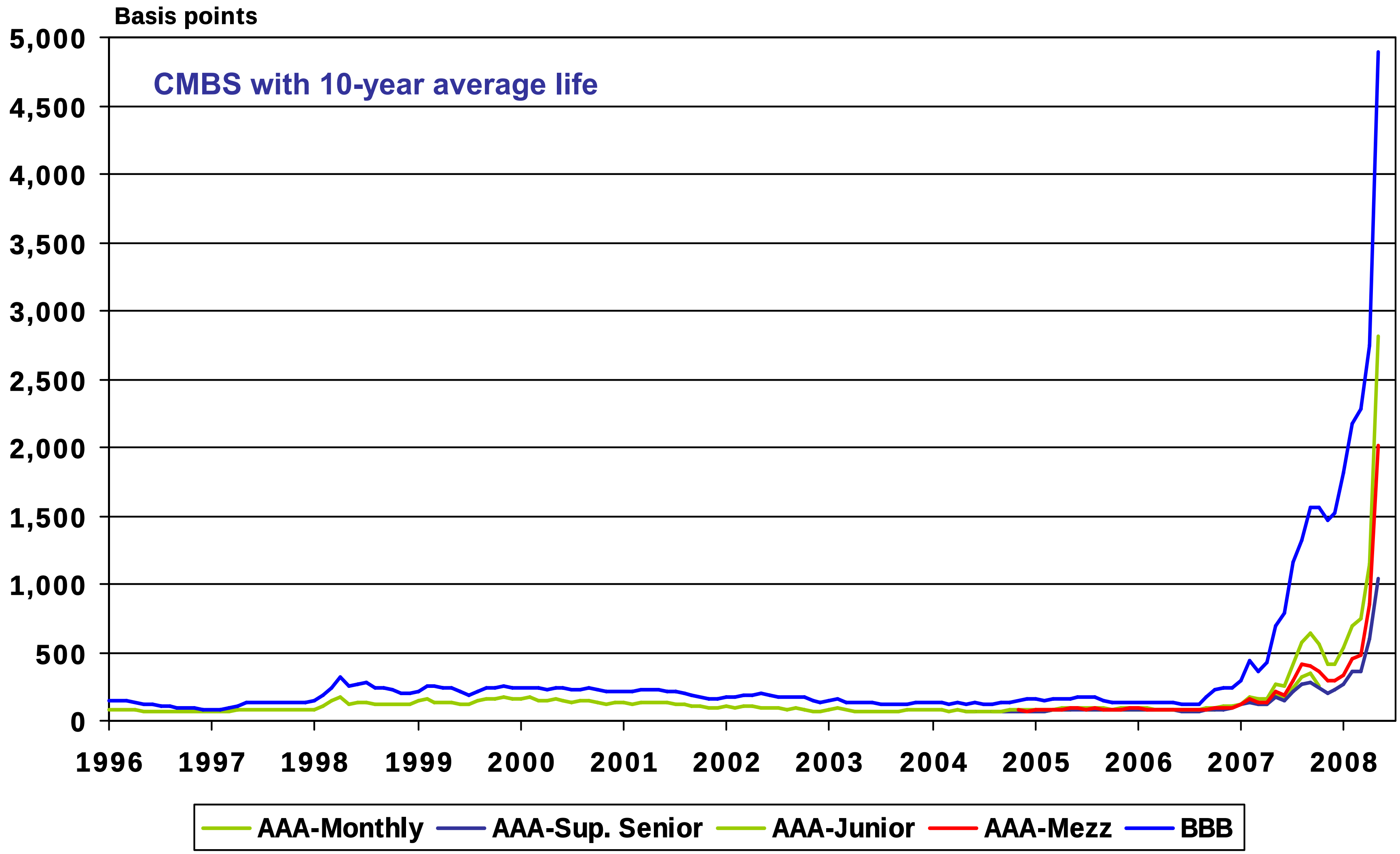
Note: Data through November 19, 2008
Source: Federal Reserve Board

Securitized Commercial Real Estate Loans
CMBS issuance volume: 1999 - 2008



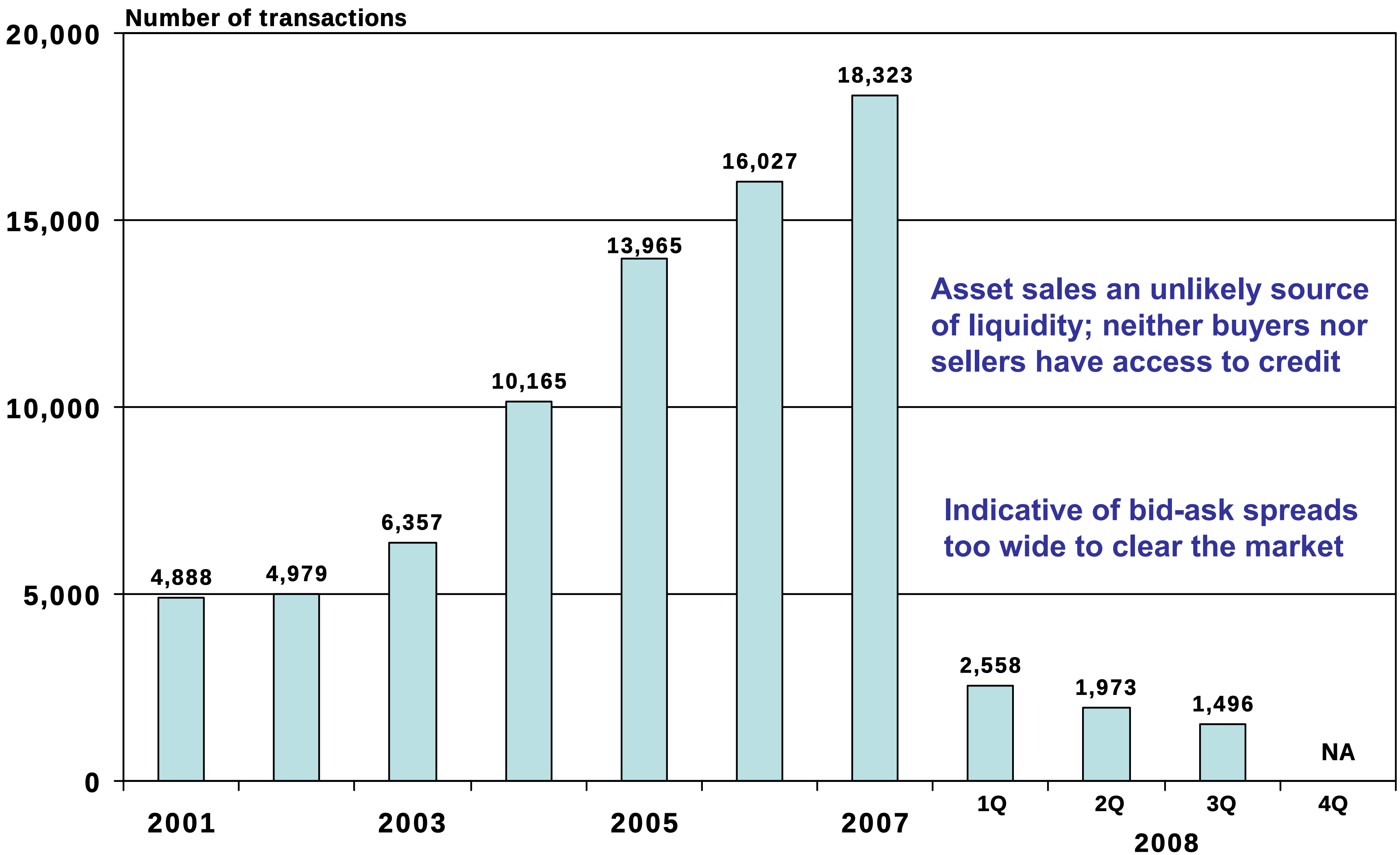
Sources: Commercial Mortgage Alert

CMBS Credit Spreads
CMBS yield less 10-year Treasury yield



Note: Data through November 30, 2008
Source: Morgan Stanley

Commercial Real Estate Transactions
Transaction volume: 2001 – 2008

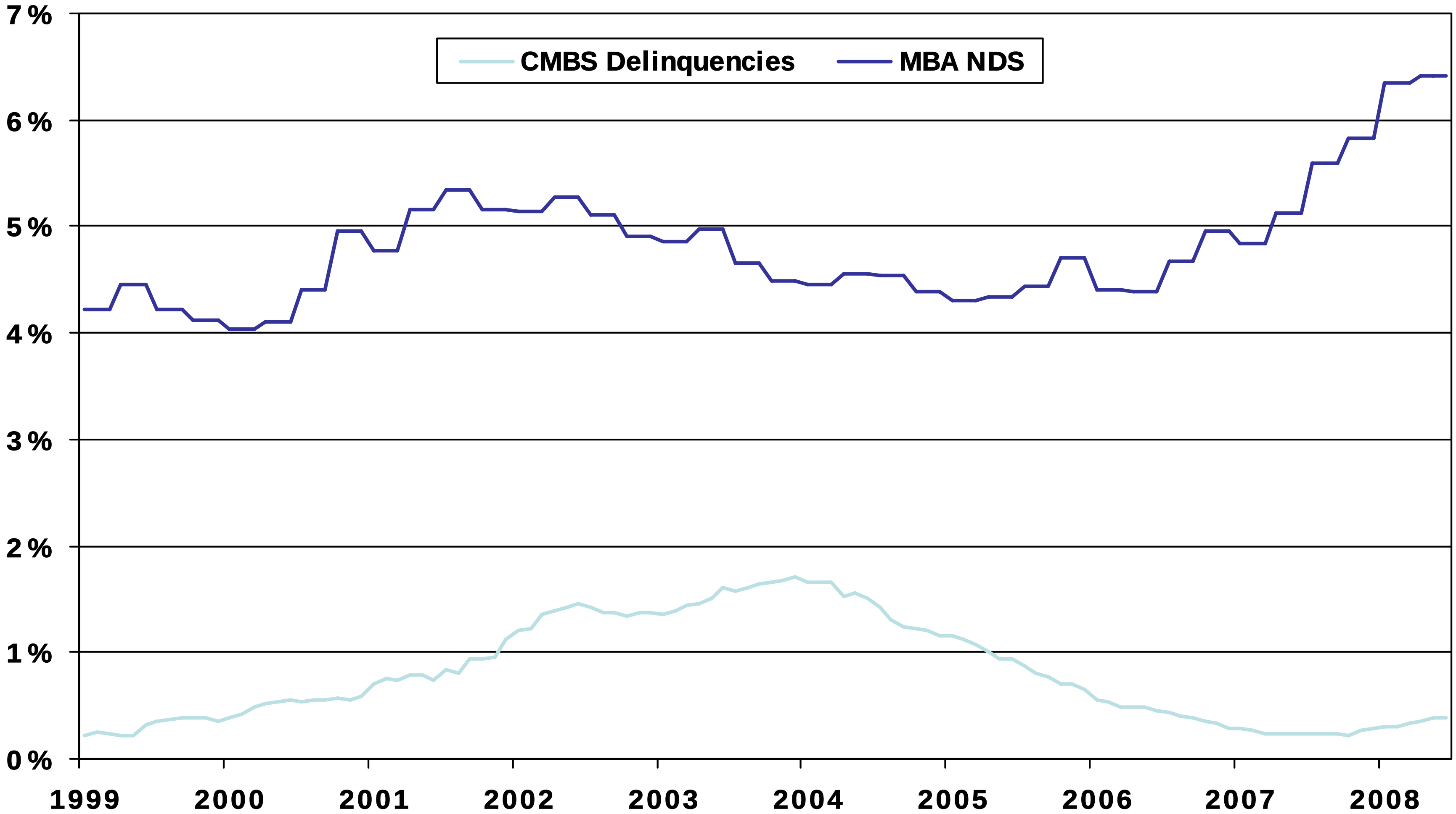


Asset sales an unlikely source of liquidity; neither buyers nor sellers have access to credit

Indicative of bid-ask spreads too wide to clear the market

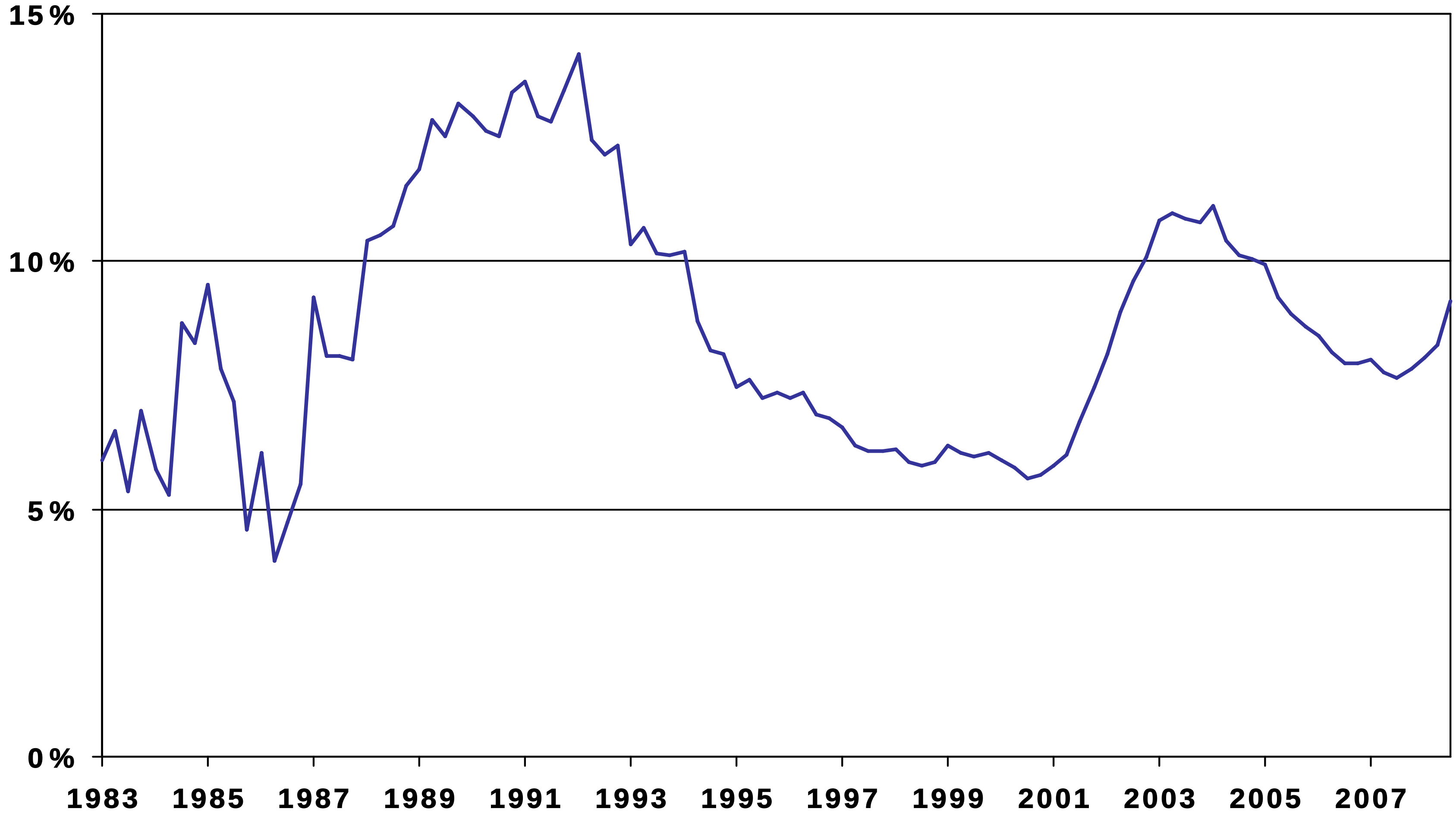
Source: Real Capital Analytics

CMBS and Residential Mortgage Delinquencies
1999 – 2008:Q2



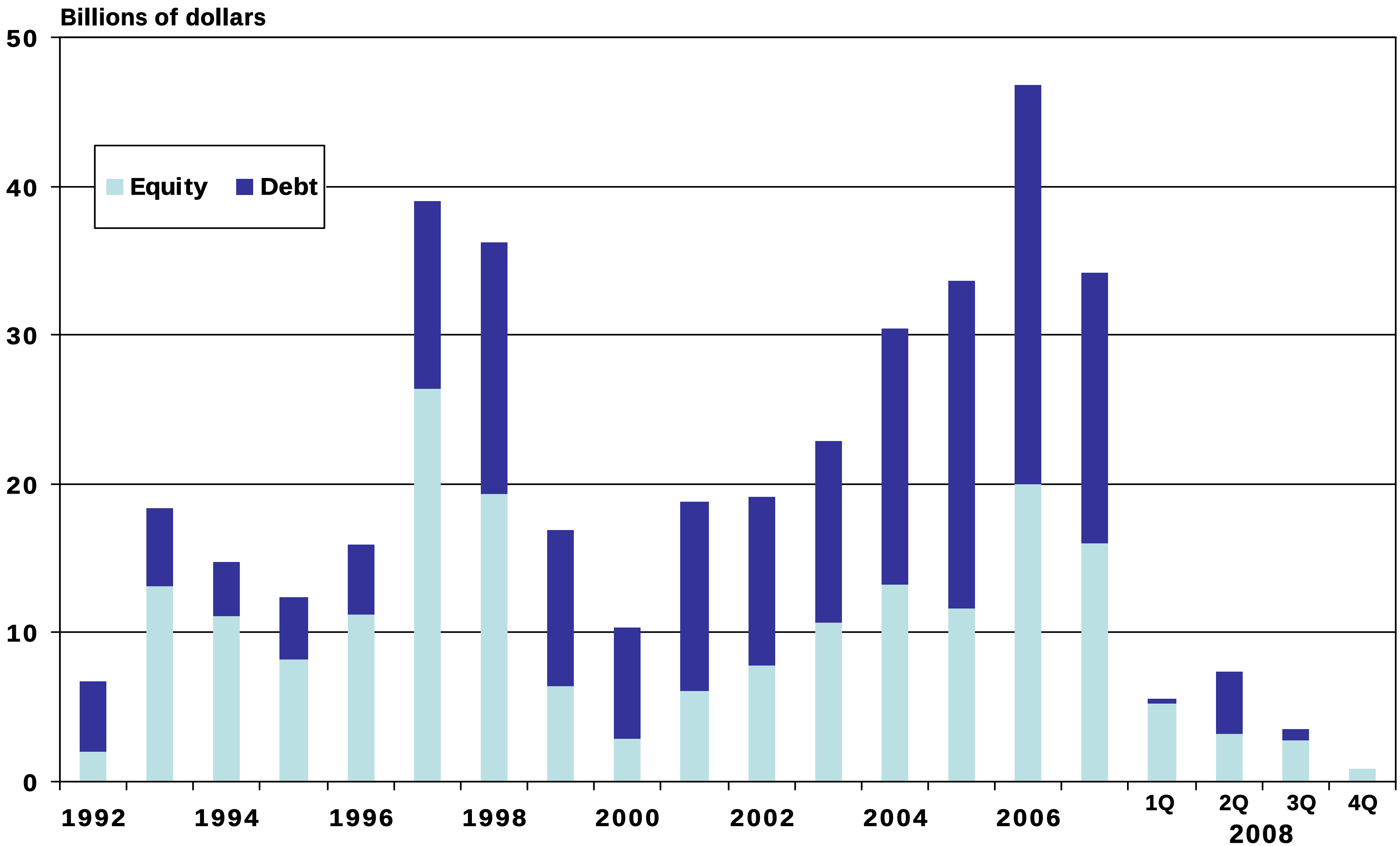
Note: Delinquency rates are for fixed-rate, conduit CMBS transactions. 60+ excludes 30-day delinquencies.
Source: Trepp, CMSA, and Mortgage Bankers Association National Delinquency Survey

Nationwide Core Property Vacancy Rates
1983 – 2008:Q3



Source: NCREIF

Securities Offerings by Public Companies



Date as of November 30, 2008
Source: NAREIT® and SNL Financial

Policy Actions to Stabilize Financial Markets

- Banks must be encouraged or required, as a condition for Treasury or Fed liquidity assistance, to refinance performing commercial mortgages and unsecured credit facilities reaching maturity
- The Treasury should allocate a portion of the remaining funds under TARP as equity to capitalize a Federal Reserve liquidity facility for new commercial mortgages and unsecured commercial real estate loans, permitting credit markets to restart and clear in an orderly fashion
- Foreign equity capital should be encouraged and barriers to such investment (such as the Foreign Investment in Real Property Tax Act or FIRPTA) should be revised
- Real estate mortgage investment conduit (REMIC) rules should be amended to facilitate reasonable modifications to the terms of loans securitized through CMBS
- Accounting rules for “mark-to-market” and “consolidation” must adapt to the current capital markets crisis