Municipal Finance, Capital Costs and Credit Ratings: More Important Now Than Ever

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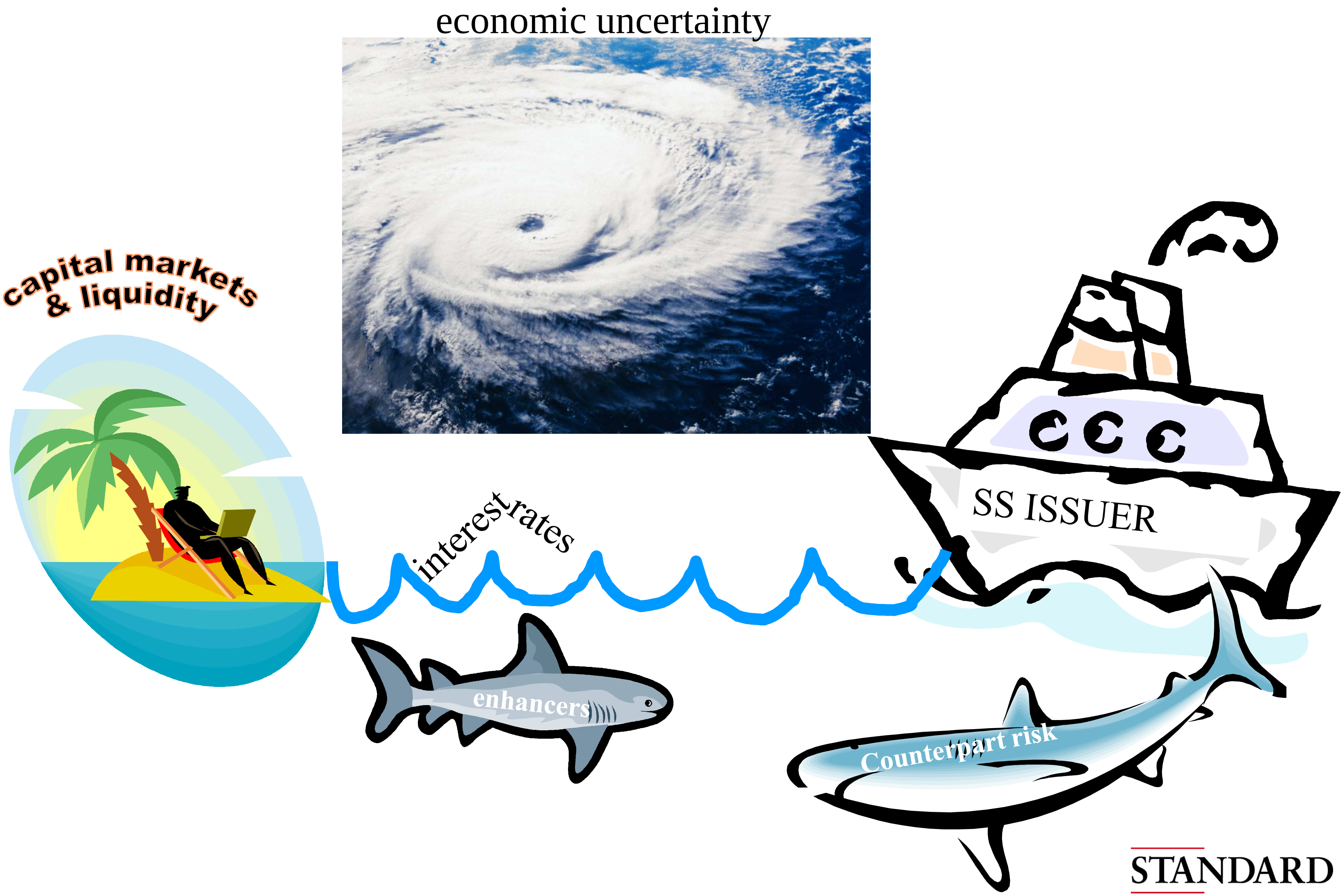
Brave New World? – A Lot to Navigate!



So Why Is All This Important?

- **It's a tough time to be selling debt right now!**
  - Municipal bond insurance
  - Liquidity providers/counterpart credit quality
    - Standby liquidity
    - Interest rate swaps
  - Interest rate risk
    - Commercial paper
    - Auction rate securities
  - Contingencies for construction sector inflation
    - Ripple effects of price of oil
    - Concrete
    - Steel
    - Labor
- **But yet it's likely your utility still has capital requirements it wants or needs to fund**

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Municipal Bond Insurance

Selected Monoline Bond Insurer Ratings/Outlooks (as of Dec 15, 2008)

• **AMBAC Assurance Corp**	**A/Negative**
• **Assured Guarantee Corp**	**AAA/Stable**
• **Berkshire Hathaway Assurance Corp**	**AAA/Stable**
• **CIFG Guaranty**	**B/Watch Developing**
• **FGIC Corp.**	**CC/Negative**
• **FSA Insurance Co.**	**AAA/Watch Negative**
• **MBIA Insurance Co.**	**AA/Negative**
• **Radian Asset Assurance Inc.**	**BBB+/Watch Negative**
• **Syncora Guarantee Inc.**	**B/Watch Developing**

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OK. So What? How Could Those Affect My Utility?

- **SEC Rule 2a-7: institutional investors (money market funds) are currently restricted to buying only highly rated ('AA-' or higher) securities**
  - When you buy insurance on your bonds, the bond rating becomes enhanced by the rating of the insurance company, even if you don't have an underlying rating
    - "Underlying" = based solely on the utility's general credit characteristics
  - Bond insurance was very common when monoline bond insurers were primarily all rated 'AAA' so many more bonds were 2a-7 eligible
  - What if now your utility is not rated AA- or higher, or not rated at all?
    - Capital market access?
    - Do you replace the existing bond insurer on your outstanding debt?
    - Is it economic for you to pursue bond insurance on future debt issuances?
    - Impact to cost of borrowing?

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How Else Can It Affect My Utility?

- **Debt service reserve fund**
  - Most municipal utility revenue-secured bonds that we see have legal provisions that include some type of DSR
  - DSR intended as supplemental liquidity in the event that pledged revenues within a fiscal year are insufficient for the current principal/interest payment
  - It is also very common for the DSR requirement to be funded in a variety of ways. The issuer, for example, may choose to:
    - Fund DSR with a portion of bond proceeds
    - Fund DSR over time (often equal monthly payments over 1 to 5 years)
    - Satisfy the requirement using a surety policy via a bond insurer
  - So what happens if the surety bond provider gets downgraded?
    - Depends on what the bond covenants say
      - May require surety replacement, immediate cash funding, or possibly even no action
      - Therefore, there could possibly be an impact to cash flow
  - S&P does not provide advice on how to structure your deal

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More Potential Impacts

- **Variable Rate Debt 101**
  - Some issuers choose to do variable rate debt because the short-term interest rates may create a more favorable cost of borrowing
  - In US Public Finance (USPF), we commonly see variable rate bonds accompanied by some kind of agreement with a financial institution to provide standby liquidity to the variable rate securities
  - This standby liquidity agreement frees up the utility's working capital and is intended to allow the process to function "normally"
  - 2008 not a "normal" year
    - Liquidity counterpart downgrades
    - Bank bonds
    - Rating triggers

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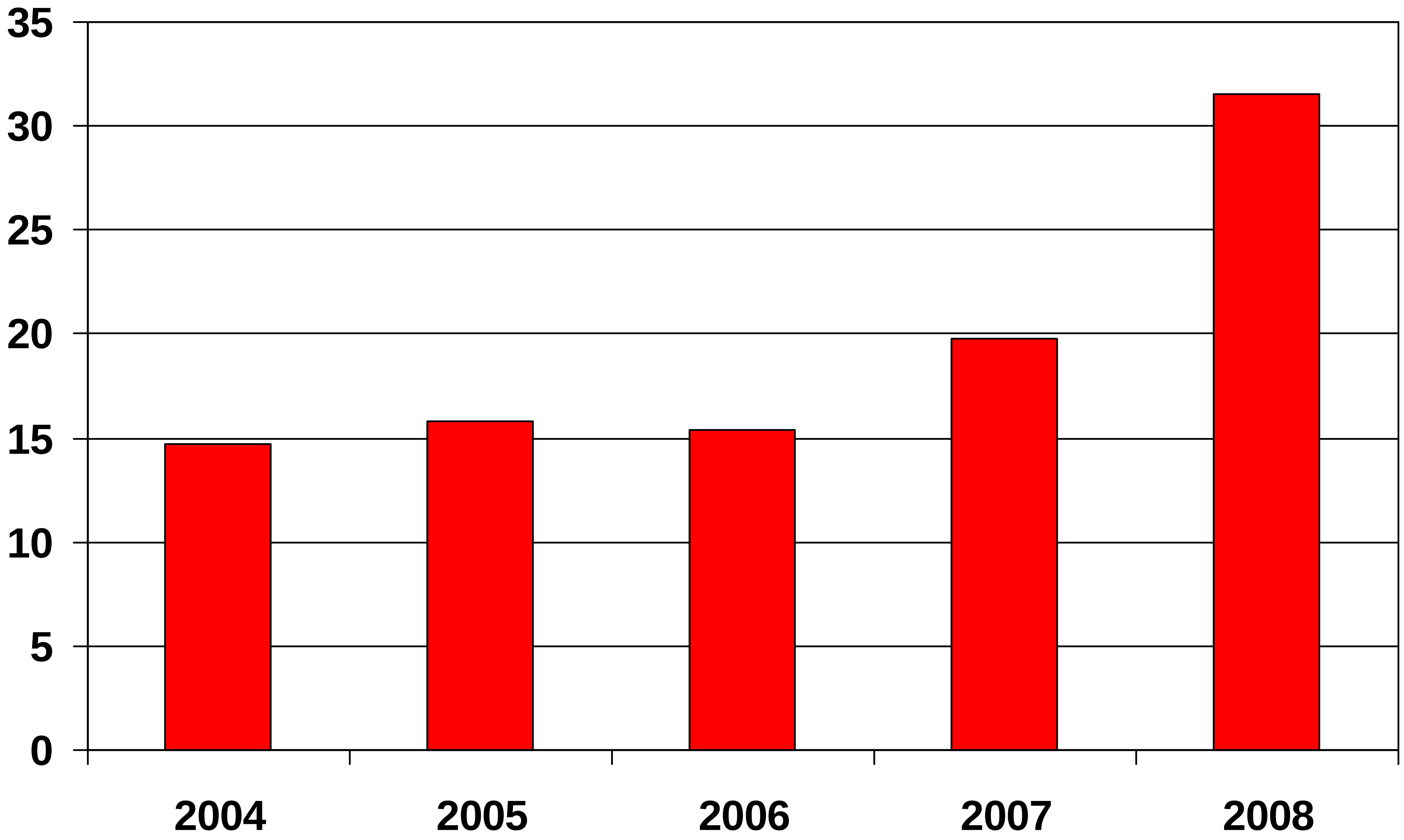
Variable Rate Debt as a Percent of Total Municipal Issuance



Source: Thompson Financial

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Interest Rate Swaps

- **A type of financial derivative that some USPF issuers choose to use to hedge interest rate risk of variable rate debt**
- **We most commonly see USPF issuers enter into an agreement with a swap counterpart in which the variable rate bonds are synthetically 'fixed,' sometimes with the issuer receiving an up-front lump sum payment**
- **What we saw in 2008:**
  – Counterpart downgrades/rating triggers on existing swaps
  – Mark to market on existing swaps were unfavorable (if the agreement was terminated today, it would be out of the money)
  – Fewer new swap agreements

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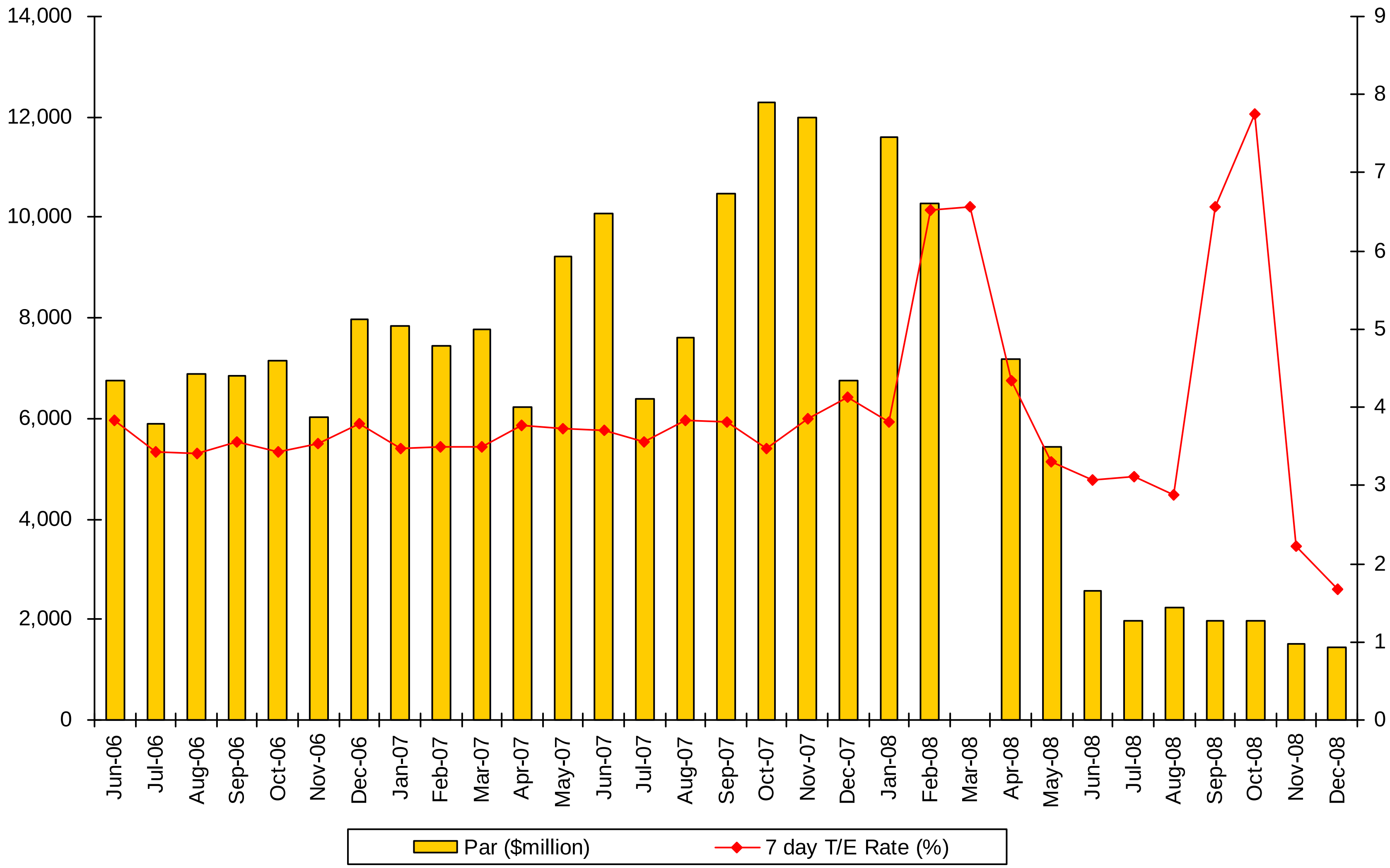
Selected Financial Institutions: Ratings Then vs. Now

Financial Institution	As of January 9, 2009	December 31, 2005
Bank of America N.A.	A+/Negative/A-1	AA/Stable/A-1+
Merrill Lynch & Co.		A+/Stable/A-1
Citigroup Inc.	A/Stable/A-1	AA-/Stable/A-1+
Dexia Bank S.A.	A/Stable/A-1	AA/Stable/A-1+
Depfa Bank PCL	BBB/Developing/A-2	AA-/Stable/A-1+
Fifth Third Bank	A-/Negative/A-2	AA-/Stable/A-1+
JP Morgan Chase & Co.	A+/Negative/A-1	A+/Stable/A-1
Bear Stearns		A/Positive/A-1
WAMU		A-/Stable/A-2
Lehman Bros. Inc.		AA-/Stable/A-1+
Regions Bank	A/Negative/A-1	A+/Stable/A-1
SunTrust Bank	A+/Negative/A-1	AA-/Stable/A-1+
UBS AG	A+/Stable/A-1	AA+/Stable/A-1+
Wells Fargo & Co.	AA/Negative/A-1+	AA-/Stable/A-1+
Wachovia Corp.		A+/Stable/A-1

SIFMA Auction Rate Securities Index



Source: http://www.sifma.org/research/statistics/statistics.html

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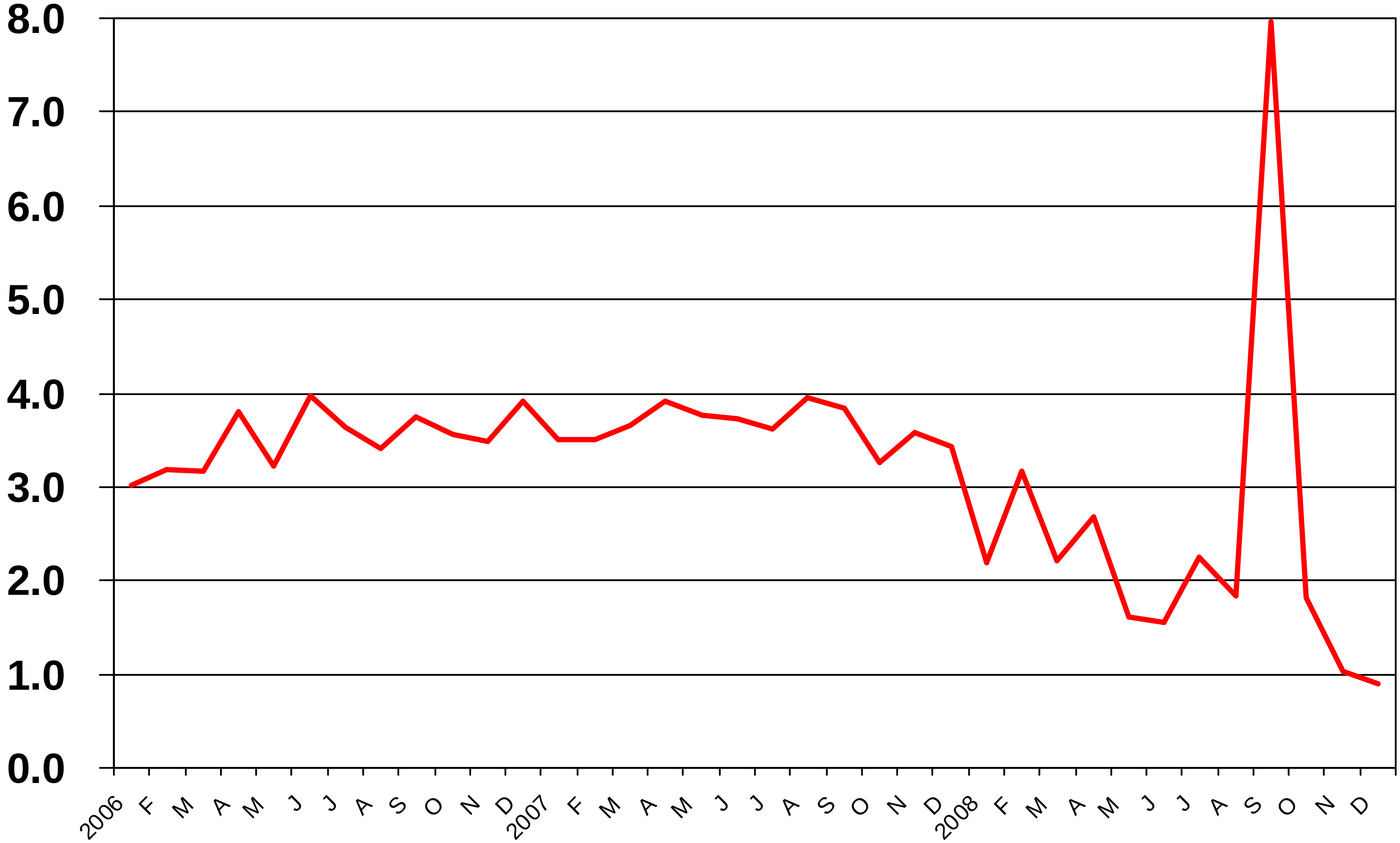
Tax Exempt Commercial Paper Interest Rates



Source: http://www.sifma.org/research/statistics/statistics.html

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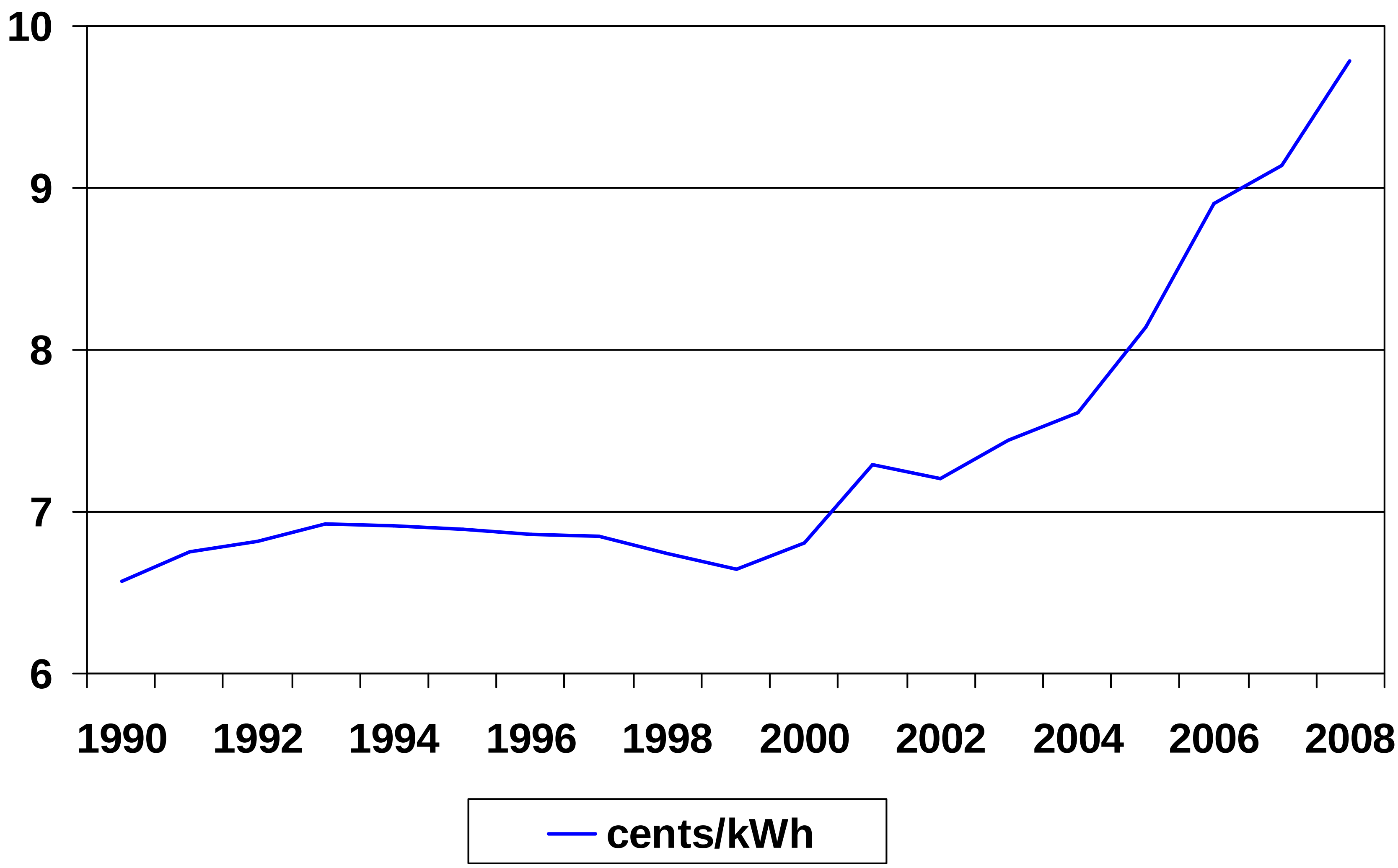
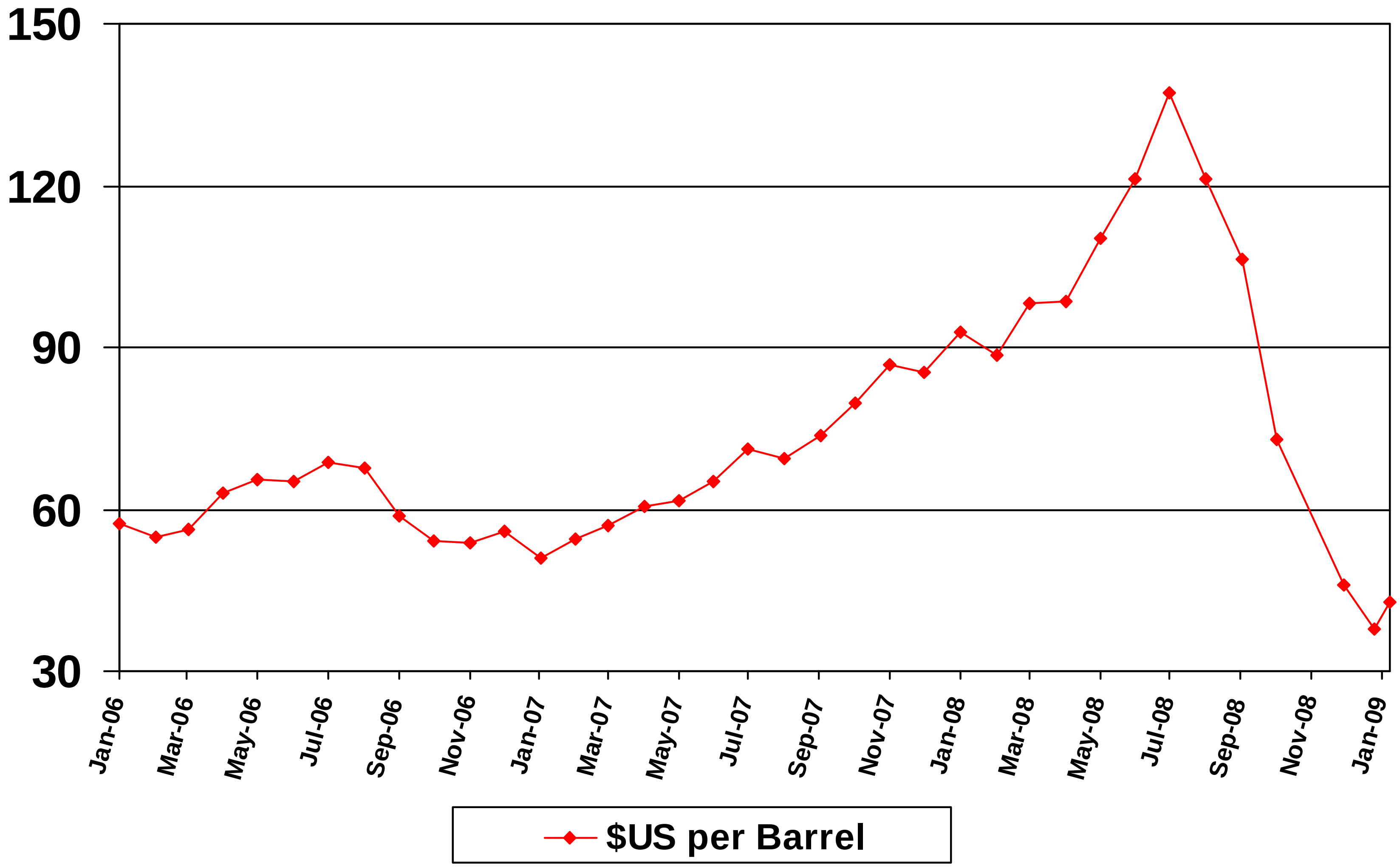
Retail Electricity Rates Since 1990



Source: U.S. Department of Energy's Energy Information Administration

Crude Oil Prices



Source: U.S. Department of Energy's Energy Information Administration

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Other Challenges We See Utilities Dealing With

- **Compensation, retention and graying of the workforce**
- **Pension & OPEB**
- **Managing rates**
- **A common utility industry rule of thumb:**
  - Cap-ex determines rates
  - Rates determine financial position
  - Could large capital needs and less federal money mean higher rates?

Credit Ratings Are More Important Now Than Ever

- **Bond insurance/enhancers less meaningful**
- **Counterparts: You may want to know about their creditworthiness, but they also may want to know about yours**
  - Counterparts include:
    - Liquidity support
    - Bilateral contracts
    - Hedges/derivatives
- **In the opinion of many institutional investors and underwriters, this transparency can be beneficial to your capital market access**

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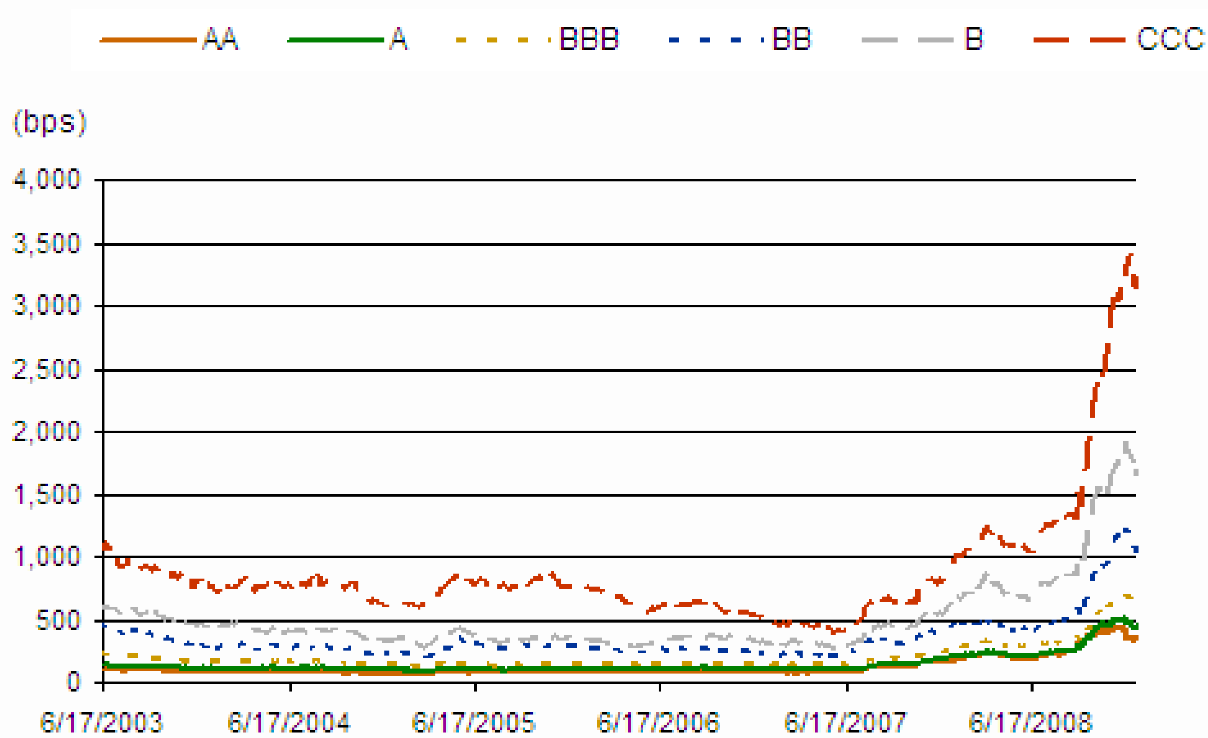
Credit Spreads (basis points above US Treasury yield)

Standard & Poor's Composite Credit Spreads By Rating Category Since June 17, 2003



Data as of Jan. 9, 2009. Sources: Standard & Poor's Global Fixed Income Research. 'AAA', 'CC', and 'C' rating categories not displayed because of small sample size.

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So What is Standard & Poor's Approach?

- **S&P surveils its rated public debt instruments**
- **Upgrades have sharply outnumbered downgrades for years**
- **Over the last several years we have been focusing on particular municipal bond securities and commenting accordingly. The result has been higher ratings for certain of those bonds**
  – Lease-appropriations
  – Special tax bonds (ex. sales, gas)
  – General obligation bonds
  – Water/sewer/drainage utility revenue bonds

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Municipal Bonds Are Not Risk Free

- **In our view, municipal bond market tends to be self-selecting. Higher-risk municipalities that are more likely to default often choose not to have their bonds rated at all.**
- **During 2007, for example, S&P rated only about 40% of the municipal bonds coming to market.**
- **Information obtained by S&P Securities Evaluations confirms that there were more than 1,100 municipal issue defaults between 1986 and 2007, but only 167 of those -- about 15% -- were rated by any rating agency.**

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Municipal Bonds Are Not Risk Free

- **Our recent municipal transition and default study shows 34 defaults by issuers rated by S&P between 1986 and 2008, including 3 in 2007**
- **Other more recent examples:**
  - Jefferson County, AL: sewer rating to 'D' on April 1, 2008
  - Vallejo, CA: Chapter 9 filing May 2008
- **Looking forward, over time, we believe low investment grade (BBB category) ratings or lower for state and local governments may reflect mostly credits that are exhibiting some kind of extraordinary stressor**
  - Examples:
    - Precipitous drop in or slow degradation of financial condition
    - Economic/employment base problems in the rate base
    - Concerns over risk management practices

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Revenue-Secured Debt: Key Rating Criteria

- **In September 2008, Standard & Poor's revised the criteria for water, sewer and drainage utility revenue bonds, citing:**
  - Monopolistic service provision
  - Price inelasticity
  - Rate competitiveness
  - Rate autonomy
  - Regulatory realities
- **We continue to provide our opinion on the key criteria points**
  - Economic considerations
  - Financial data/capital improvement plan
  - Rate-setting philosophy and practices
  - Operational characteristics
  - Management
  - Legal provisions

W-S Utility Revenue Debt: Some Examples

Q: We are under an administrative order to address SSO's. Our rolling 5-year CIP will probably increase by a factor of 10 and our rates will probably need to be increased substantially. Does this constrain the rating?

A: Not necessarily. We believe proactive rate adjustments and maintenance of strong financial metrics are still credit positives

Q: We ended up this year with about 90 days unrestricted cash on hand, and annual debt service coverage of 1.27x. According to the means and medians you publish, that seems below average versus the universe of rated cities our size. So how would you characterize these financial metrics?

A: Both are "good" in our opinion

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Top 10 Management Characteristics of Highly Rated Credits

Items we commonly see that we view as credit strengths include:

1. **Established “rainy day” reserves**
2. **Regular monitoring of revenues and economic trends to identify shortfalls early**
3. **Prioritized operating budgets with contingency plans**
4. **Formalized capital planning process**
5. **Long-term planning for all liabilities, including pension, OPEB and other contingent obligations and risks**

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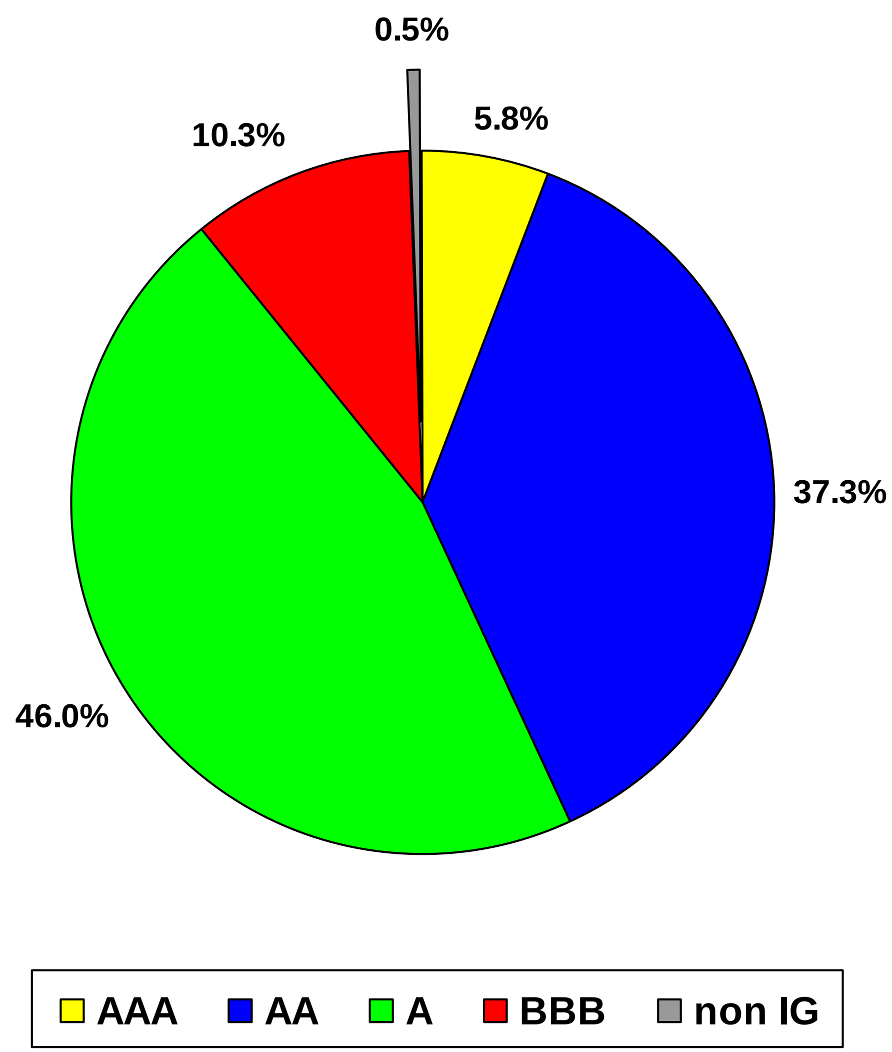
Top 10 Management Characteristics of Highly Rated Credits

6. Use of a debt affordability model
7. There exists a pay-as-you-go strategy as part of the operating and capital budgets
8. A multi-year pro forma financial plan is in place
9. Effective financial management
10. Well-defined and coordinated economic development strategies

Current Ratings Distribution for USPF W-S Revenue Bonds

- **S&P maintains underlying ratings on about 1,000 municipal waterworks, sanitary sewer and/or drainage utilities**
- **Since September 2008, over 200 upgrades have been published**
- **The surveillance process is something that is always ongoing**



As of January 15, 2009

S&P Ratings Continue to Evolve

- **S&P will revise and refresh criteria as appropriate.**
- **We anticipate further migration up the rating scale in the USPF sector, assuming that creditworthiness, particularly of governmental credits, remains, in our view, strong.**
- **We would not expect the same trend in housing, health care, toll roads, or other sectors that we believe exhibit more risk characteristics.**
- **In our view, a more incremental understanding of the factors driving credit stability adds value to the market.**

Where to Find Out More Information

- **www.standardandpoors.com**
- **www.spviews.com**
- **www.spnewactions.com**

- **Ed Sweeney (Public Information Officer/media contact for S&P U.S. Public Finance):**
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Supplementary Material

A Quick Refresher . . .

ISSUE CREDIT RATING DEFINITION:

A Standard & Poor's issue credit rating is a current opinion of the creditworthiness of an obligor with respect to a specific financial obligation, a specific class of financial obligations, or a specific financial program (including ratings on medium-term note programs and commercial paper programs). It takes into consideration the creditworthiness of guarantors, insurers, or other forms of credit enhancement on the obligation and takes into account the currency in which the obligation is denominated. The opinion evaluates the obligor's capacity and willingness to meet its financial commitments as they come due, and may assess terms, such as collateral security and subordination, which could affect ultimate payment in the event of default.

A Rating Is Not . . .

The issue credit rating is not a recommendation to purchase, sell, or hold a financial obligation, inasmuch as it does not comment as to market price or suitability for a particular investor.

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Long-Term Issue Credit Ratings

ICR’s are based, in varying degrees, on the following considerations:

- **Likelihood of payment—capacity and willingness of the obligor to meet its financial commitment on an obligation in accordance with the terms of the obligation;**
- **Nature of and provisions of the obligation;**
- **Protection afforded by, and relative position of, the obligation in the event of bankruptcy, reorganization, or other arrangement under the laws of bankruptcy and other laws affecting creditors' rights.**
- **Issue ratings are an assessment of default risk, but may incorporate an assessment of relative seniority or ultimate recovery in the event of default. Junior obligations are typically rated lower than senior obligations, to reflect the lower priority in bankruptcy, as noted above. (Such differentiation may apply when an entity has both senior and subordinated obligations, secured and unsecured obligations, or operating company and holding company obligations.)**

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Investment Grade Rating Categories

AAA

An obligation rated 'AAA' has the highest rating assigned by Standard & Poor's. The obligor's capacity to meet its financial commitment on the obligation is extremely strong.

AA

An obligation rated 'AA' differs from the highest-rated obligations only to a small degree. The obligor's capacity to meet its financial commitment on the obligation is very strong.

A

An obligation rated 'A' is somewhat more susceptible to the adverse effects of changes in circumstances and economic conditions than obligations in higher-rated categories. However, the obligor's capacity to meet its financial commitment on the obligation is still strong.

BBB

An obligation rated 'BBB' exhibits adequate protection parameters. However, adverse economic conditions or changing circumstances are more likely to lead to a weakened capacity of the obligor to meet its financial commitment on the obligation.

Plus (+) or minus (-)

The ratings from 'AA' to 'CCC' may be modified by the addition of a plus (+) or minus (-) sign to show relative standing within the major rating categories.

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Outlooks and CreditWatch

Rating Outlook Definitions

- **A Standard & Poor's rating outlook assesses the potential direction of a long-term credit rating over the intermediate term (typically six months to two years). In determining a rating outlook, consideration is given to any changes in the economic and/or fundamental business conditions. An outlook is not necessarily a precursor of a rating change or future CreditWatch action.**
  - "Positive" means that a rating may be raised.
  - "Negative" means that a rating may be lowered.
  - "Stable" means that a rating is not likely to change.
  - "Developing" means a rating may be raised or lowered.

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Outlooks and CreditWatch

CreditWatch

- **CreditWatch highlights the potential direction of a short- or long-term rating. It focuses on identifiable events and short-term trends that cause ratings to be placed under special surveillance by Standard & Poor's analytical staff. These may include mergers, recapitalizations, voter referendums, regulatory action, or anticipated operating developments. Ratings appear on CreditWatch when such an event or a deviation from an expected trend occurs and additional information is necessary to evaluate the current rating. A listing, however, does not mean a rating change is inevitable, and whenever possible, a range of alternative ratings will be shown. CreditWatch is not intended to include all ratings under review, and rating changes may occur without the ratings having first appeared on CreditWatch.**
  - "positive" designation means that a rating may be raised
  - "negative" means a rating may be lowered
  - "developing" means that a rating may be raised, lowered, or even affirmed.

Standard and Poor’s Rating Distributions

US Public Finance		
Rating	**Count**	**%**
AAA	376	3.07%
AA	3,818	15.95%
A	5,998	48.93%
BBB	1,920	15.66%
BB	112	0.91%
B	24	0.20%
CCC	4	0.03%
CC	1	0.01%
C	4	0.03%
D	1	0.01%
Grand Total	**12,258**	**100.00%**

US Public Finance Housing		
Rating	**Count**	**%**
AAA	1,377	58.17%
AA	684	28.90%
A	222	9.38%
BBB	35	1.48%
BB	20	0.84%
B	15	0.63%
CCC	7	0.30%
CC	3	0.13%
C	1	0.04%
D	3	0.13%
Grand Total	**2,367**	**100.00%**

US Corporate Finance		
Rating	**Count**	**%**
AAA	4	0.27%
AA	23	1.26%
A	202	11.05%
BBB	386	21.12%
BB	387	21.17%
B	764	41.79%
CCC	52	2.84%
CC	4	0.22%
D	5	0.27%
Grand Total	**1,828**	**100.00%**

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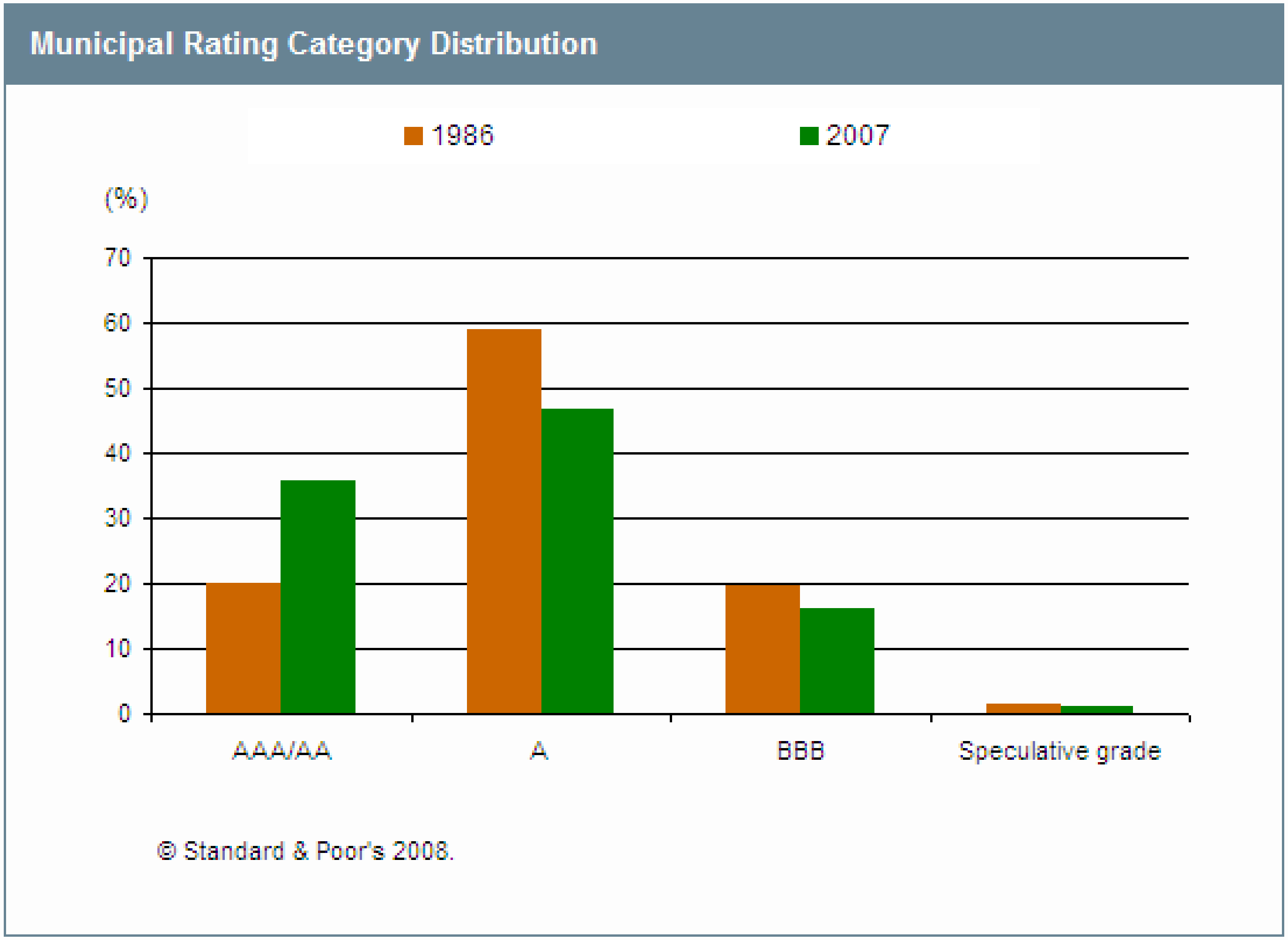
S&P Municipal Ratings Reflect Credit Strength



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