Ratio Analysis

Chapter 5

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Ratio Standards

3 Types of Standards to compare against

1. Property's historical figures

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Ratio Standards (cont.)

2. Industry averages or benchmarks: - RMA Annual Statement Studies
   - Dun and Bradstreet Key Business Ratios
   - Bear Stearns Trends in Hotel Industry
   - Restaurant Industry Operations Report (Deloitte and Touche)

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Ratio Standards (cont.)

3. Budgeted ratios from corporate or property

It is important to identify what standard is being used to compare against the performance of the hotel or restaurant.

Ratio Standards (cont.)

- Ratios can also serve the purpose of determining how well a property's goals have been achieved. If actual performance falls short of expectation, ratios could lead the way to determine the cause.

Ratio Standards (cont.)

- A purpose of ratios to creditors is to assess creditworthiness and the hotel or restaurant's ability to service debt.
- From an investor's view, it is important to know how sound the operation is as well as how profitable an investment it is.

Group of Ratios

- Liquidity - ability to meet short-term obligations.
- Solvency - ability to meet long-term obligations.
- Profitability - ability to convert revenues into profits.
- Activity - ability to generate revenues from existing assets.
- Operating - show how efficient and effective the hotel/restaurant has been managed.

Liquidity Ratios

Current assets are expected to convert into cash within a relatively short period of time and current liabilities usually require prompt cash payment, hence the need to determine the firm's ability to meet its short-term obligations.

Current Ratio

1. Current Ratio: CA/CL

$200,000/$210,000 = 0.95:1

For each dollar of current liability there is $0.95 of current assets to support that.

Owners

⇨ prefer low current ratio because they do not want current assets tied up and being unproductive.

Creditors

⇨ prefer high current ratio, provides assurance that there are adequate current assets that can quickly convert to cash to meet obligations if need be.

Management

⇨ balances the needs of owners and creditors.

Improving the Current Ratio

Some ways of improving the current ratio:

- Obtain long-term debt.
- Obtain equity participation.
- Liquidate non-current investments or fixed assets to generate cash.
- Postpone dividend payment and conserve cash.
- Eliminate current liability.

High Current Ratio

Things to watch for with a high current ratio:

- High accounts receivable.
- High inventory balance.
- Low accounts payable.

Always interpret the current ratio along with the accounts receivable turnover and inventory turnover ratios.

Acid-test Ratio

2) **Acid-test (Quick) ratio: CA-Inventory-Pre-paid expenses/CL**

$195,000/$210,000 = 0.93:1

For each dollar of current liability there is $0.93 of current assets to support that.

Current Liability

3) **Operating Cash Flow to Current Liability**:

Monitor the trend, declining trend should raise concern. Creditors, owners, managers all prefer higher ratio. This ratio is preferred because the current and quick ratios derive from balance sheet figures that are at a single point in time while this covers an operating period. Minimum of <u>0.4:1</u> is preferred.

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Accounts Receivable Turnover

4) **Accounts receivable turnover: TR/Ave. AR**

$1,500,000/$100,000 = 15times

For large convention hotels, this tends to be the largest current asset. This ratio measures how quickly accounts receivables are converted into cash - the faster the better. A declining trend in AR turnover requires investigation.

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Accounts Receivable Turnover (cont.)

Owners and creditors - prefer high AR turnover.

Management - prefer high turnover but can live with low rate if it means more credit sales.

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Average Collection Period

5) **Average Collection Period: 365/AR turnover**

365/15 = 24.3 days

shows the number of days required to collect all of the average accounts receivable. Where terms of sale is 30 days net, hotels can expect average collection period to be between 30-35 days (no more than 40 days).

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Average Collection Period (cont.)

- For large hotels, it is important to track accounts receivable as a percentage of total revenues. Typically, majority of hotel/restaurant customers will pay by credit card (40% - 70% of TR), house accounts may represent 4% - 10% of TR, and the rest cash.

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Average Collection Period (cont.)

- Usually takes 1-5 days (2.5 days average) to collect credit card receivables. Sometimes some companies may take longer.

Analysis by short-term creditors: (suppliers/vendors, bank).

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Average Collection Period (cont.)

Interest is in the hotel/restaurant's ability to generate sufficient funds to meet current operating needs. Focus is on:

- Amount of working capital.
- Quality of working capital.

Solvency Ratios

Measures hotel/restaurant's ability to meet long-term obligations. Bondholders and other long-term creditors are interested in 3 factors:

- The rate of return on their investment.
- The hotel/restaurant's ability to meet its interest obligations.
- The hotel/restaurant's ability to repay the principal when it becomes due.

Owners

➷ prefer to use more debt rather than equity because of the benefits of financial leverage.

Creditors

↳ prefer hotel to use less additional debt in order not to compromise the firm's solvency. This gives them a higher margin of protection against losses of asset values, losses from operations, declines in future cash flows.

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Two Groups of Solvency Ratios

- those derived from balance sheet figures eg. debt ratio, debt-equity ratio, solvency ratio.
- those derived from income statement figures eg. times interest earned, fixed charge coverage ratio.

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Debt Ratio

1) **Debt ratio (reverse of solvency ratio): TL/TA**. This captures the percentage of total assets financed by short-term and long-term debt.

$330,000/$640,000 = 0.52:1

For each dollar of asset, $0.52 was financed by debt.

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Long-Term Debt to Total Capitalization Ratio

2) **Long-Term Debt to Total Capitalization ratio: LTD/LTD + TOE**

$120,000/$430,000 = 0.28:1

$0.28 of each dollar of total capital was borrowed.

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Times Interest Earned

3) **Times Interest Earned: EBIT/Interest Expense**

Expresses the number of times interest expense can be covered.

$375,000/$120,000 = 3.13times.

Owners, Creditors, and Management all prefer higher ratios. Generally 5X and above is more than enough cushion.

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Fixed Charge Coverage Ratio

4) **Fixed Charge Coverage ratio:**
<u>EBIT + Lease Expense</u>

Interest Expense + Lease Expense

For hotels/restaurants with little debt but heavy lease obligations, this ratio is more meaningful than the TIE ratio.

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Debt to Equity Ratio

5) **Debt to Equity ratio: TL/TOE**

$330,000/$310,000 = 1.06:1

For each dollar that the owners have put in the business creditors have invested $1.06.

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