

**Morgan Stanley Real Estate Investing**

# Fisher Center: Financial Tsunami – Where Do We Go from Here?

November 24, 2008

## Section 1

# Global Economy and Investment Markets

## Unprecedented Financial and Economic Times

### The Vicious Cycle

1. Losses on Leveraged Borrowing
2. Deterioration in Credit Quality
3. MTMs/Losses in Financials
4. De-leveraging / Reduction in Credit Availability
5. Asset Price Declines
6. Impact on the Real Economy
7. Repeat step 1

### The Casualties

#### \$591 billion Financial Sector Writedowns <sup>(1)</sup>

Market capitalization of equity markets has declined significantly <sup>(2)</sup>:

- World: \$48Tr to \$31Tr (35% decline)
- US: \$18Tr to \$11Tr (39% decline)

\$3.6Tr in lost home values<sup>(3)</sup>

Median existing single-family home prices expected to decline from \$221,000 (2007Q1) to \$180,000 (2009Q1), a decline of over 18%<sup>(4)</sup>

US Consumer spending, nearly 2/3 of the economy, dropped 0.3% in September, the sharpest decline for consumer spending in the last four years<sup>(5)</sup>

Consumer confidence dropped by a record to 57.6 in late October, from a reading of 70.3 in late September<sup>(6)</sup>

The CDS market with its rapid growth from \$7.5Tr to over \$60Tr notional during the past four years, has come to a close and poses a significant risk that remains to be unwound<sup>(7)</sup>

1. Asset writedowns and credit losses; Bloomberg as of September 29, 2008  
 2. FactSet aggregate market value calculations from January 1, 2007 to November 7, 2008  
 3. \$20.3Tr in peak household real estate value (Federal Reserve) and 18% home value decline (Case-Schiller)  
 4. National Association of Realtors Estimate  
 5. Commerce Department  
 6. University of Michigan  
 7. Bank of International Settlements as of May 2008

## How Has Our Market View “Evolved” Over Time?

	Fall 2007	Spring 2008	Fall 2008
Economic Growth	<ul style="list-style-type: none"> <li>US in recession, slower growth elsewhere – emerging markets will help rest of world</li> </ul>	<ul style="list-style-type: none"> <li>Decoupling can still occur, although slower US hurting many other markets</li> </ul>	<ul style="list-style-type: none"> <li>Global recession – downturn to be sharper in developed markets (US, Japan, UK, France and Germany) – distinctly slower growth in emerging markets</li> </ul>
Capital Markets	<ul style="list-style-type: none"> <li>Credit crunch impacting transaction volumes, no recovery for 12+ months (late 2008)</li> <li>Lack of CMBS hitting the US and Europe the most</li> <li>MS more pessimistic than overall market</li> </ul>	<ul style="list-style-type: none"> <li>Credit “crunch” evolves to credit “crisis”, no recovery for 12+ months (mid 2009)</li> <li>Distinct slowing in all markets, with the US completely frozen</li> <li>Global markets beginning to weaken</li> </ul>	<ul style="list-style-type: none"> <li>Complete disarray, timing of recovery is unclear - 12 - 24 months</li> </ul>
Real Estate Pricing	<ul style="list-style-type: none"> <li>Re-pricing underway, differentiation by asset quality and market. Prime office cap rates may adjust as follows:                             <ul style="list-style-type: none"> <li>US: +100bp</li> <li>Western Europe: &lt;50bp</li> <li>Developed Asia: &lt;25bp</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Re-pricing underway, differentiation by asset quality and market. Prime office cap rates may adjust as follows:                             <ul style="list-style-type: none"> <li>US: 100 to 125bp</li> <li>Western Europe: 50 to 75bp</li> <li>Developed Asia: 25 to 50bp</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>All markets completely frozen, including Asia</li> <li>Re-pricing underway, differentiation by asset quality and market. Prime office cap rates may adjust as follows:                             <ul style="list-style-type: none"> <li>US: 100 to 150bp+</li> <li>Western Europe: 75bp to 100bp+</li> <li>Developed Asia: 50bp to 100bp+</li> </ul> </li> </ul>
Real Estate Fundamentals	<ul style="list-style-type: none"> <li>Fundamentals are strong although risks exist</li> <li>New supply is modest; only markets with weaker economies face risk</li> </ul>	<ul style="list-style-type: none"> <li>Vacancies moving up, tenants gain pricing power</li> <li>Greater weakness in growth to hit fundamentals</li> <li>Landlords already capitulating in the harder hit markets</li> </ul>	<ul style="list-style-type: none"> <li>Fundamentals globally beginning to weaken</li> <li>Cash flows facing risks</li> <li>Vacancies rising, downward pressure on rents</li> </ul>

## Stress in All Corners of the Market

- S&P 500 volatility at record highs (VIX is key measure of market expectations of near-term volatility)
- Hedge fund performance down:
  - Monthly return for September (6.55%), the second worst monthly performance ever recorded by the index
  - YTD performance at (10.1%)
- Metals and Crude Oil down 32% and 28% YTD, respectively
- Emerging Market Equities down 47% YTD

### Volatility

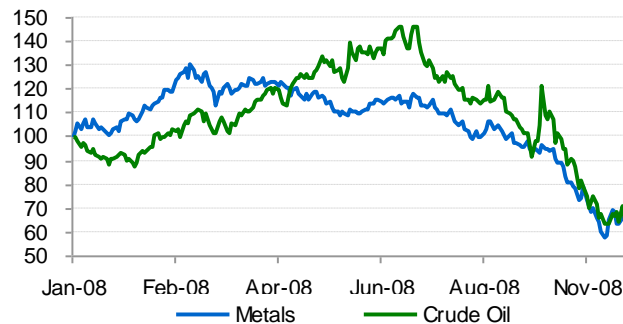
CBOE Volatility Index of S&P 500



Source: Bloomberg as of November 6, 2008

### Commodities

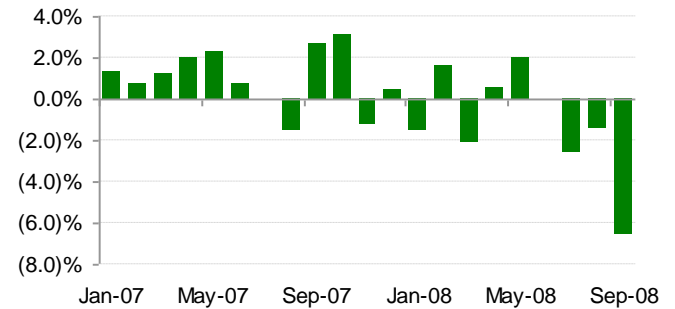
Indexed to 100



Source: Bloomberg as of November 6, 2008

### Hedge Fund Performance

Credit Suisse Tremont Hedge Fund Index (Monthly Returns)  
%



Source: HedgeFundIndex.Com

### Emerging Markets Index

MSCI Emerging Markets Index  
Indexed to 100

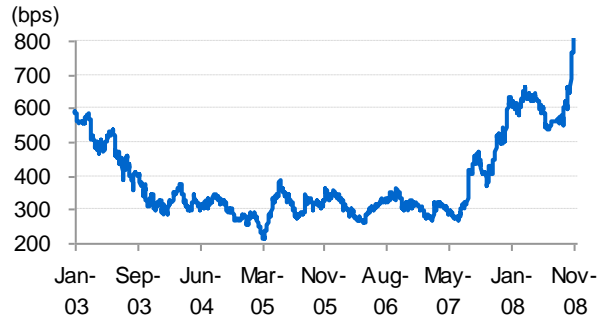


Source: FactSet as of November 6, 2008

## Lending Markets Are Expensive, if Not Closed

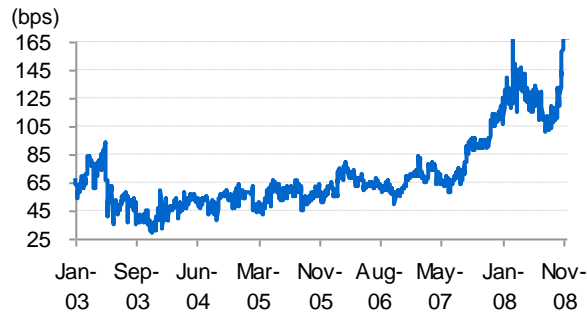
- Lending markets have been virtually closed but recent signs of a slight thaw
- Fed is actively trying to stimulate the commercial paper market

### Historical Non-Investment Grade Spreads



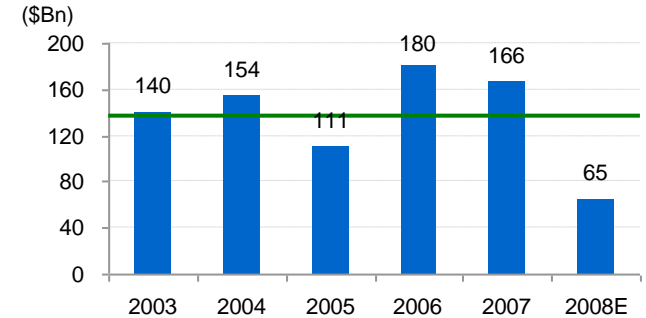
Source: Bloomberg as of November 6, 2008

### Historical Investment Grade Spreads



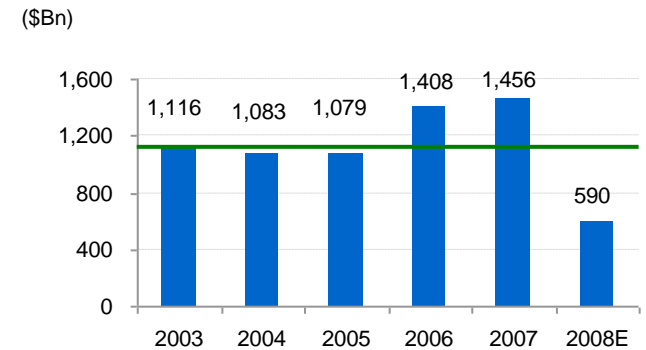
Source: Bloomberg as of November 6, 2008

### Non-Investment Grade Debt Issuance



Source: Morgan Stanley

### Investment Grade Debt Issuance



Source: Morgan Stanley

## US Real Estate Market - Key Points

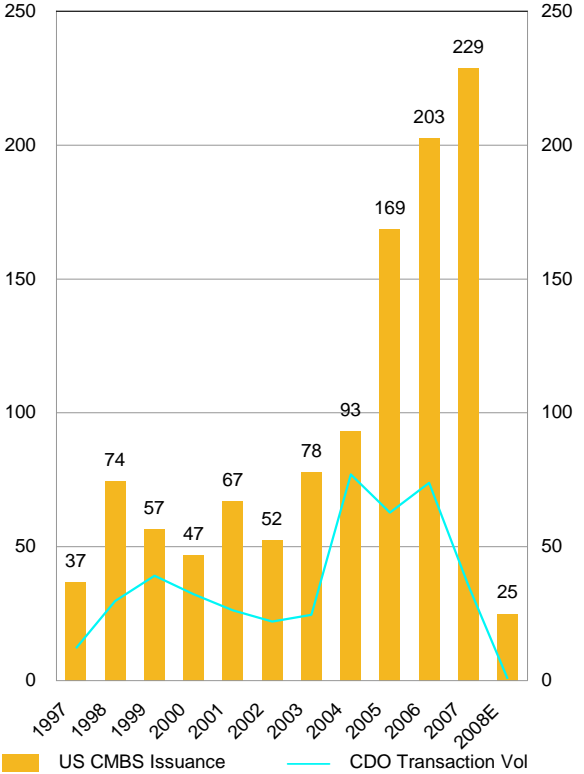
- Consumer spending is likely to be lower, and savings higher, for an extended period
- The mark-to-market on longer leases will have ended by 2010/2011, limiting those sectors' growth potential
- Quality/location pricing spreads tend to gap out the most during periods of stress, recovering during the ensuing cycle
- Capital market challenges dominate
  - Financing markets highly constrained, expensive and focused on mezz
  - Equity looking for distress can dictate terms
  - Capital markets are differentiating on quality with the best properties performing better
- Fundamentals beginning to worsen and will slide through 2009 at the least
  - Demand uniformly weakening due to slower growth and uncertainty regarding the economy
    - Office: vacancies slipping, sublease up - landlords beginning to accept lower rents
    - Retail: property quality matters, sales down in weak locations, flat in good ones
    - Apartment: job losses weighing on occupancies near-term, favorable demand trends once the economy stabilizes (strong demographics, tight credit, etc.)
    - Industrial: imports growth has slowed to near-zero, absorption flat to down in 2008/2009
    - Hotel: demand near-zero with healthy supply, occupancies continue to slip, weakening RevPAR growth (could turn negative)
    - Housing: prices still falling, unsold inventory on the decline, but markets still out of balance
  - Development now all but stopped, which helps on the margin
  - Differentiation in growth across markets helps, but capital market headwinds hitting all markets

# CMBS Markets Dislocated; Critical to a Turn Around

## CMBS Activity, Spreads and Maturities

### U.S. CMBS Issuance and CDO Transaction Volume

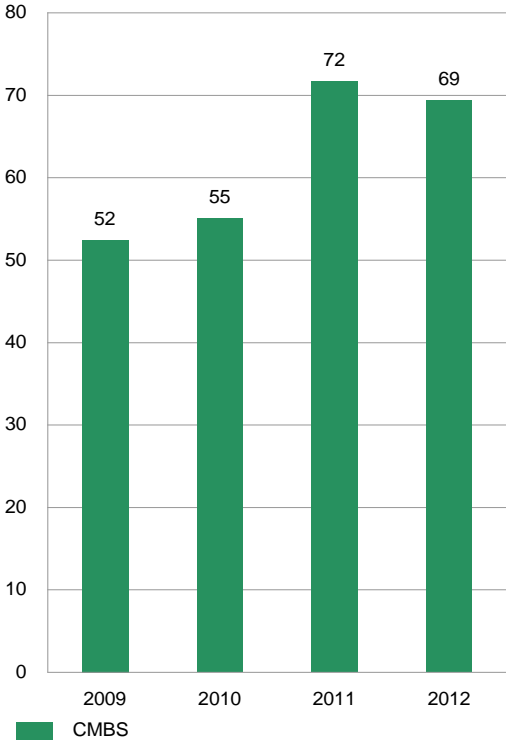
U.S. CMBS Issuance \$Bn      CDO Transaction Volume \$Bn



Source: Morgan Stanley; Real Capital Analytics data through October 2008, Morgan Stanley calculations, Thomson One

### Projected CMBS Maturities

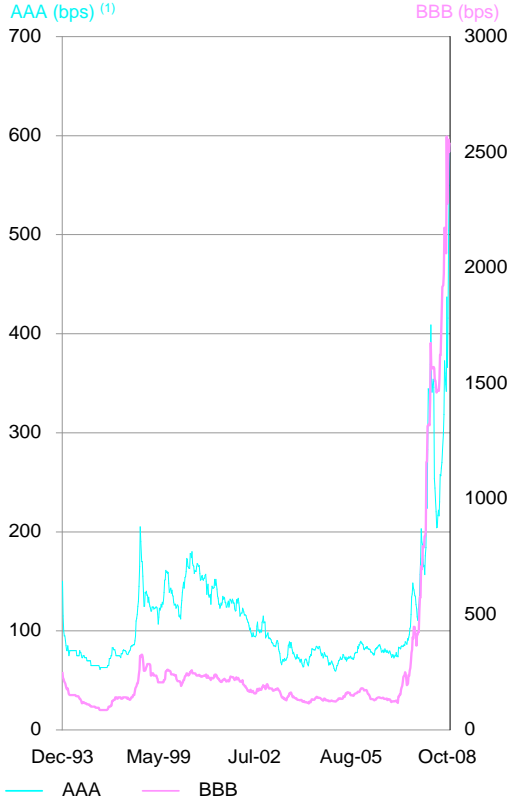
2008-2012 \$Bn



Source: Moody's Structured Finance research dated 25 February 2008; based on initial maturity dates, Trepp

### AAA & BBB CMBS Fixed Rate Spreads

Spread over 10-Year Treasury



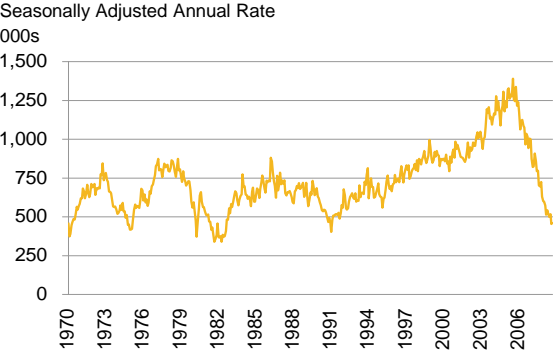
Source: Morgan Stanley Fixed Income Research through October 22, 2008

Note  
 1. On 28 May 2008, Morgan Stanley research stated that they will no longer track AAA 10-year spreads. From this date forward, AAA refers to the Super Senior AAA 10-year

# Housing Remains in Distress, Market has not yet Found Bottom

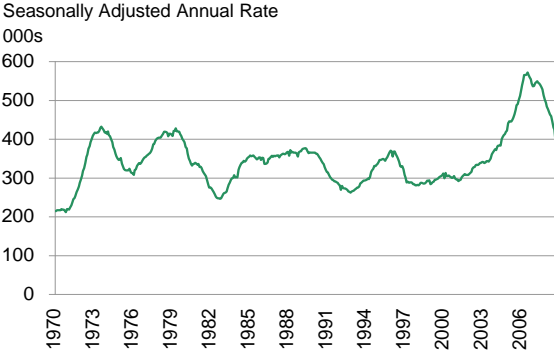
- The US housing markets remain in recession
  - Sales volumes have not yet bottomed
  - The inventory of new homes for sale has begun to decline, although remains well above normal levels
  - The supply/demand balance, as measured by months of supply, remains near peak levels
- Prices remain under pressure
  - Prices have declined 20% in total
  - But, the pace of decline has slowed

### New Home Sales



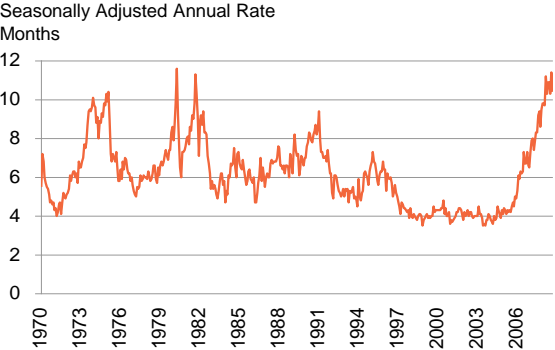
Source The Census, Moody's

### Inventory: New Homes for Sale



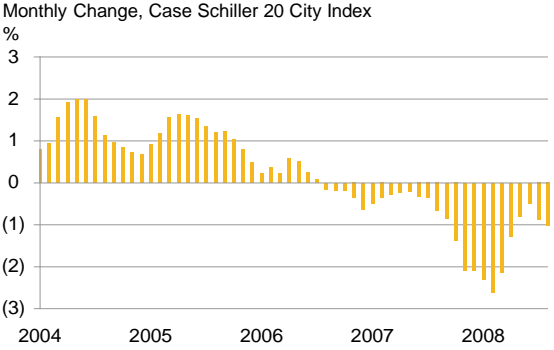
Source The Census, Moody's

### Months of Supply



Source The Census, Moody's

### Home Price Appreciation



Source Case Schiller, Moody's

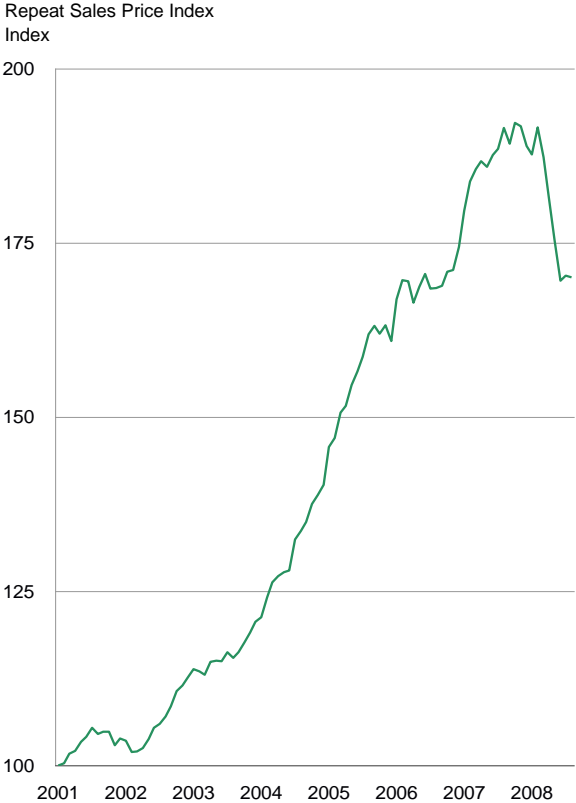
## Section 2

# Where Do We Go From Here?

# Commercial Pricing Expectations – Priced for a +/-20% Decline

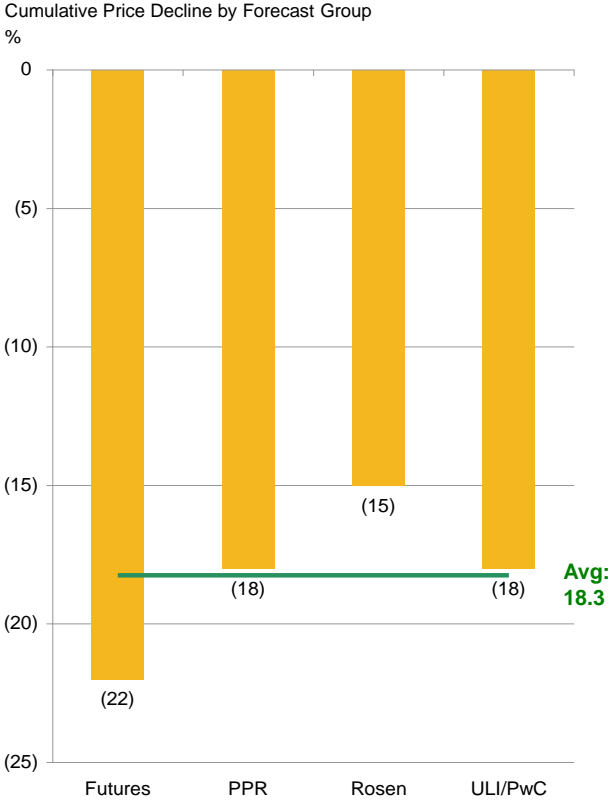
- Market commentators are looking for a +/-20% price adjustment
  - Prices have already declined 12% through August according to Moody's Commercial Property Price Index (CPPI)
  - Capital markets distress and a period of excessive pricing is putting upward pressure on yields
  - Weakening economic growth is leading to a reduced outlook for cash flow growth
- MS is projecting cap rates to rise 200bp peak to trough (i.e., rise from 5% to 7%)
  - Forecasting capital markets is especially uncertain with risks to the outlook
  - For example, as spreads revert, they could move through historical normal levels

## Commercial Property Price Index



Source Moody's, RCA, MIT

## Commercial Real Estate Price Forecasts



Source Various sources as listed, Markt

## Unsecured Borrowers: Debt Exchanges/Tender Offers

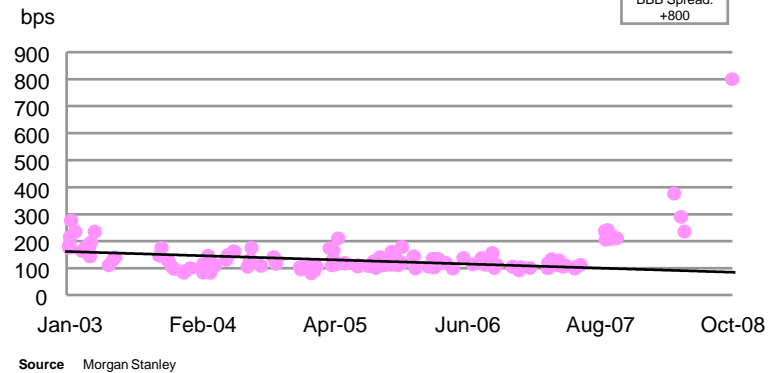
- In the current market where liquidity is at a premium, debt exchanges offer borrowers the opportunity to re-pay/reduce principal without using cash reserves
- Lenders may view the exchange as an opportunity to:
  - a) crystallize gains (if they have a low basis)
  - b) enhance their position
- Hovnanian and Harrah's, as well as multiple companies outside of real estate, such as ResCap, have recently announced debt exchanges
- For those companies that have access to capital and have debt trading below par, tender offers provide similar de-levering benefits

### Borrower Advantages

- Reduces book leverage by amount of discount
- Ability to extend maturities/enhance terms
- Possibly cash flow accretive

**Consideration: need to create attractive value proposition for lenders**

### REIT Investment Grade 10-Yr New Issue Spreads



### Case Study: Unsecured Debt Exchange – XYZ REIT

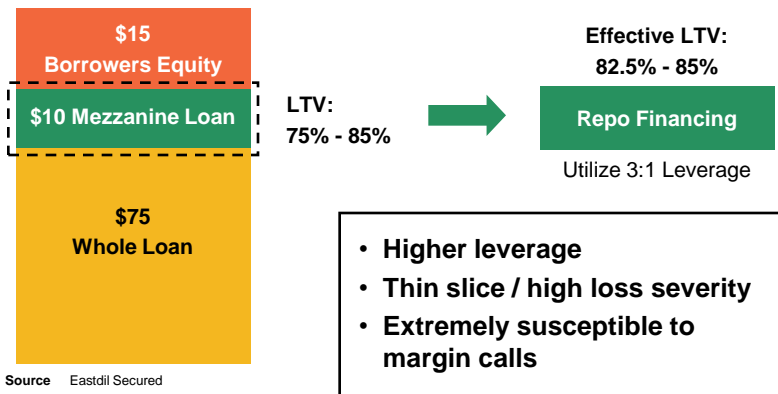
Original Bonds		Exchange Offer	
Maturity:	12/09	Maturity:	12/15
Security:	Unsecured	Security:	2 <sup>nd</sup> Lien
Coupon:	6%	Coupon:	12%
Principal Balance:	\$100	Principal Balance:	\$40
Current Market Price:	\$30	Exchange Price:	\$40

## Secured Borrowers: Old CMBS vs. New CMBS

- For secured borrowers, leverage levels will come down as liquidity for the most subordinate tranches has been reduced considerably
- Buyers of subordinate tranches will return discipline to the market and replace the role that the rating agencies have played over the last several years
  - The “new” CMBS will look more like the “old” CMBS of 5-10 years ago before CDOs became a primary source of funds for subordinate tranche buyers

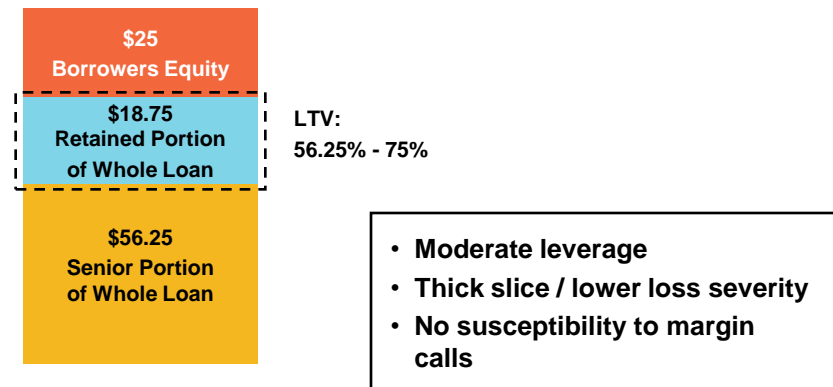
### Old CMBS

- Purchase higher risk piece of capital structure
- Use repo financing for added leverage
- Results in mismatch of short term leverage on a long term asset with potential for margin calls



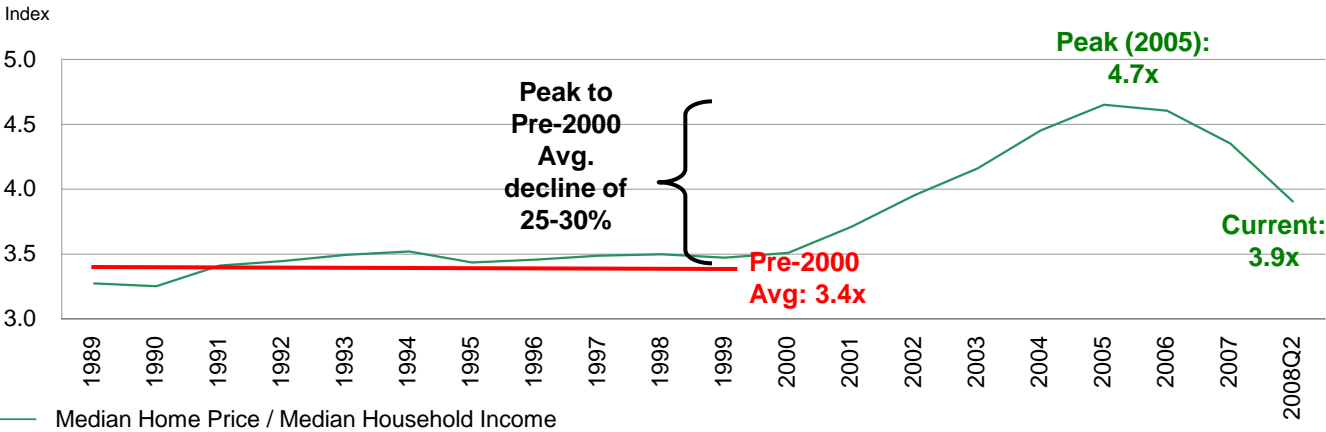
### New CMBS

- Originate whole loan
- Sell senior portion
- Hold retained option with no added leverage
- Eliminate margin call risk



# Median Home Price / Median Household Income

## United States National Average



Source: Harvard University – Joint Center For Housing Studies

- While median home price/ household income is an overly simplistic measure of affordability, the long-term trend has been remarkably stable prior to 2000
  - Beginning in 2000, low interest rates and increasing mortgage availability have caused home prices to outpace income gains
  - Median household income levels have grown by ~20% since 2000, though higher unemployment and lower wages in the next several years should offset a portion of these historical increases
- Projected future declines should bring pricing back in-line with historical affordability trends
  - To date, the market has experienced a 17% decline from peak, ~2/3 of the total projected peak-trough decline

### Rationale for Over-Correction

1. Incomes decline from unemployment / lower wages
2. Higher borrowing costs than historicals
3. Mortgage availability continues to decline

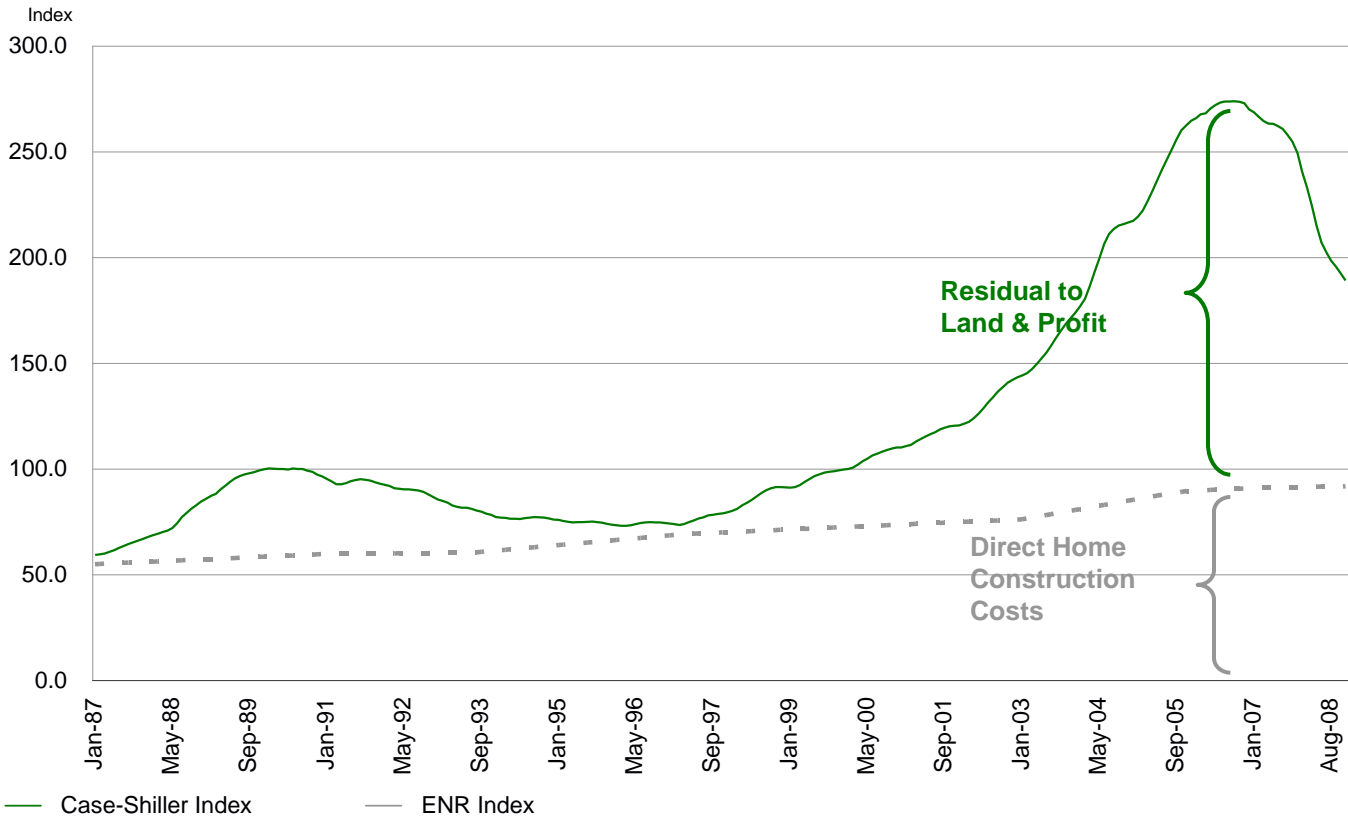
### Rationale for Under-Correction

1. Quick economic recovery with wage / job expansion
2. Lower borrowing costs
3. Government action to artificially support home values or spur mortgage availability

# What Will Change: The Leverage to Land

- As home prices grew over the last decade, construction costs have increased at more modest rates creating significant residual value for land
- Many important constituencies have benefited from the run-up in land values
  - Land owners – significant positive operating leverage in land investments
  - Municipalities – increased permitting and land use fees
  - Homebuilders – expanded margins as land value increases were crystallized through home sales
  - Contractors – increased wages and mark-ups on materials

## Los Angeles, CA



Source S&P Case / Shiller Home Price Indices August 2008; California Building Industry Association (CBIA)

# Land: Recapitalization

- 1. Municipalities must re-evaluate historical financing structures heavily weighted towards construction fees/permits
  - Services and growth plans must also be reviewed in-line with available financing sources
- 2. Land is going through a substantial re-capitalization as it is transferred to unlevered equity providers

