CRE Capital Markets Update
Amid Renewed Financial Instability and Fear of a Global Recession

Jim Clayton, Ph.D.
Vice President – Research
Cornerstone Real Estate Advisers LLC
jclayton@cornerstoneadvisers.com | (860) 509-2237

presented to:
Center for Real Estate and Urban Economic Studies

University of Connecticut

October 14, 2011
From My Presentation Here 2 Years Ago …
Volatility, Uncertainty … Twisting in the Wind?
Global Growth Projections Revised Downwards

Real GDP Growth Forecasts and Revisions Around the World

- 2011 Projection as of September
- Change from June

Source: Cornerstone Research based on forecasts from the International Monetary Fund 9-22-2011
U.S. Economy … the Big Picture

Not a “Typical” Recovery

The Three Legs (Stages) of Economic Recovery …
Not a “Typical” Recovery

Figure 4
Growth in Real GDP Components: Current and Three Previous Recoveries

Percent Change over First Two Years of Recovery

- Current Recovery
- Average of Three Previous Recoveries

Consumption  | Business Fixed Investment  | Residential Fixed Investment  | Government  | Exports
Not a “Typical” Recovery
Not a “Typical” Recovery

Michael Lewis has had time to “research”, write and publish two books on the financial crisis

March 2010

October 2011
Property Price Cycle at Bottom or Beyond

*NDenotes equally weighted cash flow based NCREIF appreciation return component (and not the published value weighted income-based data series).

Notes: NPI and TBI are quarterly indices through 2Q11. The dashed lines are monthly interpolations. Moody’s and Green Street CPPI’s are monthly indices through July and September 2011, respectively.

Source: Cornerstone Research based on data from NCREIF, MIT Center for Real Estate, Green Street Advisors and Moody's Investors Service.
Aggregate Indices Mask Divergent Pricing Dynamics

Sub-Indices of the Moody’s/REAL Repeat Sales CPPI Since Peak

Data through July 2011.

Source: Geltner Associates LLC, Real Capital Analytics (RCA), Cornerstone.
U.S. Institutional Appraisal Cap Rates

Sources: Cornerstone Research, NCREIF
U.S. Institutional Appraisal Cap Rates

Sources: Cornerstone Research, NCREIF, Federal Reserve.
NCREIF Space Market Dynamics … Apartments Lead

By Property Type

- Vacancy Rate (2Q11)
- NOI Growth (4 quarter total)
- Vacancy Rate (Average)

Source: Cornerstone Research, NCREIF.
Debt Situation Improving But Legacy Issues Remain

Deleveraging Underway and Continuing
(Debt as a Percentage of GDP)

Quarterly data through to Q211.
Source: Cornerstone Research, Federal Reserve Board, and Bureau of Economic Analysis.
Mortgage Market Improving But Legacy Issues Remain

Net Mortgage Flows by Lender Type

Life Insurance Company Mortgage Commitments and CMBS Issuance

Change in the combined outstanding balance of commercial and multifamily mortgage loans.  

* 2011 data through Q2.

Source: Cornerstone Research based on data from the Federal Reserve, ACLI and Commercial Mortgage Alert.
Volatility and Growth Concerns Impact CMBS Pricing

Source: Cornerstone Research, Trepp, Federal Reserve.
Debt and CRE Valuation: Did we learn anything??

Linking *Ex Ante* Total Asset Required Returns with Debt and Equity Costs of Capital

\[ IRR_p = IRR_E \left( \frac{E}{V} \right) + IRR_D \left( \frac{L}{V} \right) \]

In theory with financing separate (2\textsuperscript{nd}) after the investment/valuation decision …

\[ IRR_E = IRR_p + \left( IRR_p - IRR_D \right) \frac{L}{E} \]
Thanks for your attention!

Questions?

jclayton@cornerstoneadvisers.com
Disclosure Statement

- This information provided herein is believed to be obtained from sources deemed to be accurate, timely and reliable. However, no assurance is given in that respect. The reader should not rely on this information in making economic or other decisions.

- This analysis does not make any recommendation about your investments, and should not be considered investment advice. Any opinions expressed herein reflect our judgment at this date and are subject to change. Certain of the statements contained herein are statements of future expectations and other forward-looking statements that are based on management's current views and assumptions and involve known and unknown risks and uncertainties that could cause actual results, performance or events to differ materially from those expressed or implied in such statements.

- Opinions and estimates offered herein are subject to change without notice, as are statements of market trends, which are based upon current market conditions.