The Credit Crisis in Commercial Real Estate

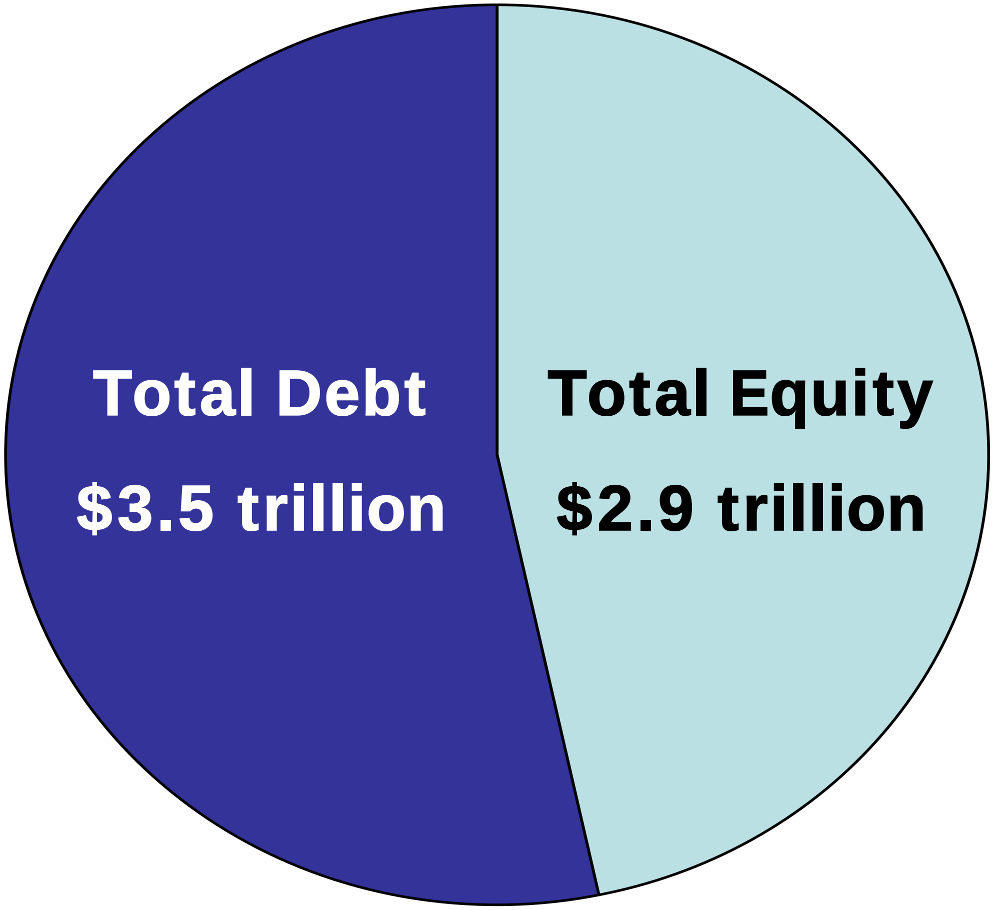
Summary

- Commercial real estate accounts for a meaningful 6.5% of GDP
- Commercial real estate entered the recession in reasonable balance
- The credit crisis creates a downward spiral of property valuations, placing the financial system at risk
- Approximately $400 billion of CRE debt matures in 2009, and another $800 billion matures in 2010 and 2011
- Two largest sources of CRE debt have been banks and CMBS
- Banks are not lending, and the CMBS market is closed
- Bid-ask spreads remain large, and property assets cannot be sold
- Performing loans must be refinanced to avoid asset price deflation
- AAA-rated debt requires Treasury support to facilitate price discovery

Commercial Real Estate Debt and Equity

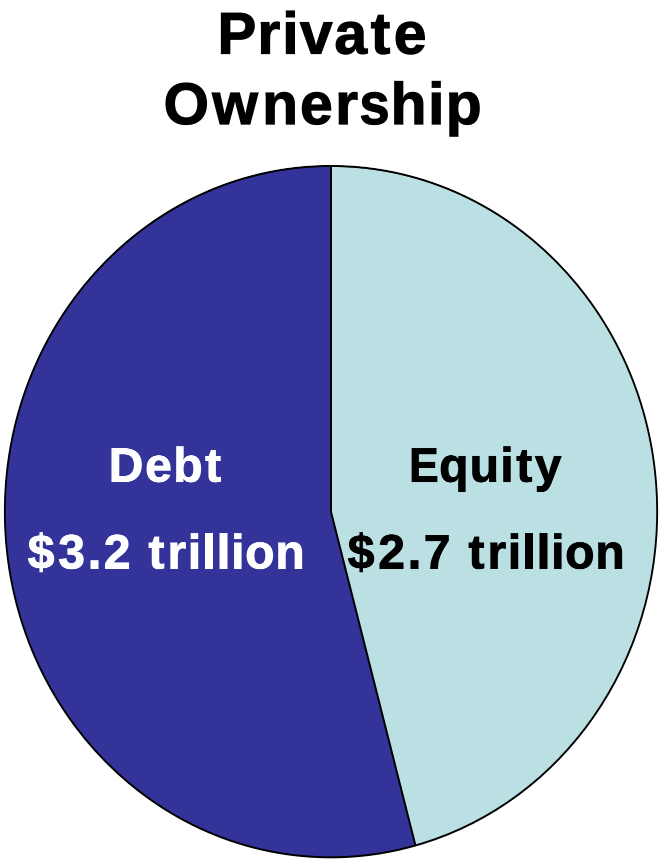
Investment-grade, income-producing real estate

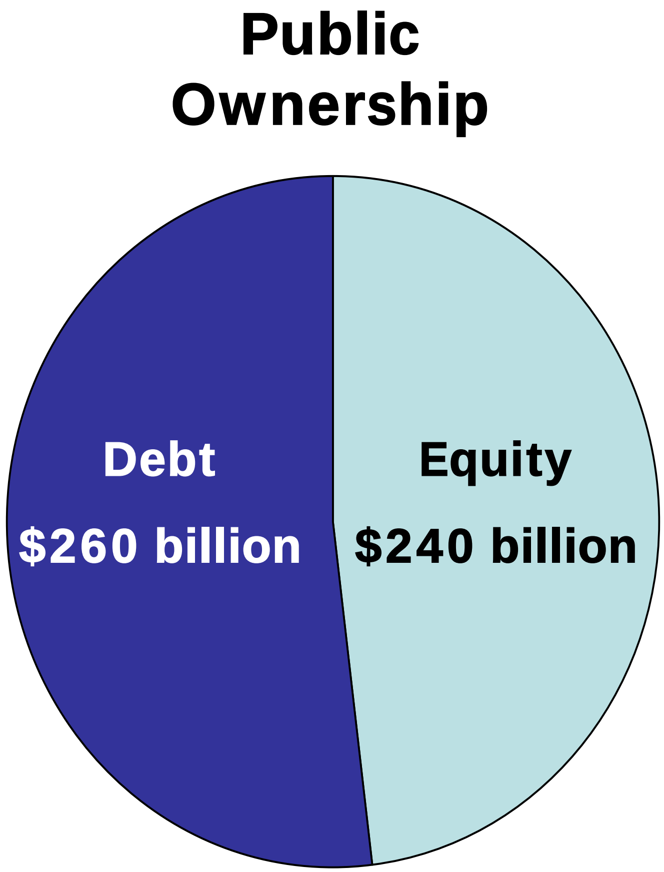
$6.4 trillion as of December 2008



Source: JPMorgan Asset Management

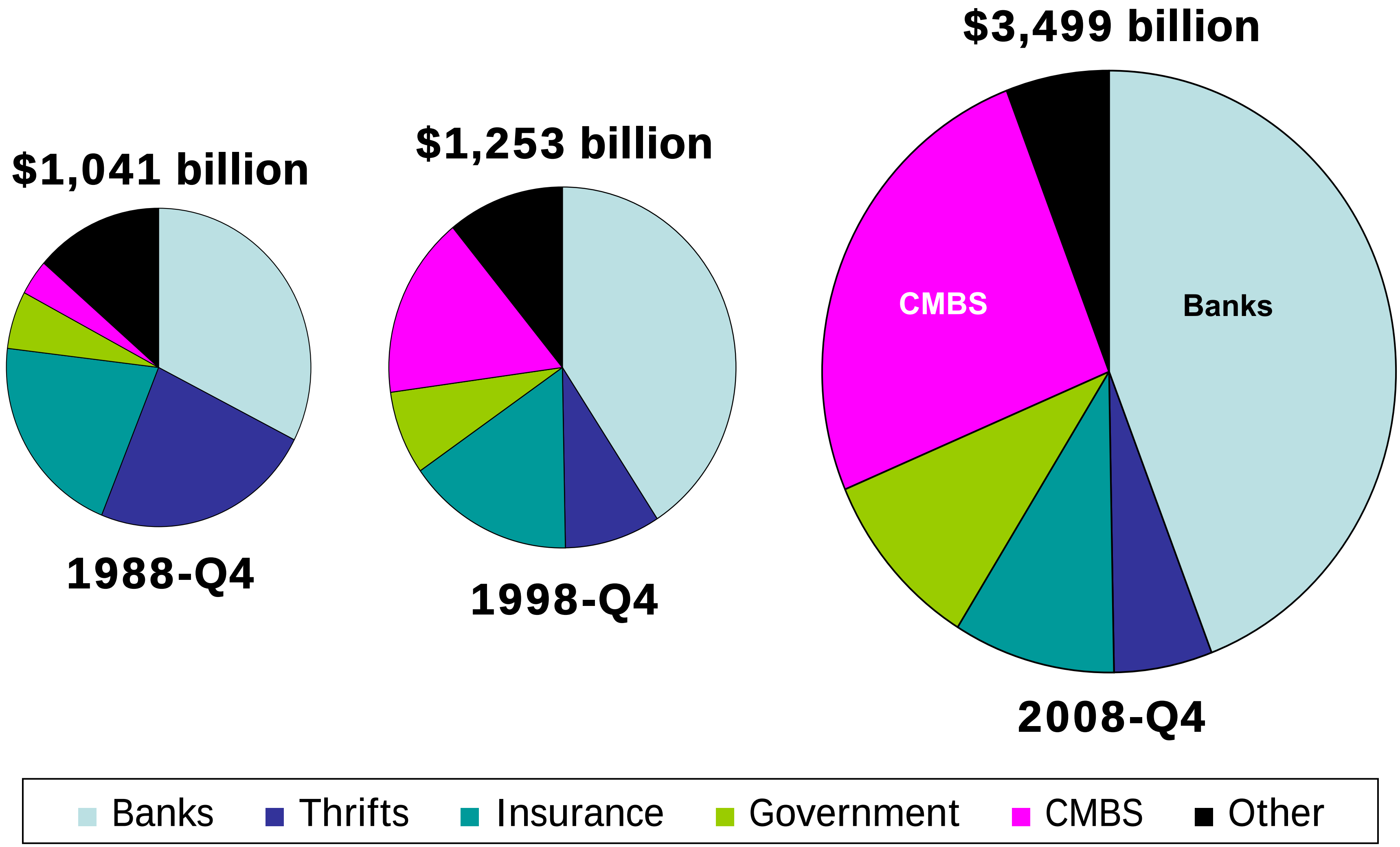
Commercial Real Estate Debt and Equity
Public and Private Ownership as of December 2008





Sources: JPMorgan Asset Management and NAREIT®

Commercial Mortgage Debt Outstanding
By source of funds



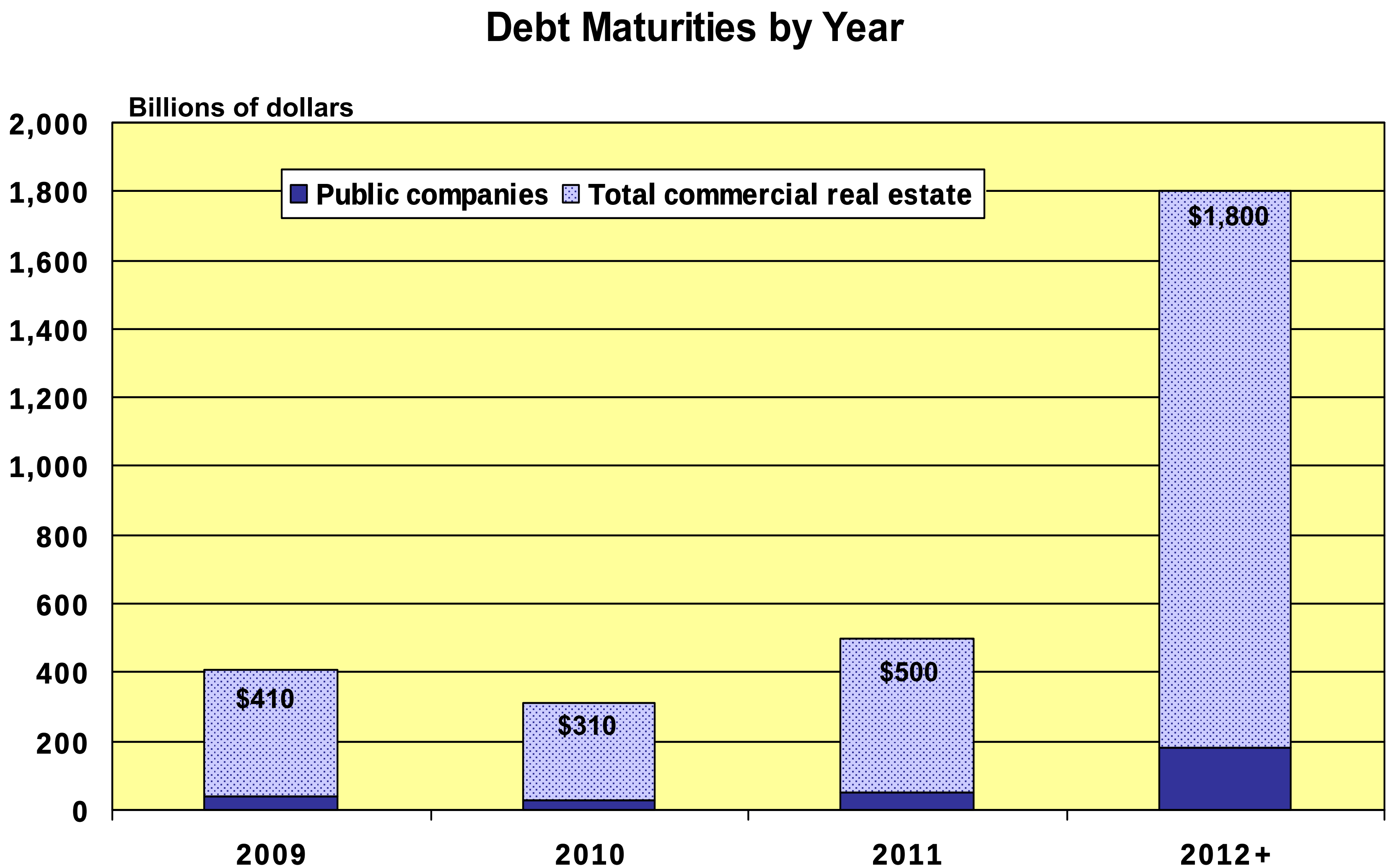
Source: Federal Reserve Flow of Funds Accounts of the United States

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

- 93 companies listed on the NYSE
- 71% investment grade by equity market capitalization
- $500 billion of property owned as of December 31, 2008
- Current leverage ratio of 51% compared with 43% at the end of 2007
- Fixed charge ratio of 2.0 compared with 2.7 at the end of 2007
- $17.7 billion of dividends paid to shareholders in 2008
- Average daily trading volume of $4 billion to $5 billion
- Share prices lead measured property valuations by 5-6 quarters
  - Share prices peaked early in 2007 and may have bottomed early in 2009

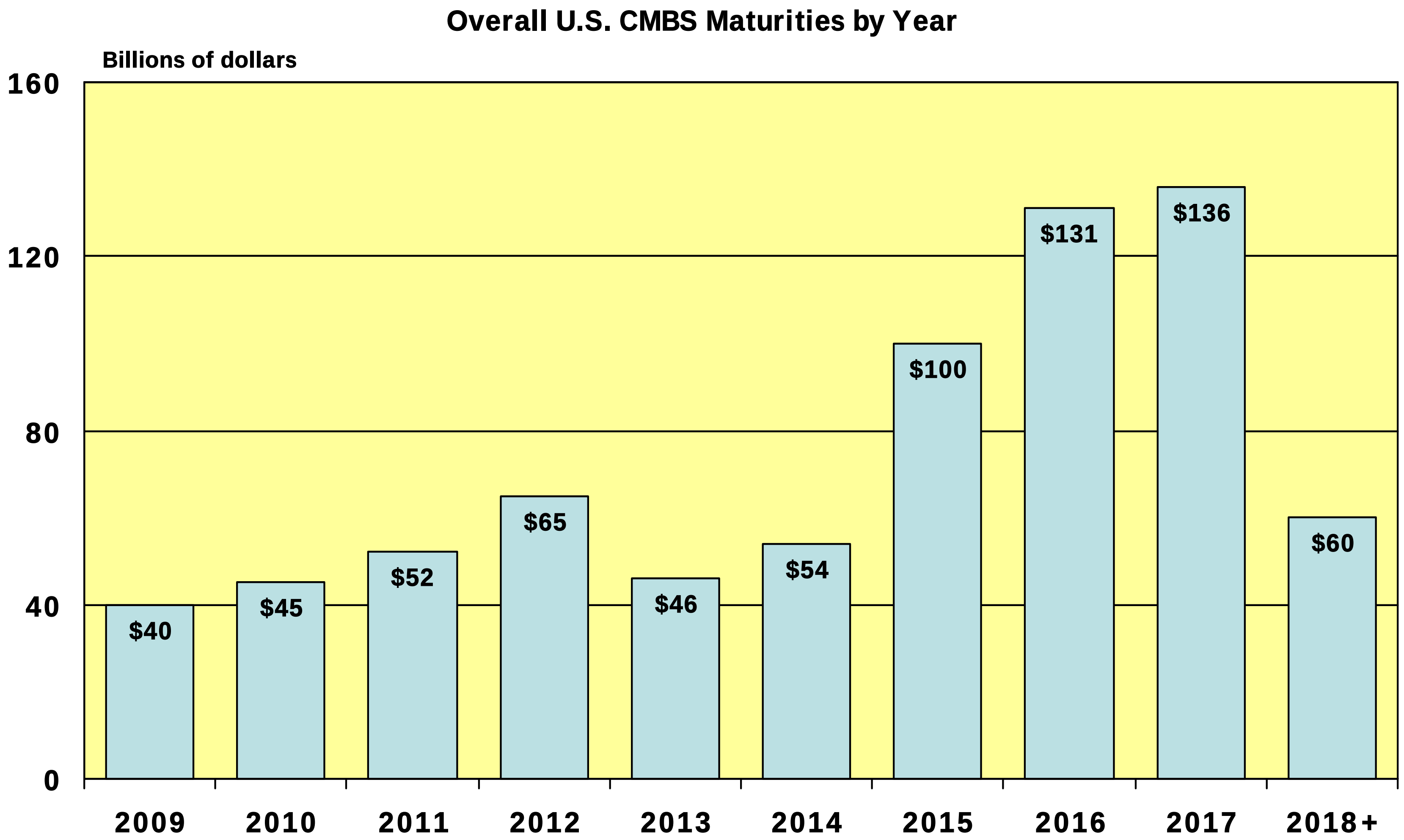
Source: NAREIT®

Commercial Real Estate Debt Maturities
Including secured and unsecured debt



Sources: Goldman Sachs and REIT filings

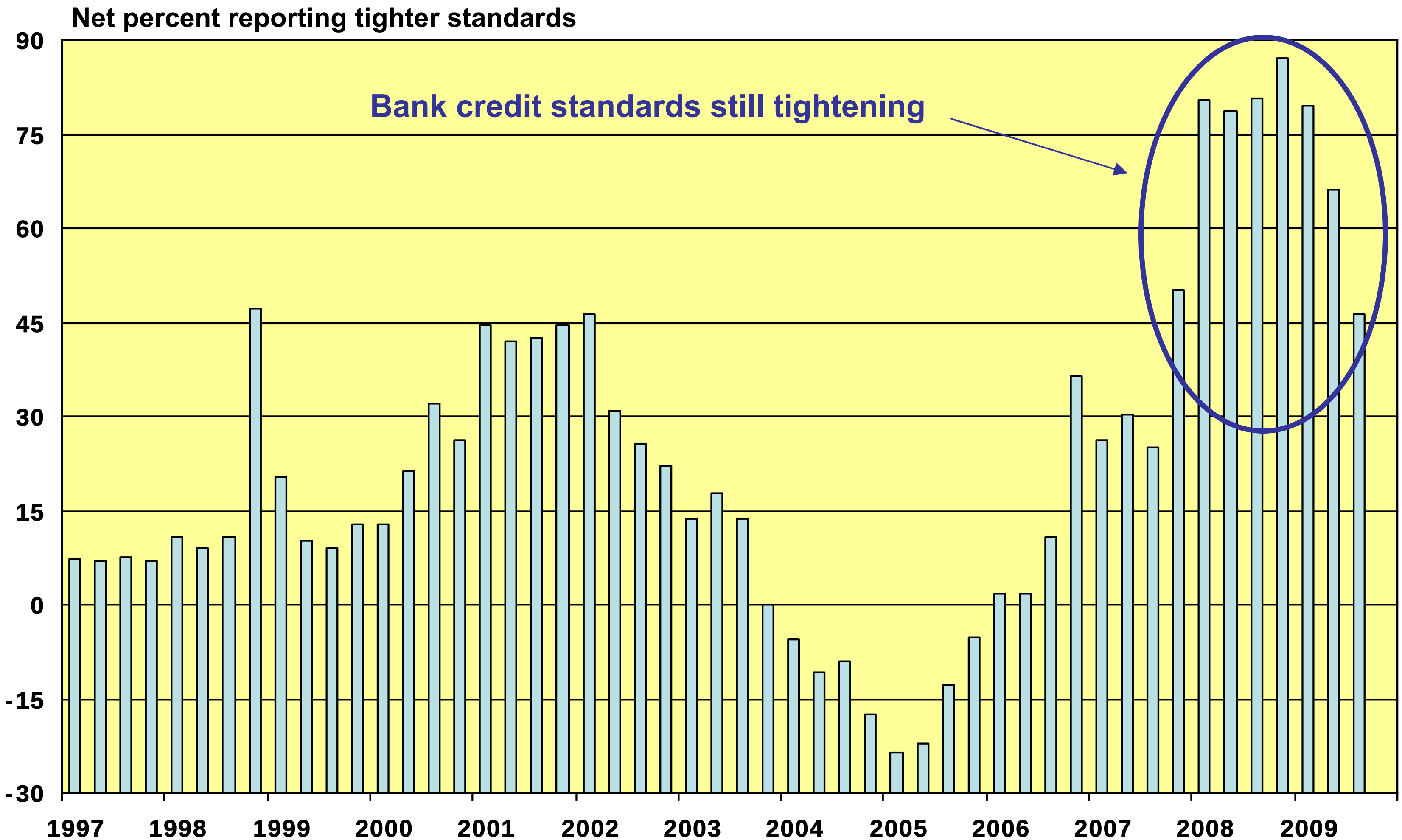
Publicly Traded Real Estate Debt (CMBS)
A window on commercial real estate debt finance
Annual maturity schedule



Sources: Goldman Sachs and Trepp

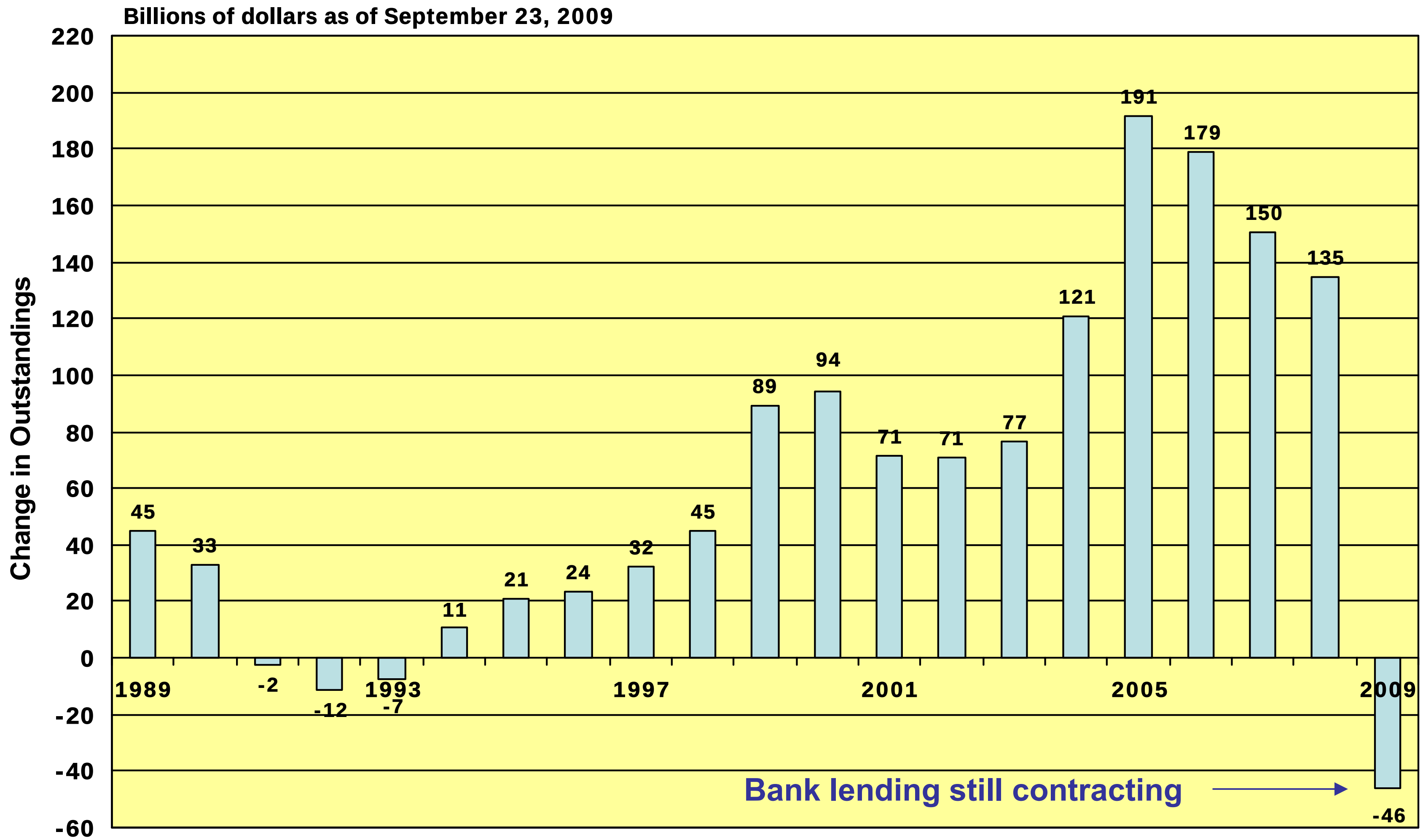
Commercial Real Estate Loans at Banks

CRE credit standards: 1997:Q1 – 2009:Q3



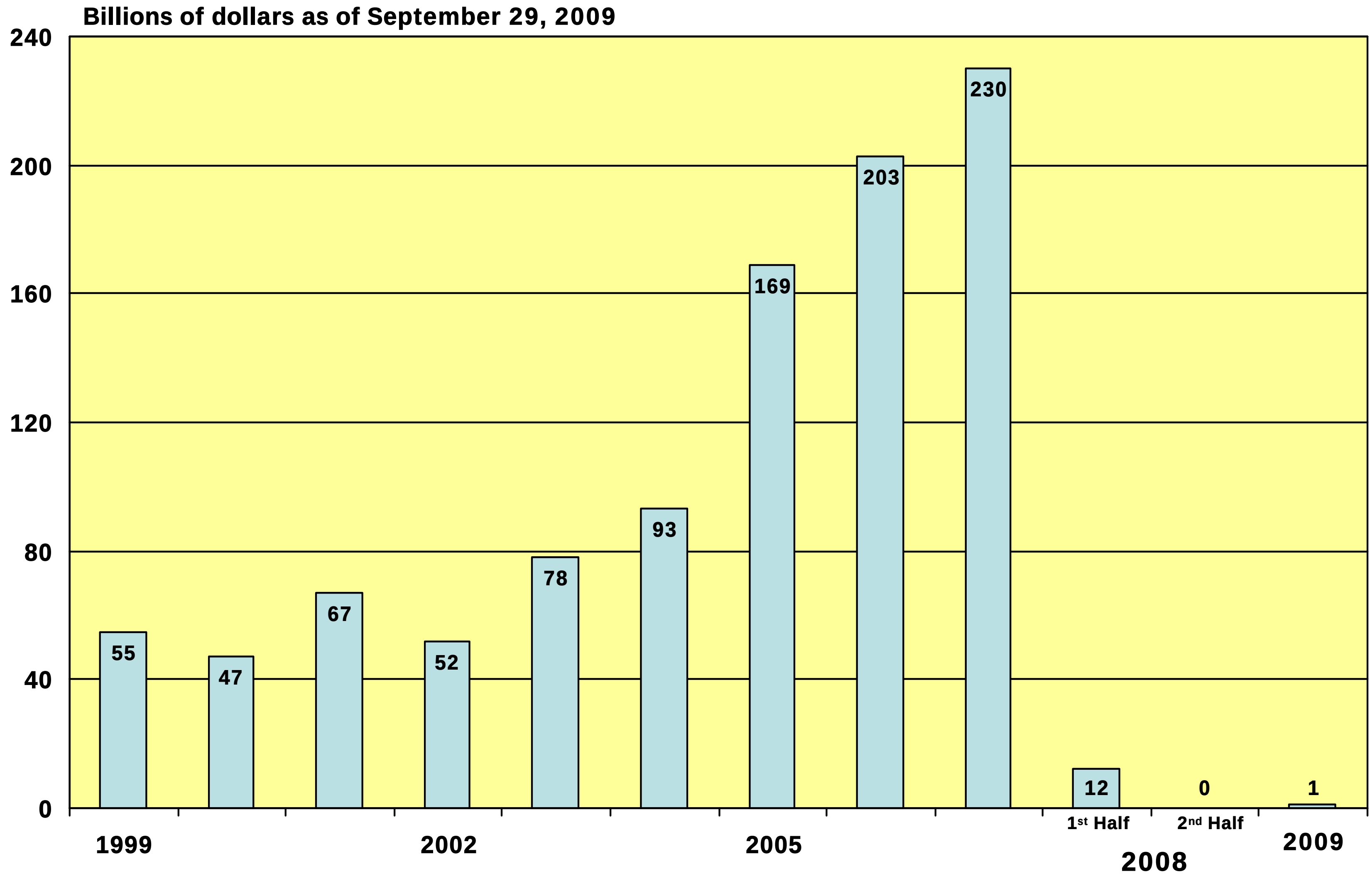
Source: Federal Reserve Board Senior Loan Officer Opinion Survey on Bank Lending Practices (July 2009)

Commercial Real Estate Loans at Banks
CRE lending volume: 1989 - 2009



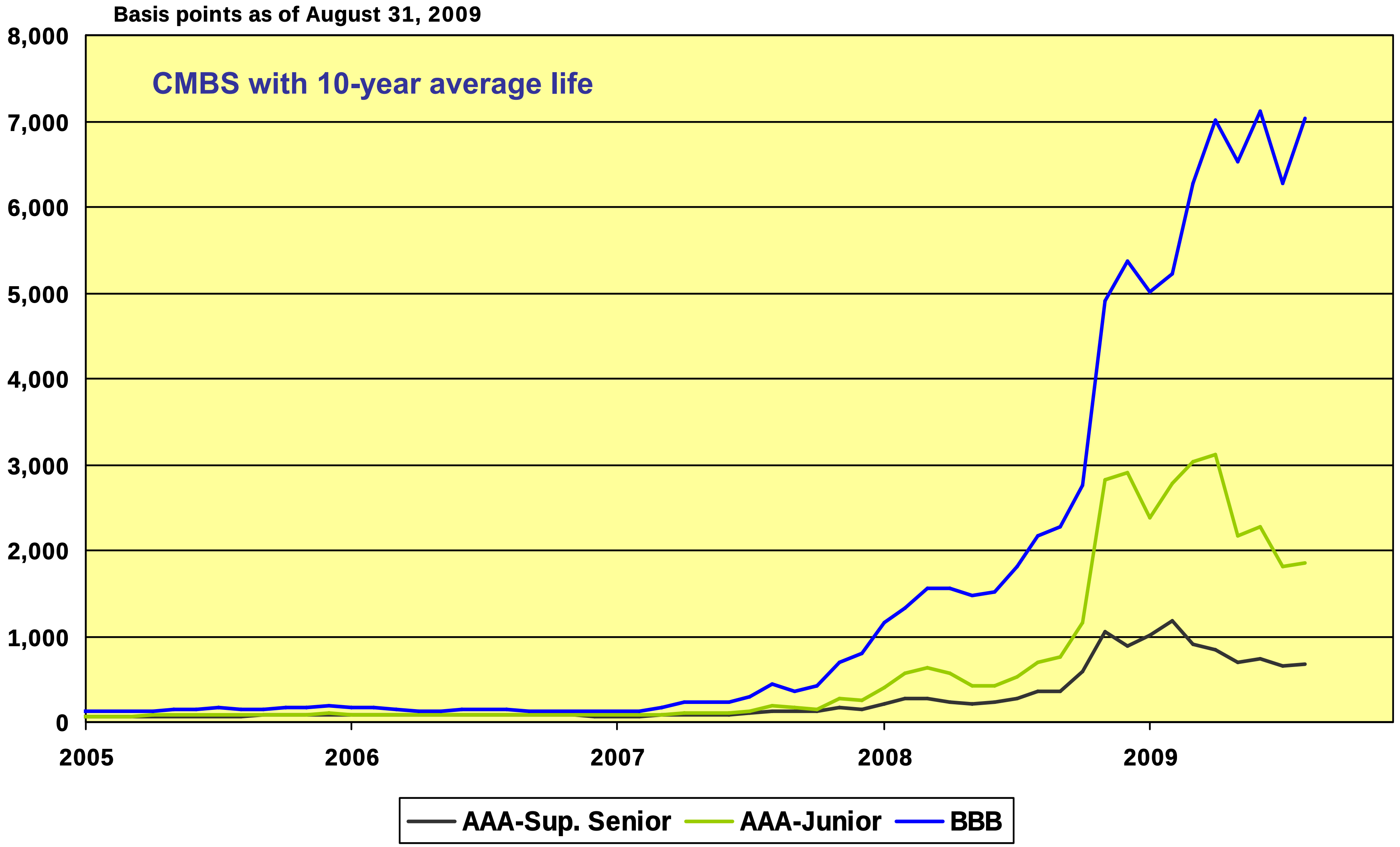
Source: Federal Reserve Board (H.8 Statistical Release)

Securitized Commercial Real Estate Loans
CMBS issuance volume: 1999 - 2009



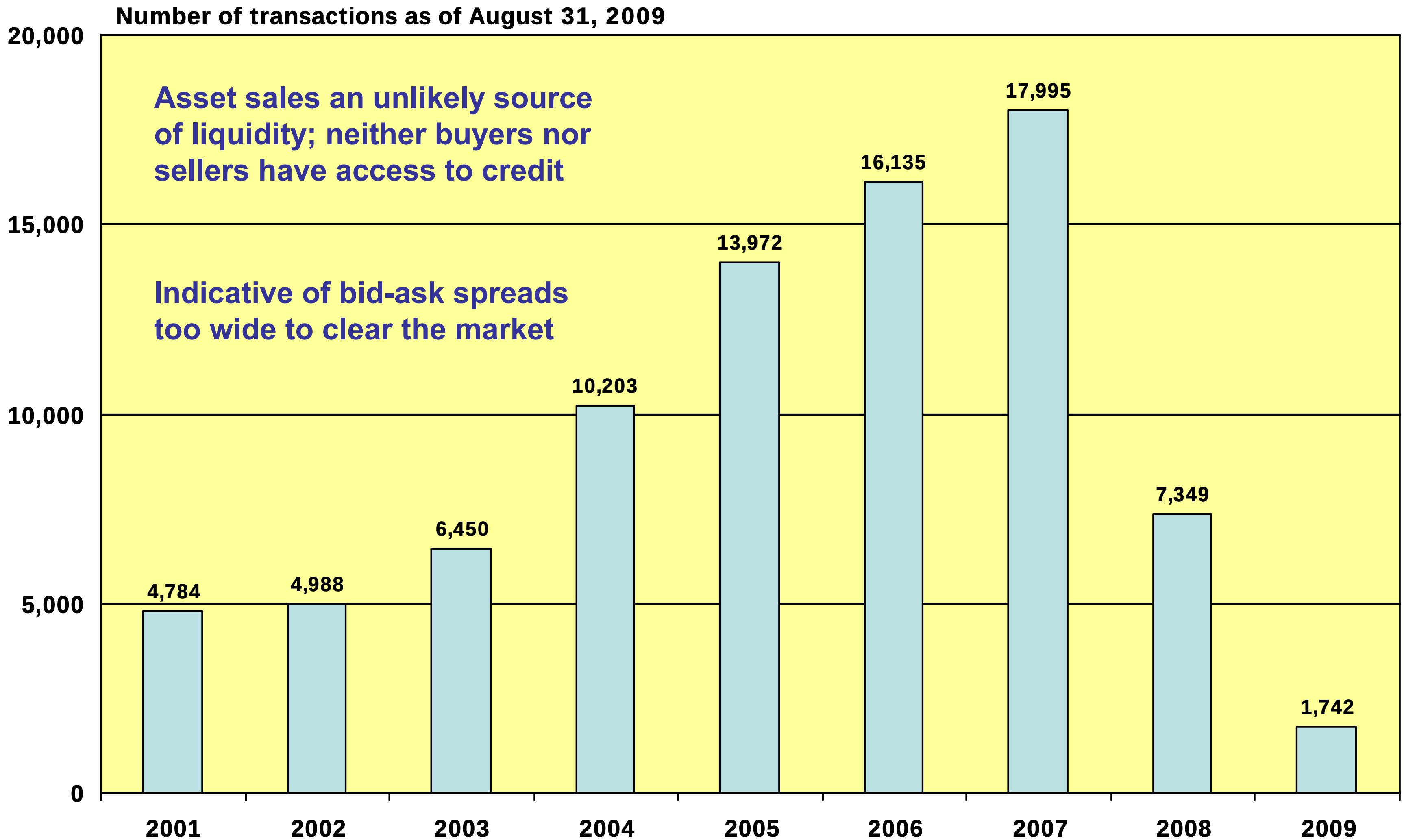
Source: Commercial Mortgage Alert

CMBS Credit Spreads
CMBS yield less 10-year Treasury yield



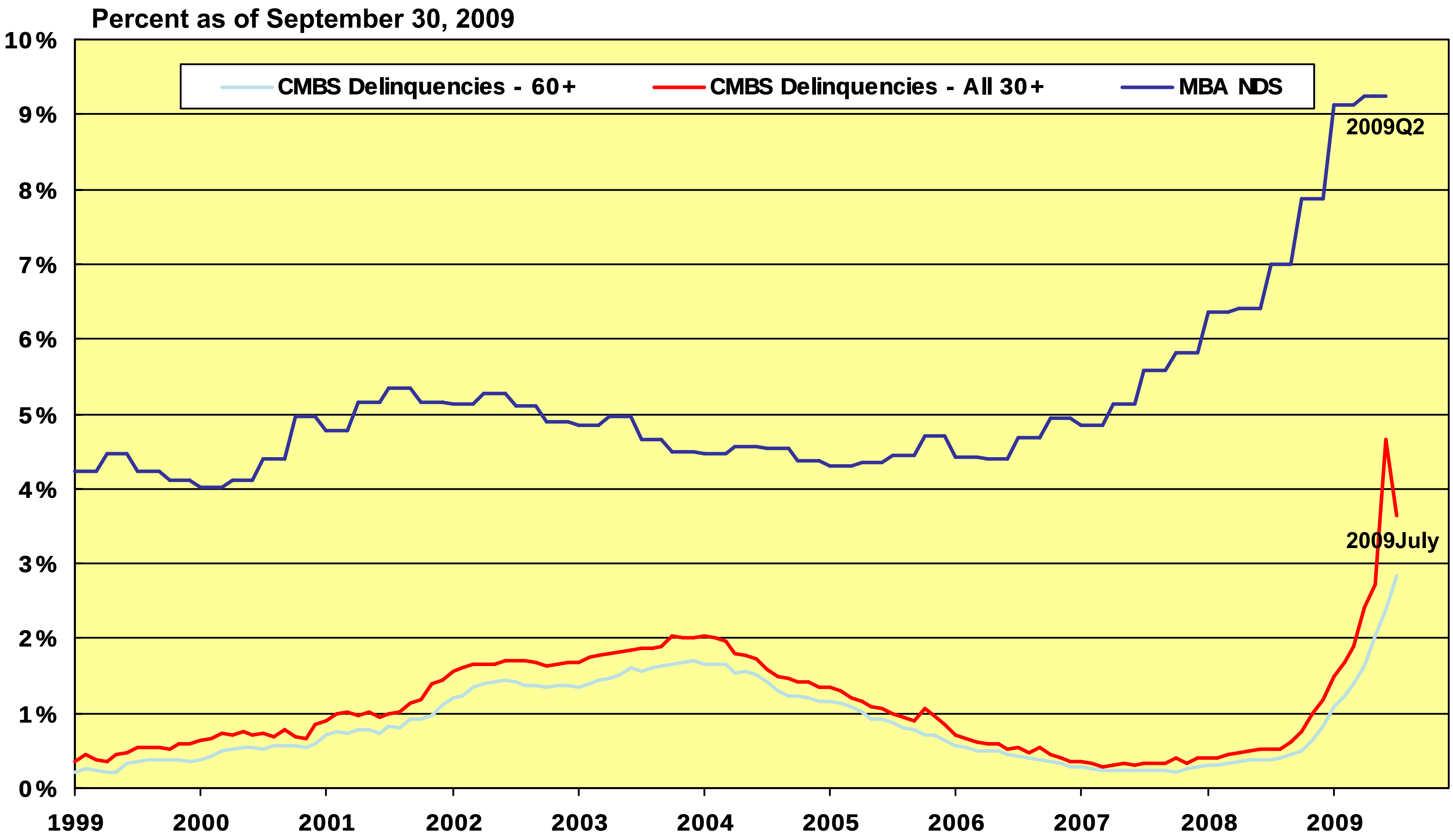
Source: Morgan Stanley

Commercial Real Estate Transactions
Transaction volume: 2001 – 2009



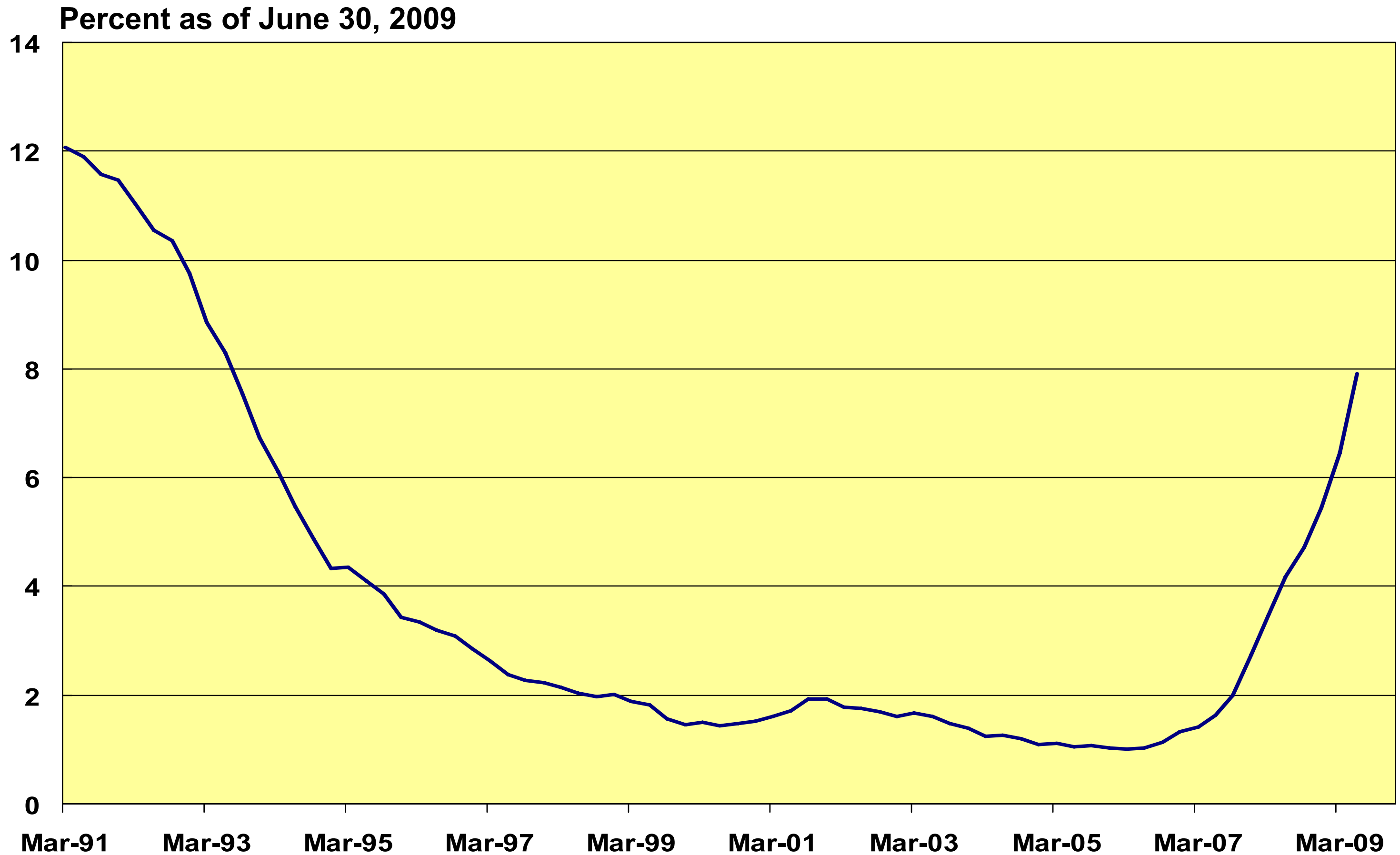
Source: Real Capital Analytics

CMBS and Residential Mortgage Delinquencies 1999 – 2009



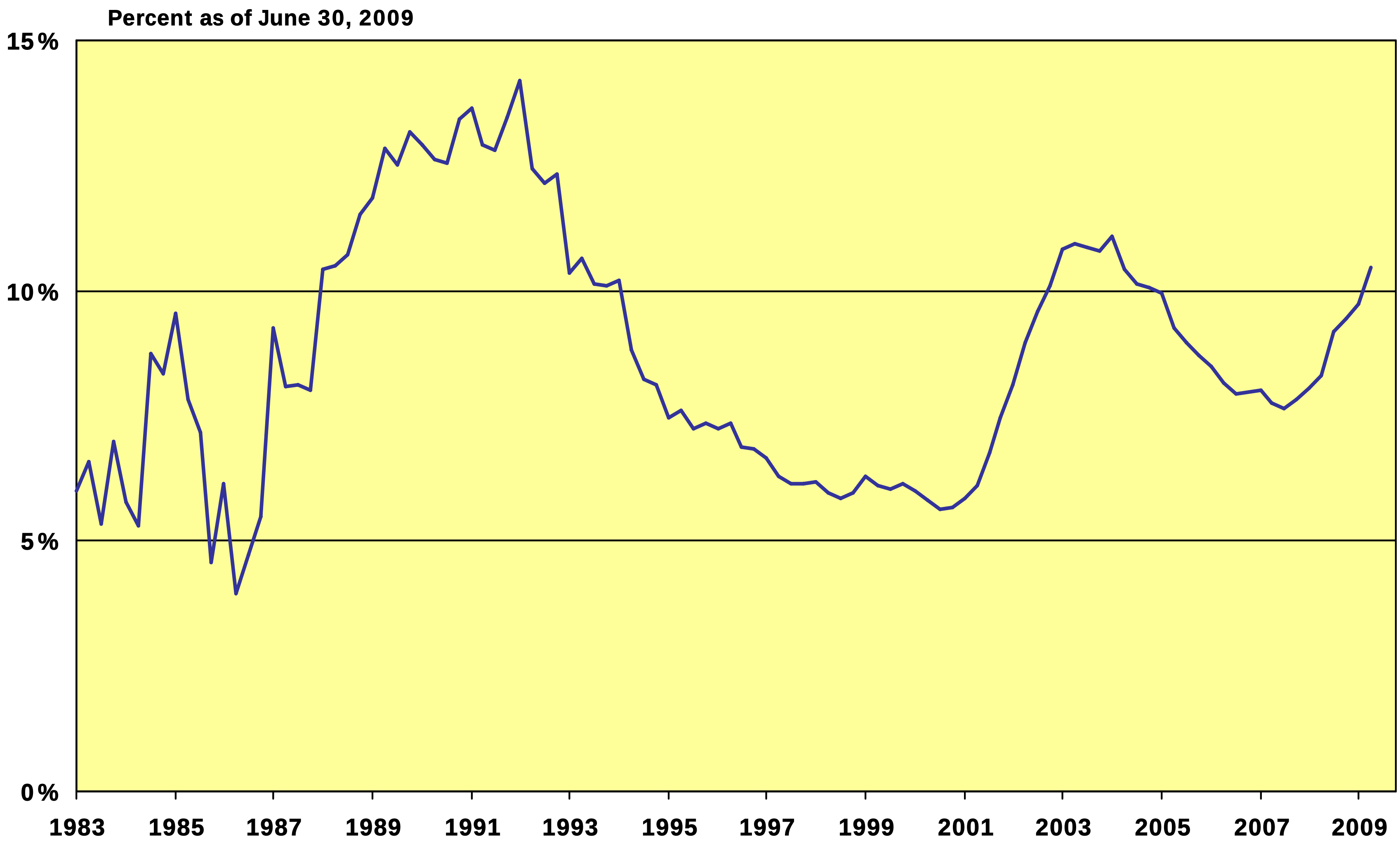
Sources: Trepp LLC, CMSA, MBA

Delinquency Rates on CRE Loans at Banks
1991 – 2009:Q2



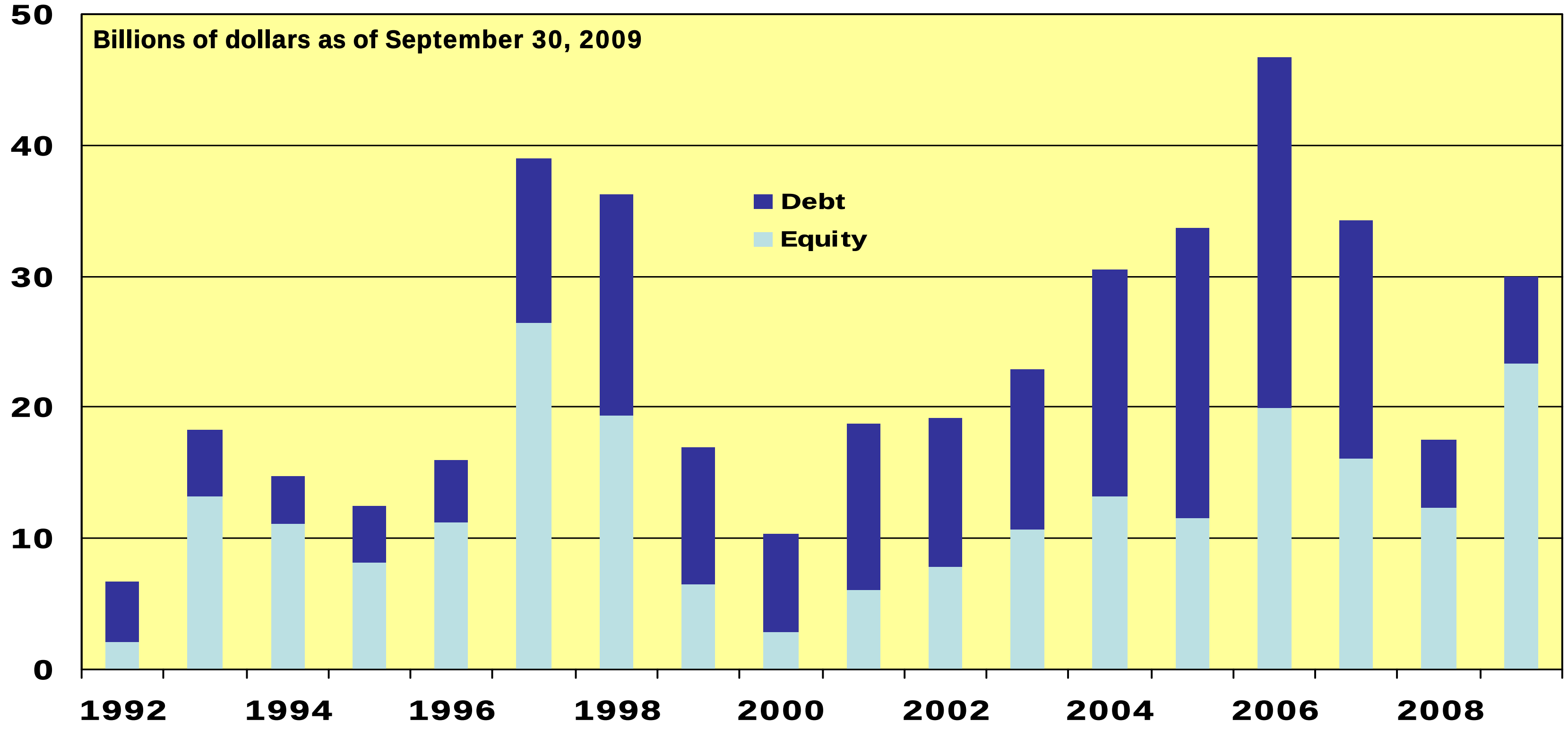
Sources: Federal Reserve Board

Nationwide Core Property Vacancy Rates
1983:Q1 – 2009:Q2



Source: NCREIF

Securities Offerings by Public Companies
Initial and secondary equity plus unsecured debt



<u>Public capital offerings in 2009</u>

75 secondary equity offerings totaling $20.7 billion

8 initial public equity offerings totaling $2.6 billion

22 unsecured debt offerings totaling $6.7 billion

Sources: 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 Term Asset-Backed Securities Loan Facility (TALF) should remain operational until the CMBS market is restored
- Foreign equity capital should be encouraged and barriers to such investment, such as the Foreign Investment in Real Property Tax Act (FIRPTA), should be revised
- Provisions to encourage workouts of distressed commercial real estate debt should be extended to REITs
- Continuation of the long-time role of Fannie Mae and Freddie Mac in providing an appropriate level of credit to the multifamily and senior housing sectors
- Accounting rules for “mark-to-market” and “consolidation” must adapt to the current capital markets crisis