**Article # 1126**

**Technical Note: Understanding the Ratio Analysis Report**

**Difficulty Level:** Beginner Level AccountMate User

**Version(s) Affected:** AccountMate 7 for SQL, Express and LAN
AccountMate 6.5 for SQL, MSDE and LAN

**Module(s) Affected:** General Ledger

**Posting Date:** 10/21/2009

## DESCRIPTION

The **Ratio Analysis Report** function in the **General Ledger** module generates a report that helps you compare the company's financial status and performance; not only with your company's own goals, but also with your competitor's goals and the industry standards. It also provides information necessary to help you make intelligent business decisions.

This Technical Note discusses the prerequisites for using the **Ratio Analysis Report**, shows the formula for calculating each ratio, and identifies which ratio is preferable - a higher or lower one. This document is also provided to explain the significance of the ratio group in the GL Account ID record and to identify which ratios are not applicable in a company that uses fund accounting.

## SOLUTION

### A. Prerequisites to using the Ratio Analysis Report

If you would like to use the **Ratio Analysis Report**, you must first activate the Ratio Analysis feature by performing these steps:

1. Access the **GL Module Setup** function from the **Housekeeping** menu.
2. In the **General (1)** Tab, mark the **Use Ratio Analysis** checkbox.
3. Click the **OK** button to close the **GL Module Setup** window.
4. Access the **Chart of Accounts Maintenance** function; then, verify in the **Information** tab that an appropriate ratio group is assigned to each applicable GL Account ID record.

### B. Ratio Formula and Preferred Ratio Level

When you have activated the Ratio Analysis feature, you can access the **Ratio**

**Analysis Report** and select in the report interface an option to generate the ratio you need. The table below illustrates for each ratio the calculation formula and the preferred ratio level that is either higher or lower than your company's goals, your competitors' performance or industry standards:

| Ratio | Formula | Preferred Ratio Level |
|---|---|---|
| ***Accounts Receivable Ratios*** | | |
| Average Age of Receivables | Average Accounts Receivable<br>Credit Sales<br>***Note:*** *Below is the computation for the Average Account Receivables:*<br>*Beginning A/R balance* *$ xxx.xx*<br>*Add: Ending A/R balance* *xxx.xx*<br>*Total* *xxx.xx*<br>*Divided by 2*<br>*Average Accounts Receivable* *$ xxx.xx* | Lower |
| Accounts Receivable Turnover | Credit Sales<br>Average Accounts Receivable | Higher |
| Days of Sales in Accounts Receivable | Accounts Receivable<br>Credit Sales | Lower |
| | | |
| ***Inventory Ratios*** | | |
| Average Days to Turnover | Average Inventory<br>Cost of Goods Sold<br>***Note:*** *Below is the computation for the Average Inventory amount:*<br>*Beginning Inventory balance* *$ xxx.xx*<br>*Add: Ending Inventory balance* *xxx.xx*<br>*Total* *xxx.xx*<br>*Divided by* *2*<br>*Average Inventory* *$ xxx.xx* | Lower |

| | | |
|---|---|---|
| Days of Sales in Inventory | Ending Inventory<br>Cost of Goods Sold | Lower |
| Inventory Turnover | Cost of Goods Sold<br>Average Inventory | Higher |
| | | |
| ***Profitability Ratios*** | | |
| Asset Turnover | Net Sales<br>Average Total Assets<br><br>***Note:*** *Below is the computation for the Average Total Assets:*<br>*Beginning Total Assets amount* *$ xxx.xx*<br>*Add: Ending Total Assets amount* *xxx.xx*<br>*Total* *xxx.xx*<br>*Divided by* *2*<br>*Average Total Assets* *$ xxx.xx* | Higher |
| Gross Profit Ratio | Gross Profit<br>Net Sales | Higher |
| Profit Margin | Net Income<br>Net Sales | Higher |
| Return on Total Assets | Net Income + Int. Expense (Net of Tax)<br>Average Total Assets | Higher |
| Return on Stockholder's Equity | Net Income<br>Average Stockholder's Equity<br><br>***Note:*** *Below is the computation for the Average Stockholder's Equity:*<br>*Beginning Stockholder's Equity* *$ xxx.xx*<br>*Add: Ending Stockholder's Equity* *xxx.xx*<br>*Total* *xxx.xx*<br>*Divided by* *2*<br>*Average Stockholder's Equity* *$ xxx.xx* | Higher |

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| ***Liquidity Ratios*** | | |
| Acid-Test | Quick Assets<br>Current Liabilities<br><br>***Note:*** *Below is the computation for the Quick Assets:*<br><br>*Cash* *$ xxx.xx*<br>*Add: Marketable Securities* *xxx.xx*<br>*Receivables (Net)* *xxx.xx*<br>---<br>*Total Quick Assets* *$ xxx.xx*<br>= = = = = | Higher |
| Current Ratio | Current Assets<br>Current Liabilities | Higher |
| | | |
| ***Stability Ratios*** | | |
| Debt Ratio | Total Liabilities<br>Total Assets | Lower |
| Debt-to-Equity Ratio | Total Liabilities – Stockholder Loans<br>Stockholder Equity + Stockholder Loans | Lower |
| Equity Ratio | Stockholder Equity + Stockholder Loans<br>Total Assets | Higher |
| Return on Long-Term Capital | Net Income+Int. Exp. on Long-Term Debt<br>Ave. Total Assets – Ave. Current Liabilities<br><br>***Note:*** *Below is the computation for the Average Current Liabilities:*<br><br>*Beginning Current Liabilities* *$ xxx.xx*<br>*Add: Ending Current Liabilities* *xxx.xx*<br>---<br>*Total* *xxx.xx*<br>*Divided by* *2*<br>---<br>*Average Current Liabilities* *$ xxx.xx*<br>= = = = = | Higher |
| Times Interest Earned | Pre-tax Operating Income<br>Interest Expense | Higher |

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|---|---|---|
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| | ***Note:*** *Below is the computation for the Pre-tax Operating Income:*<br><br>*Net Income* *$ xxx.xx*<br>*Add: Interest Expense* *xxx.xx*<br>*Taxes* *xxx.xx*<br>---<br>*Pre-tax Operating Income* *$ xxx.xx*<br>= = = = = | |
| | | |
| ***Stockholder Valuation Ratios*** | | |
| Book Value per Common Share | Common Stockholder's Equity<br>Outstanding Common Shares | Higher |
| Earnings per Share | Net Income – Preferred Dividends<br>Average Common Shares Outstanding<br><br>***Note:*** *Below is the computation for the Average Common Shares Outstanding:*<br><br>*Beg. Common Shares Outstanding* *$xxx.xx*<br>*Add: Ending Common Shares Outstanding* *xxx.xx*<br>---<br>*Total* *xxx.xx*<br>*Divided by* *2*<br>---<br>*Ave. Common Shares Outstanding* *$xxx.xx*<br>= = = = = | Higher |
| Price / Earnings | Ending Market Price per Common Share<br>Earnings per Share | Higher |

**C. Significance of the Ratio Group in the GL Account ID Record**

You must assign an appropriate ratio group in the applicable GL Account ID record. Incorrect assignment or non-assignment of a ratio group in a GL Account ID record results in an inaccurate ratio. Analysis of the company's financial status and performance based upon incorrect ratios may result in inappropriate business decisions.

For example, if you assign a "Cash" ratio group to the Trade Accounts Receivable GL Account ID record, the Age of Receivables ratio will be understated. The presence of a low Age of Receivables ratio means that it takes a short amount of time to collect your accounts receivable. If the reported Age of Receivables ratio is lower than what it should be, you may not be aware that there is a problem

with collecting your accounts receivables; and thus, will not make decisions for its resolution.

**D. Ratios that are Not Applicable to a Non-Profit Company**

If your company is using fund accounting, the following ratios are not applicable:

- All Profitability Ratios including Asset Turnover, Gross Profit, Profit Margin, Return on Total Assets, and Return on Stockholder's Equity
- Debt-to-Equity Ratio
- Equity Ratio
- All Stockholder Valuation Ratios including Book Value per Common Share, Earnings per Share, and Price / Earnings.

As you can see from the information presented, understanding the **Ratio Analysis Report** provides a clearer understanding of the Ratio Analysis feature, the formulae for the financial and performance ratios, the significance of assigning appropriate ratio groups in the GL Account ID records as well as the ratios that are not applicable to nonprofit companies.

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