

## **Financial ratio analysis in practice**

(Relevant to AAT Examination Paper 7 -- Financial Accounting)

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### **Introduction**

Financial ratio analysis interprets the relationships between chosen figures in the financial statements. The ratio explains the relationship between one quantity and another. Such mathematical relationships can be presented in terms of a rate, a percentage or a proportion.

Ratios pinpoint the underlying company conditions that may not be expressed clearly from individual financial statement elements. As a single ratio measured for a company item is meaningless when considered by itself, cross-unit or cross-comparison is used. In the discussion of company results through ratios, intra-company, industrial average and intercompany comparisons are commonly used. Liquidity, solvency and profitability are common measures used in financial ratio analysis.

### **Liquidity ratios**

Liquidity ratios are used to measure the company's ability in short run (usually one year) to meet unexpected cash requirements and to pay off its maturing obligations. Creditors, such as suppliers and bankers, are especially interested in assessing clients' debt-paying ability through liquidity analysis. Common ratios employed to determine the company's liquidity are the current ratio, acid-test ratio, receivables turnover and inventory turnover.

In practice, a company may have a better liquidity position than indicated by ratio analysis:

1. A company may have non-current assets that can be converted to cash in a short period of time. This would add to the company's liquidity. Extreme caution is needed if there is any reliance on non-current assets for liquidity. A continuous sale of non-current assets is not a healthy method financing business in the long term. Further, it may be inappropriate to convert certain non-current assets into cash in a short period of time. For example, the time for which an investment is held depends on the investment nature.
2. A company may have a good long-term debt position and thus be able to issue shares or debt to increase its finance. Therefore, the company would be able to relieve a severe liquidity problem in a reasonably short time.
3. Unused bank credit lines reflect a positive liquidity situation. These lines are normally disclosed in notes to financial statements.

On the other hand, a company may be in worse liquidity position than that reflected by the ratios:

1. A company may have guaranteed a bank note for another company. This should be disclosed in the notes to financial statements.
2. A company may have discounted notes on which the other party has full recourse

against the company. Discounted notes can be disclosed in a note to financial statements. A company that discounts a customer note receivable is actually selling the note to the bank with recourse. Other types of recourse or privilege are interest rebates and insurance services.

3. A company may have important contingent liabilities that have not been recorded, such as a legal case about disputed tax. Unrecorded contingencies which are material should be disclosed in the note to financial statements.

### **Solvency ratios**

Liquidity considers a short period of time while solvency reflects the long-term financial situation of companies. Solvency ratios are used to measure the ability of a company to continue its operations over a long period of time. Long-term creditors and stockholders are interested in the company's ability to pay interest as it reaches maturity and to repay the face value of debt. The times-interest-earned ratio and debt-to-total-assets ratio are the two ratios that reflect the company's debt-paying ability over a longer time frame.

### **Profitability ratios**

Profitability reflects the company's ability to generate earnings. Profit analysis is of vital importance to shareholders as they derive revenue in the form of dividends. An increase in profitability can cause a rise in market price, leading to capital gains. Company management use profit as a performance measure. Profitability ratios measuring assets, sales and investment are employed to analyze the profit or operating success of a company for a given time period. The common ratios used are profit margin, asset turnover, return on assets, return on common stockholders' equity, earnings per share, price earnings and payout.

Profit or loss influences the company's ability to obtain equity and debt financing. It also influences the company's liquidity position and its ability to develop. As a result, both creditors and investors are interested in evaluating profitability, or the company's earning power. Financial analysts usually regard profitability as the ultimate test of a company's operating effectiveness.

### **Expanded financial ratio analysis in practice**

Corporate management can use financial ratio analysis in many ways. Analysis can indicate the relative liquidity, solvency and profitability of a company. In companies, commercial loan departments offer a significant rating to selected ratios that basically measure liquidity or solvency. In the US, the debt-to-equity ratio gets the highest significance rating, and the current ratio is the second highest rated by the commercial loan officers. A commercial bank may choose to set a ratio as a part of a loan agreement. Bank customers' credit limits are extended basing on the fulfillment of certain ratio figures. The current ratio and debt-to-equity ratio are the two ratios most likely to be included in a loan agreement.

Financial analysts and managers give profitability ratios the high significance ratings. They rate return on investment and earnings per share the highest. Many companies choose certain key financial ratios, such as profitability ratios, to be included as part of the company's operational objectives.

Accountants give the highest significance rating to two liquidity ratios: accounts receivable in days and the current ratio. The highest rated profitability ratio is the net profit margin, while the highest rated debt ratio is the debt-to-equity ratio.

Financial statements and notes to accounts review indicate the conservatism of financial reporting regarding accounting policies. When a company has conservative accounting policies, its earnings are high quality.

There have been many academic studies on the use of financial ratios to forecast financial failure. No conclusive model has yet been developed to forecast financial ratios. Nevertheless, auditors and management employ ratio analysis to establish a company's operational situation.

Auditors use financial ratio analysis as part of their analytical review procedures. Using ratio analysis, they can detect significant fluctuations and unusual items in operating statistics. This can lead to a more effective and efficient audit. Management use financial analysis to measure and manage a company's performance more effectively. It is common for graphs to be used in annual reports to present financial information. Graphs give a clear presentation of important financial information. Graphs can present the picture better than a written report. Still, an effective use of financial analysis can integrate ratios that have been accepted as corporate objectives into comprehensive budgeting.

However, in some countries, especially the US, many companies restate their financial statements months after the first announcement. This presents a substantial problem when interpreting company financial situation. The objective of company valuation is to determine the value of the company's equity. The company's value derives from its ability to generate net cash inflows and a cash-flow-based return on investment. Research shows that a simple price-earnings ratio seems to play an important role in analysts' or fund managers' normal valuation procedures. Meanwhile multi-period discounted valuation models play a significant role in a company performance review.

In recent years, the collapse of the housing market in the US and of many financial institutions like Lehman Brothers led to a worldwide stock market collapse. Company financial analysis that was done only a few years ago was rarely used.

### **Conclusion**

A company can use the annual report to relate financial data effectively through the use of financial ratios. No major effort is made to explain financial results by the disclosure of financial ratios in annual reports. A review of financial ratios disclosed in annual reports indicates that wide differences of opinions exist on how many of the ratios should be measured. Employment of ratio analysis depends on the industry involved and no fixed number of ratios is used. Liquidity, solvency and profitability are the major categories.

### **References**

Gibson, C.H. (2011), Financial Reporting and Analysis, 12<sup>th</sup> edition, Cengage Learning Publishing Company.