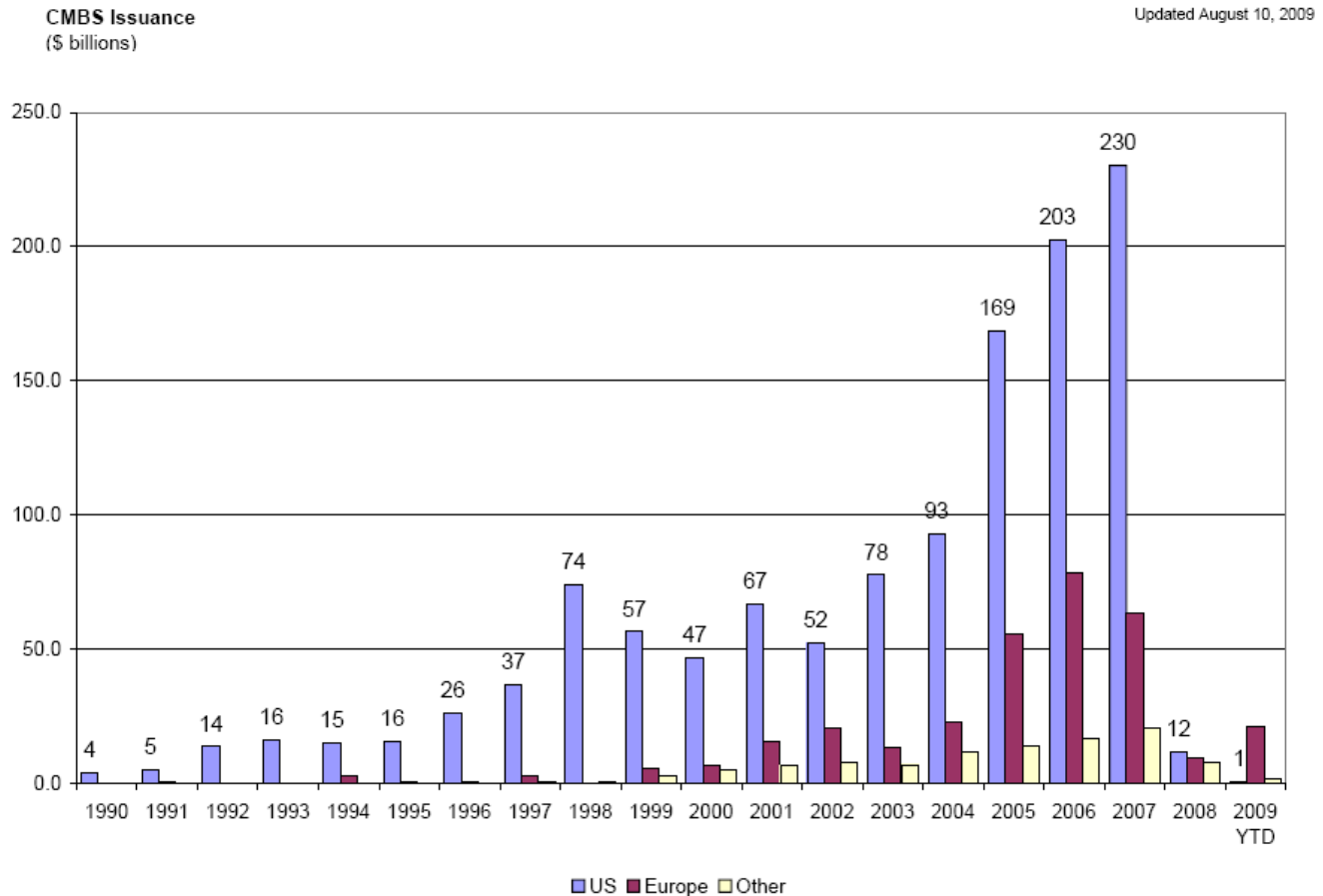




**Reznick**  
CAPITAL MARKETS

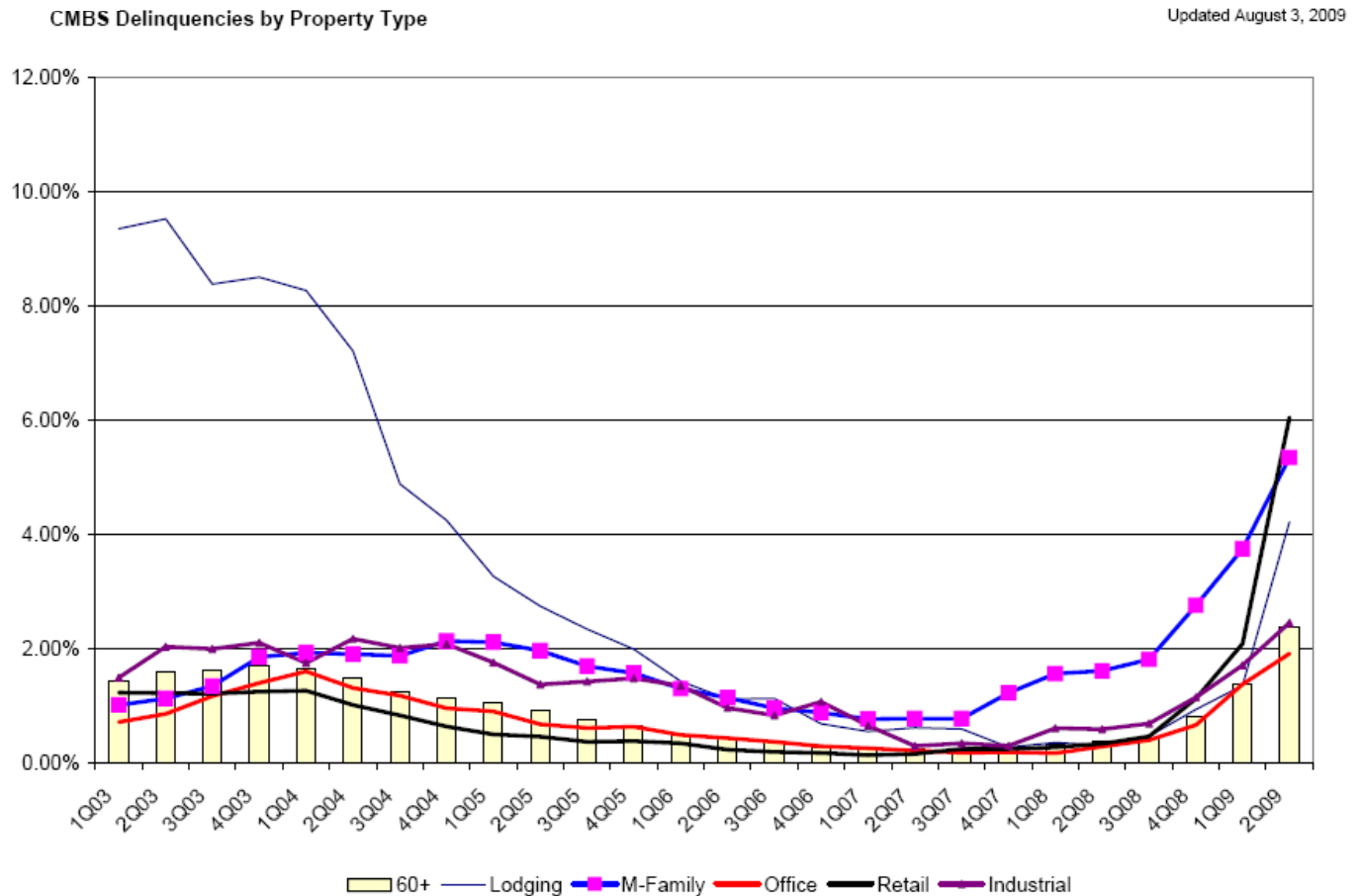
# CMBS Market Update – Historical Issuance Volume

- CMBS issuance grew at a feverish pace from 2002, peaked in 2007, and ground to a virtual halt thereafter with a de minimis amount of issuance in 2008 & 2009



# CMBS Market Update – Default Rates

- Default rates across all CRE asset types are rising steadily, and have a long way to go before matching previous downturn levels

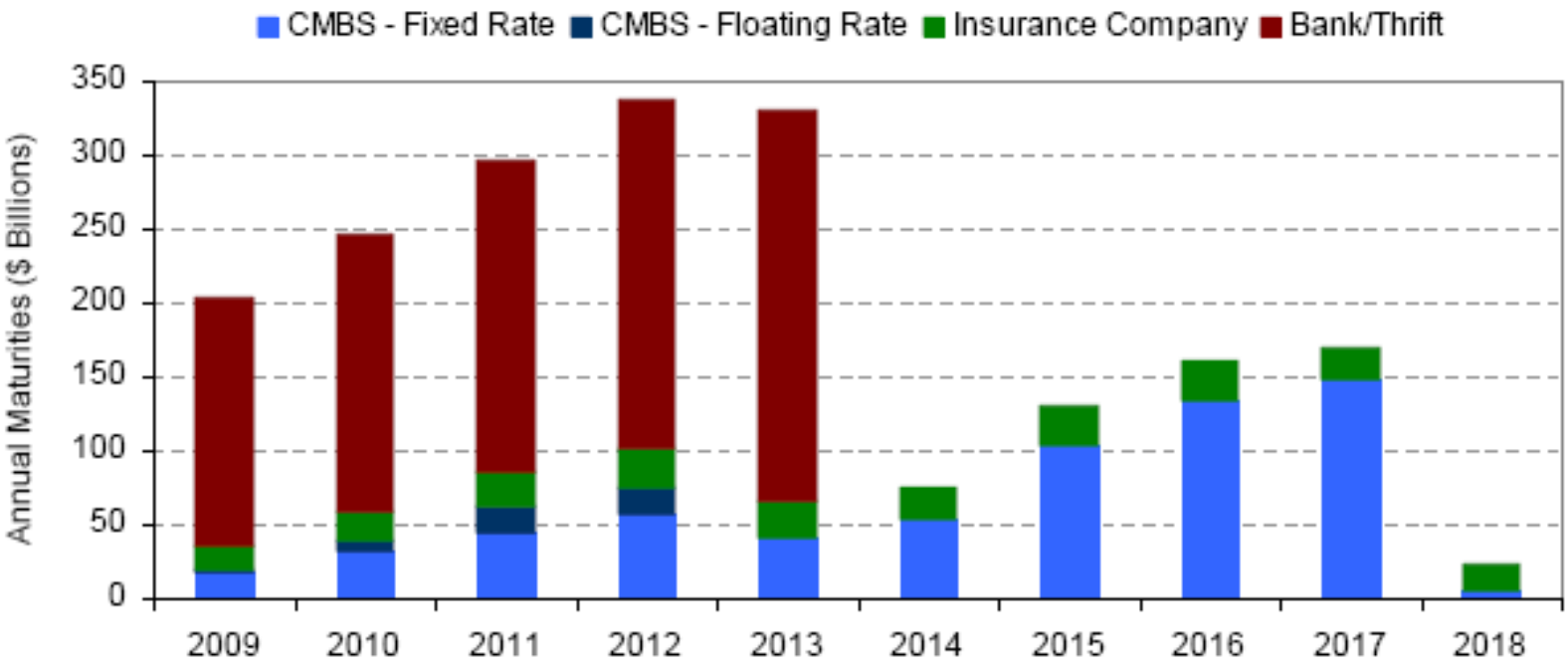


Source: Trepp LLC

# CMBS Market Update - Maturities

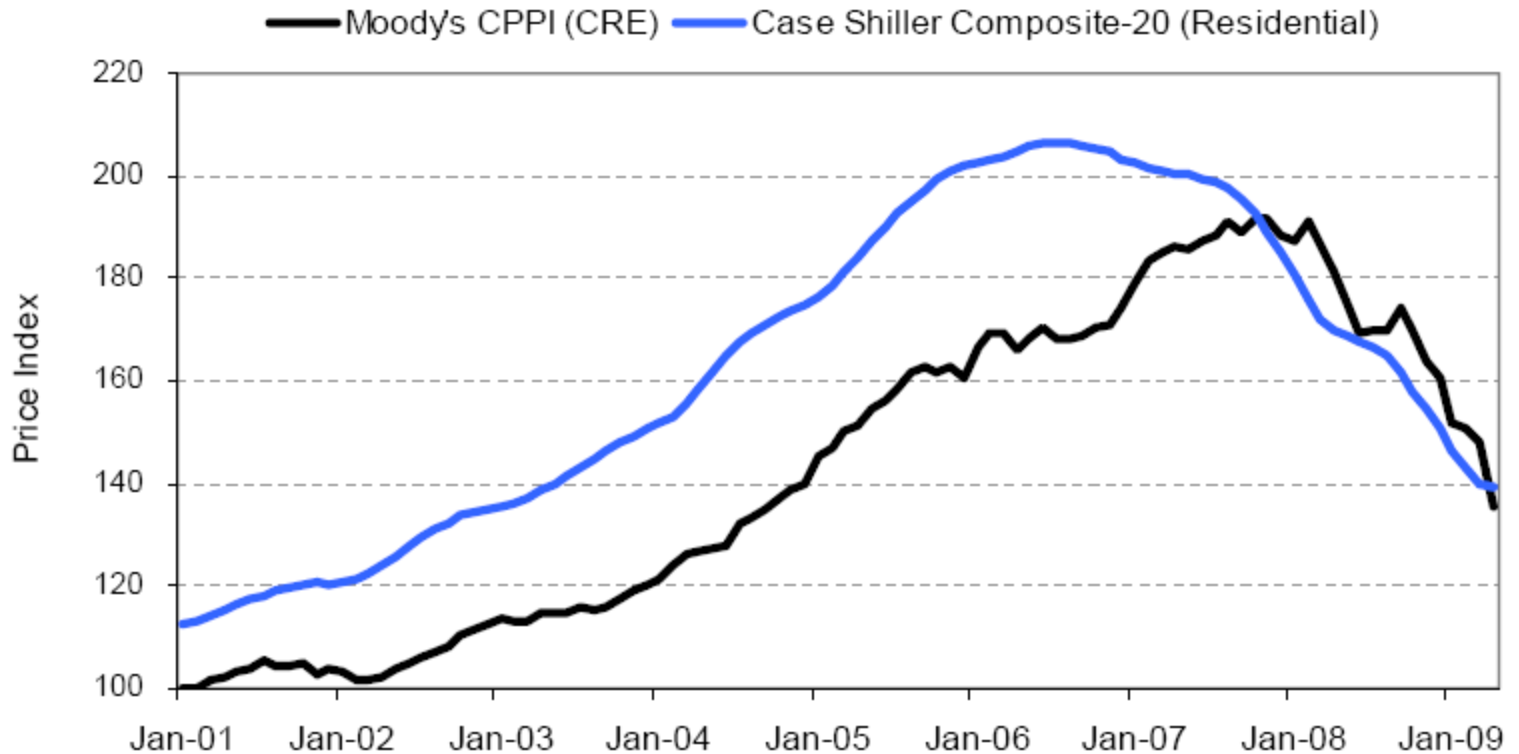
- Weak fundamentals will drive term defaults, but it is commonly believed that the over-leverage caused by lax underwriting standards coupled with the lack of available capital for refinancings poses the greatest threat to valuations
- A recent Deutsche Bank report states that: *“At least two thirds of the loans maturing between 2009 and 2018 (\$410 billion) are unlikely to qualify for refinancing at maturity without significant equity infusions from borrowers. For the 2007 vintage, well in excess of 80% of the loans are unlikely to qualify.”*

**Estimated maturity profile of commercial mortgages in CMBS, bank and life company portfolios**



# CRE Market Update – Value Impairment

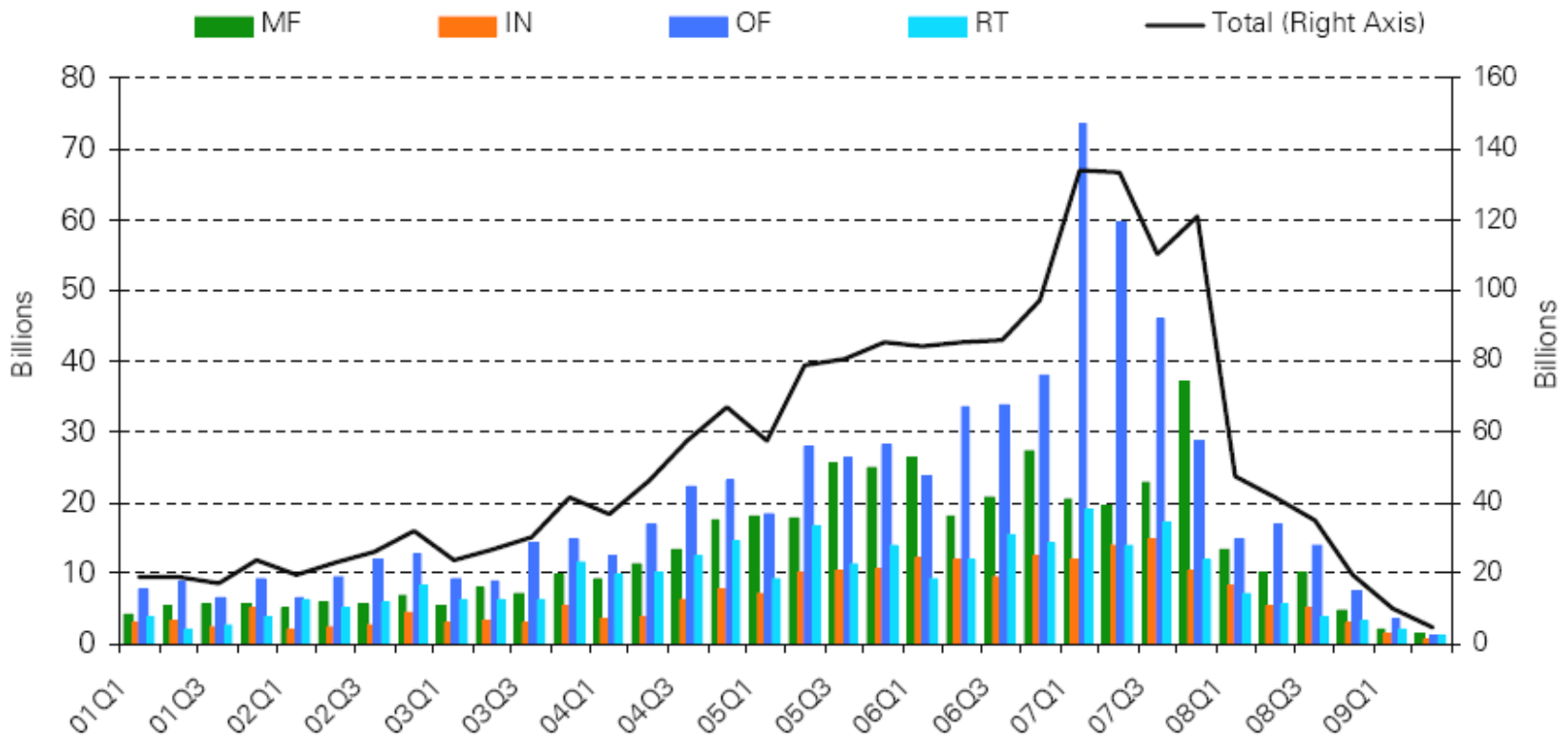
- Commercial real estate price declines have accelerated, and prices are off 35% so far from their peak in 2007



Source: Moody's and REAL and Case Shiller

# CRE Market Update – Sales Volume

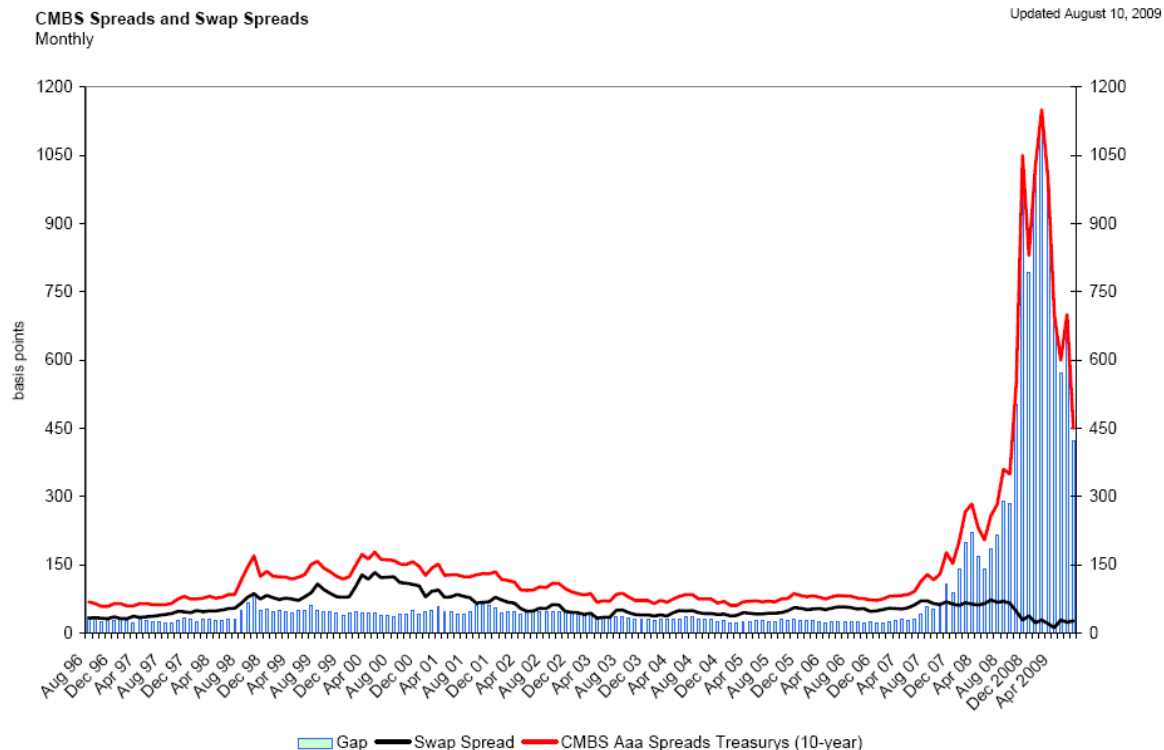
- Transaction volume is down from a peak of \$133.2 billion in Q2 2007 to \$4.8 billion in Q2 2009



Source: Real Capital Analytics

# CMBS Market Update – Real Reasons for Optimism

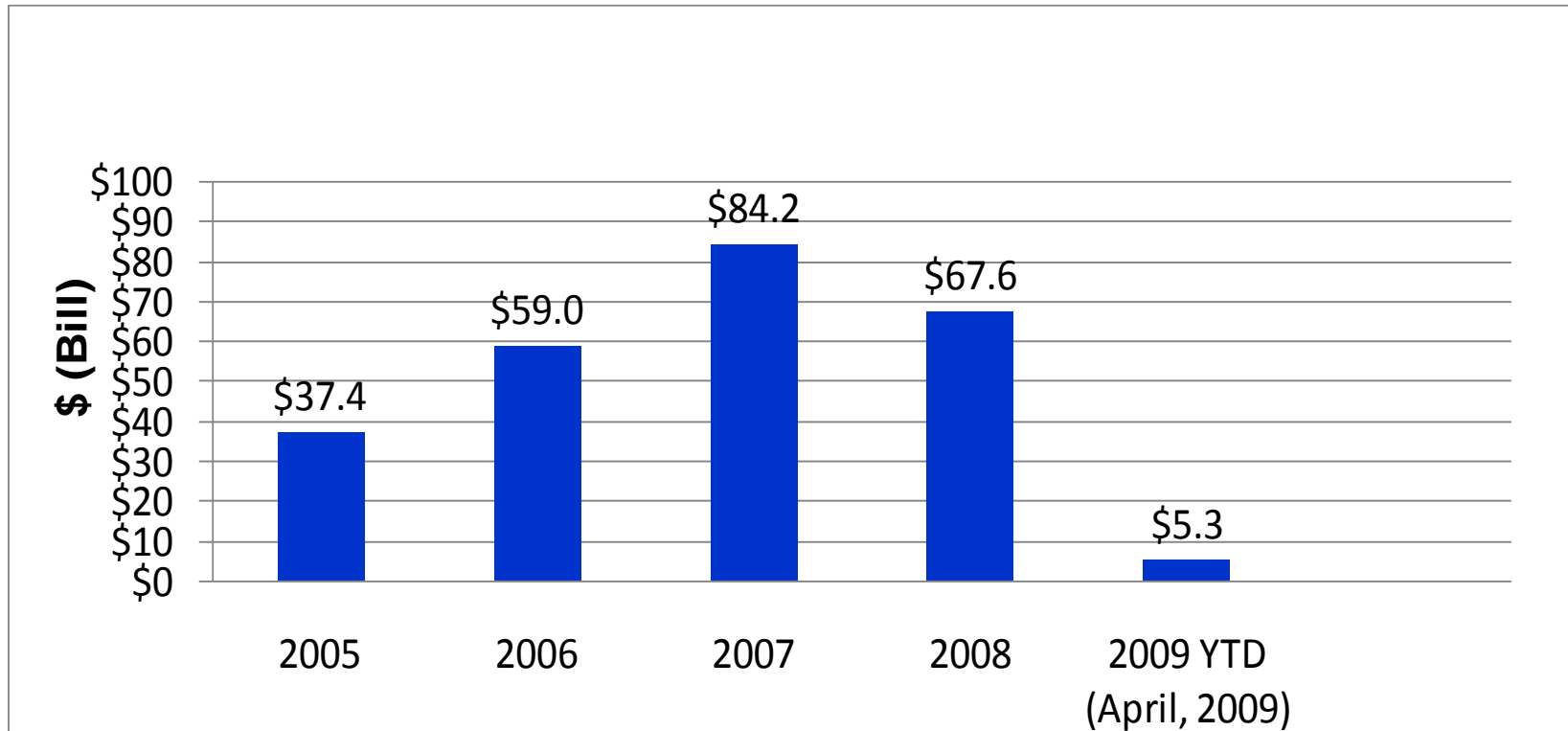
- The capital markets are reflecting a widespread belief that distress in the CRE market will lead to opportunity to acquire real estate or real estate debt at extremely attractive prices
- TALF has also led to recent rallies in CMBS pricing and has created a fledgling low leverage new issuance market – legacy CMBS AAA spreads to treasuries have rallied from wides of 1100+ basis points to current levels of 450 basis points



Source: Morgan Stanley. Generic AAA spreads from August 1996 to December 2004; Super Senior AAA from January 2005 to present.

# Capital Raised by Real Estate Private Equity Funds

(Value Added & Opportunistic Closed Ended Funds)



Source: Private Equity Real Estate

# CRE Market Update – Real Reasons for Optimism

- While completing transactions still remains challenging, many sources of capital have recognized the opportunity to put out cash at attractive terms:
  - Banks – banks have begun to ramp up lending, carefully starting to issue term sheets to their best clients, on the most attractive assets, etc.
  - Funds – first mortgage and mezzanine funds are slowly coming off the sidelines, and starting to issue more term sheets and hit on deals. Even equity (hard asset) sales have begun to happen, because while rare so far, buyer and seller expectations have started to meet
  - REITS - the public markets clearly see the opportunity – Colony Capital, Starwood Capital, Ladder Capital, and Angelo, Gordon & Co. are among the groups who have filed for REIT IPOs in the past few months
    - **Great response to Starwood’s IPO on August 12<sup>th</sup>, 2009 - Starwood Capital had originally filed to raise up to \$500 million through a stock offering, but raised \$830 million instead. The company initially sought to sell 25 million common shares, but ended up selling 40.5 million for \$20 per share (including another possible 6.1 million shares subject to an overallotment option)**





# Renewable Energy

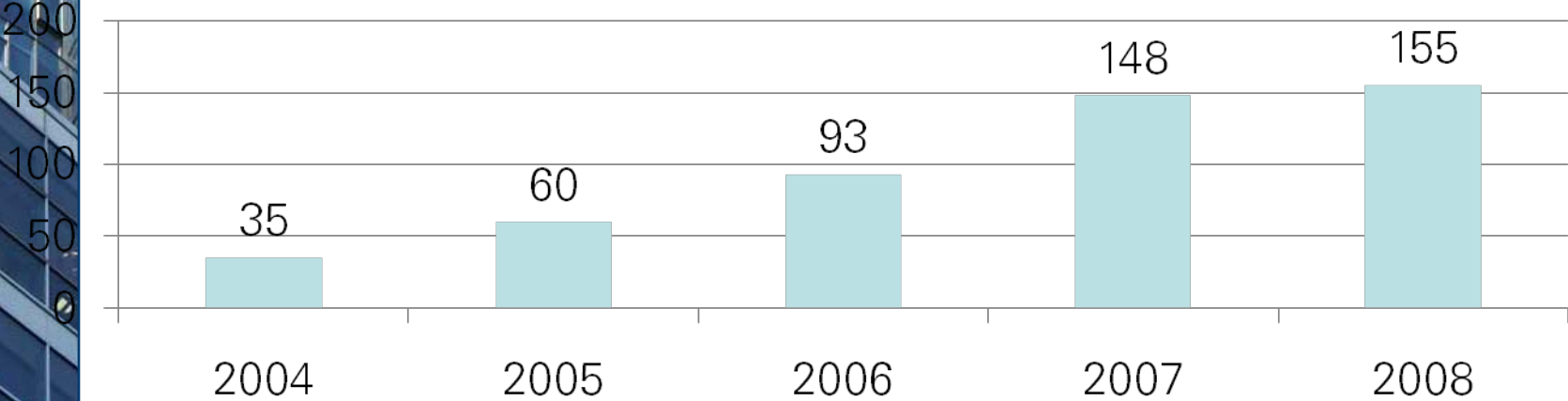
**Between now and 2030, over \$20 trillion will be invested in energy infrastructure worldwide**

**Estimated \$1.5 trillion will be invested by the U.S. power sector alone**



# Renewable Energy New Investment

Equity Billions





## Wind Generation

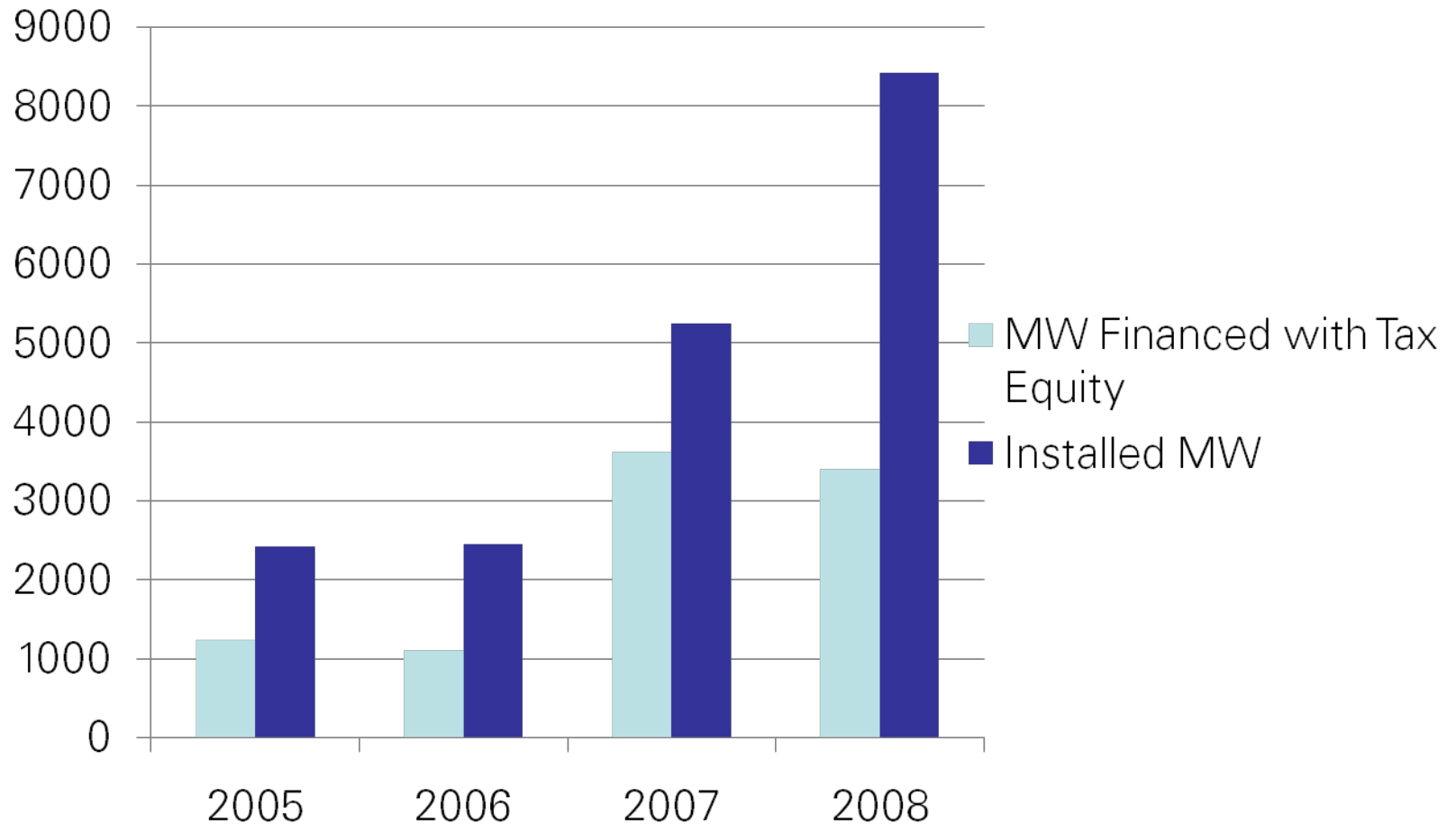
- Wind project investment is projected to expand from \$51.4 billion in 2008 to \$139.1 billion in 2018
- 2008 global wind power installations reached a record 27,000 MW
  - U.S. represented more than 40% of total new electricity generating capacity brought online
    - Moved ahead of Germany as the world's leading generator of wind energy



## Wind Generation

- In 2008, with over 8,300 megawatts (MW) installed, wind power provided 42% of all the new generating capacity added in the U.S., according to initial estimates, up from less than 2% of new capacity added in 2004
- New wind projects installed in 2008 represent an investment of \$17 billion
  - the largest capital investment in the U.S. electricity sector

# Tax Equity Head Wind



# Wind

- Tax equity markets provided \$5.5 billion in capital in both 2007 and 2008
- To meet the Administration's targets of doubling non-hydro renewable energy generation by 2011, the tax equity market will have to increase to \$11 billion in 2009 and \$17.6 billion in 2010

# Solar PV

- In 2007, solar photovoltaic (PV) installations grew by 45% (Prometheus 2007)
- In 2008, PV installations grew by 81% (SEIA 2009)
- In the past few years, renewable energy development has flourished and, until recently, the availability of capital investment had not been a constraint on developing new projects.



## Solar

- The United States was the fourth largest solar market in the world in 2007
- Grid-tied PV capacity increased 58 percent in 2008 and solar water heating capacity increased 40 percent
- Tax equity market:
  - 2007: \$3.4 billion
  - 2008: \$3.5 billion
- Utilities are now eligible to take the ITC
- Solar capital markets are still open –new deals are being funded
- Solar technology stability and dependability.
- Solar generation predictability.
- Short construction cycle



## Solar PV

- Solar pv (including modules, system components, and installation) will grow from a \$29.6 billion industry in 2008 to \$80.6 billion by 2018
  - Annual installations reached more than 4 GW worldwide in 2008, a fourfold increase from four years earlier, when the solar PV market reached the gigawatt milestone for the first time



## Global Solar

- Grid-connected solar photovoltaic (PV) continued to be the fastest growing power generation technology, with a 70- percent increase in existing capacity to 13 GW in 2008.
  - Sixfold increase in global capacity since 2004.
- Annual installations of grid-tied solar PV reached an estimated 5.4 GW in 2008.
  - Spain market leader, with 2.6 GW of new capacity installed
    - Half of global installations
    - Fivefold increase over the 550 MW added in Spain in 2007
  - Germany installed 1.5 GW in 2008.
  - United States 310 MW added
  - South Korea 200–270 MW
  - Japan 240 MW
  - Italy 200–300 MW



## Geothermal

- Geothermal power capacity reached over 10 GW in 2008
  - The United States remains the world development leader, with more than 120 projects under development in early 2009, representing at least 5 GW



## Biopower Opportunity

- The Department of Energy (DOE) estimates that biomass-based power currently provides nearly 45 billion kilowatt hours of electricity, or about 1.2% of the nation's electric sales
- **DOE projects that overtime, biomass could supply as much as 14% of the nation's power needs**



## Recovery Act

- In February 2009, the U.S. federal government enacted ARRA, a nearly \$800 billion economic stimulus bill that was composed of spending and tax cuts.
- Energy efficiency and renewable energy sectors will receive more than \$71 billion in newly appropriated funding, plus another \$20 billion in additional tax credit incentives



## Private Equity/Venture Capital

- U.S.-based venture capital investments in energy technologies increased 22 percent, from \$2.7 billion in 2007 to \$3.3 billion in 2008, according to New Energy Finance.
- As a percent of total VC investments, energy tech grew nearly 30 percent, from 9.1 percent of all investments in 2007 to 11.8 percent in 2008.
  - In 2000, energy tech represented just a half a percent of all VC investments

