# Demystifying Financial Ratios

## Why Bother?

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# Why use financial ratios?

- Useful in identifying and developing management strategies to allocate limited resources
- Useful in measuring the effectiveness of those strategies over time
- Useful in communicating the success of those strategies to elected officials, taxpayers, voters and investors

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# How do we use ratios?

- Ratios can be used to identify and measure financial trends over time.
  - *Trended data gives us insight into the direction we are headed. Are economic and financial conditions improving or weakening and at what pace?*
- Ratios can be used to compare the financial condition of one taxing unit with its peers
  - *Comparative data helps stakeholders evaluate local economic and financial conditions in light of the experiences of comparable units*

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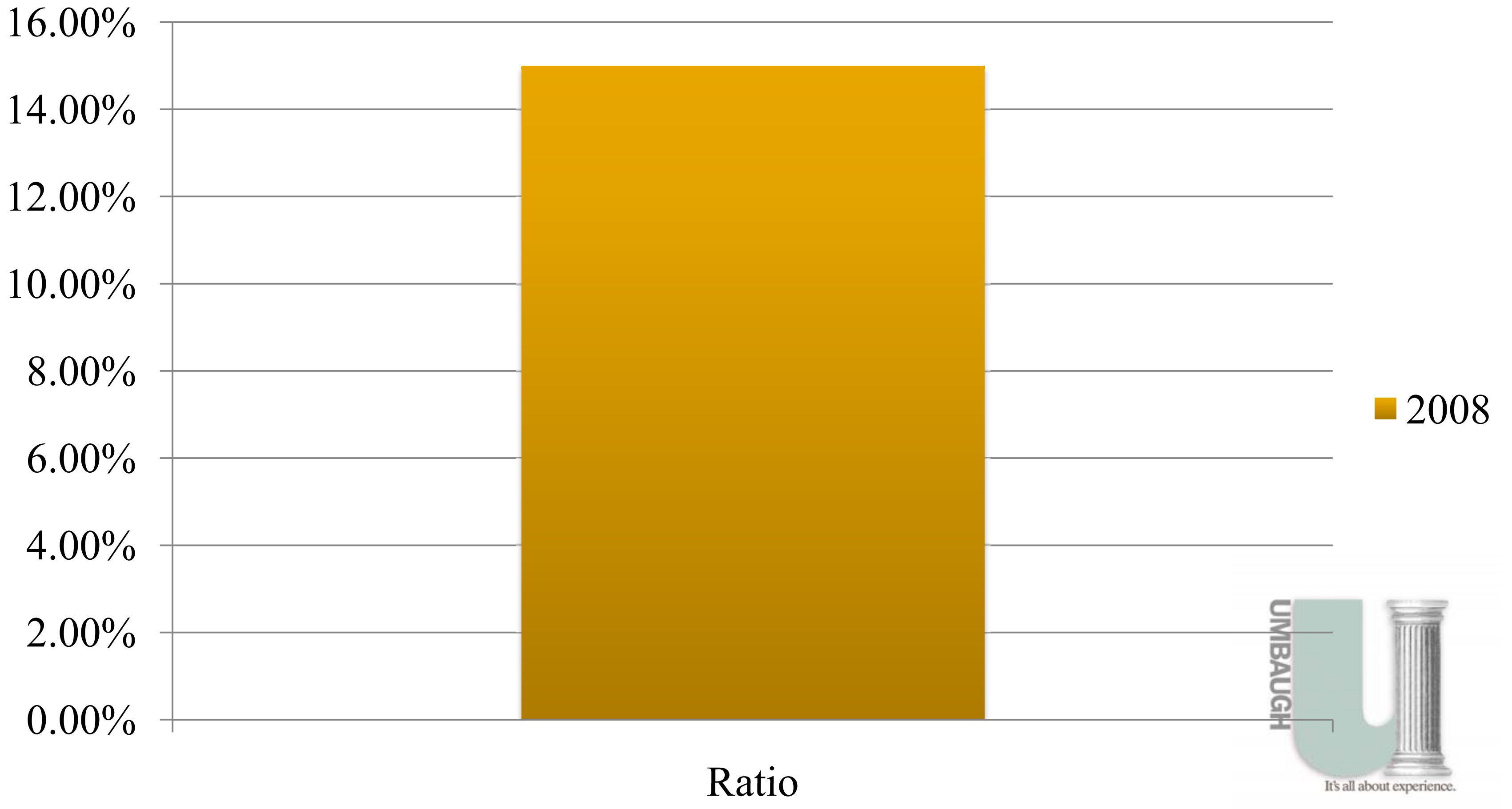
# Ratio of General Fund Balance vs. Expenditures



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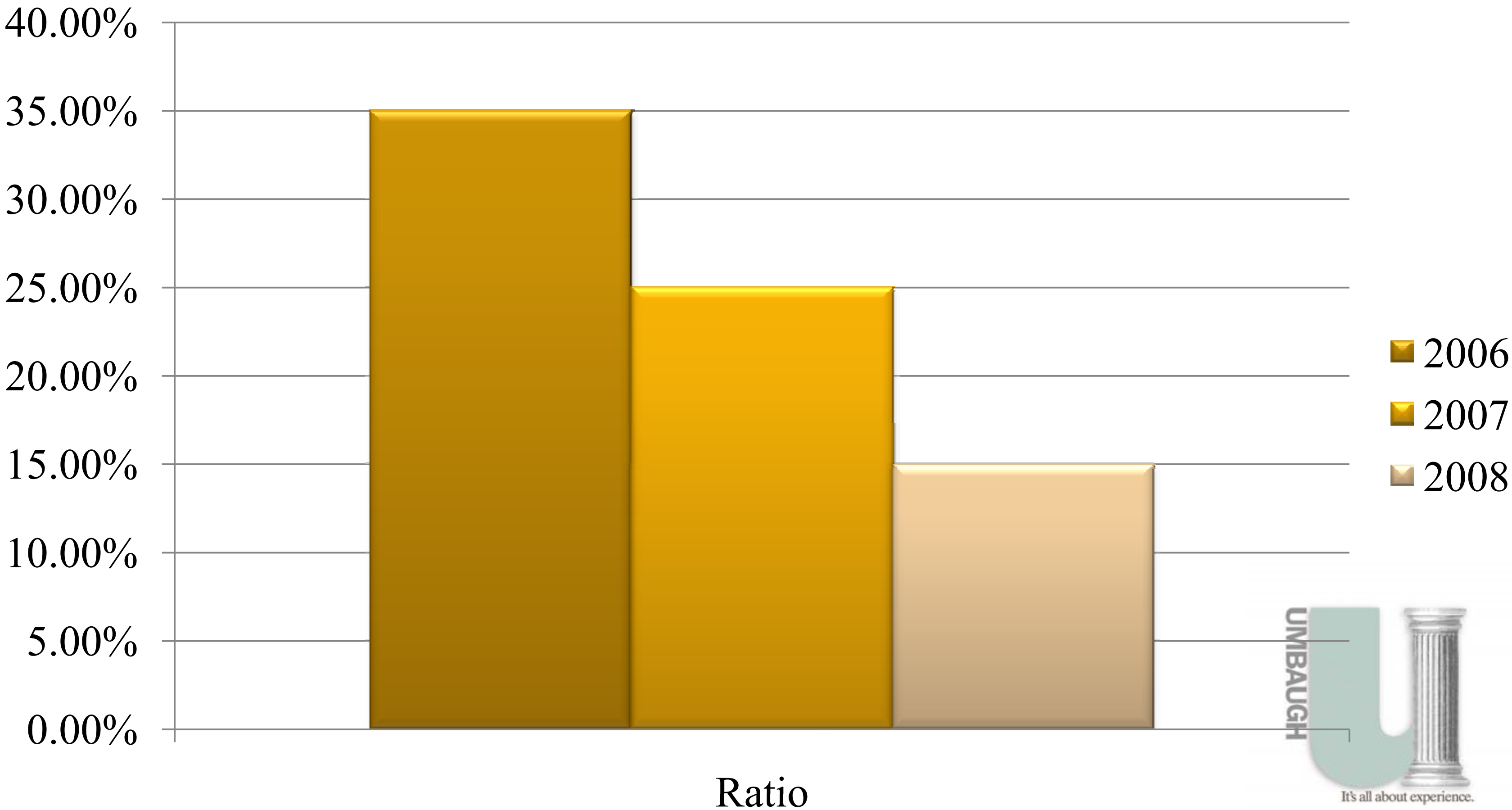

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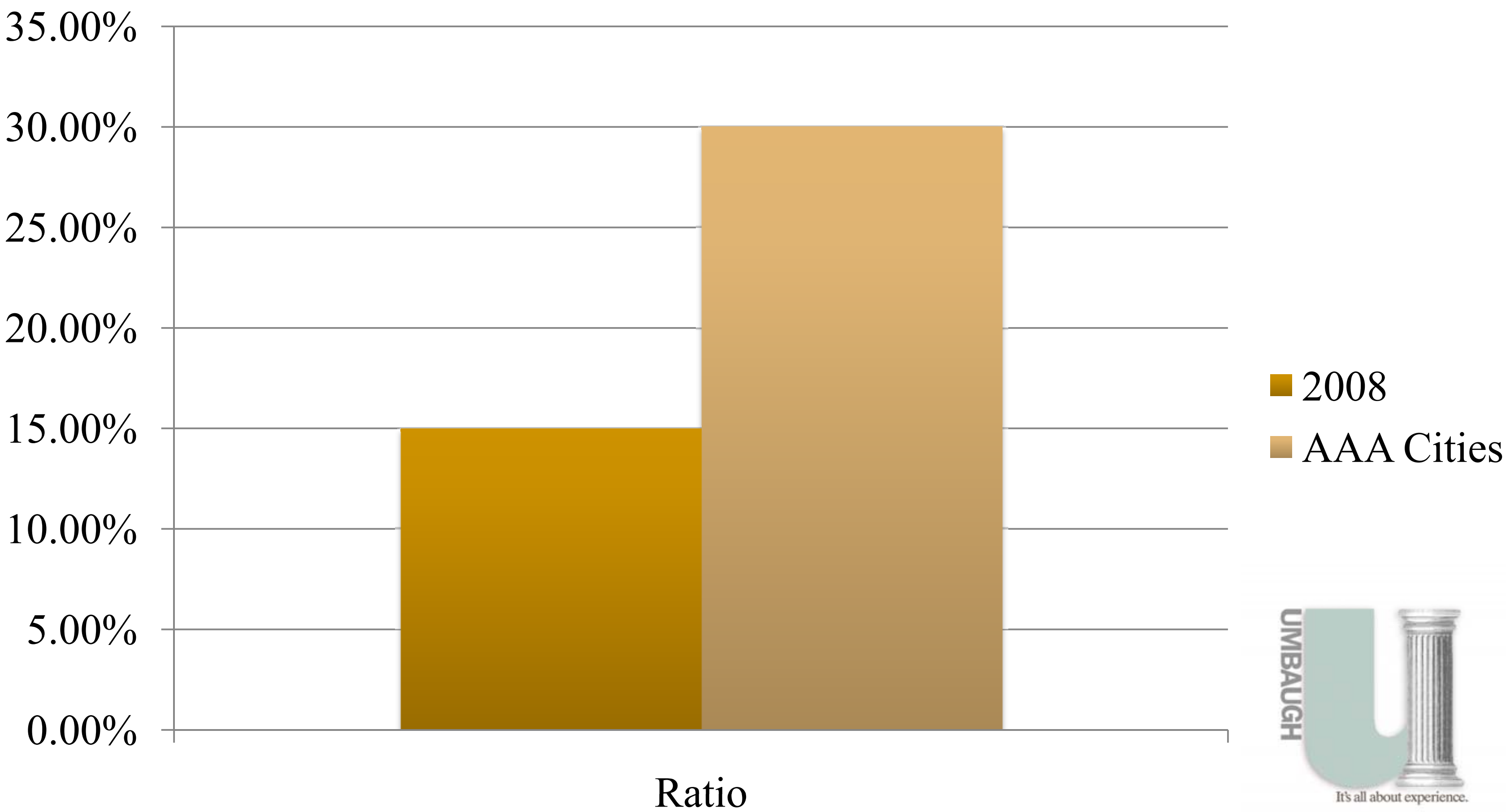


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# Why are financial ratios important to bond investors and credit analysts?

- Financial ratios are helpful in making judgments about an issuer’s financial health and creditworthiness
  - Liquidity
  - Financial flexibility
  - Financial leverage
- Ratios help bond purchasers evaluate risk among investment alternatives

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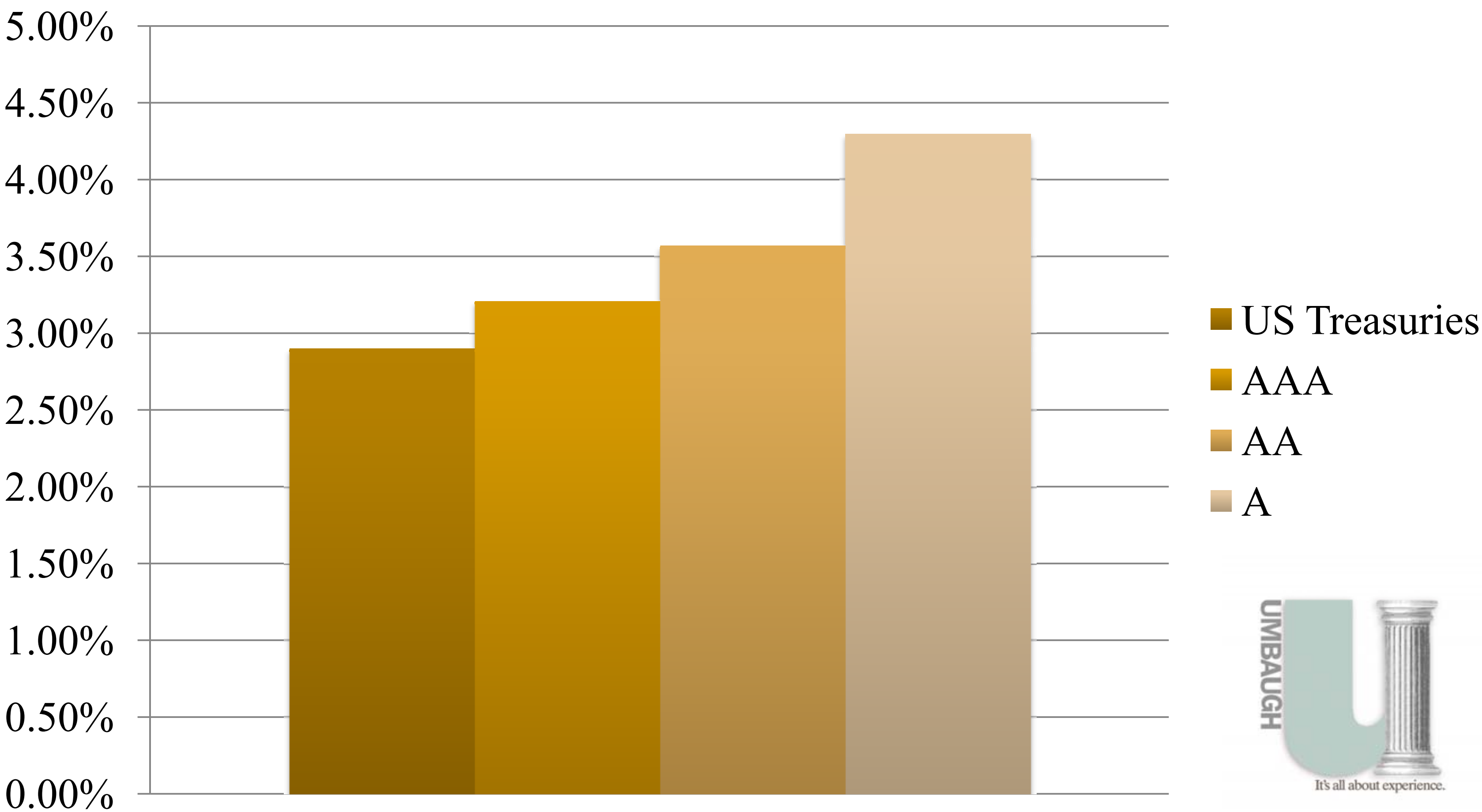
# Impact of Financial Ratios on Credit Costs

- Financial ratios are used by credit rating agencies and investors to measure credit risk
- Risk verses reward: the higher the perceived risk, the more compensation, or "reward", investors will demand to extend credit to you
- If we can reduce credit risk and improve bond ratings, then we can reduce our borrowing costs

# Risk Premiums for 10 Year GO Obligations




Source: Delphis Hanover Corporation, April 20, 2009.

# Risk and bond pricing

- Interest rates increase with perceived risk
  - Investment risk and interest rates generally increase with the length of time to final bond maturity
  - Interest rates increase as the credit quality of a bond diminishes and investment risk grows

# Risk and Interest Rates

| Years | AAA | AAA (insured) | AA | A | Baa |
|---|---|---|---|---|---|
| 1 | 0.97% | 1.05% | 1.25% | 1.88% | 2.47% |
| 5 | 2.15% | 2.23% | 2.43% | 3.09% | 3.74% |
| 10 | 3.27% | 3.38% | 3.63% | 4.36% | 5.02% |
| 15 | 4.25% | 4.37% | 4.60% | 5.33% | 6.04% |
| 20 | 4.73% | 4.85% | 5.11% | 5.82% | 6.50% |

Source: Delphis Hanover Corporation, April 17, 2009.

# Illustrative Savings from Improved Bond Ratings

| | AA Rating | A Rating |
|---|---|---|
| Bond Principal | $10,000,000 | $10,000,000 |
| Average Interest Rate over 20 years | 5.11% | 5.82% |
| Average Annual Payment | $810,000 | $860,000 |
| Total Interest Cost | $6,199,000 | $7,183,000 |

$ 984,000 in Interest Savings from Improved Bond Rating.

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# Managing with Financial Ratios

- By identifying and understanding your key ratios, you can implement a financial plan to improve or maintain your creditworthiness and your bond rating
  - For instance, weak fund balances may contribute to a lower credit rating when compared with your peers. A budget strategy to restore fund balances over a period of time may improve your bond rating and reduce borrowing costs

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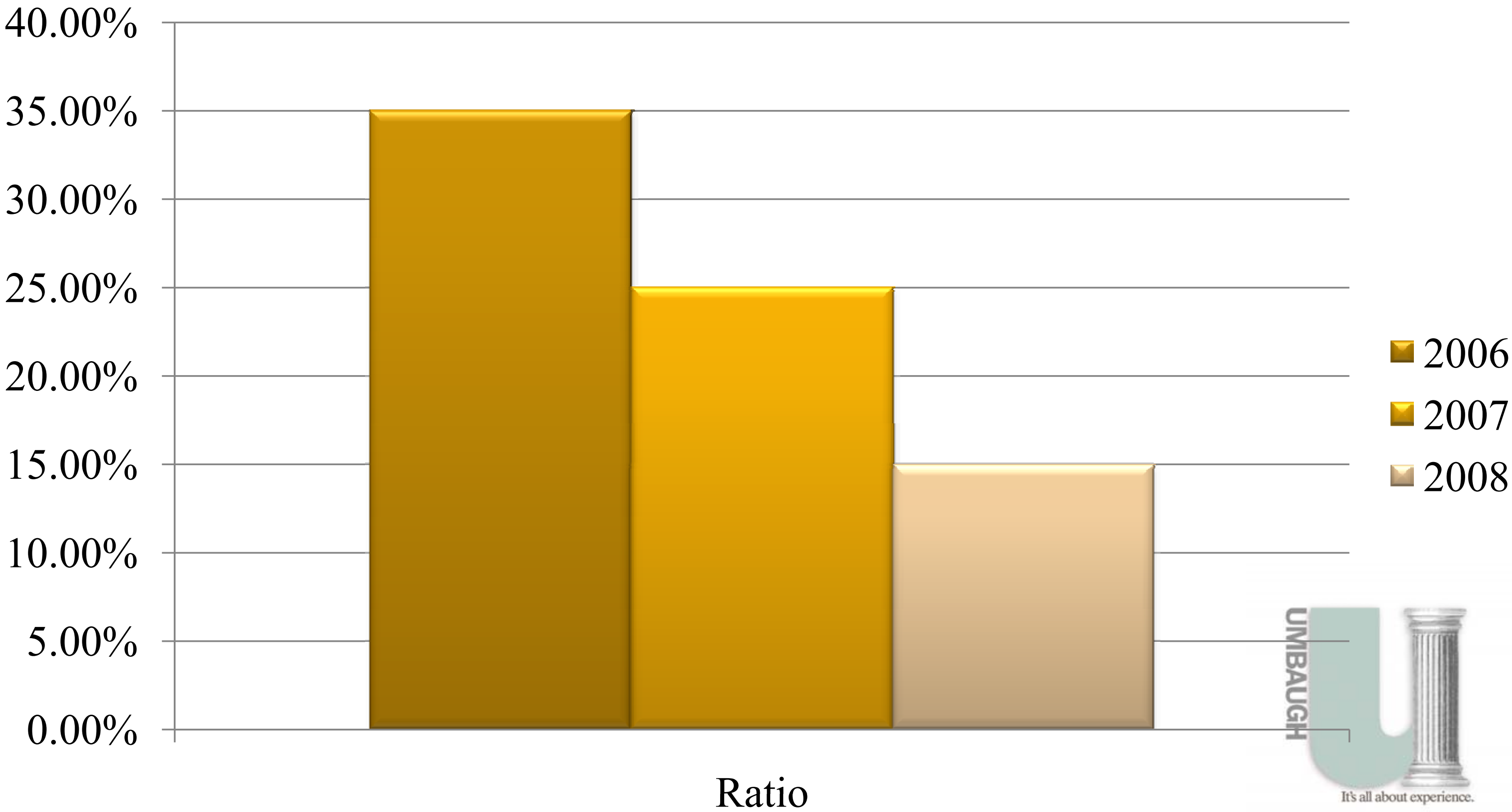
# Ratio of General Fund Balance vs. Expenditures



# Managing with Financial Ratios

- Weak coverage ratios for your water utility may suggest that it is time for a rate adjustment.
  - Improving bond coverage ratios can influence bond ratings and reduce interest expense on new borrowing
  - Many bond resolutions require minimum debt service coverage ratios

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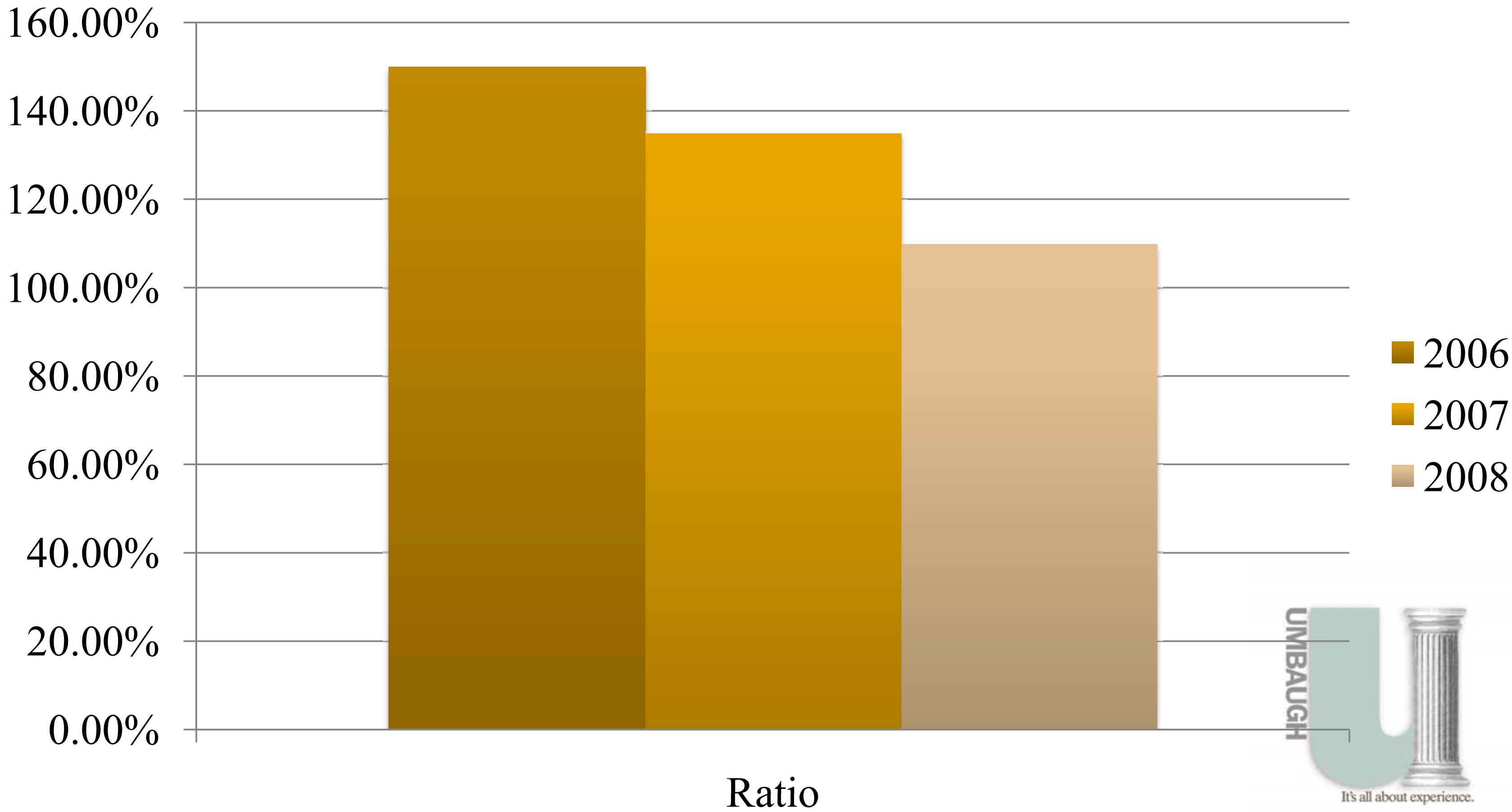
# Debt Service Coverage Of Waterworks Revenue Bonds

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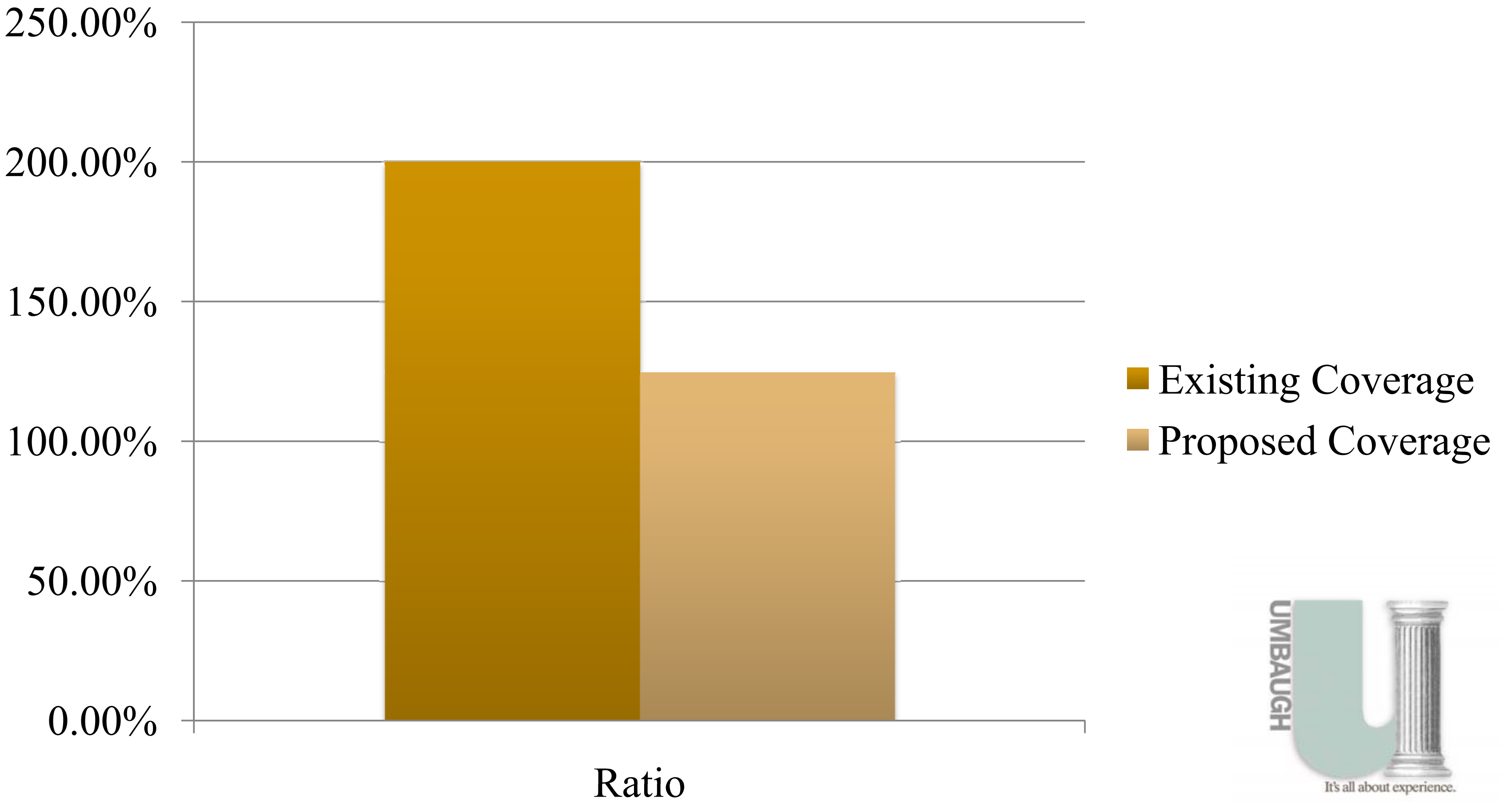
# Managing with Financial Ratios

- Declining debt service coverage ratios within a Tax Increment Area may suggest the need to pledge additional revenue sources before issuing new debt

# Debt Coverage Ratios Within TIF Area

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# Managing with Financial Ratios

- High net debt per capita and high net debt as a % of market value may suggest the need to develop a coordinated capital plan that utilizes existing revenues to fund capital needs on a "pay-as-you-go" basis rather than rely solely on borrowing
  - Reducing financial leverage can improve bond ratings and reduce borrowing costs for those projects where borrowing is necessary

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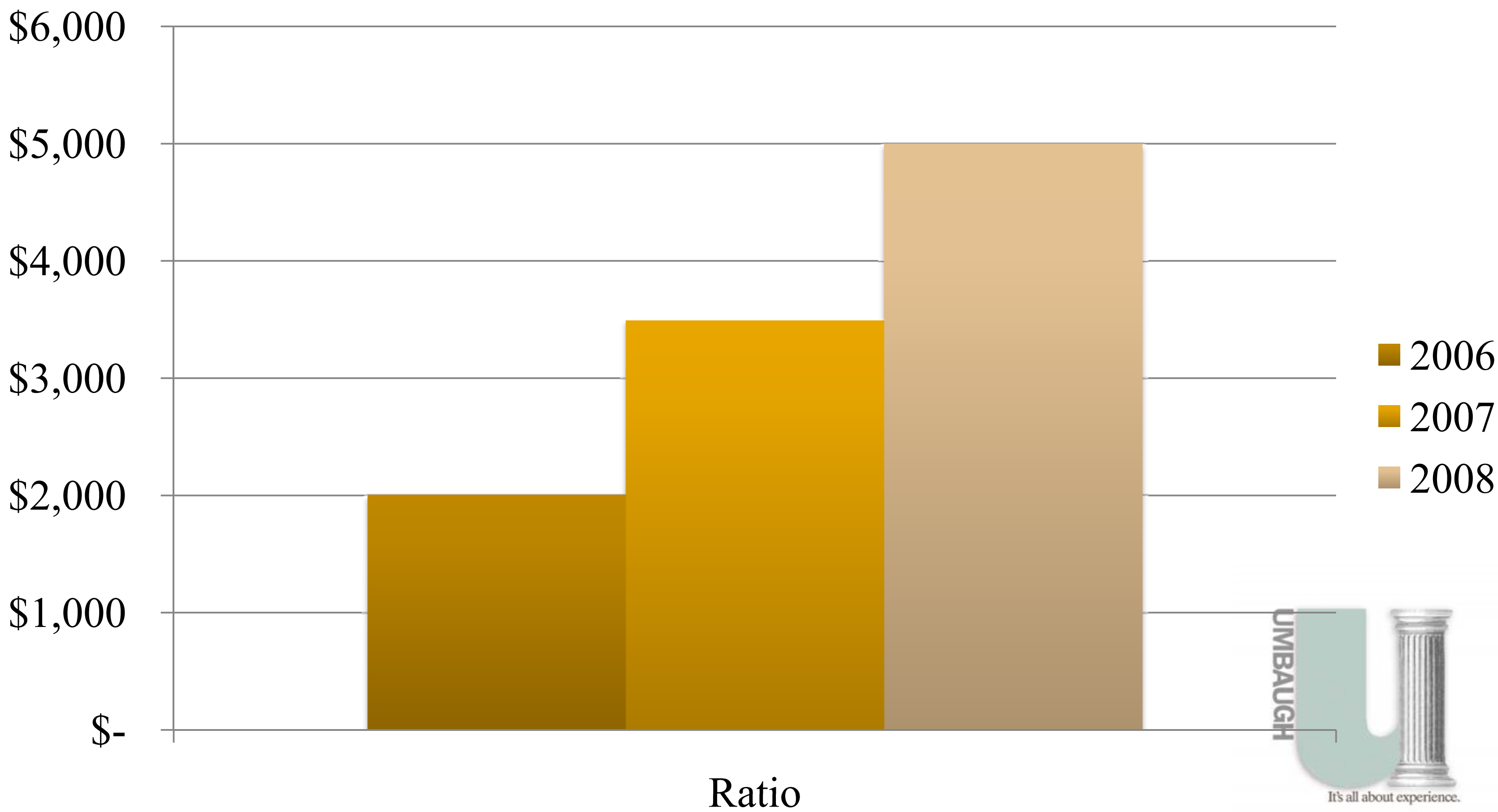
# Net Debt Per Capita



# Managing with Financial Ratios

- High concentrations in credit risk stemming from a limited number of large taxpayers may suggest a need for an economic development strategy to diversify tax base.
  - A diversified tax base will improve credit quality and reduce borrowing costs

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# Managing with Financial Ratios

- Most financial ratios cannot be changed overnight. But understanding your financial trends will provide an opportunity to develop a long range strategy for improvement
- Demonstrating that you understand your financial and economic challenges and developing a business plan to address these issues, are a significant factors in the evaluation process

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