Financial Planning and Investment Concepts in Utility Decision Making

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Major Utility Issues

- *Regulatory Requirements*
- *Infrastructure Upgrades*
- *Optimize Collection & Treatment Process*
- *Workforce Development*
- **Business Factors**

Business Factors

- *Asset Management*
- *CIP Planning*
- **Financial Planning**
- *Cost Analysis*
- *Rate Structure*

Traditional Financial Planning

- ***Demographics/ Service Area***
- ***Utility Performance***
- ***Management***
- ***Financial Analysis***

2009 Financial Planning Issues

- ***Economic Downturn - Recession***
- ***Control CIP Costs – Future Inflation***
- ***More Focus on Integrating CIP and Financial Planning***

Focus on Traditional Financial Planning

1

Demographics/Service Area

- Population Growth
- Income Growth
- Employers/Industry
- Fiscal Challenges

2

Utility Performance

- Sales Growth
- Plant Condition
- Operations
- Treatment Methods

3

Management

- Policies and Procedures
- Goals and Objectives
- Consistency
- Long Range Planning

4

Financial Analysis

- Operating History
- Operating Projections
- Ratio Analysis
- Debt & Asset Management

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Recession Considerations

- ***Credit Availability***
- ***Bond Yields***
- ***Local Economic Base***
- ***Local Housing Conditions***
- ***Impact of Future Inflation on CIP***

Credit Availability

- ***Investors:*** *Institutions cautious but lack liquidity*
  Retail buyers have limited assets
  Munis better then Treasuries per trade papers

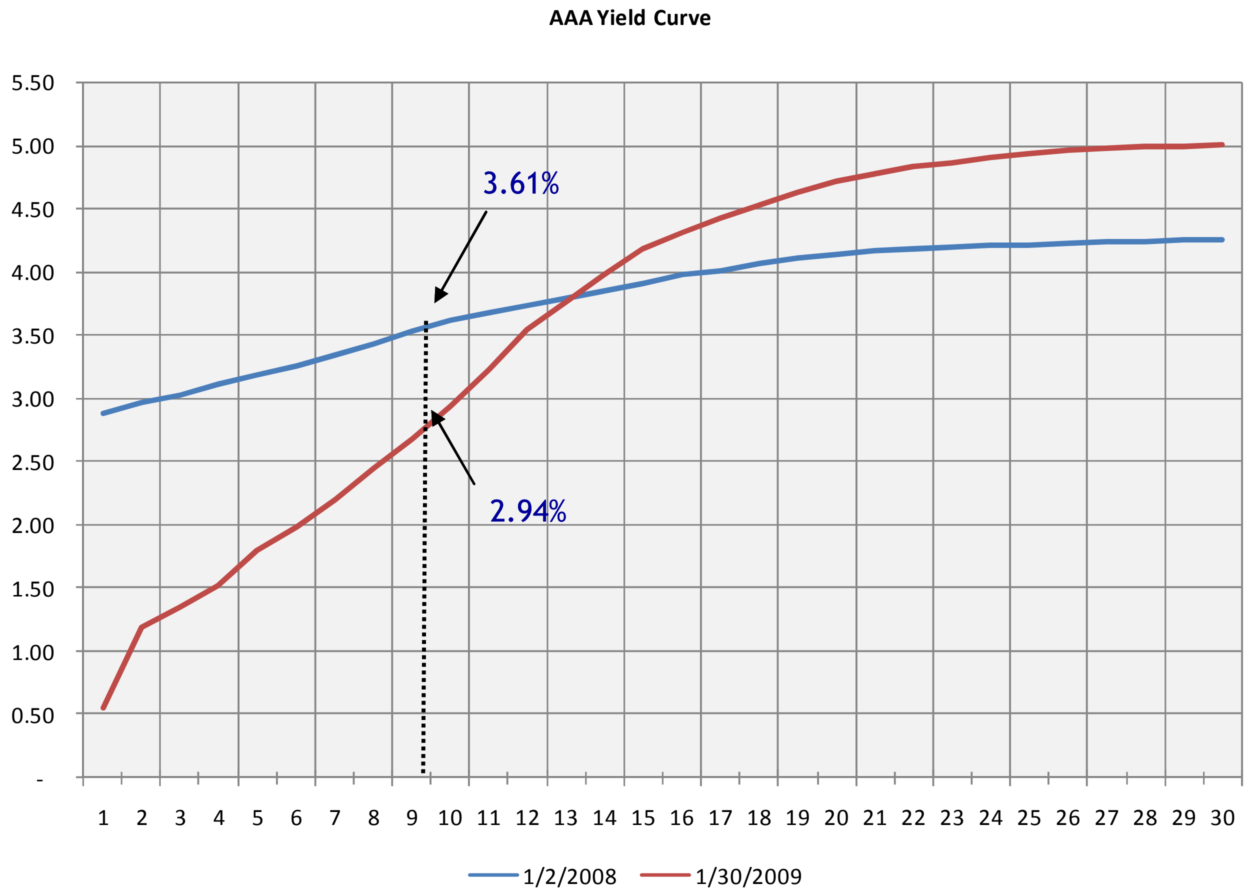
- ***Banks:*** *Who's left standing?*

- ***Credit Ratings:*** *The key to utility financing – Do you know your credit rating? Do you have a current rating?*

- ***Bond Insurance:*** *Part of the problem – Only a few firms remaining*

Bond Yields

- The Municipal Market Data (MMD) scale is a generic high grade municipal bond index scale produced by an independent company.
- The scale is produced on a daily basis and provides a "spread" for each investment-grade credit rating to the natural "AAA" scale.



Local Economic Base

- ***Industry Mix: Financials, Autos, Manufacturing suffering most***

- ***Size of Economy: Medium and Large areas have more options***
  unless it's a one industry economy

- ***Geographic Location: Midwest most affected by autos,***
  Northeast by financials & banks

- ***Workforce Skills/Training: Strong training capabilities offer better***
  hope for re-employment

Local Housing Conditions

- *Mortgage Foreclosure Hotspots: California, Nevada, Texas and Florida*
- *Vacant Houses = Lost Water/Wastewater Revenues*
- *How long will it take to work off housing inventory?*
- *Vacant houses impact local businesses and governments*

Impact of Future Inflation on CIP

- ***Strategic Focus Needed – Avoid the short term solution***

- ***Balance long term infrastructure costs against current financing costs***

- ***Keep your eye on the construction inflation index – remember the cost of steel, energy and concrete just six – eight months ago – and expect more of the same after the bailout and the market corrects itself***

Traditional Financial Considerations

- ***Operating Ratio Analysis***

- ***Debt & Asset Management***

Typical Ratio Analysis

Liquidity	
Current Ratio	=(current assets)/(current liabilities)
Days of Liquidity	=(current assets)/(op. expense/365)
Days of Cash Funded Operations	=(cash)/(op. expense/365)
Days of Funded Operations	=(cash + other available assets)/(op. expense/365)
Capitalization	
Total Liabilities/Total Equity	=(total liabilities)/(total equity)
LT Debt/Plant	=(long-term debt)/(PP&E)
Debt/Capitalization	=(LT debt)/(LT debt + equity)
EBITDA/Interest	=EBITDA/(interest expense)
EBIT/Interest	=EBIT/(interest expense)
Debt Ratio	=(LT debt + accr. int. - DSRF&DSF)/[(fxd as. - depr) + (net curr. as.)]
Debt Service Coverage	
Debt Service Coverage	=(EBIT)/(debt service) x
Debt Service Coverage Max Payment	=(EBIT)/(max debt service) x
Debt Service Safety Margin	=1-[(O&M exp. + P&I)/(op. rev. + non-op.rev.)]
FFO/Long-term Debt	=EBITDA/(LT debt)
FFO/Capital Expenditures	=EBITDA/(capital expenditures)
Return on Net Utility Plant	=Net Income- IRR-CFI/Net utility plant
Earnings	
Sales Growth	
Operating Margin	=(EBITDA)/(op. revenue)
Operating Ratio	=(o&m expenses)/(op. revenue)
Net Profit Margin	=(net income)/(op. revenue)
Net Take Down	=1-[(O&M exp)/(op. rev. + non-op. rev.)]
Transfers or Dividend	
Dividend Yield	=(dividends or transfers paid)/(total equity)
Payout Ratio	=(dividends or transfers paid)/(EBIT)
Transfers/Operating Revenue	=(WILOT + Dividend)/(Op. rev.)
Total Transfers Ratio	=(Water in lieu of taxes + Dividend) / Operating Revenue
Dividend Yield	= Dividends Paid/Stockholders Equity Eligible for Return
Dividend Payout Ratio	= Dividends Paid/Net Income - IRR - CFI

Debt & Asset Management

- ***Debt Policies – Coverage ratios, types of instruments allowed by law***

- ***Debt & Capital Planning – CIP costs vs Financing Cost***

- ***Investment Policies – Are you limited to CDs & Governments?***

Market Conditions Affecting Issuers

- ***Timeline***
- ***Banking Upheaval***
- ***Staffing Changes***
- ***Distribution of Bonds***
- ***Insurers***
- ***Interest Impacts***

2008 Timeline of Events

Jan
- Ambac downgraded to AA
- FOMC lowers Fed Funds from 4.25% to 3.00%

Feb
- XL downgraded to A-
- FGIC downgraded to A

Mar
- CIFG downgraded to A1
- XL, FGIC downgraded to BB
- FOMC lowers Fed Funds from 3.00% to 2.25%

Apr
- Berkshire Hathaway offers bond insurance
- MBIA downgraded to AA
- FOMC lowers Fed Funds from 2.25% to 2.00%

May
- UBS exits Muni Business
- CIFG downgraded to Ba2

June
- Ambac downgraded to Aa3
- MBIA downgraded to A2
- Bear Stearns acquired by JP Morgan
- Consumer Confidence 56%. Lowest since 1980

July
- Crude Oil hits all-time high $147/bbl.
- FSA, Assured Guaranty on review for downgrade / negative outlook

Aug
- Inflation = 5.6%
- US Home Prices down 15% YOY

Sept
- US Treasury Bills (3-mo.) 0.23%, lowest level since 1954)
- Bank of America announces it will buy Merrill Lynch
- Feds bail out AIG with $85 billion loan @ 11%
- Crude Oil down to $91/bbl
- Barclays announces it will buy approximately 1/2 of Lehman Brothers

Oct
- FOMC lowers Fed Funds from 2.00% to 1.50%
- Government introduces the TARP

Nov/Dec
- FSA & Assured announce merger
- FSA & Assured downgraded to Aa3; Aa2 respectively
- Citigroup receives an additional $20 billion
- Crude Oil down to $52/bbl

Market Upheaval Continues

The financial markets continue to face an evolving crisis. The chart below shows the top municipal bond underwriters for 2007 and the effects of the financial crisis on those firms.

2007 Municipal Bond Rankings
Senior Managed Bond Issues

Book Runner	Par Amount (US$ mil)	Rank	Number of Issues
Citi	61,861.1	1	603
Merrill Lynch & Co	47,927.1	2	423
UBS Securities LLC	36,253.0	3	613
Goldman Sachs & Co	28,003.8	4	182
J P Morgan Securities Inc	25,566.3	5	338
Morgan Stanley	25,495.1	6	255
Lehman Brothers	24,803.9	7	250
Bear Stearns & Co	24,629.8	8	133
Banc of America Securities LLC	17,051.1	9	402
RBC Capital Markets	14,307.8	10	568
Morgan Keegan & Co Inc	**11,055.4**	**11**	**556**
Wachovia Securities	10,684.4	12	462

Nov '08 – Citi received an additional $20 billion bailout outside of the TARP from the government

Sep '08 - Merrill Lynch announced they are being purchased by Bank of America

June '08 - UBS exited the municipal bond business

Sep '08 – Goldman Sachs and Morgan Stanley announce plans to convert to Bank Holding Companies

Sep '08 - Lehman Brothers announced that they will declare bankruptcy; certain divisions are purchased by Barclays

Mar '08 - Bear Stearns was purchased by JP Morgan

Sep '08 – Wells Fargo to purchase Wachovia

Staffing Changes at Tax-Exempt Banking

Public Finance Banking Staff				
Bank	Spring 2008	Known Staff Changes	Dec-08	% Change
Citibank	164	(33)	131	-20%
Merrill Lynch	112	18	130	16%
UBS	143	(143)	-	-100%
Goldman Sachs	110	(30)	80	-27%
JPMorgan	164	(25)	139	-15%
Morgan Stanley	80	unknown	80	0%
Lehman Brothers	83	- bought by Barclays -		
Bear Stearns	79	(79)	-	-100%
Banc of America	105	unknown	105	0%
RBC Capital Mark	172	unknown	172	0%
Morgan Keegan	72	15	87	21%
Wachovia	166	- substantially decreasing -		

Source: Redbook; *The Bond Buyer* artides

What Do These Changes Mean for Issuers?

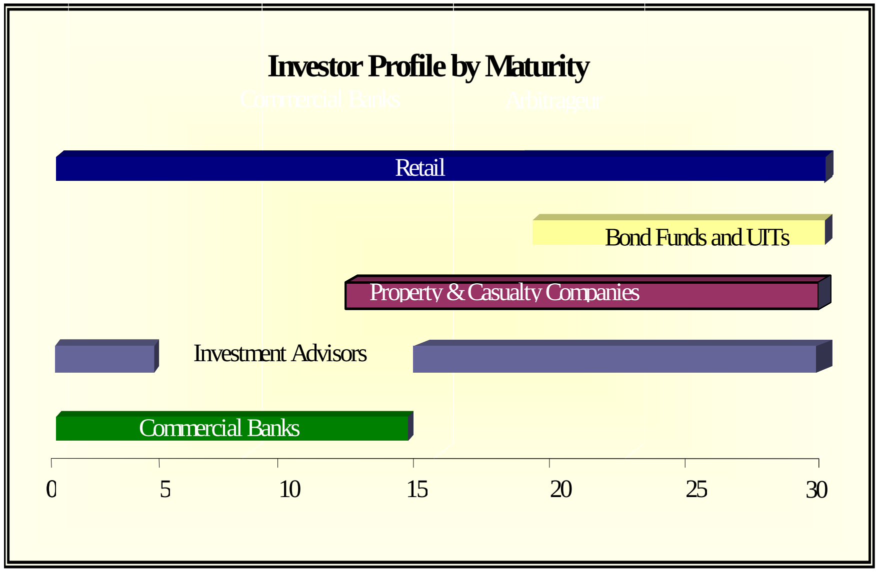
- **Market players have changed**
  - **Look to historical street firms to support large issuers and large transactions**
  - **Look to large regionals to step into the gap left by historical street firms**
  - **Look to local regionals to increase market presence**

- **Transaction teams may change**
  - **Potentially larger underwriting teams as issuers gain comfort with capabilities of "new" team members**

- **Issuers should focus on fundamentals**
  - **Distribution capabilities of firms**
  - **Capital commitments to the municipal market place**

Distribution – Investor Types

- Traditional Investors
  - Mom & Pop Retail
  - Mutual Funds
  - Unit Investment Trusts (UIT)
  - Insurance Companies
  - Large Institutions/Banks



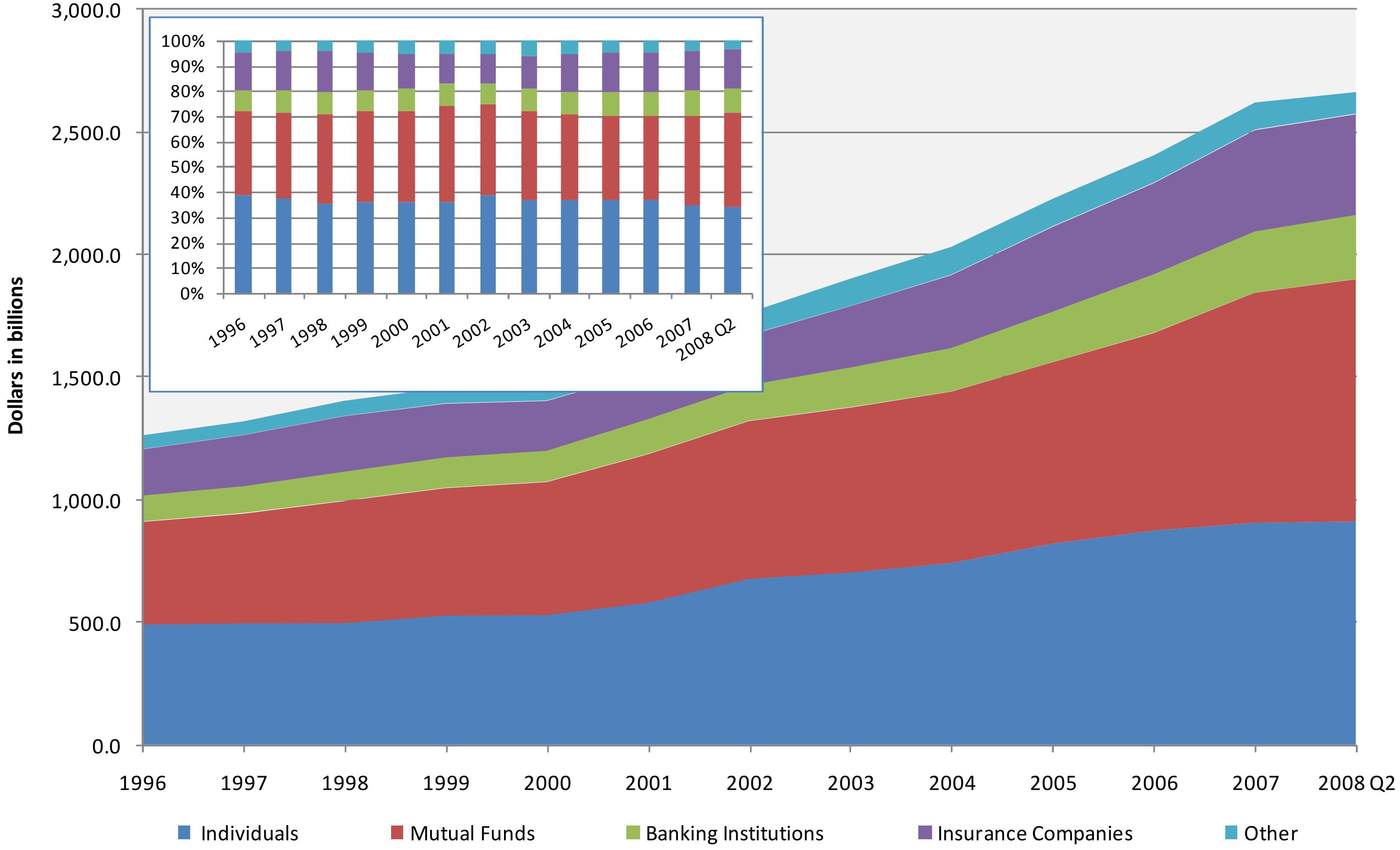
- Non-Traditional Investors
  - Arbitrage Accounts
  - Tender Option Bond programs (TOBs)
  - Cross Over Buyers

Distribution – Investor Tiers

- **We often discuss investor classes in terms of "Tiers." Traditional investors are tiered as follows:**

	Tier 1	Tier 2 & 3		Retail	
Buyers	Mutual Finds Unit Investment Trusts Arbitrage Accounts TOBs	Medium and small sized Insurance Companies Institutions		Mom & Pop Bank Trust Departments	
Characteristics		**Tier 2**	**Tier 3**	**High Net Worth Sales**	**Traditional Retail**
	Assets over $1 billion	Assets between $500 million to $1 billion	Assets between $100 - 500 million	Relatively small trades (under $5 million)	Small trades
	Buy large blocks	Buy large blocks	Buy and hold accounts	Sophisticated investors	Price insensitive
	Very price sensitive	Moderately price sensitive			
Coverage					
Morgan Keegan	**20 Sales Professionals**	**125 Dedicated Sales Professionals**		**1,250 Financial Advisors**	
Other Street Firms	**8 - 12 Sales Professionals**	**Typically 0 dedicated; considered Retail**		**Varies**	

Holders of Municipal Debt



Capital Commitments to Municipal Markets

- Issuers often ask about an underwriter's capital position. There are two components to capital – regulatory net capital and excess net capital.
    - Regulatory Net Capital is the required amount of capital an underwriter must have on hand to fund its assets as determined by SEC Rule 15c3-1.
    - Excess Net Capital is additional capital maintained by the underwriting firm to support its activities.
- Capital discussions must include a discussion about the underwriting firm's leverage.
    - Leverage is difficult to determine as it fluctuates daily based on inventory.
    - A basic measure is assets/equity.
    - A common measure is inventory/total capital.

Bank	Regulatory Net Capital	Assets to Equity Ratio†
Citi*	7,994	15.40
Merrill Lynch & Co	17,290	27.78
J P Morgan Securities Inc*	2,212	15.44
Morgan Stanley	4,498	29.89
Goldman Sachs & Co	NA	24.28
Lehman Brothers	4,982	24.36
UBS Securities LLC	3,756	46.92
Banc of America Securities LLC*	NA	10.55
RBC Capital Markets	323	24.14
Wachovia Securities*	1,492	10.81
Morgan Keegan	**391**	**2.43**

† Ratio calculated by dividing Total Assets by Total Equity
*Ratios shown are for the banks' holding company. Regions leverage ratio for 2nd Quarter is 7.33
Source: SIFMA Yearbook; WSJ

- Municipal issuers care about an underwriting firm's commitment to the municipal marketplace.
    - Impossible to determine.

Status of Municipal Bond Insurance

- In the past year the municipal market has seen significant disruption due to the rating agencies' rating outlooks and the downgrades of the municipal bond insurance companies.
- Of the bond insurance companies operating in 2007, every one has either been downgraded or put on negative credit watch by at least one of the rating agencies (Berkshire Hathaway "BHAC" was formed in 2008).
- These downgrades have effectively prevented six of the bond insurers from insuring new issues and jeopardized their long-term viability.
- Because the market still has a demand for fixed rate bonds, there is a potential for new bond insurance companies to enter the market in the future.
- Assured Guaranty and Financial Security Assurance were most recently downgraded by Moody's

Current Insurer Ratings (February 2, 2009):

Bond Insurer Ratings Grid

As of 1/30/2009

	RATING ISSUED BY	Ambac	Assured Guaranty	CIFG	FGIC	FSA	MBIA	BHAC	XLCA (Syncora)	Radian
Ratings	Moodys	Baa1	Aa2	Ba3	Caa1	Aa3	Baa1	Aaa	Caa1	A3
	S&P	A	AAA	BB	CCC	AAA	AA	AAA	CC	BBB+
	Fitch	NR	AAA	NR	NR	AAA	NR	AAA	NR	NR
Outlook/Watch	Moodys	DEVELOP	STABLE	DEVELOP	NEG	DEVELOP	DEVELOP	STABLE	DEV WATCH	NEG WATCH
	S&P	NEG	STABLE	-	NEG	NEG WATCH	NEG	STABLE	NEG	NEG WATCH
	Fitch	-	STABLE	-	-	NEG WATCH	-	STABLE	-	-

Municipal Market Data

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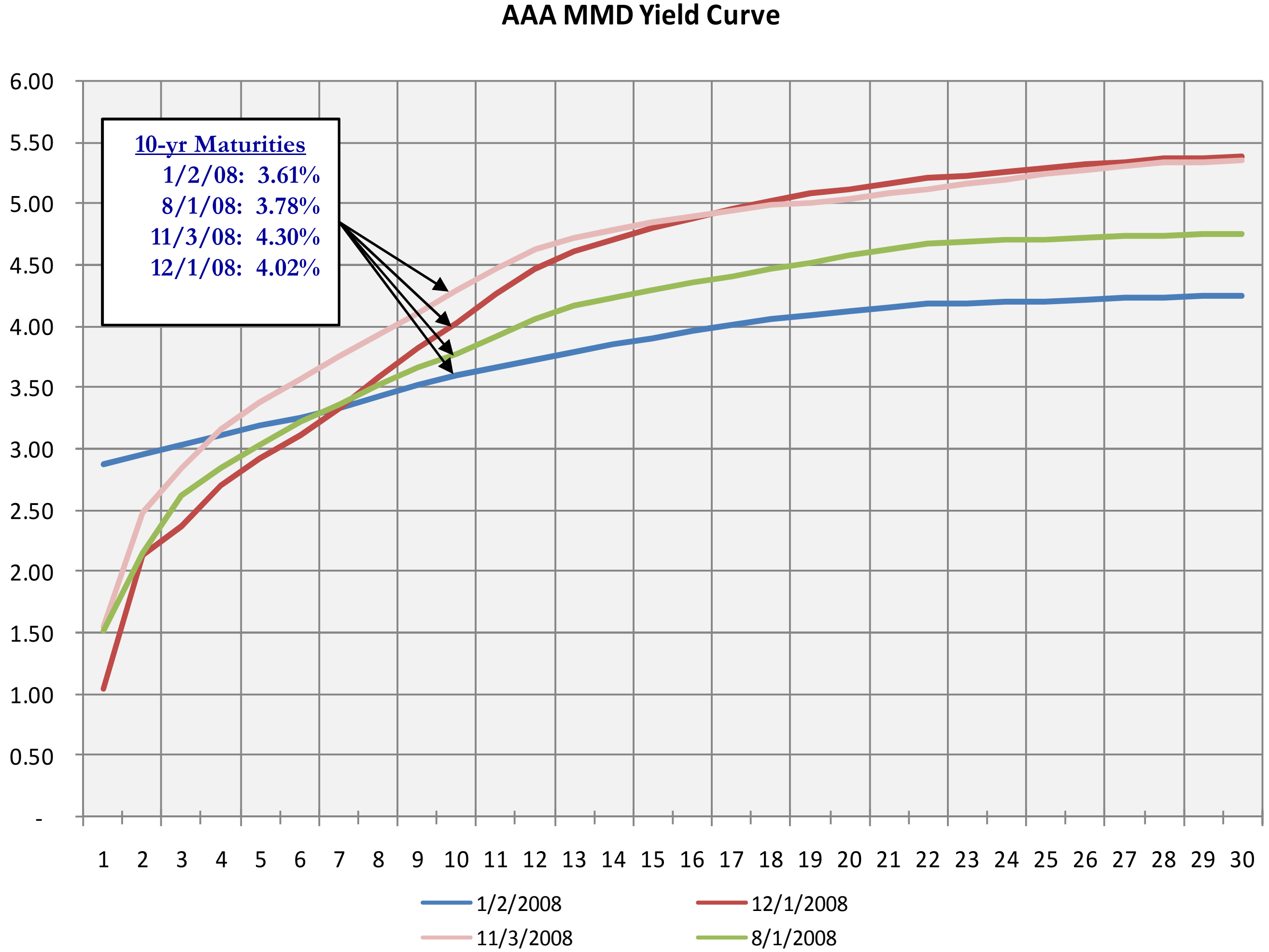
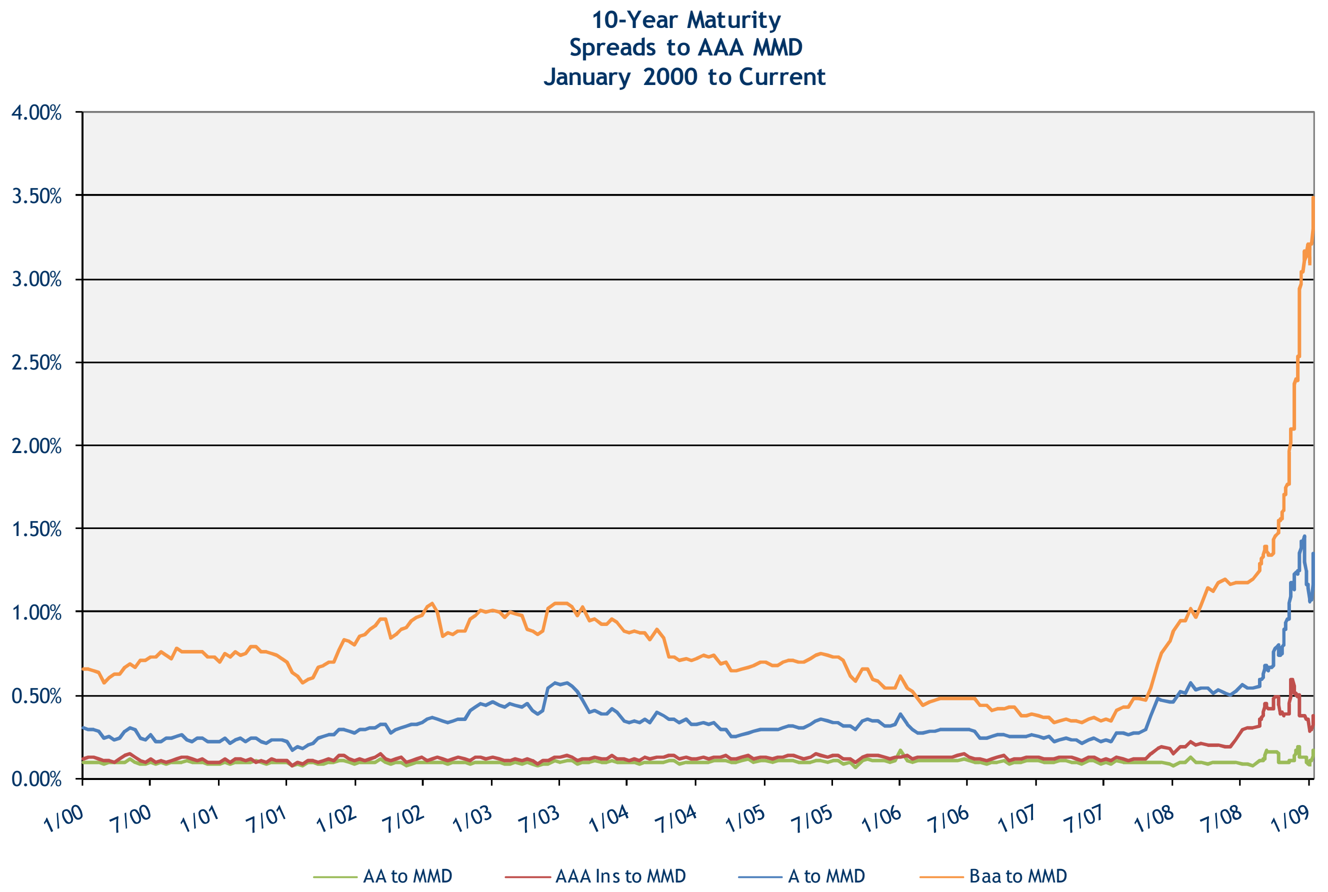


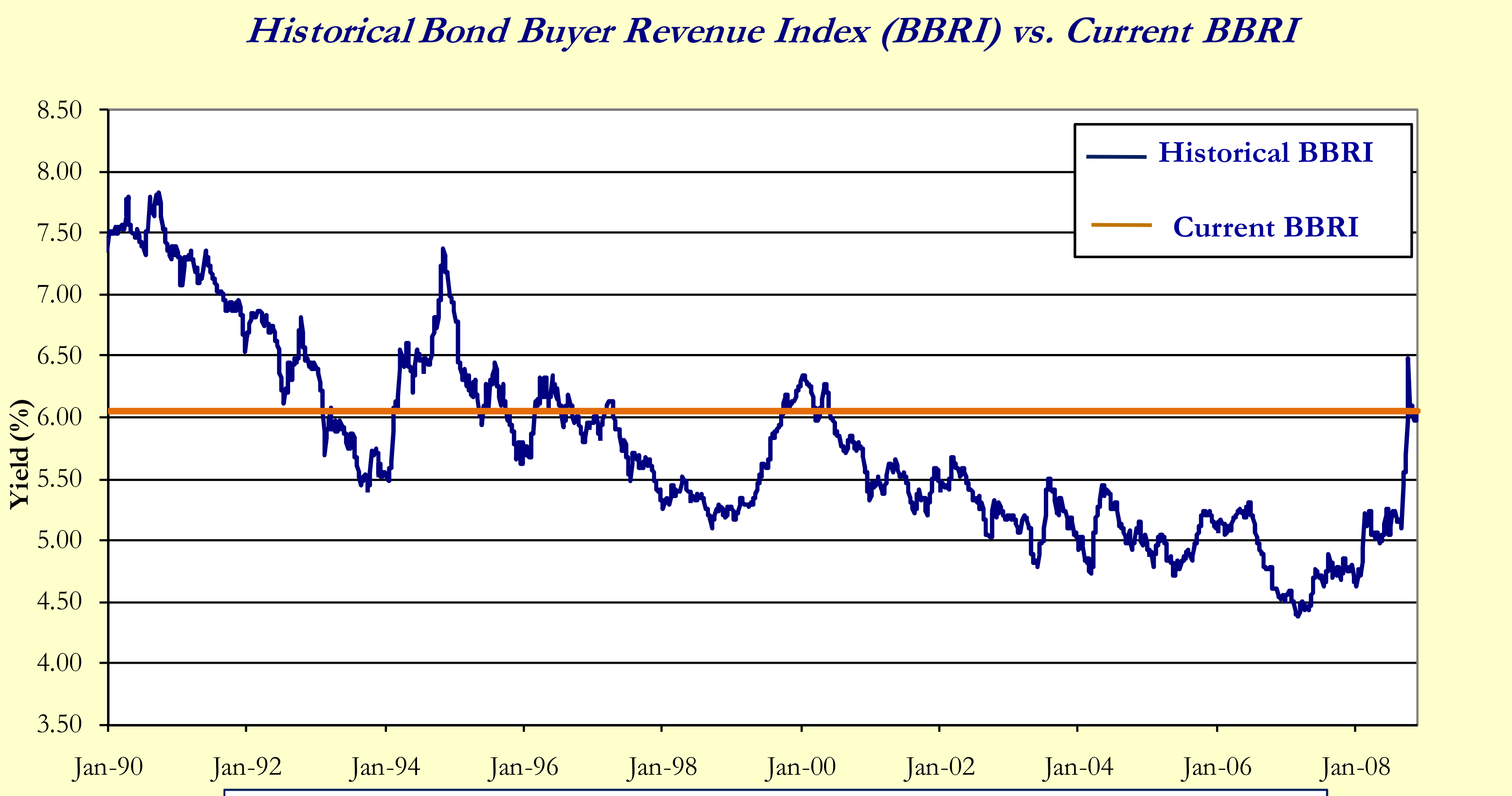
Historical and Current Credit Quality Spreads

- **Because of fewer insurance options, fewer dealers are bidding on bonds and there is an overall reduction in liquidity. As a result, interest rates have increased for issuers at all underlying ratings.**
- **Spreads have also begun to increase for AA rated bond issues, and insurance has decreased in value as AAA insured spreads have widened significantly.**



Current vs. Historical Bond Buyer Revenue Index

- **Bond Buyer Revenue Index - Indicator published on a periodic basis by *The Bond Buyer* showing an estimation of the yield that would be offered on 20-year general obligation bonds with a composite rating of approximately "A."**



30.36% of the time rates have been higher than the current rate of 6.06%

69.10% of the time rates have been lower than the current rate of 6.06%

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