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**Presentation to:**



***Post-Crisis, Post-Carbon:***  
**Implications for the Utility Industry**

**November 2009**

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# Agenda

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**Utility Capital Requirements**

**U.S. Economy**

**Banking System**

**Bond Markets**

**Equity Markets**

**Cost of Capital Trends**

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# Capital Requirements

## U.S. Electric Utilities 2010-2030

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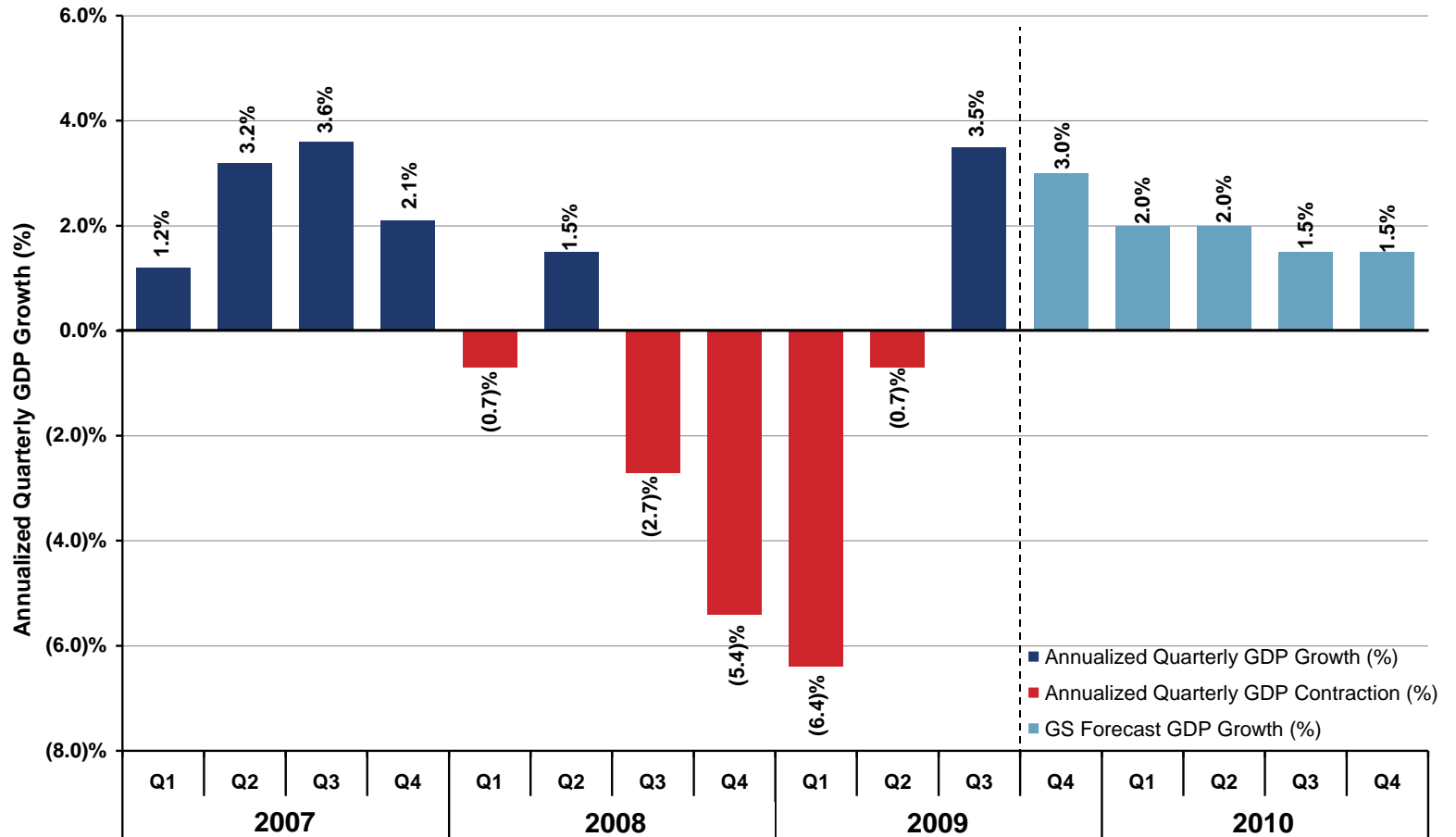
<b>\$ billions</b>	<b>Capital Investment through 2030</b>
\$ 500	Generation
600	Distribution
300	Transmission
100	Metering, SmartGrid, Demand Response

<b>\$ trillions</b>	<b>Capital Investment through 2050</b>
\$ 1.8	Total cost of CO <sub>2</sub> abatement

Source: Brattle Group, EPRI

# U.S. Gross Domestic Product

## Annualized Growth Rate, Quarterly Since 2007



Source: Goldman Sachs Economics Research

# Indexed Stock Price Performance

## U.S. Large Banks (BKX) vs. Dow 30 Industrials

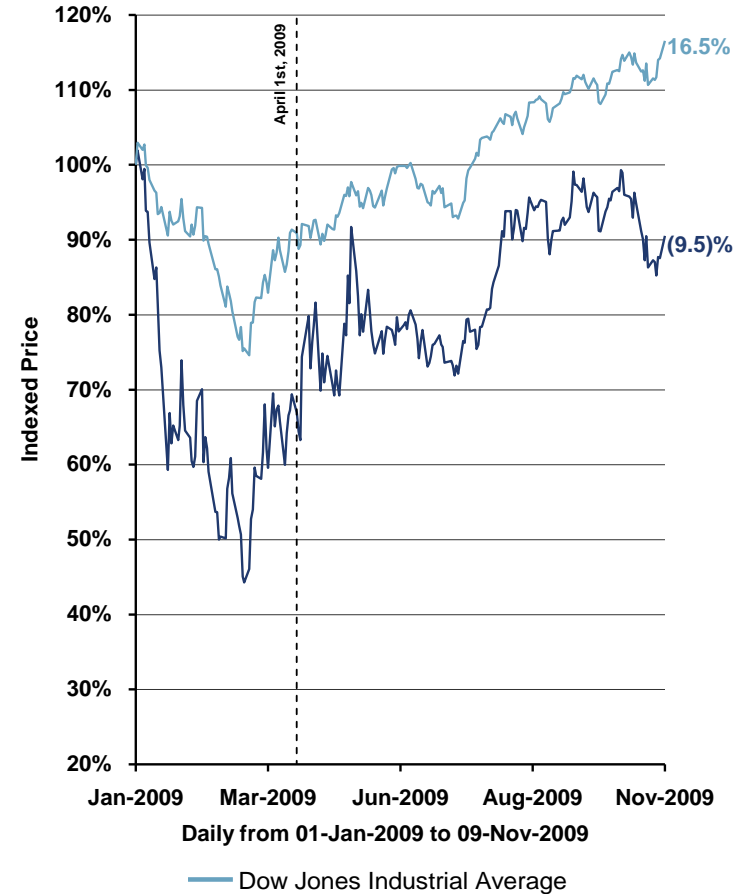
### BKX Components

BAC	MI
BBT	MTB
BK	NTRS
C	PBCT
CBSH	PNC
CFR	RF
CMA	SNV
COF	STI
FITB	STT
HBAN	USB
JPM	WFC
KEY	ZION

### Since July 1st, 2007



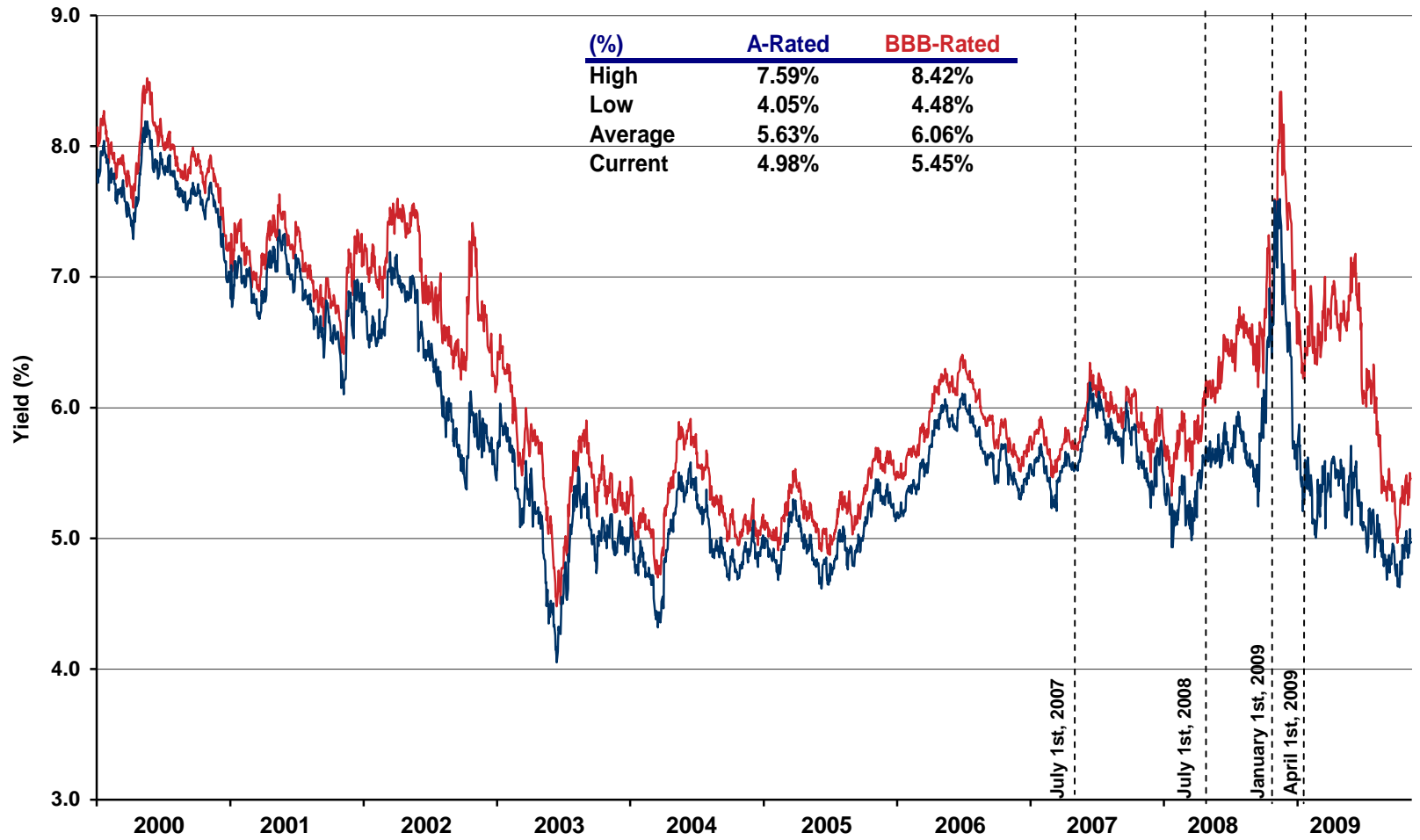
### Since January 1st, 2009



Source: Bloomberg as of 09-November-2009

# Utility 10-Year Bond Yields

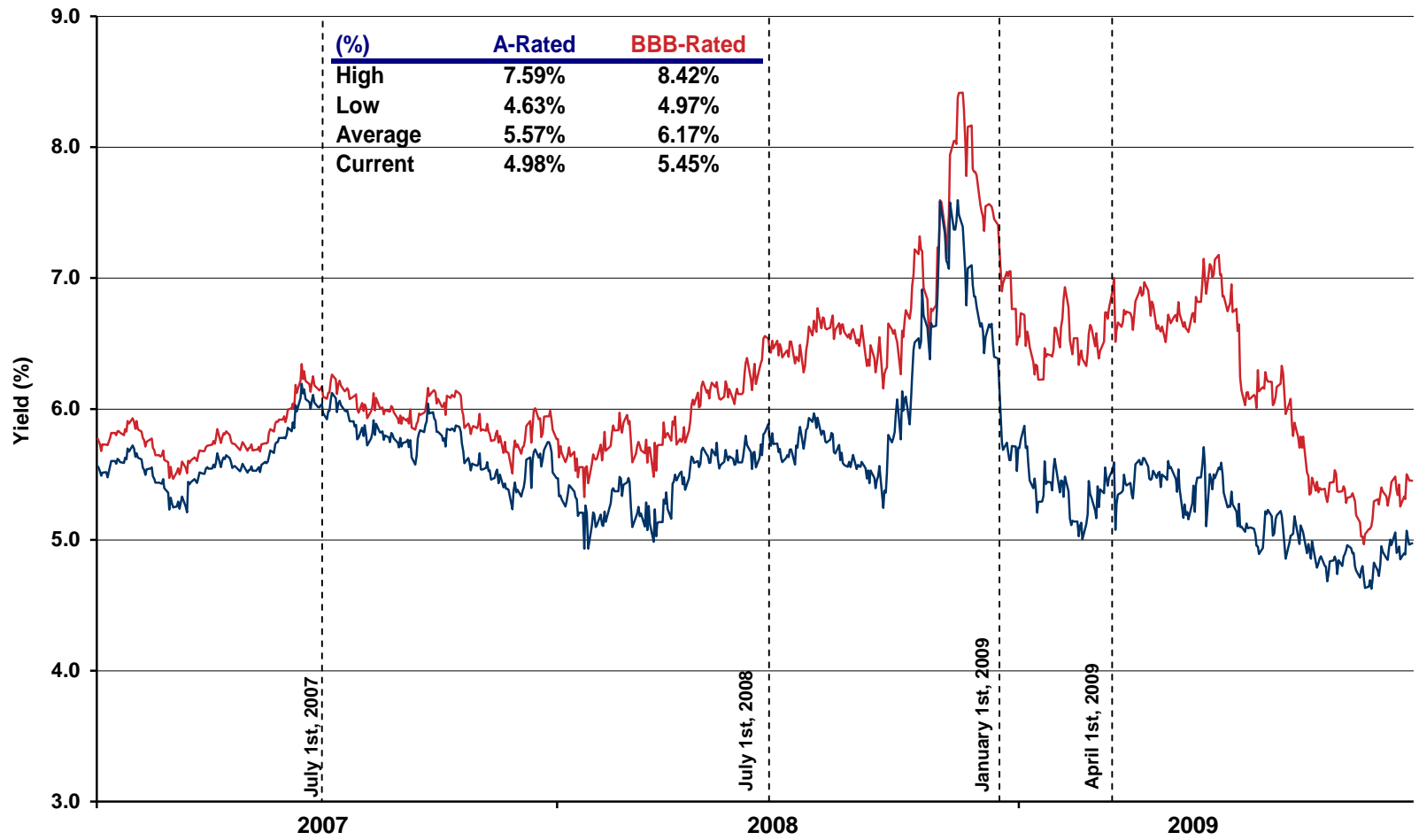
Since 2000



Source: Bloomberg

# Utility 10-Year Bond Yields

## Since 2007



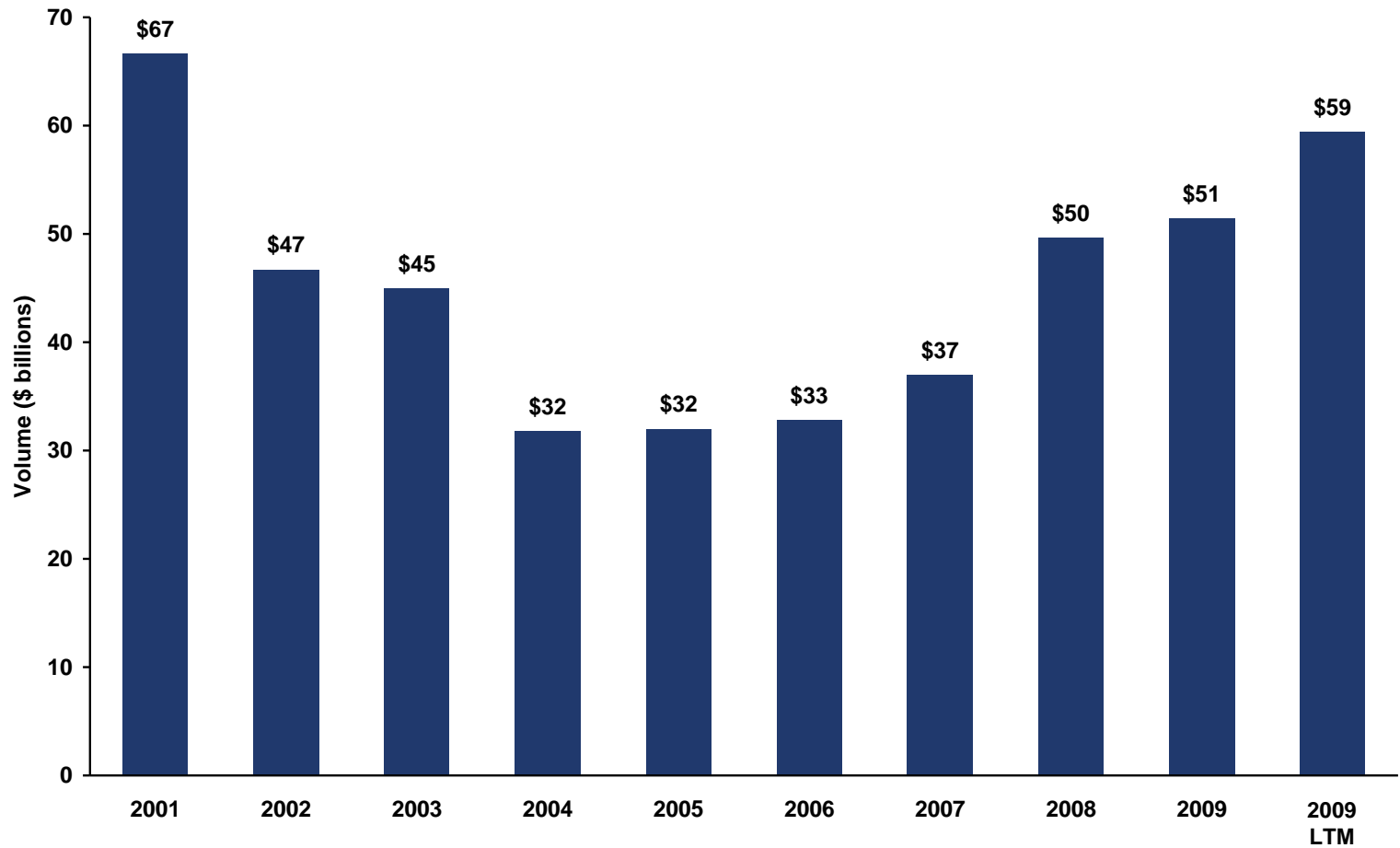
Source: Bloomberg

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# Utility & Power Bond Issuance

Annual New Issue Volume Since 2001

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Source: Thomson Reuters

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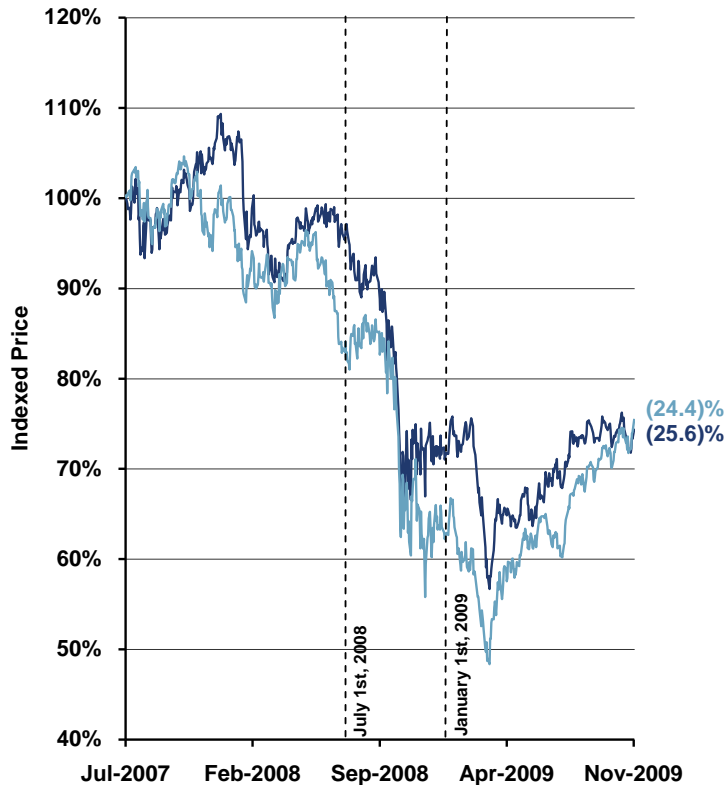
# Indexed Stock Price Performance

## Utility Sector Index (UTY) vs. Dow 30 Industrials

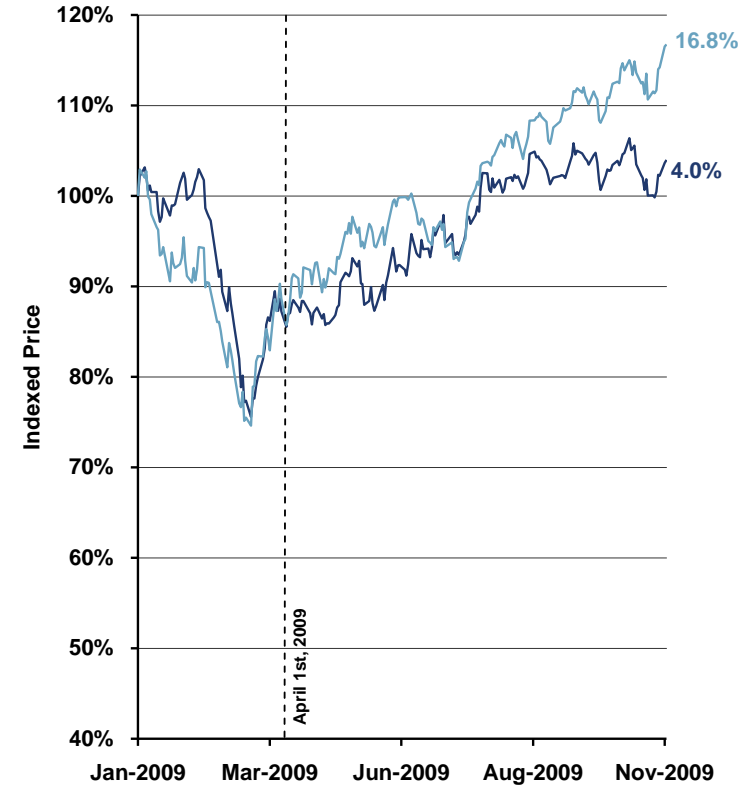
### UTY Components

AEE	ETR
AEP	EXC
AES	FE
CEG	FPL
CNP	NU
D	PCG
DTE	PEG
DUK	PGN
ED	SO
EIX	XEL

### Since July 1st, 2007



### Since January 1st, 2009



— Utility Sector Index

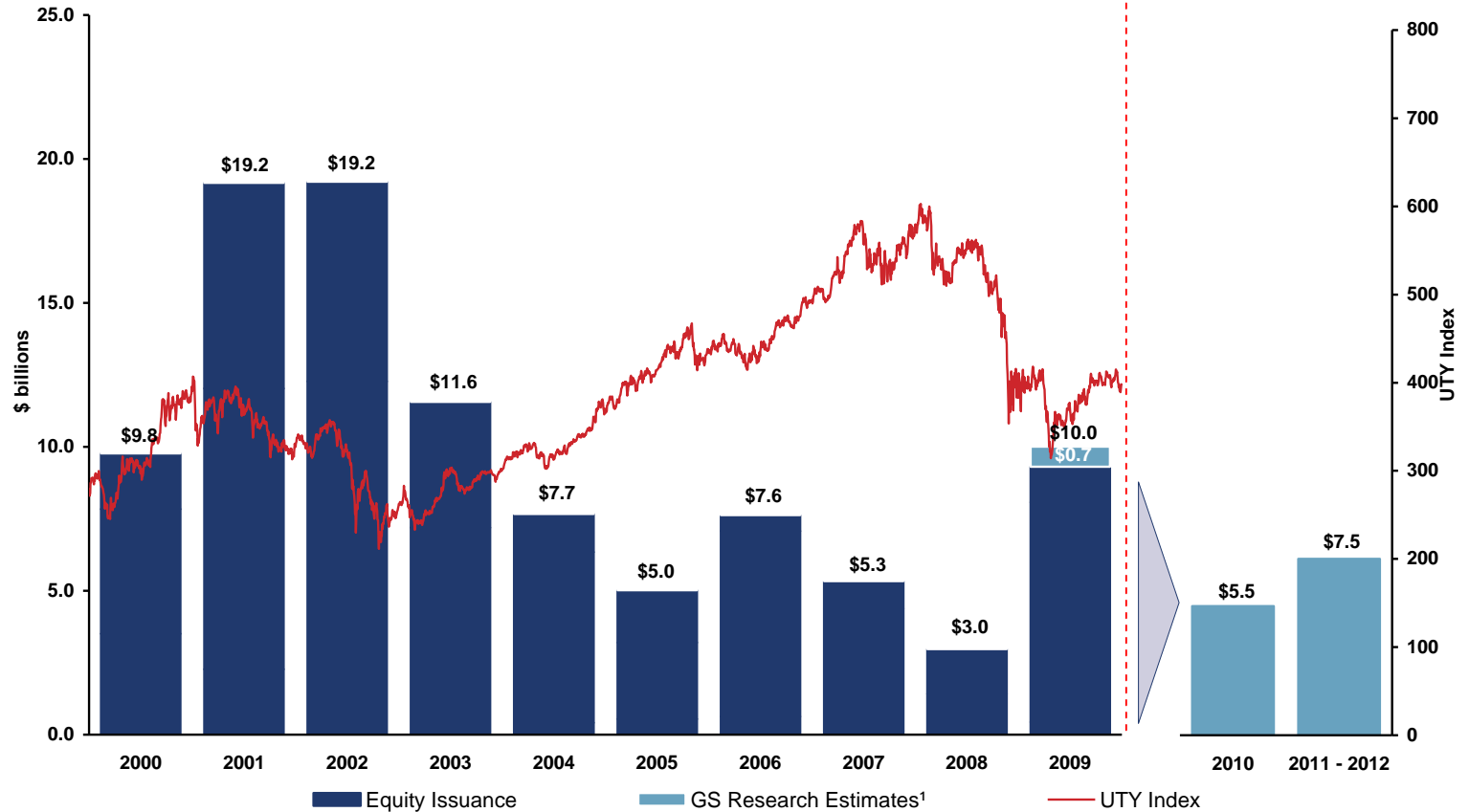
— Dow Jones Indus. Avg

Source: Bloomberg as of 09-November-2009

# Utility & Power Equity Issuance

Annual New Issue Volume Since 2000

Utility Issuance Over Time



Source: DeaLogic

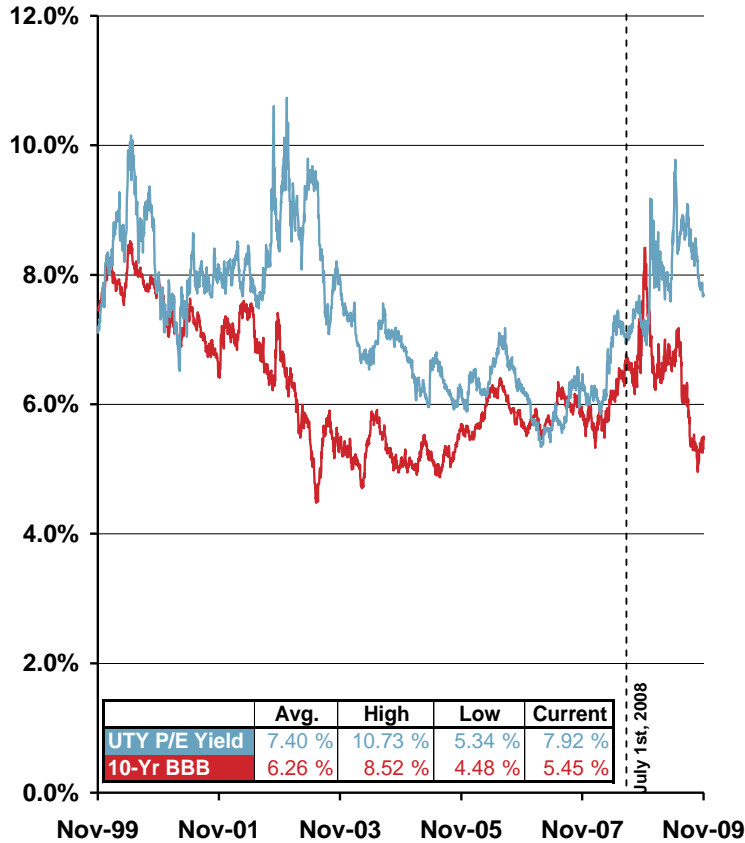
<sup>1</sup> As of June 2009.

# Utility P/E vs. Bond Yields

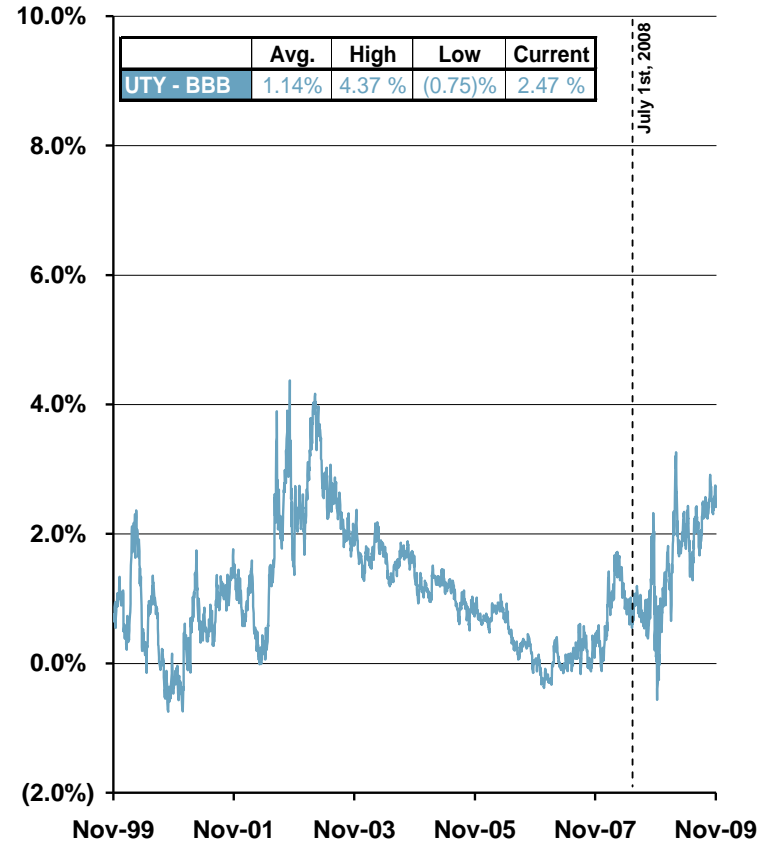
## UTY 10

AEE NU  
 AEP PCG  
 ED PGN  
 DTE SO  
 DUK XEL

## Utility P/E “Yield” vs. Utility BBB 10-Year Bonds



## Utility P/E “Yield” minus Utility BBB 10-Year



Source: Bloomberg as of 06-Nov-2009