

# The Economy and Capital Markets: Effect on the Cost of Capital to Utilities



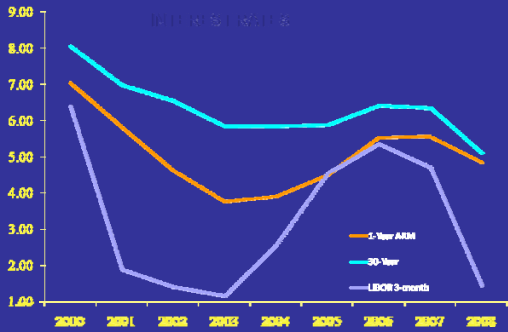
Reena Aggarwal

McDonough School of Business  
Georgetown University

Society of Utility and Regulatory Financial Analysts 2009 Financial Forum, Thursday, April 16

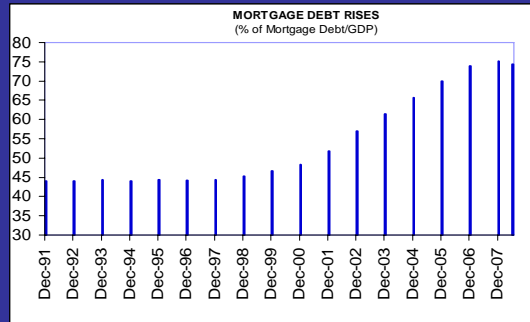


## CHEAP ACCESS TO CAPITAL

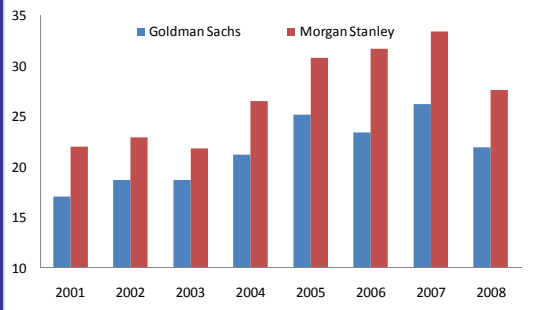


Source: Bloomberg  
As of 12/31/2008

## CHEAP ACCESS TO CAPITAL

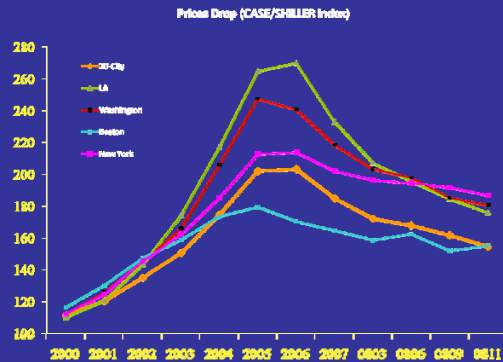


## LEVERAGE INCREASES

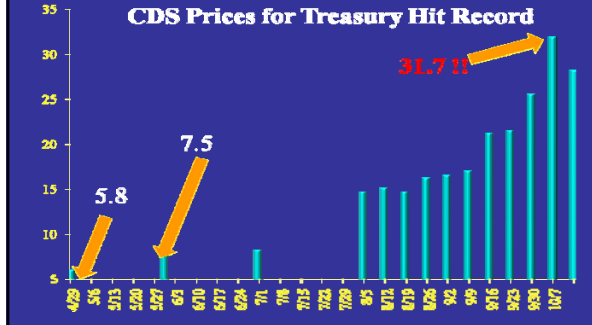


Source: Bloomberg  
As of 03/2008

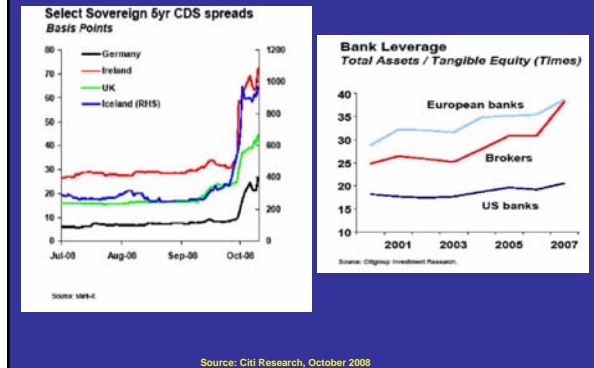
## HOUSING PROBLEMS CONTINUE



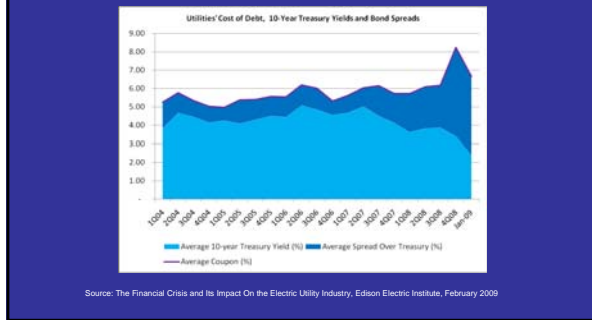
## Credit Markets Came to a Halt



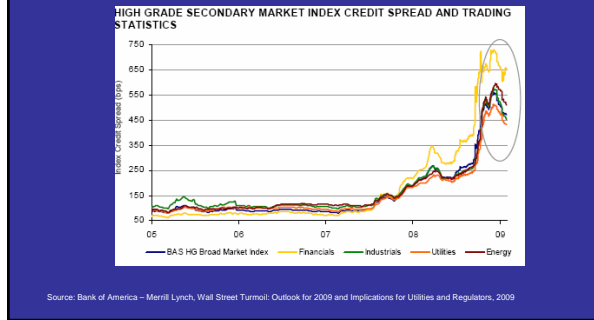
## Global Problem



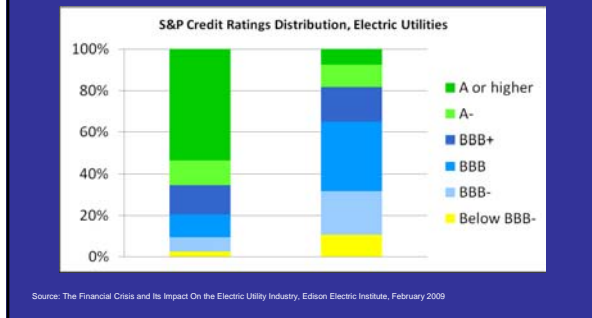
## Utility Spreads Widen



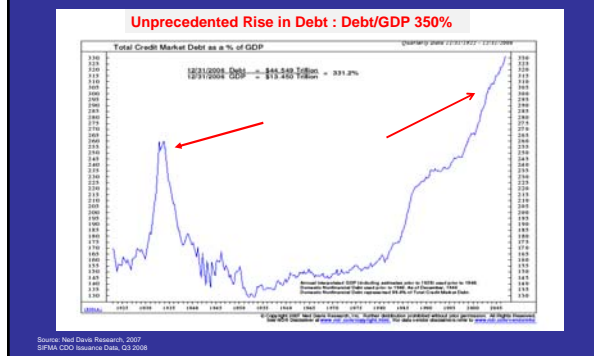
## Credit Spreads Widen



## Utility Ratings Decline 1992 vs 2008



## DELEVERAGING WILL BE PAINFUL AND WILL TAKE TIME

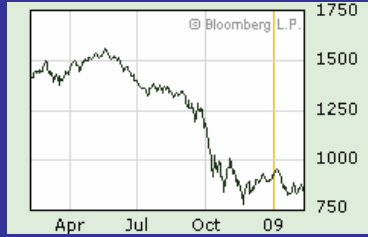


## Global Markets Impacted

### MSCI World Index

**2008**

US	-40%
ASIA	-52%
LA	-61%
EE	-62%

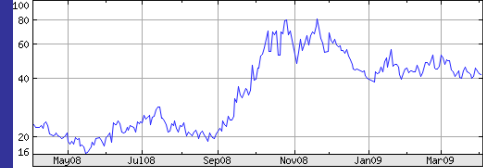


Source: Bloomberg  
As of February 11, 2009

## Market Volatility is High

### EDOE SPY MARKET VOLATILITY INDE

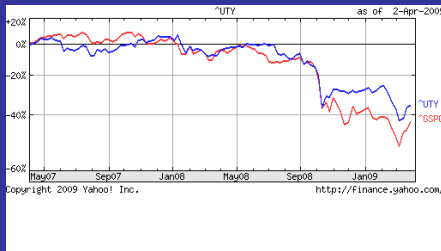
as of 2-Apr-2009



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## Utility Index Down



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## Utility Free Cash Flow Projections

### Free cash flow deficit (\$bn)

2005A	2006A	2007A	2008E	2009E	2010E	Cumul. '08-'10E
(7.0)	(11.0)	(16.0)	(25.6)	(18.3)	(16.2)	(60.1)

Source: 2005–2007 numbers reflect equity research, 2008E–2010E numbers reflect equity research projections for 52 select utility companies. Free cash flow = cash flow from operations - capex - dividends

Source: J.P. Morgan, February 2009

## Market Risk Premium

Sep 01	Dec 07	Jan 09	Jan 09 – U.S.	Jan 09 – Europe
4.7%	5.96%	6.2%	6.5%	5.3%

Source: Several surveys by Ivo Welch & 2009 survey by Pablo Fernandez

## TARP



Source: <http://projects.nytimes.com/credicrisis/recipients/table>

## Unemployment

Source: [http://www.forbes.com/2009/01/09/january-layoffs-4-es-lead-co\\_14\\_0109january09layoffs.html](http://www.forbes.com/2009/01/09/january-layoffs-4-es-lead-co_14_0109january09layoffs.html)

## Road to Recovery Job Losses Continue

### Soaring unemployment

7.6%

### Worst annual job losses

1945	2,750,000
2008	2,590,000
1982	2,130,000
2001	1,760,000
1949	1,510,000

Source: <http://money.cnn.com/>

## Road to Recovery Skyrocketing Federal Debt is a Threat

\*estimate. Source: Budget of the United States Government, Fiscal Year 2009, White House

## Road to Recovery Interest rates are as low as possible

Shaded areas indicate US recessions as determined by the NBER.  
2009 Federal Reserve Bank of St. Louis: [research.stlouisfed.org](http://research.stlouisfed.org)

## Recovery will be Slow Deficit Expected to Soar

### Off the Deep End

Total annual deficit or surplus as a share of GDP

Sources: Congressional Budget Office; Strategas Group  
Source: Wall Street Journal

## Recovery will be Slow GLOBAL ECONOMIC SLOWDOWN

	2010e	2009e	2008	2007
World	3.0	0.5	3.4	5.2
U.S.	1.1	-2.0	1.1	2.0
India	6.5	5.1	7.3	9.3
China	8.0	6.7	9.0	13.0

Source: IMF Survey, January 2009

## When will we hit bottom?



Finally... history will repeat itself  
1928-2007

	T-Bills	T-Bonds	Stocks
1928-2007	3.91%	5.26%	11.69%
1967-2007	6.05%	7.66%	11.98%
1997-2007	4.13%	6.71%	9.39%
1928-2007	\$2,081	\$5,007	\$178,150

**Better times will return !**