Ratio Analysis: Financial Benchmarks for the Club Industry

Raymond S. Schmidgall
schmidga@bus.msu.edu

Agnes L. DeFranco
ALDeFranco@Central.UH.EDU

Follow this and additional works at: https://scholarworks.umass.edu/jhfm

Recommended Citation
Available at: https://scholarworks.umass.edu/jhfm/vol12/iss1/2
RATIO ANALYSIS: FINANCIAL BENCHMARKS
FOR THE CLUB INDUSTRY

Raymond S. Schmidgall
and
Agnes L. DeFranco

Abstract

General managers of clubs are often inundated with operations and membership issues and may not be able to spend quality time engaging in the analysis of the financial health of the club. With the aid of a handful of ratios, general managers and club controllers can assess the business trends and financial viability of their operations very easily. The top ratios used by club managers are: payroll cost percentage, cost of food sold percentage, cost of beverage sold percentage, current ratio, and debt-equity ratio. The results of several ratios focusing primarily on clubs’ balance sheets are presented in this article.

Introduction

The club industry is a unique segment of the hospitality business. It is part restaurant and part hotel. It serves food and beverage to its members and also provides various services from lodging to catering. It is also recreational. Some clubs have health and exercise facilities, from golf to tennis, from aerobics to Pilates classes and, in some cases, even a spa. It is not easy to manage an operation that is so multi-faceted.

While most clubs in the United States are equity clubs and are non-profit in nature, this does not necessarily mean that club managers and controllers can do whatever they would like with their resources and sustain a loss for their clubs all the time. They are still responsible for the financial viability of the clubs while at the same time providing the desired level of services to their members, if not exceeding such level. It is therefore imperative that there be tools to assist managers and their professional staffs to measure the financial success of their clubs.

Benchmarking is a process by which to compare one’s property against itself, the competition, or even the industry as a whole. In comparing with oneself, either to a historical perspective or to budget, trends, weaknesses, and opportunities for improvement can be identified. In the financial areas, such benchmarks and comparisons are normally quantitative in nature and are in the forms of financial ratios.

The Need for the Study

Currently, there are financial ratios and benchmarking publications available for the club industry. In a more general sense, three publications that are often referenced in the business world regarding financial ratios are The Business Almanac, Dun and Bradstreet,
and Robert Morris Associates. All three sources use standard industrial classification codes so that each industry has its own competitive set, making the benchmarking process more meaningful (DeFranco, Countryman, and Venegas, 2004). However, as good as these publications are, they are not specific to the club industry. As seen in the results of this study, about 86 percent of our respondents are country, city, and golf clubs. According to the standard industrial classification codes published under the U.S. Department of Labor (www.osha.gov), there is one code, 7997, that represents membership sports and recreation clubs. While this is the closest code, this analysis includes not only country clubs, city clubs, and golf clubs, but also aviation clubs, beach clubs, bridge clubs, gun clubs, riding clubs, shooting clubs, swimming clubs, yacht clubs, and sports clubs such as baseball, football, bowling, hockey, and soccer that are not professional or semi-professional in nature.

In a more specific sense, there are other companies such as PKF that provide financial data for clubs. They do an excellent job in publishing operating ratios for clubs on an annual basis. However, balance sheet ratios are not included. Furthermore, the information reported in all the above-mentioned publications does not rank the usefulness and importance of the various ratios and measurements.

The Purpose of the Study

Therefore, this study has four main objectives. First, medians of selected accounts are included to give an overview of the financial picture of the club industry. Second, this study identifies the most used and important ratios in the club business. Third, using the information gathered from the significant accounts, the mean, median, standard deviation, and upper and lower quartile statistics of 16 key ratios are provided to serve as benchmarks tools for the club industry. Finally, this study also acts as the initial phase of a longitudinal study to track the 16 ratios in years to come.

Literature Review

Benchmarking: Measurements for References

Withiam (1991) refers to a benchmark as “a point of reference or a standard against which all other efforts are judged.” Benchmarking is the process of finding the best reference point. Camp (1989) defined benchmarking as strategic, operational, and management oriented. Within operational benchmarking is relative cost, which concerns financial measurements. Most closely related to the financial segment of the hospitality industry is Schmidt’s benchmarking study in 1992, where he classified benchmarking into strategic, cost, and customer behavior. He includes financial accounting ratios such as return on capital, cost of capital, the market value to book value ratio, and the highest average shareholder return to identify how well shareholders’ value is being created strategically. While some of these do not pertain to the club industry, Schmidt’s cost benchmarking also focuses on operational cost structure.

Ratio analysis is one of the core topics in any accounting curriculum. Ratio analysis expresses a relationship between two figures by dividing one number by another. It
presents financial data in another light and gives controllers and managers another view of the financial health of their business. For example, assume a club reported $60,000 in gross profit last month with a sales level of $100,000. Dividing $60,000 by $100,000 yields a 60 percent gross profit margin. For this month, the club reports $75,000 in gross profit. This is $15,000 more than last month's dollar amount. However, if the sales of this month are $150,000, the club has achieved only a 50 percent gross profit margin, which is much worse than what it was in the previous month. Suddenly, this $75,000 is not so great. It is good to look at absolute numbers (Weygandt, Kieso, Kimmel, & DeFranco, 2005), but it is of utmost importance that management examine relative figures such as ratios in order to gain a better, deeper, and more meaningful understanding of the entire situation (Schmidgall & Damitio, 2001).

Ratios can be divided into five main areas: liquidity, solvency, activity, profitability, and operating. Liquidity ratios measure a club’s ability to meet its short-term obligations, while solvency ratios measure its ability to meet the long-term obligations. Managers normally use activity ratios to measure their ability to use the club’s assets. Profitability ratios reflect management’s effectiveness in generating returns. Last but not least, operating ratios help management analyze the operations of the club (Schmidgall & Damitio, 2001).

It is also important to note that ratios are simply an expression of any two numbers. In other words, any two numbers divided by each other can form a ratio. For ratios to be of any meaning, these numbers must be related. For instance, dividing food cost into rent expense cost will not yield a result that management finds useful (Schmidgall & Damitio, 2001). Although they are both cost figures, they are not meaningfully related.

Schmidgall and Damitio (2001) also advocate the use of ratios as financial goals. For instance, a labor cost of 40 percent in a particular club will compare favorably with last year’s labor cost of 42 percent and the industry standard of 41 percent. However, if the goal was set at 38 percent, the club is not achieving its goal.

Ratio analysis, together with benchmarking, can provide each club operation a useful method to assess its financial results.

Methodology

In Spring of 2004, with the assistance of the Hospitality Financial and Technology Professionals (HFTP) Research Institute, a list of ratios that have been reported as useful by the membership of the HFTP was collected. With that, a cover letter and a two-page survey were developed and pilot tested with club controllers for validity. HFTP’s membership database was then used to randomly select 500 club controllers to participate in this study.

The survey consisted of six parts. Part I had four questions regarding the general information of the club such as type, number of members, geographical location, and the profit versus non-profit orientation of the club. Parts II, III, and IV asked for balances of
accounts in the balance sheet, the statement of activities, and the statement of cash flows. These data were then used to calculate the ratios. Part V asked respondents to rank their ten most important financial and operating ratios used in their respective clubs. No ratios were given in the entire survey and thus the respondents were not prompted or influenced by any means as to their choices of the top rated ratios. Part VI consisted of one question asking for the title of the respondents.

A total of 85 surveys were returned and SPSS was used to compile the descriptive statistics.

Results and Discussion

Profile of the Respondents

Of the 85 respondents, 84.7 percent are controllers and 4.7 percent are chief financial officers. Assistant controller (2.4 percent) and others (8.2 percent), generally members of the clubs’ accounting department, make up the total. The majority of the respondents are associated with country and golf clubs (76.5 percent), having mostly 300 to 750 members (57 percent). They are also mostly clustered in the East of the United States (57.7 percent). Figures 1 through 4 detail these data graphically.
The Most Useful Ratios in Clubs

Respondents were requested to list up to ten key ratios used in their clubs in their order of importance. Sixty-nine of the 85 respondents (81 percent) listed ratios; however, only six respondents provided 10 ratios. The 69 respondents listed an average of 4.6 ratios.

Table 1 contains a summary of the financial ratios used and their importance. The most popular ratio (used by 54 of the clubs or 78 percent of the respondents listing ratios) was payroll cost percentage. A score was calculated for each ratio based on its importance. The first ratio listed was given an importance rating of 10, the second ratio listed was given a rating of 9 and so on. The importance score for payroll cost percentage was 7.83 out of a possible 10. The weighted score is the product of the percentage of clubs using the ratio and the importance score.
Table 1
Ratios: use and importance

<table>
<thead>
<tr>
<th>Ratio</th>
<th>Mentions</th>
<th>Mentions % of Total</th>
<th>Importance Score</th>
<th>Weighted Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Payroll cost %</td>
<td>54</td>
<td>78%</td>
<td>7.83</td>
<td>6.13</td>
</tr>
<tr>
<td>Cost of food sold %</td>
<td>45</td>
<td>65%</td>
<td>9.31</td>
<td>6.07</td>
</tr>
<tr>
<td>Cost of beverage sold %</td>
<td>36</td>
<td>52%</td>
<td>8.22</td>
<td>4.29</td>
</tr>
<tr>
<td>Current ratio</td>
<td>36</td>
<td>52%</td>
<td>7.56</td>
<td>3.94</td>
</tr>
<tr>
<td>Debt-equity</td>
<td>13</td>
<td>19%</td>
<td>8.23</td>
<td>1.55</td>
</tr>
<tr>
<td>Cost of food &amp; bev. sold %</td>
<td>11</td>
<td>16%</td>
<td>9.36</td>
<td>1.49</td>
</tr>
<tr>
<td>Inventory turnover</td>
<td>15</td>
<td>22%</td>
<td>6.67</td>
<td>1.45</td>
</tr>
<tr>
<td>Gross profit %</td>
<td>7</td>
<td>10%</td>
<td>9.57</td>
<td>0.97</td>
</tr>
<tr>
<td>Occupancy %</td>
<td>6</td>
<td>9%</td>
<td>8.00</td>
<td>0.70</td>
</tr>
<tr>
<td>Maintenance cost/holes</td>
<td>7</td>
<td>10%</td>
<td>6.33</td>
<td>0.64</td>
</tr>
<tr>
<td>Accounts receivable turnover</td>
<td>6</td>
<td>9%</td>
<td>6.33</td>
<td>0.55</td>
</tr>
<tr>
<td>Cash flow to debt</td>
<td>4</td>
<td>6%</td>
<td>9.25</td>
<td>0.54</td>
</tr>
<tr>
<td>Cost of merchandise sold %</td>
<td>4</td>
<td>6%</td>
<td>7.50</td>
<td>0.43</td>
</tr>
<tr>
<td>Rounds of golf ratios</td>
<td>4</td>
<td>6%</td>
<td>7.00</td>
<td>0.41</td>
</tr>
<tr>
<td>Average food service check</td>
<td>3</td>
<td>4%</td>
<td>8.00</td>
<td>0.35</td>
</tr>
<tr>
<td>Mix of sales</td>
<td>2</td>
<td>3%</td>
<td>9.00</td>
<td>0.26</td>
</tr>
<tr>
<td>Spending per member</td>
<td>3</td>
<td>4%</td>
<td>3.67</td>
<td>0.16</td>
</tr>
<tr>
<td>Other ratios</td>
<td>61</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>317</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Payroll cost percentage was the most popular ratio. Although it did not receive the highest importance score, it did receive the highest weighted score. This is not surprising since payroll costs are the highest expense in the club industry.

The top five ratios used were payroll cost percentage, cost of food sold percentage, cost of beverage sold percentage, current ratio, and inventory turnover.

The top five ratios based on importance were gross profit percentage, cost of food & beverage sold percentage, cost of food sold percentage, cash flow to debt, mix of sale. Though these were considered important to those respondents listing them, only cost of food sold percentage was used by more than 50 percent of the respondents.

Finally, considering both use and importance, the top five ratios are payroll cost percentage, cost of food sold percentage, cost of beverage sold percentage, the current ratio, and the debt-equity ratio.
2003 Results

In the spirit of benchmarking, it is interesting to know the amounts in selected key accounts across the 85 responding clubs. For the balance sheet, the following are the median figures for the assets accounts:

\[
\begin{align*}
\text{Cash} & : \$680,769 \\
\text{Accounts Receivables} & : 601,000 \\
\text{Food Inventory} & : 21,989 \\
\text{Beverage Inventory} & : 29,835 \\
\text{Golf Inventory} & : 57,140 \\
\text{Other Assets} & : 219,598 \\
\text{Total Current Assets} & : 1,610,331 \\
\text{Property and Equipment} & : 11,077,651 \\
\text{Accumulated Depreciation} & : (4,762,056) \\
\text{Total Prop. & Equip.} & : 6,315,595 \\
\text{Total Assets} & : $7,872,577^* \\
\end{align*}
\]

*Note that the Total Assets as reported here is not the same amount as would have been calculated by adding total current assets to total property and equipment. This is because medians (50th percentile figures) are used in the reporting process.

Of all the respondents, half of them have assets above the $7.87 million level, while the other half are below. Current assets account for about 20 percent of the assets, signifying that the majority of a club’s assets are tied up with property and equipment.

The following are selected liability and members’ equity accounts balances at the end of 2003:

\[
\begin{align*}
\text{Total current liabilities} & : \$1,031,394 \\
\text{Mortgage payable} & : 1,362,248 \\
\text{Total long-term debt} & : 1,524,160 \\
\text{Total members’ equity} & : 5,516,769 \\
\end{align*}
\]

It is very positive to note that over 60 percent of the clubs’ financing is through equity rather than debt. In general, it appears clubs should have fairly high solvency ratios and should be able to pay their debts without much difficulty.

In the operations area, the data for the following key accounts were collected and the medians are reported as follows:
Revenues:

<table>
<thead>
<tr>
<th>Item</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dues</td>
<td>$2,079,829</td>
</tr>
<tr>
<td>Food Sales</td>
<td>1,050,000</td>
</tr>
<tr>
<td>Beverage Sales</td>
<td>374,044</td>
</tr>
<tr>
<td>Proshop Sales</td>
<td>444,144</td>
</tr>
<tr>
<td>Other Revenues</td>
<td>691,137</td>
</tr>
<tr>
<td>Total Revenues</td>
<td>$5,020,354</td>
</tr>
</tbody>
</table>

*Note that the Total Revenues as reported here is not the same amount as would have been calculated by adding all revenues. This is because medians (50th percentile figures) are used in the reporting process.

Costs:

<table>
<thead>
<tr>
<th>Item</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost of Food Used</td>
<td>$445,149</td>
</tr>
<tr>
<td>Cost of Beverage Sold</td>
<td>115,341</td>
</tr>
<tr>
<td>Cost of Golf Merchandise</td>
<td>141,926</td>
</tr>
<tr>
<td>Fixed Charges:</td>
<td></td>
</tr>
<tr>
<td>Interest Expense</td>
<td>$50,411</td>
</tr>
<tr>
<td>Depreciation Expense</td>
<td>498,524</td>
</tr>
<tr>
<td>Rent Expense</td>
<td>68,000</td>
</tr>
<tr>
<td>Fire Insurance</td>
<td>94,131</td>
</tr>
<tr>
<td>Property Taxes</td>
<td>126,856</td>
</tr>
<tr>
<td>Net Income</td>
<td>$67,887</td>
</tr>
</tbody>
</table>

As expected, dues income makes up over 40 percent of the revenues of a club, while food and beverage together add another 25 percent. As reported earlier, respondents are very interested in food and beverage costs percentages. In this study, the cost of food sold percentage is approximately 42 percent, while beverage cost percentage is at about 31 percent. If food and beverage sales and costs are totaled, then gross profit of food and beverage is $863,554, which represents a gross profit percentage of 61 percent and thus a combined food and beverage cost percentage of 39 percent.

Although clubs are mostly non-profit entities, the median profit reported is $67,887, which when converted to cash can serve as a source of funds for the clubs to use for upgrades and other purposes. The last number requested from respondents was total operating cash flows. The median response was $382,079.

**The Sweet 16**

For practical purposes and also for more meaningful measurement and comparison, results collected from the key accounts are transformed into 16 key financial ratios. In addition to the mean and standard deviation, Table 2 presents the median, the upper quartile, and the lower quartile. This level of detail provides better data points for comparison. Individual companies may choose to compare to the mean or the quartiles, whichever serves their purpose best at that point.
### Table 2
The ratios

<table>
<thead>
<tr>
<th>Ratios</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Median</th>
<th>Lower Quartile (25 percent)</th>
<th>Upper Quartile (75 percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current ratio&lt;br/&gt;January 2003</td>
<td>3.55</td>
<td>11.9</td>
<td>1.45</td>
<td>0.94</td>
<td>2.37</td>
</tr>
<tr>
<td>December 2003</td>
<td>2.68</td>
<td>4.94</td>
<td>1.42</td>
<td>0.91</td>
<td>2.46</td>
</tr>
<tr>
<td>Accounts receivable turnover</td>
<td>10.11</td>
<td>7.14</td>
<td>9.01</td>
<td>5.61</td>
<td>12.15</td>
</tr>
<tr>
<td>Operating cash flows to current liabilities</td>
<td>0.74</td>
<td>2.90</td>
<td>0.37</td>
<td>0.020</td>
<td>0.61</td>
</tr>
<tr>
<td>Operating cash flows to long-term debt</td>
<td>0.04</td>
<td>1.25</td>
<td>0.06</td>
<td>0.005</td>
<td>0.24</td>
</tr>
<tr>
<td>Long term debt to total capitalization&lt;br/&gt;January 2003</td>
<td>0.28</td>
<td>0.24</td>
<td>0.21</td>
<td>0.097</td>
<td>0.49</td>
</tr>
<tr>
<td>December 2003</td>
<td>0.24</td>
<td>0.43</td>
<td>0.21</td>
<td>0.057</td>
<td>0.48</td>
</tr>
<tr>
<td>Debt-equity ratio&lt;br/&gt;January 2003</td>
<td>.50</td>
<td>3.07</td>
<td>0.25</td>
<td>0.10</td>
<td>0.88</td>
</tr>
<tr>
<td>December 2003</td>
<td>1.39</td>
<td>8.59</td>
<td>0.27</td>
<td>0.04</td>
<td>0.83</td>
</tr>
<tr>
<td>Times interest earned</td>
<td>1137.33</td>
<td>7610.33</td>
<td>2.59</td>
<td>0.32</td>
<td>19.10</td>
</tr>
<tr>
<td>Fixed charge coverage</td>
<td>4.38</td>
<td>10.69</td>
<td>1.89</td>
<td>0.77</td>
<td>6.16</td>
</tr>
<tr>
<td>Food inventory turnover</td>
<td>23.09</td>
<td>12.90</td>
<td>19.83</td>
<td>15.10</td>
<td>27.12</td>
</tr>
<tr>
<td>Beverage inventory turnover</td>
<td>4.54</td>
<td>3.14</td>
<td>4.19</td>
<td>2.46</td>
<td>6.07</td>
</tr>
<tr>
<td>Fixed asset turnover</td>
<td>1.63</td>
<td>6.10</td>
<td>0.80</td>
<td>0.55</td>
<td>1.12</td>
</tr>
<tr>
<td>Total asset turnover</td>
<td>0.74</td>
<td>0.53</td>
<td>0.63</td>
<td>0.46</td>
<td>0.81</td>
</tr>
<tr>
<td>Profit margin</td>
<td>0.072</td>
<td>0.32</td>
<td>0.017</td>
<td>-0.012</td>
<td>0.082</td>
</tr>
<tr>
<td>Return on assets</td>
<td>0.01</td>
<td>0.04</td>
<td>0.003</td>
<td>-0.002</td>
<td>0.012</td>
</tr>
<tr>
<td>Return on members’ equity</td>
<td>0.02</td>
<td>.1033</td>
<td>0.004</td>
<td>-0.004</td>
<td>0.024</td>
</tr>
<tr>
<td>Operating efficiency</td>
<td>0.26</td>
<td>0.34</td>
<td>0.229</td>
<td>0.14</td>
<td>0.27</td>
</tr>
</tbody>
</table>

Ratios 1–3 are liquidity ratios, measuring the ability of the clubs to meet their short-term obligations. Ratios 4–8 are solvency ratios that measure the ability of clubs to meet their long-term obligations. Ratios 9–12 are activity ratios that help indicate management’s ability to use the club’s assets. Ratios 13–16 are profitability ratios.

For the discussion, the median rather than the mean figure is used. In doing so, should there be any extremes, the results will not be skewed one way or another.
Liquidity Ratios

**Current ratio** = current assets/current liabilities

If the current ratio is 1.0, that means a club has the exact amount of current assets to cover and pay off its current debts. From Table 2, the current ratios at the beginning of the year and the end of the year did not present a significant difference. At a median of 1.42, lower quartile of 0.91, and upper quartile at 2.46, at the end of 2003 the club industry, as a whole, does not appear to have any difficulties meeting its short-term obligations.

**Accounts receivable turnover** = total revenues/average accounts receivable

This ratio measures the speed of conversion of accounts receivable into cash. A median of 9.01 means the receivables were collected nine times per year. Dividing the turnover of 9.01 into 365 means the average collection period is approximately 41 days. This is a fairly good figure as the club industry bills its members on a monthly basis and members generally have until the end of the following month to pay. The upper quartile of 12.15 is exactly at a monthly rate or 30 days, whereas the lower quartile of 5.61 shows that some clubs take up to 65 days, or more than two months, to collect. In such cases, these clubs may want to look into the collection procedures or credit policies that they have in place and make some adjustments and improvements.

**Operating cash flows to current liabilities** = operating cash flow/average current liabilities

The operating cash flow number is taken from the clubs' statements of cash flow. Dividing this figure by the average current liabilities results in the median of 0.37, which means that $0.37 of cash flow from operations was provided by the average club for each $1 of average current debt for 2003. You can begin to see the power of tracking such ratios to gauge the performance of your club.

Solvency Ratios

**Operating cash flows to long-term debt** = operating cash flow/average long-term debt

Similar to the previous ratio, this figure measures how much cash flow is being generated to cover the obligations in long-term debt. A median of 0.06 means $0.06 of cash flow from operations was provided by the club for each $1 of average long-term debt for 2003.

**Long-term debt to total capitalization** = long-term debt liabilities/total liabilities + total members equity

As the formula suggests, a median of 0.21 for both December 2002 and December 2003 means long-term debt is 21 percent of the total capitalization of the clubs. This is a good number from a creditor perspective since creditors prefer a lower percentage. A low percentage such as this means the majority of the club is financed by members' equity.

**Debt-equity ratio** = total long-term liabilities/total members' equity
This ratio is slightly different from the previous capitalization ratio in that it only looks at long-term debt as a portion of members’ equity. Since management would prefer less debt, it is ideal for this ratio to be less than one. For the beginning and end of 2003, the medians of 0.25 and 0.27, the lower quartiles of 0.11 and 0.04, and upper quartiles of 0.88 and 0.83 are all below 1.0, indicating that the club industry appears to be doing extremely well in managing its long-term debt.

\[ \text{Times interest earned (TIE)} = \frac{(\text{net income} + \text{interest expense})}{\text{interest expense}} \]

or

\[ = \frac{\text{EBIT}}{\text{interest expense}} \]

It is always good to know how many times a club can cover its interest payments. This is a very useful number for creditors in measuring the solvency of a business from an income perspective. In 2003, the club respondents reported a median TIE ratio of 2.59. While the lower 25 percent of the respondents only showed a 0.32 TIE, meaning that they only have $0.32 of earnings prior to interest expense to cover their interest obligations, the upper quartile reported a TIE of 19.10 times.

\[ \text{Fixed charge coverage} = \frac{\text{net income} + \text{interest expense} + \text{rent expense}}{\text{interest expense} + \text{rent expense}} \]

This is similar to the TIE, but it also includes expenses from operating leases for property and equipment. This is especially important as the club business needs a large amount of property and equipment for its daily operation, and some clubs do prefer leasing over purchase. The result of a 1.89 median means that such costs can be covered 1.89 times.

**Activity Ratios**

**Food inventory turnover** = cost of food used / average food inventory

The food inventory turnover median is 19.83, meaning that the average food inventory stays in the operation for an average of 18.4 days (365 / 19.83). The lower and upper quartiles of 15.10 and 27.12 are translated into 24 days and 13 days. Obviously, some food such as canned goods may last more than the average 18.4 days, while produce items may be used up daily. It is good to monitor how quickly food items are being recycled.

**Beverage inventory turnover** = cost of beverage sold / average beverage inventory

A median of 4.19 means beverage items such as liquor, beer, and wine, stay in an operation for about 3 months or 87 days (365 / 4.19). It is expected that beverage items do not normally have a large turnover unless the club has a lot of catering business or big banquets.

**Fixed asset turnover** = total revenues / average net fixed assets
This ratio measures how effective management is in using the fixed assets. A larger number or a higher turnover means the assets are generating more revenues for the club. However, since the denominator is average fixed assets, be aware that the depreciation method used will affect this ratio. Accelerated depreciation methods will yield a higher turnover ratio than will the straight-line method (Schmidgall & Damitio, 2001). This study reported median, lower, and upper quartiles of fixed asset turnover at 0.80, 0.55, and 1.12 respectively. Thus, for every dollar of net fixed assets, $0.80 cents in revenue was generated.

\[
\text{Total asset turnover} = \frac{\text{total revenues}}{\text{average total assets}}
\]

Instead of looking simply at fixed assets, this ratio includes all assets. Thus, one can expect the results to be lower than the previous. A median of 0.63, a lower quartile of 0.46, and an upper quartile of 0.81 were reported, indicating that for every dollar of assets, $0.63 in revenue was generated.

**Profitability Ratios**

\[
\text{Profit margin} = \frac{\text{net income (or increase in net assets)}}{\text{total revenues}}
\]

As non-profit entities, clubs do not expect a high profit margin. For 2003, respondents reported 1.7 percent in net income compared to total revenues. The upper quartile reached 8.2 percent, while the lower quartile reported a loss of 1.2 percent. Note that the mean of the study is at 7.2 percent, much closer to the upper quartile than the median, indicating that there were a few clubs that made very substantial profits and thus pulled the mean average higher than the median.

\[
\text{Return on assets} = \frac{\text{net income (or increase in net assets)}}{\text{average total assets}}
\]

This ratio measures the relationship between net income and total assets. A median of 0.003 means for every dollar in assets, the club generates 0.3 cents in profit. Again, clubs are mostly non-profit and thus this ratio is not expected to be at a high level. With the upper quartile at 1.2 percent some clubs are making money and would be able to channel such funds to capital investments.

\[
\text{Return on members' equity} = \frac{\text{net income (or increase in net assets)}}{\text{average net assets (or members' equity)}}
\]

The result of the median in this ratio is slightly higher than the return on assets, at a level of 0.4 percent. The upper quartile of 2.4 percent is also very positive.

\[
\text{Operating efficiency ratio} = \frac{\text{income before fixed charges}}{\text{total revenues}}
\]

The last ratio, operating efficiency, offers a better measurement of “management” effectiveness than the profit margin. Many managers are not involved in, nor are they privy to, the negotiations of many fixed charges such as interest. The boards of directors
often make such decisions. A median of 22.9 percent means for every $1 of total revenue, the club earns 22.9 cents.

**Suggestions for Ratio Analysis**

The purpose of this study is to provide the industry with some new and meaningful measurements. As seen from the results, certain ratios (such as profit margins and cost percentages) are more often used than others in the club business. Others, such as current ratio or cash flows to short- and long-term debt, are also important. Ratio analysis is a powerful financial and diagnostic tool.

**Choose Appropriate Ratios and Set Realistic Standards**

Each club is a unique operation and each board may have different sets of goals in any given year. It is imperative, therefore, for each club to choose the ratios that pertain to its own operations and goals and then set the realistic standards so the performance of the club can be analyzed correctly. For example, in the food service industry, a 30 to 35 percent food cost for a casual to fine-dining restaurant is a good goal, while this percentage is often less than 30 percent in cafeterias and quick service restaurants. However, achieving a 30 percent food cost in a club may not be realistic. Members pay membership dues already. They expect some of their dues to cover their food expenditures and that the prices of the menu items will therefore be very reasonable. Setting realistic standards is very important.

**Understand the Numbers behind the Ratios**

Knowing what the ratios mean, what numbers that make up the ratios, and the sources of those numbers can help general managers and controllers to identify opportunities for improvement. For example, an inventory turnover ratio that is not at a normal level set for your club can signify anything from a wrong extension in the inventory book, to taking incorrect inventory, to waste, and worse still, to theft in your club operations. Understanding the numbers behind the ratios allows managers to better investigate the causes behind any significant variances.

**Take Appropriate Corrective Actions**

It is not good to simply calculate the ratios. Management needs to analyze them, benchmark them, understand what may cause a ratio to deviate from a norm, and most importantly, once the problem is identified, take corrective actions. Involve the staff in some of these discussions and make them part of the solutions to the issues. This increases the “buy-in” of the corrective actions and creates more team spirit in the club.

**Monthly and Year-to-date Analysis**

Just as you would have a budget on an annual basis and then divide that into monthly budgets for short-term comparisons, you may also want to perform ratio analy-
ysis on a monthly and on a year-to-date basis. This really helps club managers and controllers to easily identify any anomaly. The extremes can be pointed out and adjustments and corrections can then be made.

In summary, ratios are numbers. These numbers can be used to assist management in problem solving and decision-making. Ratio analysis, when used correctly, is an invaluable management tool.

References


Raymond S. Schmidgall, Ph.D., is the Hilton Hotels Professor of Hospitality Financial Management in the School of Hospitality Business at Michigan State University. Agnes L. DeFranco, Ed.D., is an Associate Professor and Interim Asst. Vice President of Undergraduate Studies in the Conrad N. Hilton College of Hotel & Restaurant Management at the University of Houston.