# Analysis of County Business-Type Funds

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## ABSTRACT

*Occasionally, a local candidate for public office will seek such office with the idea of operating government like a business. However, parts of local governments should already be operated in a business like manner. This paper applies traditional business type analysis to the enterprise funds of the countries of Mississippi. The analysis shows that the typical county enterprise fund is operated so that current liabilities can be paid when due; sufficient revenues are collected to cover the cost of services provided, and long-term debt can be serviced when due.*

## INTRODUCTION

Because of various legal and regulatory constraints, the financial activities of a government are organized into three different fund types -- governmental, proprietary, and fiduciary. Proprietary funds are those activities of a government that are financed and operated in a manner similar to private businesses.

The purpose of this paper is to analyze the proprietary enterprise funds of the counties of Mississippi using traditional business-type analysis. The results of this analysis should be useful to county citizens and county administrators as they attempt to compare the operations of their county business-type funds with others. Also, auditors of county enterprise funds should find this information useful as it will provide benchmarks by which to provide advice to governmental clients.

## METHOD

The State Audit Department of the State of Mississippi provides access to county financial statements on its web site. At the writing of this paper, the most recent complete year available was fiscal year ended September 30, 2002. There are 45 county financial statements available for this year. Of those counties, 21 had proprietary enterprise funds which should be operated in a business like manner. The following traditional business ratios were applied to these county enterprise funds:

Liquidity Ratios

Current ratio = current assets/current liabilities

Quick ratio = cash + marketable securities + net receivables / current liabilities

Current cash debt ratio = net cash provided by operations/ current liabilities

Income Ratios

Asset turnover = revenue/ total assets

Operating margin = operating income/ operating revenue

Overall margin = net income/total revenue

Operating return on assets = operating income/ total assets

Return on assets = net income/ total assets

Coverage Ratios

Debt ratio = total debts/ total assets

Cash debt coverage ratio = net cash provided by operations/ total liabilities

## RESULTS

***Liquidity Ratios***

Table 1 presents the quartile information for the liquidity ratios.

| | Current Ratio | Quick Ratio | Cash Debt Coverage Ratio |
|---|---|---|---|
| Low | 1.05 | 1.05 | (1.49) |
| 25 percentile | 1.97 | 1.97 | (.23) |
| 50 percentile | 3.64 | 3.64 | .62 |
| 75 percentile | 7.18 | 5.65 | 1.14 |
| High | 63.71 | 63.71 | 25.42 |

**Table 1: County Enterprise Funds Liquidity Ratios**

Note that county enterprise funds do not have significant amounts of inventory or prepaid expenses; hence, for all but one county the current ratio was the same as the quick ratio. For convenience, we will look at only the quick ratio. The quick ratio is a measure of the enterprise fund’s ability to pay off its short-term debt. The quick ratio ranged from a low of 1.05 to a high of 63.71. The median quick ratio for county enterprise funds was 3.64. The average Mississippi enterprise funds had $3.64 to cover every $1 in current liabilities. Considering this ratio, the enterprise funds were very liquid.

The current cash debt coverage ratio measures a fund's ability to generate sufficient cash from a year's operations to cover its short term liabilities. This ratio ranged from a low of (1.49) to a high of 25.42. The median ratio was .62. The typical county enterprise fund generated enough cash from operations to cover 62% of current debt. However, considering the high quick ratio of over 3.6 times current debt, the country enterprise funds of Mississippi should be considered liquid for the period under analysis.

***Income Ratios***

The income ratios of the county enterprise funds are given in Table 2.

| | Asset Turnover | Operating Margin | Overall Margin | Operating Return on Assets | Return on Assets |
|---|---|---|---|---|---|
| Low | .16 | (.73) | (.36) | (.52) | (.19) |
| 25 percentile | .48 | (.13) | (.04) | (.06) | (.01) |
| 50 percentile | .76 | .03 | .03 | .02 | .05 |
| 75 percentile | 1.18 | .15 | .11 | .06 | .09 |
| High | 2.66 | .53 | .46 | .27 | .24 |

**Table 2: County Enterprise Funds Income Ratios**

The asset turnover ratio is an indication of how well a fund converts its assets into revenue. For the Mississippi county enterprise funds, this ratio had a low of .16 and a high of 2.66. The median was .76; hence, the typical enterprise funds were able to convert $1 of enterprise assets into $.76 of revenue.

The operating margin provides a measure of the ability of a fund to convert a dollar of operating revenue into operating profit. The ratio was between (.73) and .53 with a median of .03. The typical county enterprise fund is operated with a low margin. It appears that enterprise managers often operate these funds to cover the cost of the services provided. The overall margin is a measure of the ability of county enterprise funds to convert a dollar of revenue (operating and nonoperating) into net income. Note that the overall margin ranged from (.36) to .53 with the same .03 median as funds had for the operating margin. It was noted that all countries with a negative operating margin had positive nonoperating net income; therefore, the range in overall margin is not as wide as the range in operating margin. It appears that several enterprise fund managers operated their funds with low or negative operating margins with the knowledge that nonoperating revenues would be available to reduce or cover any negative operations. Also, it appears that many managers, knowing that additional revenue would be needed from operating activities to cover large nonoperating expenses, operate their enterprise funds with higher operating profits to cover the expected nonoperating expenses.

The operating return on assets provides a measure of the enterprise fund's ability to convert fund assets into operating income. The typical Mississippi county enterprise fund had an operating return of .02. The return ranged from (.52) to .27. The return on assets is a measure of the fund's ability to convert assets into net income. The return ranged from (.19) to .24 with a median of .05. These ratios reinforce the indication that the typical Mississippi county operated its enterprise fund only to cover the cost of providing the service. The smaller range of the return on assets than the operating return on assets provides additional evidence that nonoperating revenues are used to help cover the costs of these services.

***Coverage Ratios***

Table 3 provide information on the county enterprise funds coverage ratios.

| | Debt to Total Assets | Cash debt coverage ratio |
|---|---|---|
| Low | .04 | (1.03) |
| 25 percentile | .11 | (.13) |
| 50 percentile | .36 | .24 |
| 75 percentile | .54 | .52 |
| High | 1.00 | 1.41 |

**Table 3: County Enterprise Funds Coverage Ratios**

County enterprise funds' debt ratios provide a long term measure of the ability of the funds to pay their debts. The lower a fund's debt ratio the better its ability to cover long-term debt. County enterprise funds' debt ratios had a low of .04 and a high of 1.00. The median ratio was .36. A look at the upper quartile of funds with ratios from .54 to 1.00 find two scenarios. About half of the funds in this upper quartile had recently borrowed funds using revenue bonds for correctional facilities. All but one of these facilities had operating income. In time, it would be expected that with continued income these funds would be able to reduce their debt ratios. The other enterprise funds with high debt ratios had a significant amount of advances from other funds. Hence, major creditors for these enterprise funds were other funds within the county.

The cash debt coverage ratio is a measure of a fund's ability to generate cash to cover liabilities. The ratio was a low of (1.03) to a high of 1.41 with the median ratio being .24; hence, the typical county enterprise fund is generating enough cash from operations to cover its debts within five years. Combined with the median debt ratio of .36, it appears that the county enterprise funds have the ability to meet their debts without transferring assets from other funds.

## CONCLUSION

This paper has provided an analysis of the county enterprise funds of the state of Mississippi. In general, these funds are operated so that current liabilities can be paid when due; sufficient revenues are collected to cover the cost of services provided, and long-term debt can be serviced when due.

Additional study would include an analysis of the counties as a whole. The most recent available information was for the year 2002 which precedes the adoption by most Mississippi counties of GASB 34. GASB 34 requires counties to provide government-wide information which would provide useful data for an analysis of the county as a whole. Plans are underway to update this analysis as the 2003 financial statements become available.