

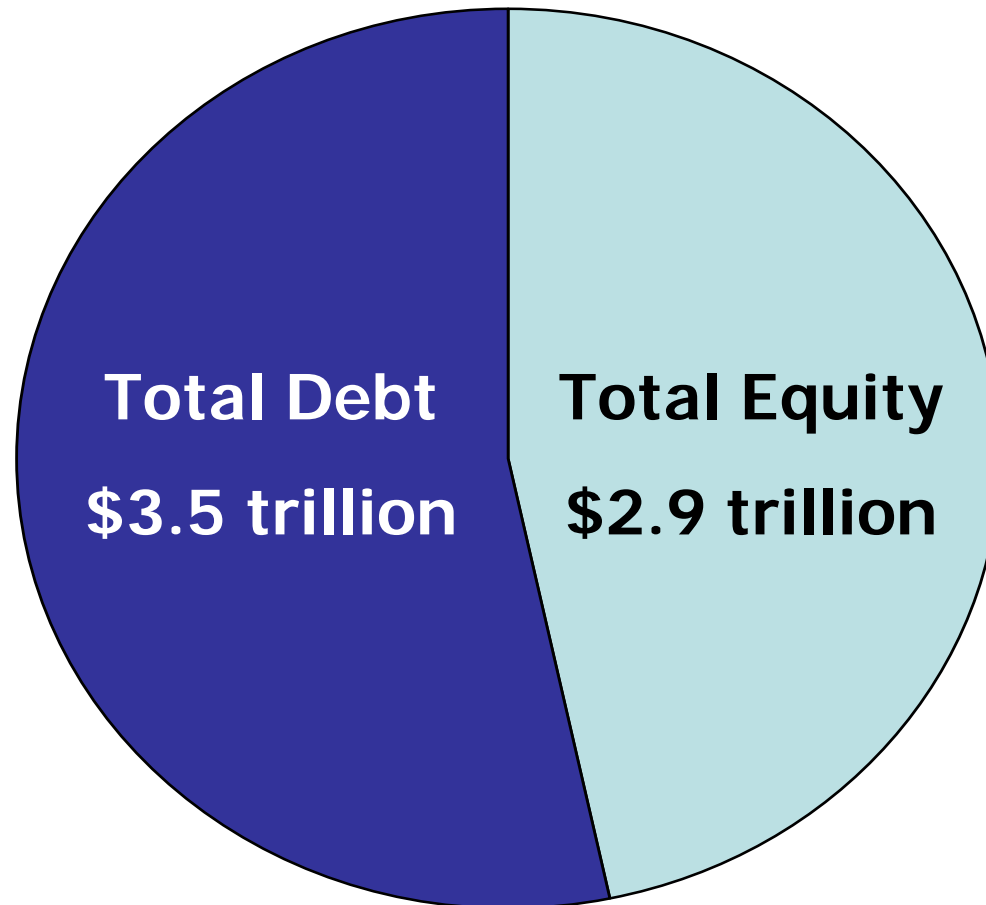
# **The Credit Crisis in Commercial Real Estate**

# Summary

- Commercial real estate accounts for a meaningful 6% of GDP
- Commercial real estate entered the recession reasonably well balanced
- However, the credit crisis has created a downward spiral of property valuations that places 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

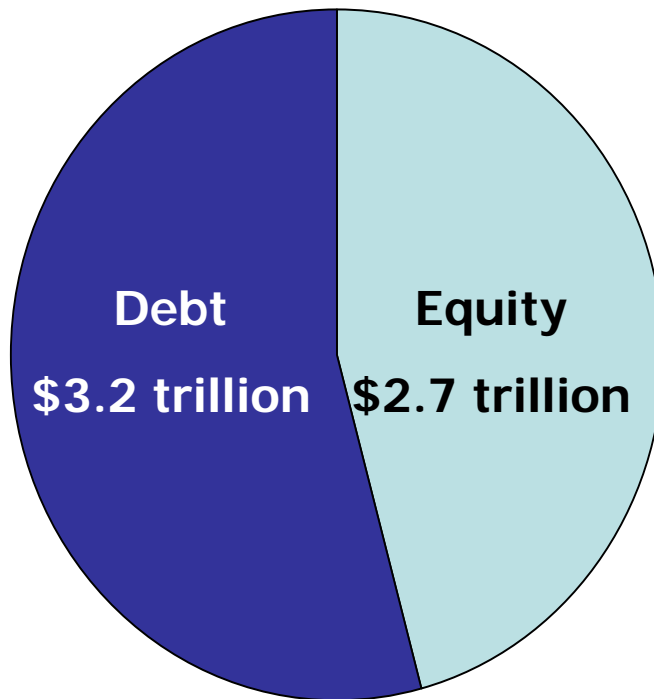
Investment-grade, income-producing real estate  
\$6.4 trillion as of December 2008



# Commercial Real Estate Debt and Equity

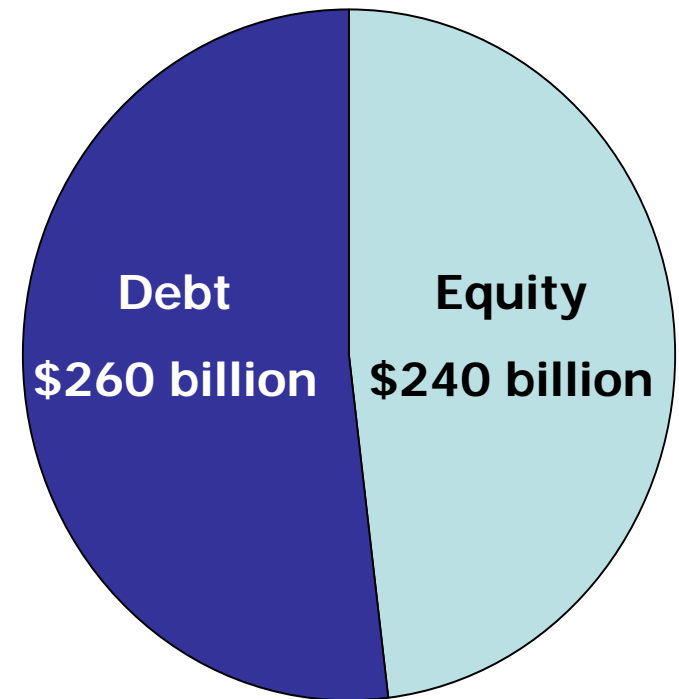
## Public and Private Ownership as of December 2008

### Private Ownership



**\$5.9 trillion**

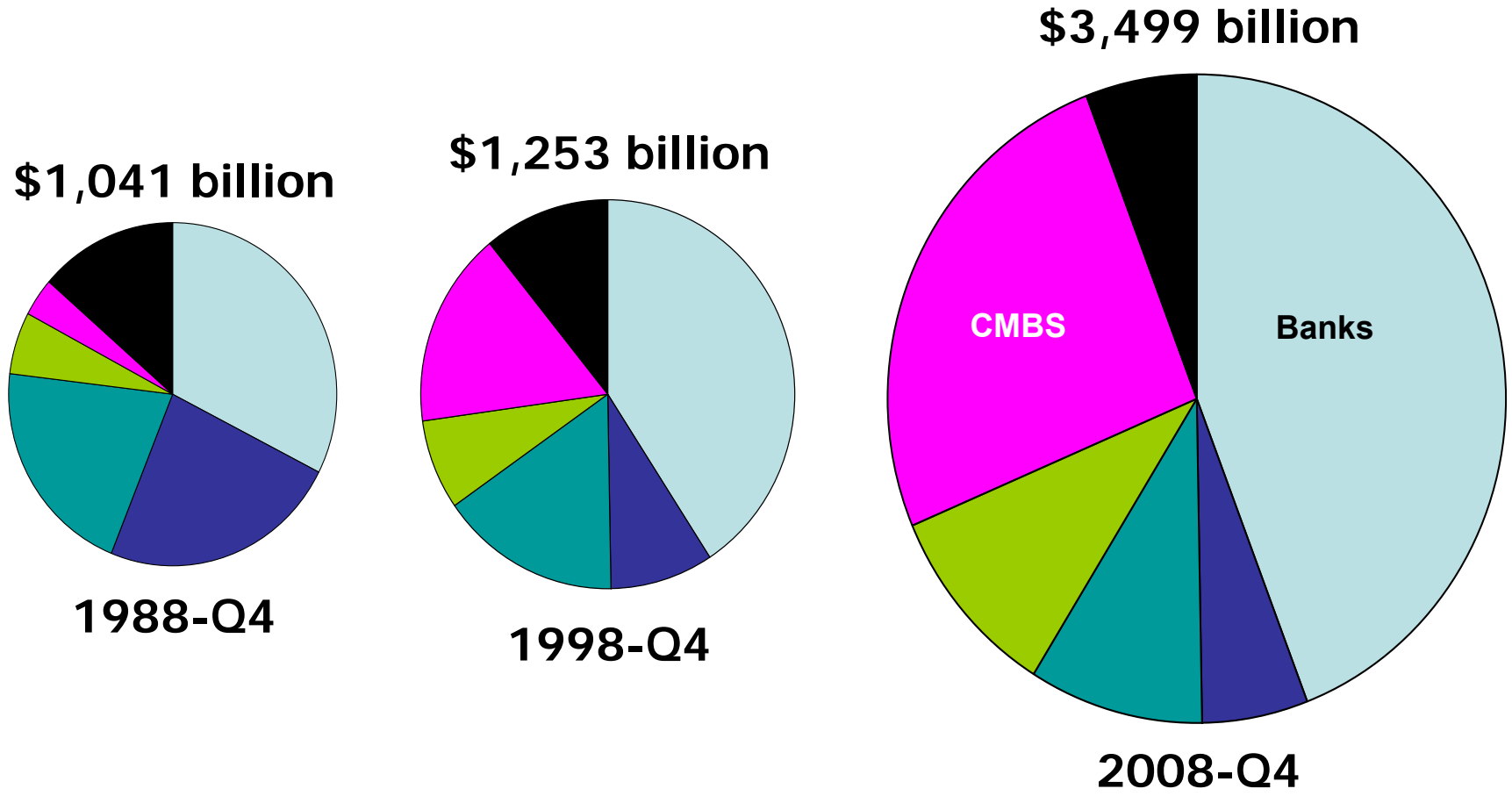
### Public Ownership



**\$0.5 trillion**

# 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)

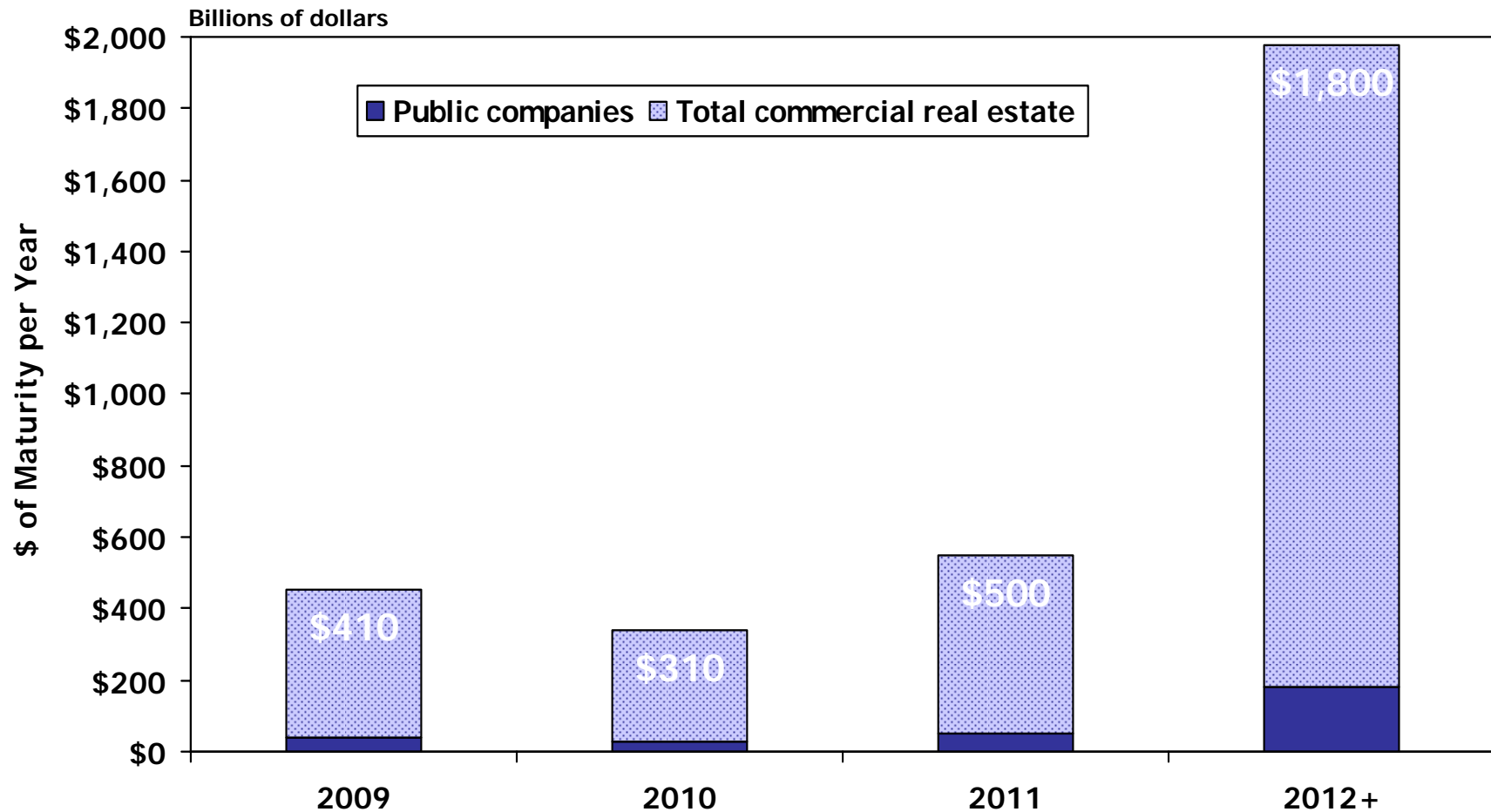
## A window on commercial real estate equity finance

- 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 57% compared with 43% at the end of 2007
- Fixed charge ratio of 2.5 at 2009:Q1 compared with 2.7 at 2007:Q4
- \$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

# Commercial Real Estate Debt Maturities

## Including secured and unsecured debt

### Debt Maturities by Year



Sources: Goldman Sachs and REIT filings

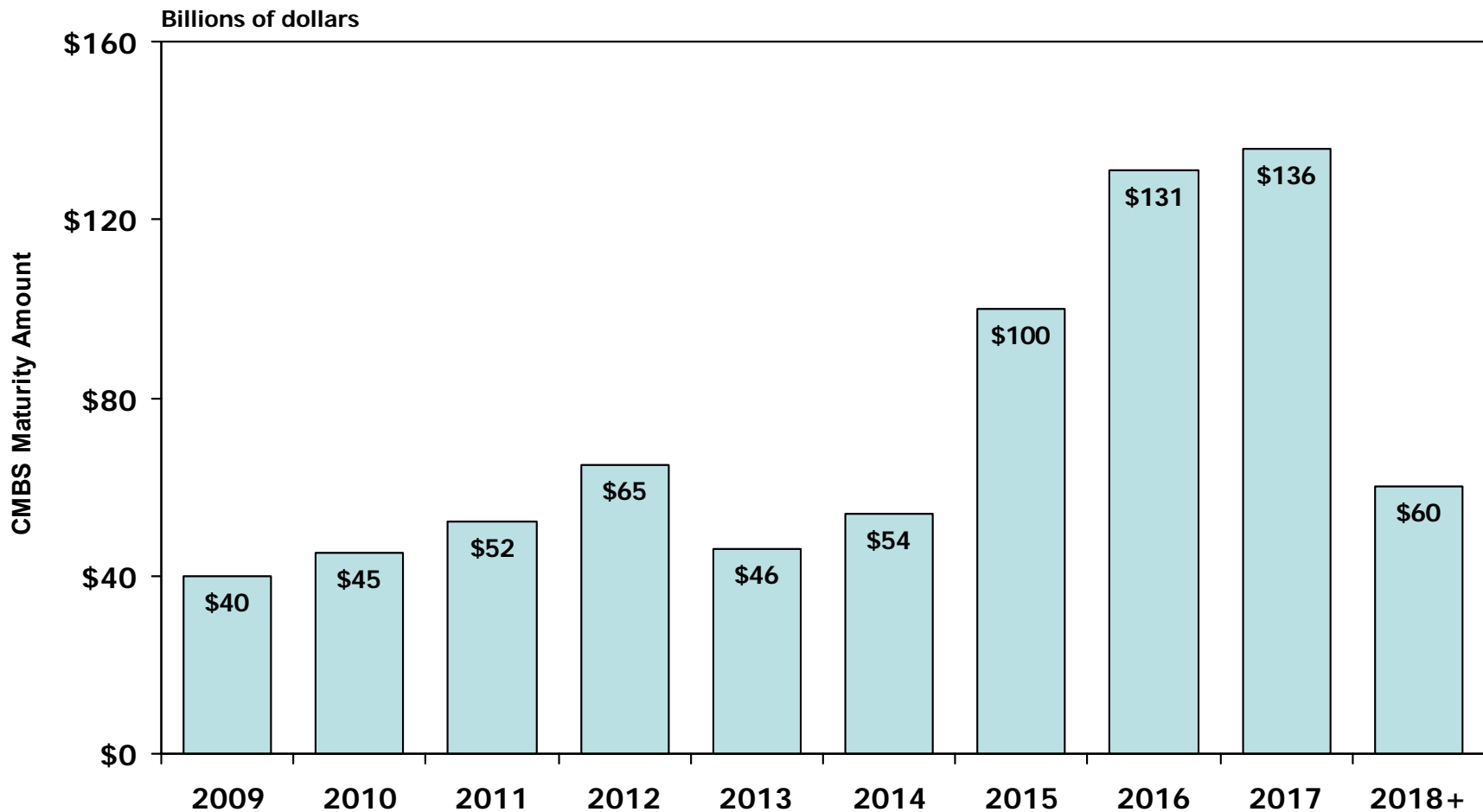


# Publicly Traded Real Estate Debt (CMBS)

## A window on commercial real estate debt finance

### Annual maturity schedule

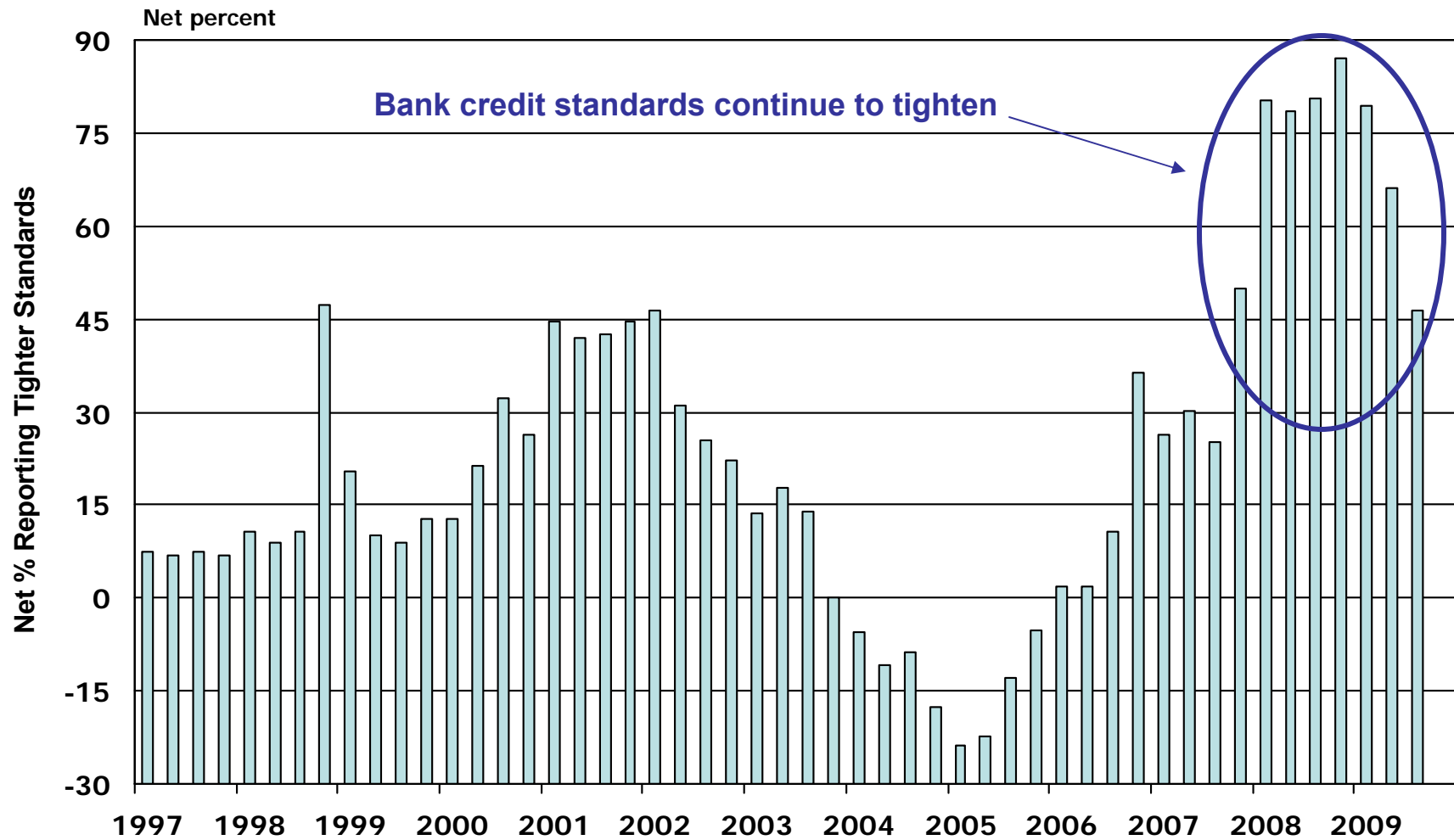
Overall U.S. CMBS Maturities by Year



Sources: Goldman Sachs and Trepp

# Commercial Real Estate Loans at Banks

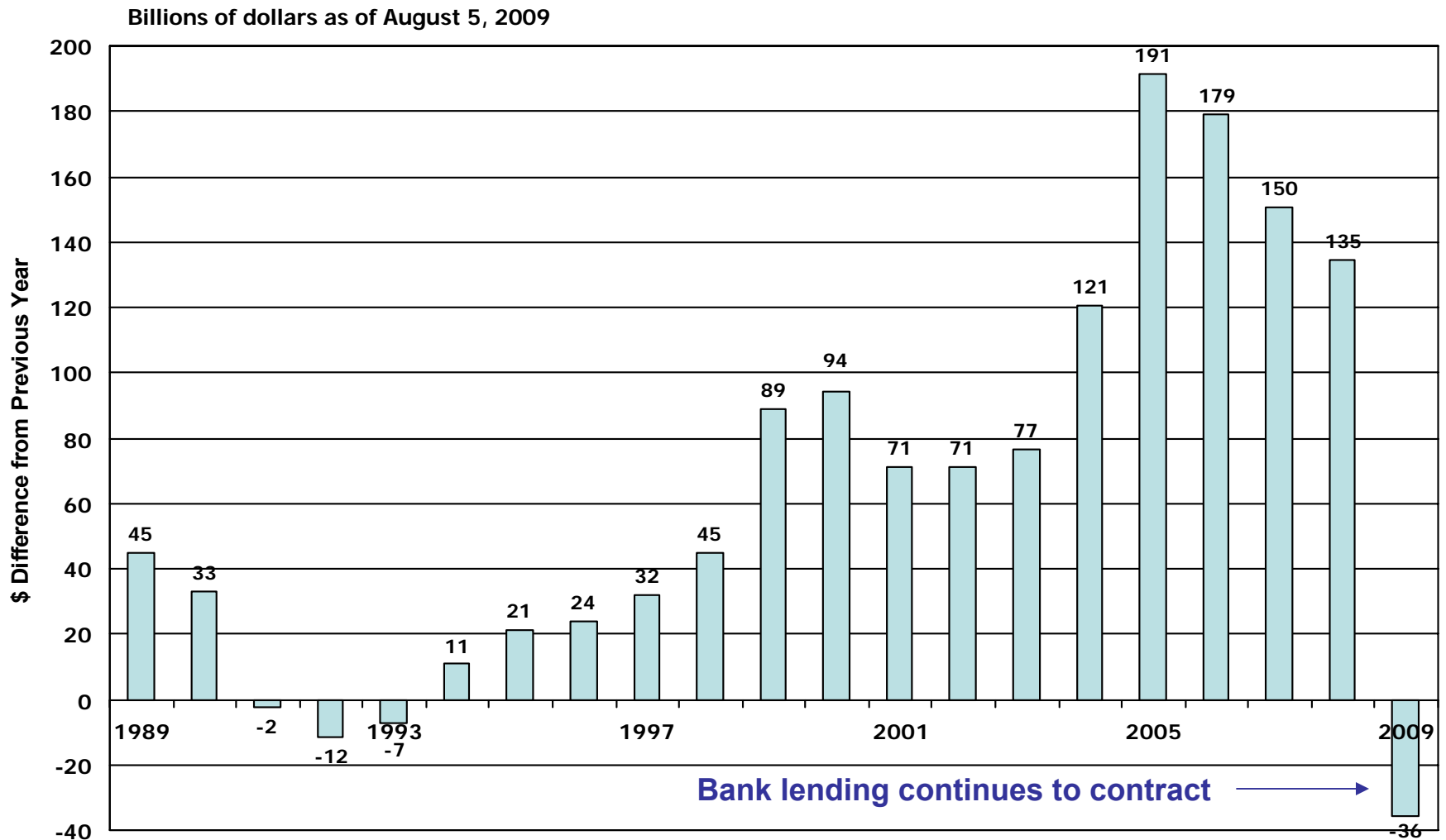
## CRE credit standards: 1997:Q1 – 2009:Q3



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

# Commercial Real Estate Loans at Banks

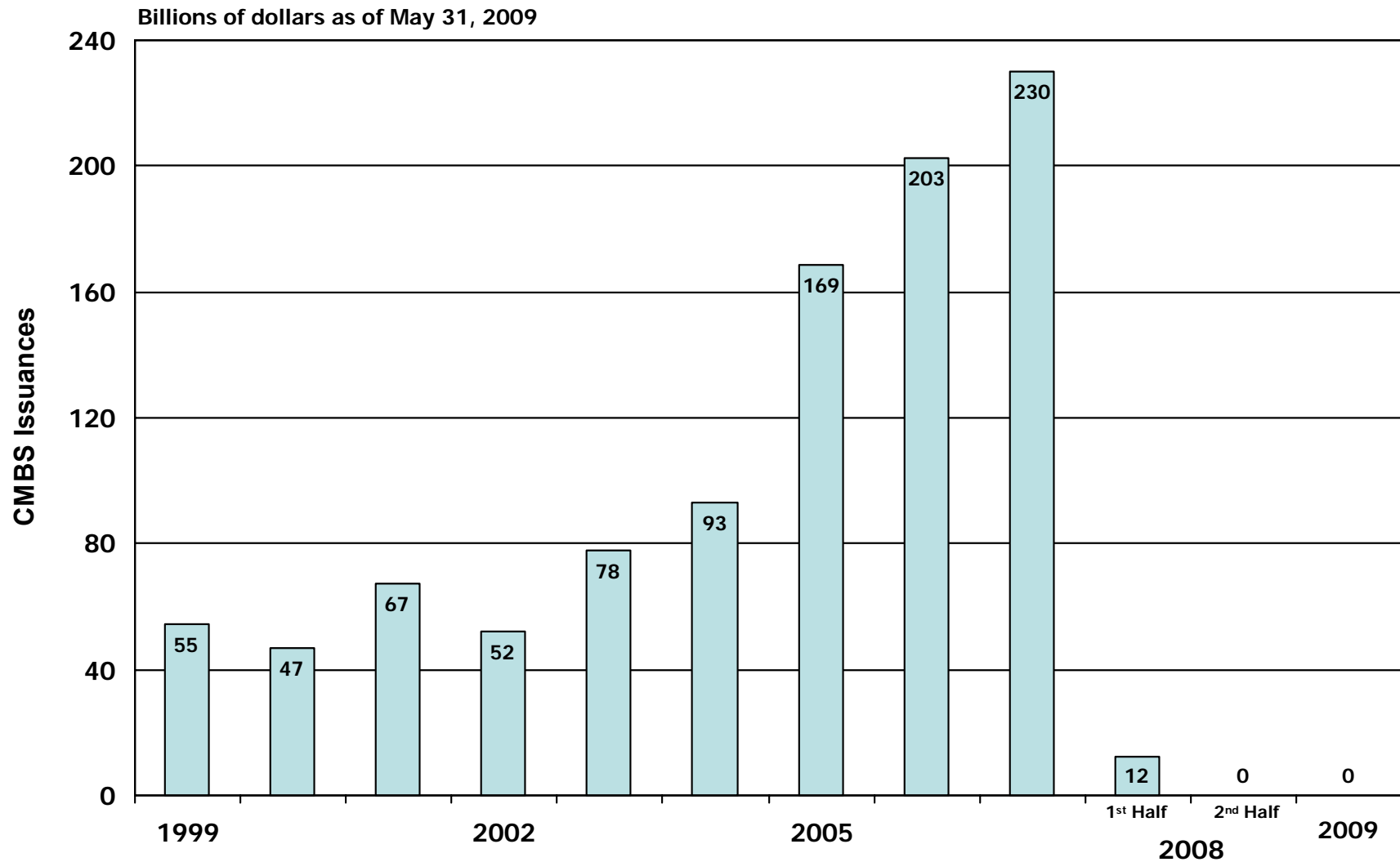
## CRE lending volume: 1989 - 2009



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

# Securitized Commercial Real Estate Loans

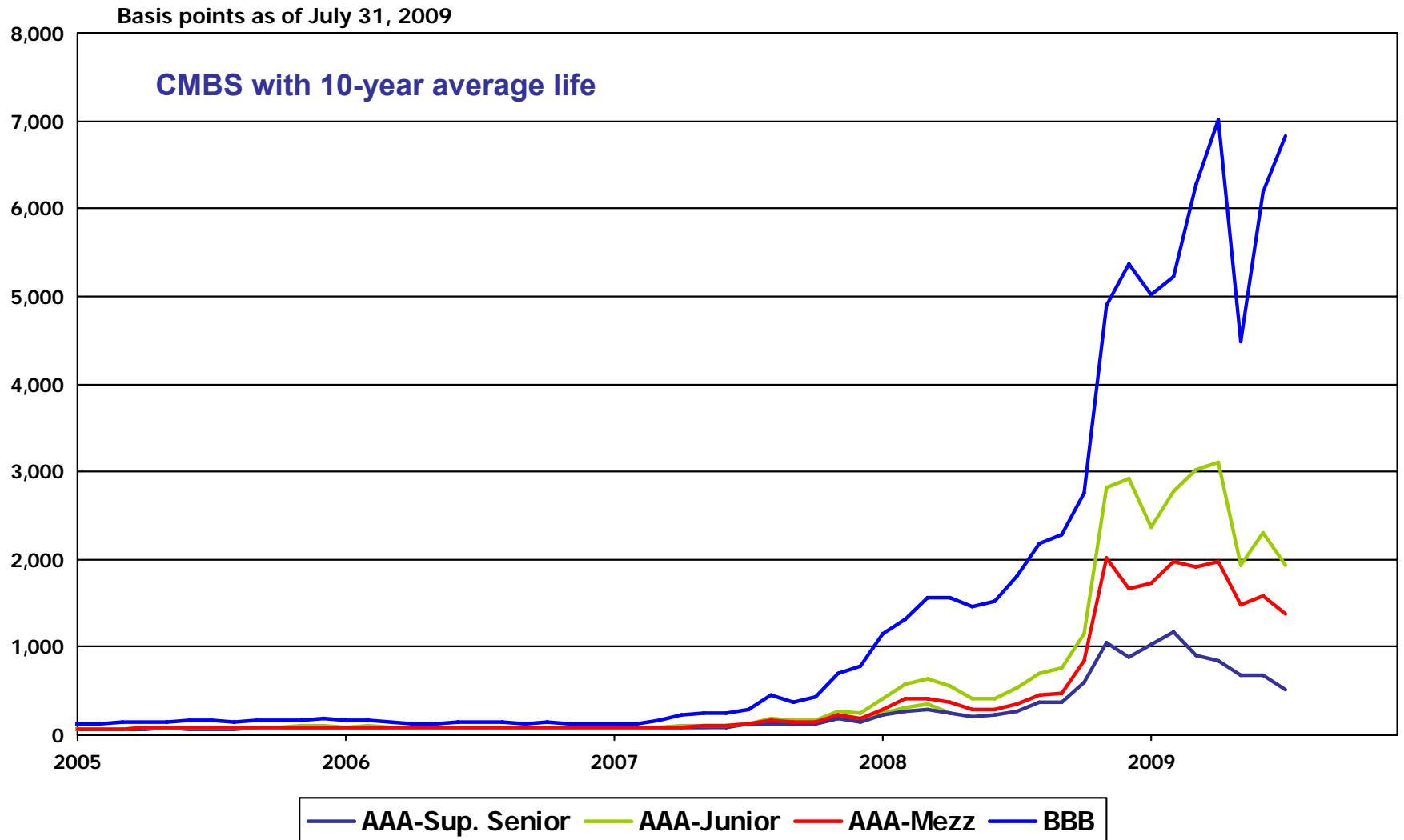
## CMBS issuance volume: 1999 - 2009



Source: Commercial Mortgage Securities Association

# CMBS Credit Spreads

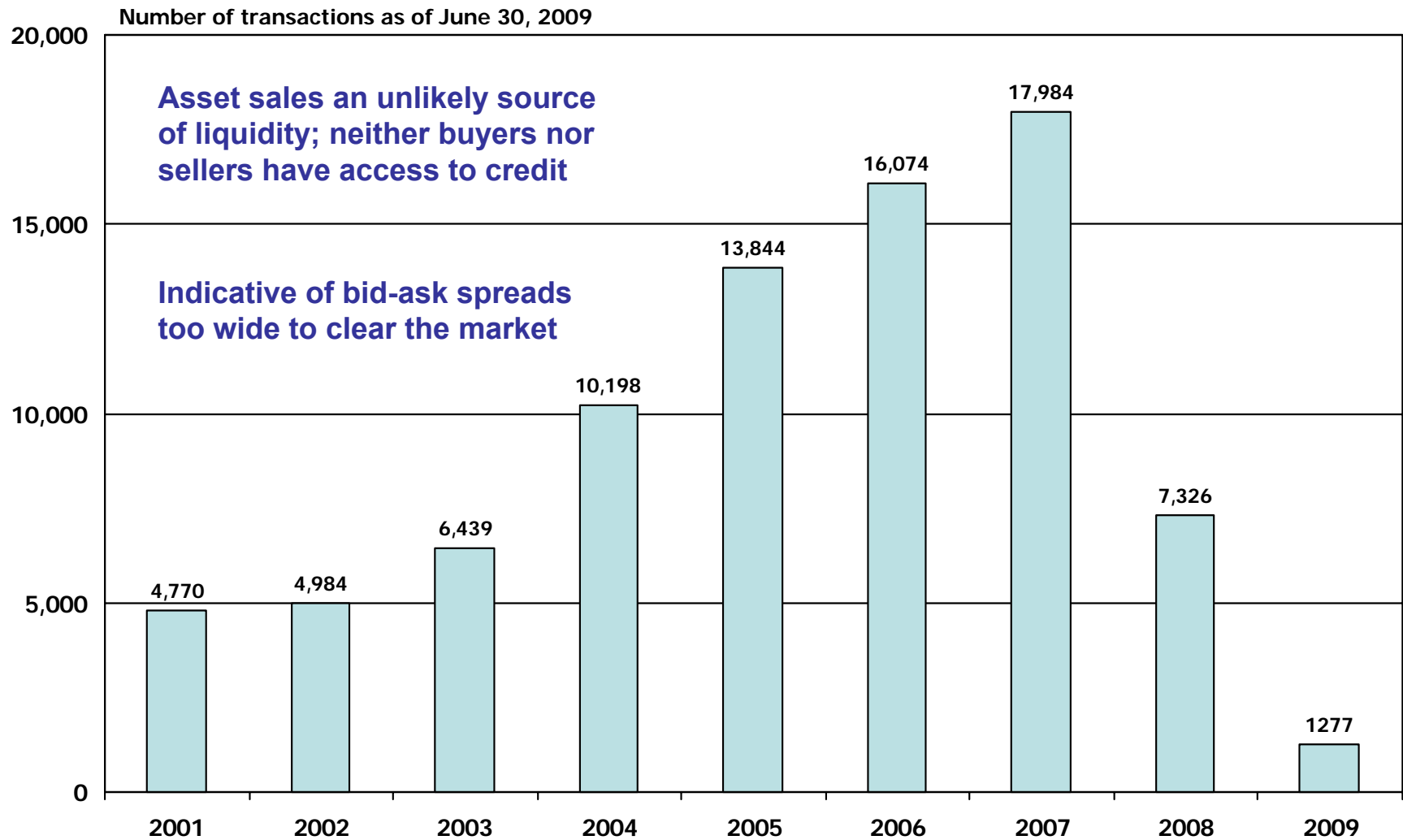
## CMBS yield less 10-year Treasury yield



Source: Morgan Stanley

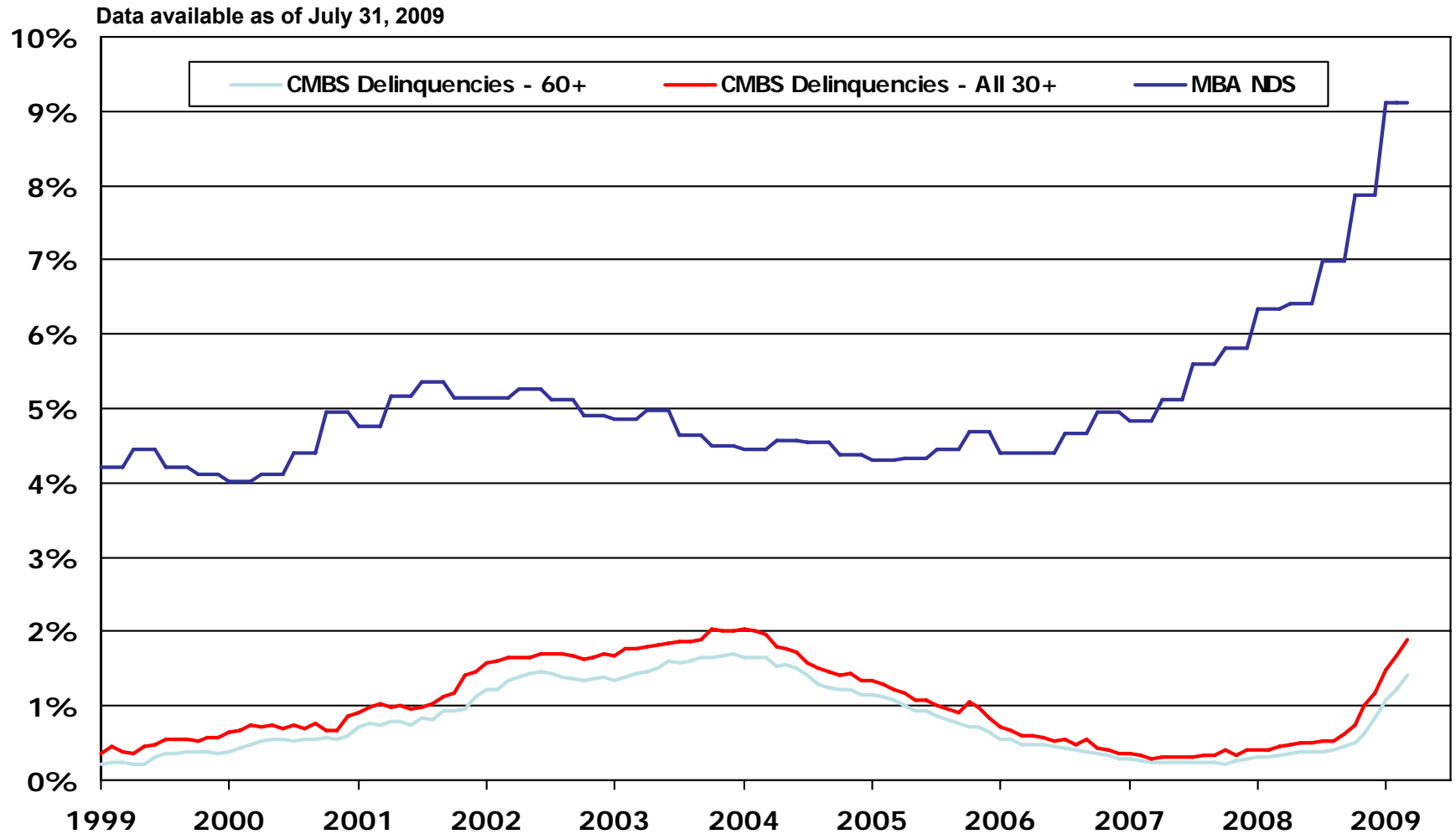
# Commercial Real Estate Transactions

## Transaction volume: 2001 – 2009



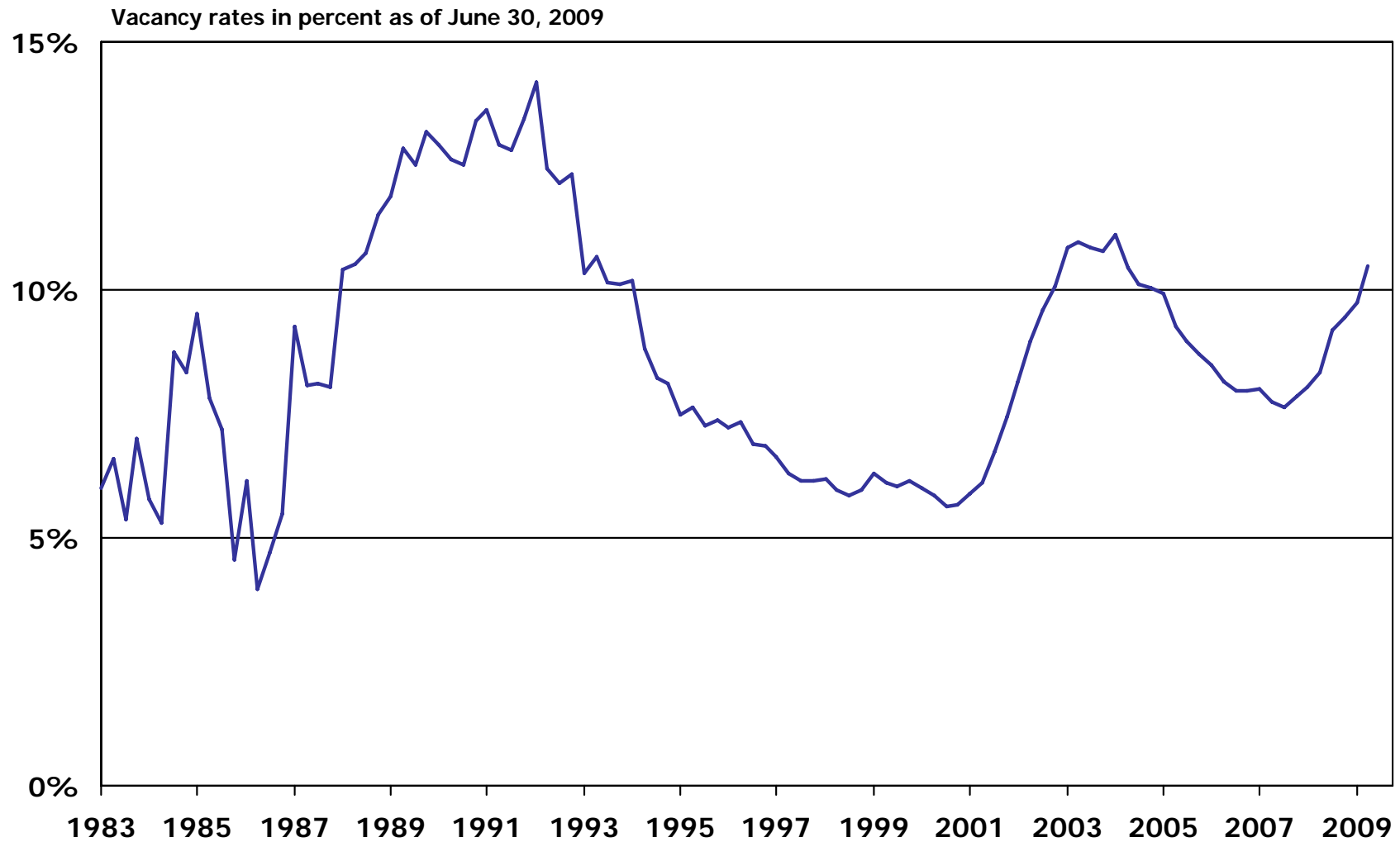
Source: Real Capital Analytics

# CMBS and Residential Mortgage Delinquencies 1999 – 2009:Q1



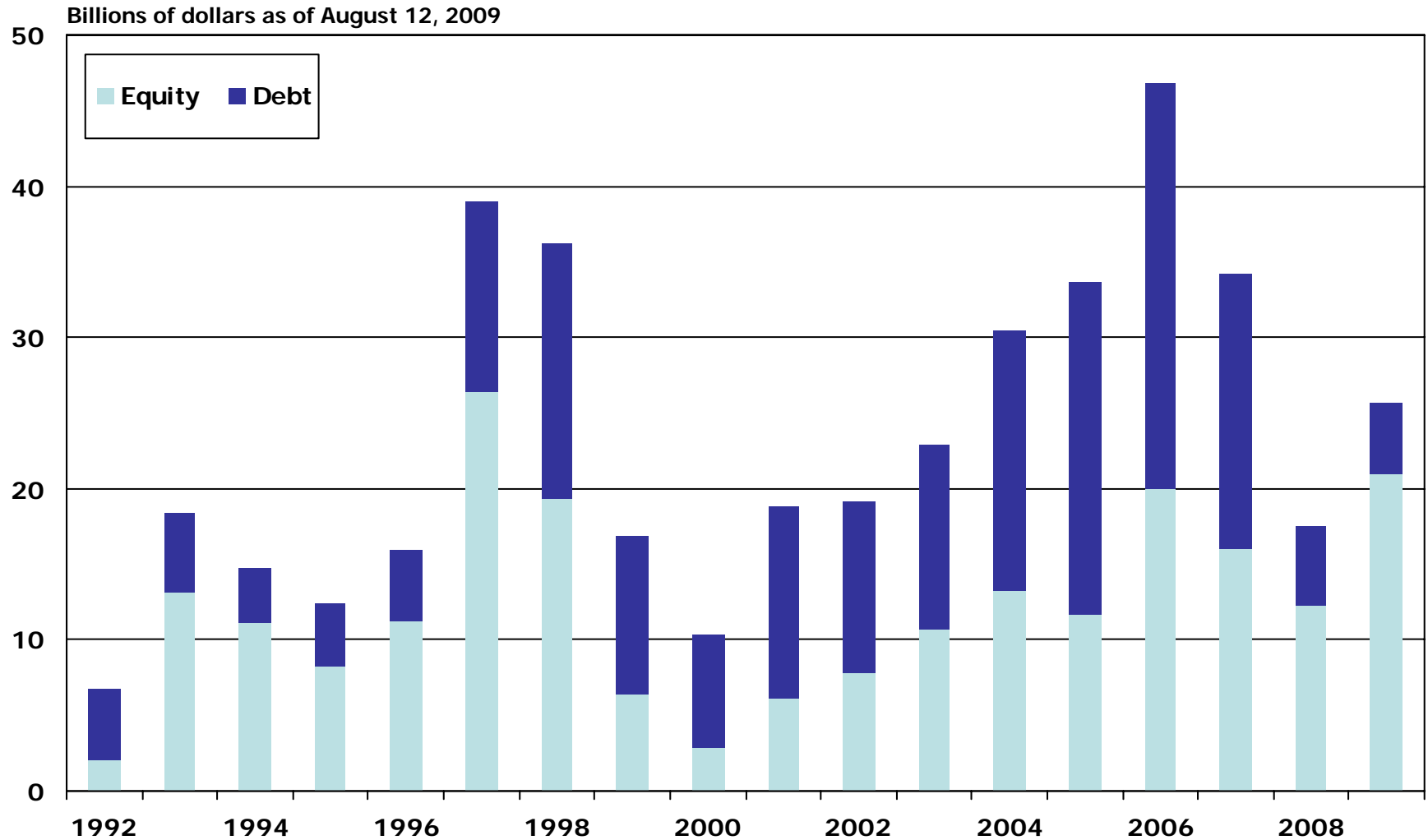
Sources: Trepp LLC, CMSA, MBA

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



Source: NCREIF

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



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
- Real estate mortgage investment conduit (REMIC) rules should be amended to facilitate reasonable modifications to the terms of loans securitized through CMBS
- 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