Financial outlook of spinning industry of Pakistan
by Muhammad Mushtaq Mangat, Muhammad Sarwar Rana and Abdul Raheem Wahab.

This study elaborates the financial outlook of spinning industry from 2006 to 2008. Spinning industry of Pakistan is one of the oldest and well organized manufacturing sector of Pakistan and according to 2009 data there are more than 450 spinning mills and nearly 12 million spindles installed in Pakistan. Spinning industry is capital intensive in nature and needs a huge investment and continuous support of banks for the regular supply of fibers.

Financial ratios and spinning mills of Pakistan

The future of firms can be determined to some extent from financial ratios derived from their financial statements. This report highlights current problems and financial health of the mills and considering these ratios, one can develop an idea about the future of this sector.

Financial ratios indicate financial health and strength of the firms and some times this long list of financial ratios can create confusion. The user needs to array all available ratios and group them under various heads. Such exercise can help user to earmark the useful ratios (Gombola and Edward, 1983). There is a logical connectivity among these groups since they are derived from the same source. Classification and selection of useful ratios depends upon the objectives as well as the business dynamics. Gombola and Edward (1983) have grouped ratios into seven following classes:

1. Return on investment.
2. Capital intensiveness.
3. Inventory intensiveness.
5. Receivable intensiveness.
6. Short term liquidity.
7. Cash position.

Chen and Shimerda (1981) have discussed the significance of financial ratios in evaluating the performance and financial position of the firms. They concluded that such ratios can also help to predict the bankruptcy of firms up to 90%.

According to Gupta and Huffier (1972), rapid changes in business have forced business world to develop functional and practical financial ratios of the organization. There are many usages of these ratio but primarily these ratios are used for prediction purpose.

Beaver (1966) points out that ratio analysis is being used since the beginning of the nineteenth century and initially current ratio was used primarily for the evaluation of creditworthiness. Ratios are quite important for investors, lenders, where as academic world is moving away from this traditional concept and demands to develop a multivariate model. Particularly, to predict the bankruptcy of such models, Altman (1968) writing about this idea developed a model which has given 95% accurate results. There is a serious difference of opinion between academic world and real business world.

Nevertheless, both agree that the ratios are quite useful for the prediction of future. The main difference is how one applies these ratios. This paper is an effort to assess the current financial health of a sector, which is very much important for the economy of Pakistan. We prefer to apply traditional method to measure financial ratios. However we believe that for prediction of solvency, such limited knowledge is quite meager and needs in depth information to have a reliable result.

The selection of ratios needs a careful consideration keeping in mind the objectivity of the study. According to empirical studies by Chen and Shimerda (1981), there is no constant and set rule which may be useful in selecting the ratios. In our view such selection is of subjective nature and biased towards the nature and objectivity of the researchers.

Financial ratios are derived for certain applications. There is an emerging trend in transforming these ratios into a meaningful predicting model by using advance statistical techniques. Application of statistical techniques provide useful results but accuracy and usefulness of these results are under question (Deakin 1976). Application of statistical techniques depends upon some assumptions. Deakin explains that it is not possible in all cases that such techniques can be used to predict the future of the firms. Statistics in its nature relies on the assumptions and it provides the probability of the outcome. Keeping this limitation Deakin does not support to use advanced statistical tools rather prefers traditional use of ratios to assess financial health of the firms.

Gupta and Huffier elaborate two main problems related to study of the ratios when these are used at macro level or for a cluster. One is related to data validity and second selection of standards which can be used as benchmark. Without having any standard it would be difficult to comment on the number derived through financial analysis. The current nature of business requires changes in standards on a continuous basis to accommodate the rapid change in the business model. Acceptability of these standards is another issue.

Data structure and evaluation of data is another source of ambiguity about the results, as in most of the cases required data is not available and consequently, researchers have to rely on the limited data (Gupta and Huffier 1972). Working with a limited data does not allow certain absolute statements. Rather, results may be classified into broad categories. In this study we are also facing this dilemma and we are unable to put forward any absolute statement. However, we will be able to give mean, minimum and maximum values. These values will provide a broader view about the spinning industry of Pakistan.

Osteryoung et al (1992) have compared financial ratio of small, medium, and large firms and concluded that there is a significant difference among the ratios. Ratios of retail business naturally will be different from the manufacturing business. Therefore, ratios from the same sector are being considered.

Lev (1969) had tried to solve this issue and explained that traditionally firms compare their ratios with average of the sector. Lev studied and found that generally firms adjust their targets according to the mean of the said sector. Nevertheless, there are also predetermined standards available in the literature but their application is quite different. This difference may be due to size or due to the nature of the business. In our view this difference may be cyclic in nature.

According to Rees (1965), data is informative when related to a point of comparison, hence benchmarking is misleading when applied to different industries. benchmarking can be achieved through a time series comparison with examined firms or by using cross sectional perspective by using industry average. Firm's performance should always be judged keeping in view the overall performance of the sector. If there is a general decline or rise, it means nothing is special with any particular firm. However rate of change must be compared with other players.

Rees states that it is always difficult to select most appropriate ratio and also many ratios may cause subset of ratios. This study will compare the ratios with generally acceptable ratios and this study will also provide a benchmark for future studies.
The above discussion is to give a brief description of financial ratios. These ratios are highly useful for shareholders and the banking sector.

Comparison and benchmarking for financial ratios is one of the major issues faced by the financial analysts. Above discussion emphasizes that there is no international benchmarking for these ratios. Ratios should be compared within same sector and keeping in view the context. This study also gives the average values of the sector and individual firms can compare their own ratios with the averages of the sector.

This research explores the financial position of the spinning mills. It is believed that one can predict the future of the firms after analyzing financial reports of the firms. To assess the financial outlook of the sector, annual financial reports of the mills from 2006-7 and 2007-8 were evaluated.

Total of 62 reports from Lahore and Karachi Stock exchanges are collected and data from composite units (spinning, weaving and wet processing) was not used due to their different structure from ordinary spinning mills. Therefore, financial reports of 55 spinning mills are used for the study which is nearly 13% of the total mills. The total of 14 different ratios from the available data are calculated and grouped into main four categories given as under:

### Current Ratio

Current Ratio is an indicator of the capability of the firms to pay their current liability by converting current assets. It is also known as “liquidity ratio” or “cash asset ratio” and also the “cash ratio”. It is calculated by dividing current assets with current liabilities.

\[
\text{Current Ratio} = \frac{\text{Current assets}}{\text{Current liabilities}}
\]

High figures mean that company has the capacity to pay its current liability. Acceptable figures vary, depending upon the type of business. Generally, more than one is acceptable. Smaller value shows that company has not enough current assets to discharge its current liabilities.

The current ratio of one means that the current assets are equal to current liabilities. Less than one means that company has more current liabilities and less current assets, which is a sign of concern in some cases.

We have compiled current ratio of spinning mills of Pakistan and found the mean of current ratio is less than 1.00 in both years it is alarming. Mean of current ratio in 2006-7 was 0.87 and 0.82 in 2007-8.

### Ratio table

Ratio table depicts that there is no improvement in 2007-8 and if it continues, there is a probability that in coming year’s situation of the sector will not improve. However, firms can check their position by comparing with the average of the sector. For example, this table shows that 25% firms have current ratio more than 1.00. It reflects that there are certain firms which have more current assets than current liabilities.

### Return on assets

Return on Assets (ROA) is an indicator which tells about the efficiency of firm in using the assets. It is calculated by dividing the annual earning of the company with total assets, shown as percentage.

\[
\text{Return on assets} = \frac{\text{Net earning}}{\text{Total assets}} \times 100
\]

This ratio is also an indicator of money earned by a company against each dollar invested. There is an understood variation in the number, since it is highly related to capital investment. Spinning mills are capital intensive sectors and these figures should be compared with another capital intensive sector. Ratio table shows that mean of the return on asset is -2.07 and -1.73%, which is quite alarming.

### Gross profit margin

Profit maximization is one of the core functions of commercial firms. Gross profit is a difference of net sale and COGS. It shows how well the operation is generating revenue.

\[
\text{Gross profit margin} = \frac{\text{Gross profit}}{\text{Net sale}} \times 100
\]

Ratio table shows that spinning industry of Pakistan could have only 6.53% and 6.21% gross profit margin in 2006-7 and 2007-8 respectively. Although these firms earned profit, the percentage was too small, and profits earned were minimal. However, majority of the firms did not report any loss in operations.

### Operating profit margin

Operating Profit Margin (OPM) is also called operating margin, operating income margin or return on sales (RO S). It is calculated by dividing operating profit with net sale usually presented in percentage. It shows the efficiency of the firm in generating profits from its operations. Difference between gross profit and operating profit provides information about the overhead expenses in total cost.

\[
\text{Operating profit margin} = \frac{\text{Operating profit}}{\text{Net sale}} \times 100
\]

Ratio table depicts that in 2006-7, its mean value is 1.82%, whereas in 2007-8, there was a decrease of -0.58%. It shows that as a whole, spinning mills of Pakistan have borne losses. The table also depicts that 25% firms have -3% loss, however, more than 50% firms have positive figure.

### Return on equity

Equity is the money invested by the shareholders for profit. This ratio indicates the firm’s ability to earn against the investment. It is also called return on average common equity, return on net worth, return on ordinary shareholders’ funds.

\[
\text{Return on Equity} = \frac{\text{Net income after tax}}{\text{Net equity}} \times 100
\]

Spinning mills of Pakistan have only 0.71% ROE in 2006-7 and situation became worst in 2007-8. In 2007-8, it has -10.74%, which tells us that net loss of the firms will lead them to a serious position and this position may not allow them to survive and ultimately there are more chances that many firms will be bankrupt.

### Earning per share

Earning per Share (EPS) is an indicator of the firm performance. It depends upon the profitability of the firms. It is calculated after closing the previous year’s books. It is the portion of the firm’s profit which is allocated to each outstanding share of investors. In other words, it is a valid and reliable tool to measure the profitability of the companies. It is calculated as:

\[
\text{EPS} = \frac{\text{Net income-dividends on preferred stocks}}{\text{Average outstanding shares}} \times 100
\]

In this study, EPS is considered as the single most significant variable in determining a share’s price in stock exchange. This variable also tells price-to-earnings valuation ratio. The table tells about the EPS situation of spinning mills of Pakistan. It is obvious that in 2006-7, the mean value of EPS is Rs. -0.39, whereas, it has gone to Rs. -2.37 in 2007-8, almost three times greater than previous years.
It shows that spinning industry of Pakistan is facing loss and this trend can instigate many other losses. Data also provides information that more than 50% mills in 2007-8 have reported the loss, whereas, in 2006-7, more than 50% mills earned profit.

Debit ratio

Debit ratio is one of the fundamental ratios used to determine the financial health of the firms. It tells that what is the level of total liabilities and assets of the firms.

\[
\text{Debit ratio} = \frac{\text{Total liabilities}}{\text{Total assets}} \times 100
\]

Spinning mills of Pakistan have 78.95% and 64% debt ratio in 2006-7 and 2007-8 respectively. It means that liabilities are more than the assets. This ratio has declined, which means that with the passage of time the difference between liabilities and assets is increasing.

Total asset turnover

Total Asset Turnover (TAT) is a ratio that deals with net sales and total assets. This ratio measures how well a firm is using its assets to generate revenue.

\[
\text{Total asset turnover (TAT)} = \frac{\text{Net sales}}{\text{Average total assets}}
\]

Table shows that in 2006-7, TAT mean value is 0.98 and in 2007-8 it is 0.95. Both figures tell that as a whole spinning industry could not generate revenue equal to the total assets.

As discussed earlier that spinning sector is a capital intensive sector, we cannot compare results with any retail sector. As discussed in previous pages firms are compared with firms belonging to same sector. As discussed in previous pages firms are compared with firms belonging to same sector.

This table also depicts that 25% firms succeeded to report sale more than capital invested (1.12 and 1.20 in 2006-7 and 2007-8 respectively).

Fixed asset turnover

Spinning mills have to invest in fixed assets to generate revenue. It may be in shape of land, machinery etc. Ratio of fixed and capital assets depends upon the type of industry.

\[
\text{Fixed Asset Turnover (FAT)} = \frac{\text{Net sales}}{\text{Average fixed assets}} \times 100
\]

Spinning industry demands more fixed assets as compared to a stitching mill. This ratio simply deals with the ability of the firm to generate revenue from fixed assets. Naturally higher figure means that firm is generating more revenue from the fixed assets. Table shows that in 2006-7, this ratio is 1.45, whereas, in 2007-8 it was 1.56. It shows that spinning industry as a whole generates more revenue by using fixed assets in 2007-8 as compared to previous year.

It is obvious from the table that average of 25% firms is 1.95 and 1.91 for 2006-7 and 2007-8 respectively.

Current asset turnover

Current Asset Turnover (CAT) is an indicator how the firm is using its current assets to revenue. This ratio shows that how many times, the firm has generated revenue as compared to its current assets.

\[
\text{Current Asset Turnover} = \frac{\text{Net sales}}{\text{Average current assets}}
\]

Ratio table shows that mean value on this ratio in 2006-7 is 3.00, which has gone down to 2.65 in 2007-8. We have seen already that spinning industry of Pakistan has failed to have turnover equal to their total assets. Nevertheless, spinning industry could manage to have revenue nearly three times to their current assets.

Salaries to total cost

Wages and salaries are a part of COGS. It varies depending upon many factors i.e. Type of firm, size of firm etc. Apparently it is difficult to comment on value. However, it is possible that we may compare this value among different mills belonging to same sector. As discussed in previous pages firms are compared with the average of the sector.

\[
\text{Salary to cost ratio} = \frac{\text{Total wages and salary}}{\text{COGS}} \times 100
\]

Ratio table tells that salary cost is 8% of the COGS in both years. Nevertheless, this range is too wide. It starts from 3% and goes to 18%. Furthermore, data reveals that in both years 50% firms have 10% share of salary and wages in COGS.

Energy to total COGS

Cost of fuel or energy is the second major cost of spinning mills. Data shows that its range is from 6 to 22 percent of the total cost of production. It is very useful to note that there are mills where share of fuel cost is too low and the mean value of energy to COGS is 11 and 10% in 2006-7 and 2007-8 respectively.

There is a slight decline in the share of energy and it may be due to increase in cost of raw material which has pushed down the energy share or might be due to better use of energy. There is another possibility that this decline may be due to shift of many mills on in house generation of electricity by using natural gas, which is cheaper than the electricity provided by the government.

It may be due to efficient system or use of natural gas to produce electricity. The table shows a minor reduction in the average share of fuel cost. It may be due to many reasons; efficient use of electricity, modern technology or switching to gas based generators of electricity.

Raw material to COGS

The table shows that raw material, which is mainly fiber, has 68.76% and 70.00% share in COGS in 2006-7 and 2007-8 respectively. Main raw material of spinning mill is fiber, mainly cotton, polyester or any other blends of fiber. Data shows that it has a wide range.

Cost of raw material covers nearly 3/4 of COGS. Any minor change in this cost can create a big problem for the spinning industry. Pakistan is a major producer of cotton and at the same time major user of cotton in domestic market. Cotton is natural product and its production depends upon many factors, with a cyclic price trend. It was observed during survey that firms having better current assets prefer to buy cotton at cheap rates and ultimately, it gives them advantages and increase profit margin of such firms.

Conclusion

From all above discussion, more than 50% mills have shown losses in 2007-8, current ratio of more than 60% mills is less than one. Return on assets is quite low, rather many companies have shown a negative figure. Financial situation of spinning mills with the exception of few leaders is quite precarious and in coming years, there is a chance that many share holders will lose their all investment and banks will not be able to take their loans back.

References

Spinning

Financial ratios of spinning industry of Pakistan

<table>
<thead>
<tr>
<th>2006-07</th>
<th>2007-08</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>Percentile</td>
</tr>
<tr>
<td></td>
<td>25</td>
</tr>
<tr>
<td>Current Ratio</td>
<td>0.87</td>
</tr>
<tr>
<td>Return on Assets</td>
<td>-2.07%</td>
</tr>
<tr>
<td>Gross Profit Margin</td>
<td>6.53%</td>
</tr>
<tr>
<td>Operating Margin</td>
<td>1.82%</td>
</tr>
<tr>
<td>Profit Margin</td>
<td>-1.74%</td>
</tr>
<tr>
<td>Return on Equity</td>
<td>0.71%</td>
</tr>
<tr>
<td>Earnings Per Share (Pk. Rs)</td>
<td>0.4</td>
</tr>
<tr>
<td>Debit Ratio</td>
<td>78.95%</td>
</tr>
<tr>
<td>Total Asset Turnover</td>
<td>0.98</td>
</tr>
<tr>
<td>Fixed Asset Turnover</td>
<td>1.45</td>
</tr>
<tr>
<td>Current Asset Turnover</td>
<td>3</td>
</tr>
<tr>
<td>Salaries to Total Cost</td>
<td>8.12%</td>
</tr>
<tr>
<td>Energy to Total Cost</td>
<td>10.50%</td>
</tr>
<tr>
<td>Raw Material to Total Cost</td>
<td>68.76%</td>
</tr>
</tbody>
</table>


Editor’s Note: This study is based on 2006-2008 data and may not reflect the current financial situation of the spinning sector.

Anti-corruption Seminar in Lahore, March 16, 2010

The Center for the Globally Responsible Leaders, (CGRL), an academic arm of the University of Management & Technology, is holding a one-day seminar titled “UN Global Compact 10th Principle and Corporate Sector Engagement” on March 16, 2010 in Pearl Continental Lahore.

The objective of the Seminar is to focus on corruption and unethical practices that have virtually made inroads into all avenues of our personal and professional lives, and as a result have badly affected our norms and values that are the binding forces for the building blocks of a civilized society.

Textile industry’s decline in Pakistan need to be assessed in the light of the corrupt practices that might have seeped into the body structure of the businesses operating in Pakistan, or the extortion and the bribery at the industrial policy level that might have driven this industry to the brink of disaster. Convening of this seminar, therefore, appears to be a good opportunity for our industry leaders to join in with other stakeholders and explore where and why did we all go wrong.

CGRL aims at establishing a networking link to business organizations and academic institutions, both nationally and internationally, for addressing the problems being faced by Pakistan in particular and the world in general. The seminar is designed to build up synergy between academia, industry and government organizations and strive to work out a strategy to help each other and to create and sustain an environment of mutual trust and confidence among all stakeholders.

Mr. Mohammad Nazim Director General CGRL can be reached at dgcgrl@umt.edu.pk or cell no: 0300 4518122 for details about CGRL or the up-coming seminar.