Debt Capacity and Affordability

Mechanics of a Bond Sale Program

California Debt and Investment Advisory Commission

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Who Cares about Debt Capacity?

Taxpayers

Elected Officials

Ratepayers

Investors

Municipal Management

Rating Agencies

Credit Enhancement Providers

Why is Debt Capacity an Important Issue?

- Debt can be an effective tool for financial managers
- However, since debt is generally paid by the taxpayer or ratepayer, maintaining affordability is important
  - Unaffordable debt burden can have an adverse impact on the underlying economy
  - It can discourage both residential and business growth
- Excessive debt can negatively impact a municipality's financial position
  - Reduces financial flexibility
  - May negatively impact credit rating
  - May lead to more difficult and costly borrowing

Why Issue Debt?

- Expedite completion of revenue generating projects
- Assist in funding long-term liabilities
- Improve infrastructure
- Leverage other available funds (State, Federal or Private) for public projects
- Meet regulatory requirements
- Stimulate economic activity
- Achieve public policy goals
  - Intergenerational equity

Challenges to Determining Debt Capacity

- It can be difficult to establish the proper framework for determining debt capacity
  - Legal constraints versus prudent financial management
  - Calculating the true debt burden (net tax-supported or net revenue-supported debt)
- It can also be challenging to align public policy and financial resources
  - Stated policy objectives often exceed limited funding resources
- Ratios can be confusing and difficult to calculate, as they depend on estimates of many factors, including
  - Long-term assumptions of borrowing costs
  - Economic factors such as personal income and assessed values

Metrics for Measuring Debt

Tax-Backed	Revenue-Backed
• Debt Per Capita	• Debt to Plant (or Debt to Equity)
• Debt as a % of Assessed Value	• Debt per Customer
• Debt as a % of Personal Income	• Debt Service as a % of Revenues or Expenditures
• Debt Service as a % of Revenues or Expenditures	• Amortization
• Amortization	• Coverage
• Growth of debt service as a % of budget	• Adjusted Coverage

=> Impact of overlapping debt on the tax or rate base

Appropriate Debt Levels

Tax-Supported Example

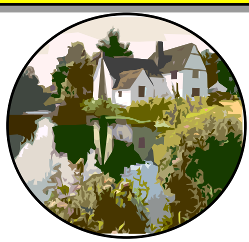
	High	Medium	Low
Debt per capita ($)	5,000 & above	2,000-5,000	Below 1,500
Debt as a % of assessed value	Above 8%	3-8%	Below 3%
Amortization (10-year)	65% & above	40-50%	Less than 25%
Debt as a % of expenditures	15% & above	7-14%	Below 7%

Water Revenue Example

	High	Medium	Low
Coverage	1.50 & above	1.25x-1.50x	1.00x-1.25x
Debt to plant	75% & above	50-75%	50% & below
Debt per customer ($)	4,000 & above	1,500-2,000	1,000 & below
Amortization (10-year)	65% & above	40-50%	Less than 25%

Impact of Overlapping Debt on "Muniland City"

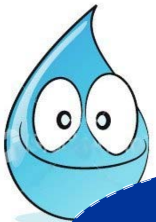
MUNI COUNTY
440,000 residents
$100 mm GO bonds
$100 mm POBs



MUNI MOSQUITO ABATEMENT DISTRICT
$20 mm Special Tax

MUNILAND FIRE DISTRICT
$50 mm GO bonds

220,000 residents
MUNILAND CITY
$100 mm GO bonds
$50 mm COPs



MUNILAND WATER DISTRICT
$200 mm Revenue Bonds

MUNILAND SCHOOL DISTRICT
$50 mm GO bonds

Direct Debt per capita: $682

Overlapping Debt per capita: ~$1,680

Debt Capacity Analysis

Samples of Sound Debt Capacity Studies

- State of California:
  - Web address: http://www.treasurer.ca.gov/publications/2007dar.pdf
- State of Virginia:
  - Web address: http://www.trs.virginia.gov/Documents/Debt/DCAC/DCAC2008.pdf
- City of New York:
  - Web address: http://www.nyc.gov/html/records/pdf/govpub/3069sda4_07.pdf

Characteristics of a Well-Structured Debt Capacity Study

- Addresses affordability based on different measures
- Includes assumptions driven by a multi-year comprehensive capital plan
- Links debt decisions to the overall operating budget
- Takes into account policy and economic impacts
- Utilizes conservative forecasting

One Size Does Not Fit All

- Analyzing debt capacity is an important exercise but the appropriate amount of debt cannot be determined by ratio alone
- Debt capacity should be balanced with public policy which can be difficult
- Determining affordability requires challenging forecasting and should be frequently adjusted
- Limited resources demand tough choices as to how and what to debt finance
- Debt needs to be linked to a thorough capital planning process and the overall operating budget