Community Fiscal Health:
Using Ratios and Other Indicators to Assess Fiscal Well Being

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Overview

- Defining and Understanding Fiscal Health/Financial Condition/Economic Condition
- Measuring and Assessing Available Information
- Practical Considerations (It Depends!)

Poll

If you were asked if your community is fiscally healthy how would you respond?

Poll

What measures are you already using – formally or informally – to assess the health of your community?

Poll

What measure of assessing health are you most interested in learning about today?

Fiscal Health – Why Do We Care?

Several important decision makers are likely assessing the health of communities?

- Lenders/bondholders
- Regulatory bodies
- Taxpayers/Residents
- Analysts/Trade Groups
- Other funders
- You!

Fiscal Health – What is It?

- Fiscal health is defined by context and nuance
  - Hard to measure
  - Means different things to different people
  - Its meaning can change over time

Fiscal Health vs Economic Condition

- Economic Condition defined
  - Financial Position
  - Financial Condition
    - Fiscal Capacity
    - Service Capacity

Financial Position

- Net position or fund balance on the financial statements
  - Restrictions, nonspendable, commitments, and unrestricted
- Compare to other governments
- Compare to other years
- Net position in other ratios

Financial Position – Fund Balance

- How much fund balance should I have in the general fund?
  - ZERO is not usually a good choice
  - Risk tolerance should be considered
  - Consider known future spending plans
  - Consider timing of tax collections
  - Many governments target between 10% - 30% of annual expenditures
  - In the past, the GFOA has recommended approximately 2 months of expenditures

Financial Position Ratios

- Aggregate net position to activity
  - Unrestricted net position / total expenses
    - $14,500,000 / $2,750,000 = 5.27 (or 527%)
  - Unrestricted net position / total revenue
    - $14,500,000 / $3,125,000 = 4.64 (or 464%)
- Aggregate fund balance to activity
  - Unassigned fund balance / total expenditures and other financing uses
    - $3,500,000 / ($12,750,000 + $175,000) = .27 (or 27%)
  - Unassigned fund balance / total revenue and other financing sources
    - $3,500,000 / ($13,125,000 + $525,000) = .256 (or 25.6%)

Common Size Ratio Example

	Government # 1		Government # 2	
	Year 1	Year 2	Year 1	Year 2
Unrestricted Net Position	$4,000,000	$5,000,000	$40,000,000	$41,000,000
Expenses	$10,000,000	$10,000,000	$100,000,000	$100,000,000
Ratio	40.00%	50.00%	40.00%	41.00%

Other Financial Position Considerations

- Percentage Distribution Ratios
  - Percentage of assets in cash
    - Cash / total assets
  - Percentage of assets in A/R
    - A/R / total assets
  - Net position to asset ratio
    - Net position / total assets

Practical Considerations

- Use and understand definitions
- Don’t use definitions….without context
- Persistence (Iterative process)
- Thoroughness
- Use commons size ratios, percentage change, and percentage distribution

Poll

How far out are you typically measuring your community's capacity to meet financial obligations and provide ongoing services?

Financial Condition

- Fiscal Capacity
  - The government’s ability and willingness to meet its financial obligations as they come due
- Service Capacity
  - The government's ability and willingness to meet its commitments to provide services on an ongoing basis

Fiscal Capacity Ratios

- Liquidity
- Solvency
  - Leverage ratios
  - Coverage ratios
- Ability to pay
- Financial efficiency

Liquidity Ratios

- Current ratio
  - Current assets / current liabilities
    - Government's ability to cover its current liabilities
- Quick ratio
  - (Cash + current investments) / current liabilities
    - Government's ability to cover its current liabilities with only its "quick" assets
- Days cash on hand
  - ((unrestricted cash + unrestricted cash equivalents) / (total expenses – depreciation)) x 365
    - How many days the government could continue operations from a point in time

Solvency Ratios

- Liquidity vs. solvency
- Solvency
  - Leverage
    - Degree of borrowing
  - Coverage
    - Ability to generate resources in the future to cover borrowings

Leverage Ratios

- Liabilities to assets ratio
  - Total liabilities / total assets
  - $30,000,000 / $40,000,000 = .75
- Liabilities to net position ratio
  - Total liabilities / total net position
  - $30,000,000 / $10,000,000 = 3.0

Coverage Ratios

- Interest coverage ratio (or times interest earned ratio)
  - (cash flows from operations + interest expense) / interest expense
  - ($2,000,000+$3,000,000) / $3,000,000 = 1.67

- Debt service coverage ratio
  - (cash flows from operations + debt service) / debt service
  - ($2,000,000+$3,000,000+$1,750,000) / ($3,000,000+$1,750,000)=1.42

Interest Coverage Entity Wide

- (cash flow from operations + interest expense)/interest expense
- =((excess or deficiency of general fund revenues over expenditures + enterprise funds cash flows from operations)+(interest on long term debt for governmental + business-type activities))/(interest on LT debt for governmental +business-type activities)

Debt Service Coverage entity wide

- (cash flows from operations + debt service) / debt service
- =((excess or deficiency of general fund revenues over expenditures + enterprise funds cash flows from operations)+(interest on LT debt+principal payments on LT debt)) / (interest on LT debt+principal payments on LT debt)

Ability to Pay Ratios

- Similar to coverage ratios
- Combine financial and non-financial data
- Where does the non-financial data come from?

Ability to Pay Off Liabilities

- Debt per $100 of assessed property value
  - = (total debt outstanding x 100) / total assessed property value
- Debt per $1,000 of personal income
  - =(total debt outstanding x 1,000) / total personal income
- Debt per capita
  - =total debt outstanding / total population
- Debt service ratio
  - =total annual debt service / total annual noncapital expenditures
  - =((principal expenditures+interest expenditures)/(total expenditures-capital outlay)) x 100

Special Purpose Ability to Pay Liabilities

- Public school district
  - Long-term debt per student
- Public University
  - Long-term debt per full time equivalent student
- Public Airport
  - Debt per enplanement
- Public Hospital
  - Debt per patient admission

Ability to Raise Revenues and Pay for Services

- Revenue focused ratio examples
  - Effective income tax rate=income tax revenues/total personal income
  - Property tax revenues / assessed property value
  - Sales tax revenue / total retail sales
  - Tuition revenues / FTE enrollment
  - Water customer charges / total water consumption

Ability to Raise Revenues and Pay for Services

- Pay for service ratios
  - Total health and sanitation expenses / total population
  - Total health and sanitation expenses / total number of households
  - Total public safety expenses / total police and fire incident responses
  - Total wastewater treatment expenses / gallons of flowage

Revenue Backed Debt

- Specific revenue generating activates are most important
- Days cash on hand
- Maximum annual debt service coverage ratio
- (net income + depreciation + interest expense)/maximum annual debt service

Risk Exposure Ratio

- Focuses on revenues that are subject to abrupt changes
- =(investment revenue + intergovernmental aid) / unrestricted property tax revenue
- Example
  - ($1,958,144 + 5,176,310 + 4,894,915 + 1,457,820) / 51,693,573 = 0.26
  - In other words, a 1 percent shortfall in those revenues would require a .26 percent increase in the general purpose property tax levy.

Tax Leverage Ratio

- Shows how much property taxes needs to increase to cover a 1% increase in costs
- = operating expenses / unrestricted property tax revenue

Financial Efficiency Ratios

- Receivable efficiency ratio
  - (Taxes receivable / tax revenues) x 100
- Payables efficiency ratio
  - (vendor payables / vendor expenses) x 100

Indexing

Ratio	(a) Local City	(b) Avg. of 10 Cities	(a) / (b) = Index
Debt per $100 of assessed property value	$2.02	$2.31	0.875
Debt per $1,000 of personal income	9.91	11.95	0.829
Debt per capita	882	1,070	0.824
Property tax revenues/assessed values	1.44	1.17	1.231
Taxes per capita	722	706	1.023

Adjusting for Inflation

- Financial statements are stated in nominal dollars
- Remove inflation by converting to constant dollars
- Consumer Price Index (CPI)

Inflation Adjustment Example

	Year 1	Year 15
Property tax revenue	$12,000,000	$15,000,000
CPI	177	237

- (237/177) x $12,000,000 = $16,067,797
- ($15,000,000 - $16,067,797) / $16,067,797 = -.066 x 100 = - 6.6%

Some Key Takeaways

- There are no absolutes in assessing health
  - More art than science
- Perspective of the “assessor” matters
  - The conclusion drawn from a measure may change if you live in the community in question vs. if you work there
- Consider your objectives and audience before you start
- Don’t live by one ratio alone

Poll

Considering the measures we've discussed today do you feel that your community is healthy?

- Or

Considering the measures we've discussed today do you feel better equipped to assess the health of your community?

Sources of data

- CAFR
- www.census.gov
- Bureau of Economic Analysis www.bea.gov
- Bureau of Labor Statistics www.bls.gov
- Bureau of Justice Statistics www.bjs.gov
- Bureau of Transportation Statistics www.bts.gov
- National Center for Education Statistics www.nces.ed.gov
- National Center for Health Statistics www.cdc.gov/nchs
- Environmental Protection Agency www.epa.gov

Questions???


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IGFOA ANNUAL CONFERENCE • SEPTEMBER 8–10, 2019