

The Impact of Investing Environment on Financial Performance

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Abstract

The study aims to compare the financial performance of BOS's two international branches - Mexico and China. The branch with better financial performance is recommended as best investing environment. The judgment tool of financial performance of the two companies is the ratio analysis. The study analyzed financial performance for the period 2013 and 2014. Conclusion is drawn depending on the financial performance.

Keywords: Financial Performance, Ratio Analysis, Comparative Analysis

I. Introduction

The Automotive industry is one of the largest industries worldwide. Since the early start of the automotive industry German companies proved that they are the best automakers in the way they innovate, market, and sell cars. Many of the automakers located in Germany are DaimlerChrysler, BMW, Audi, Volkswagen, and Porsche. Stuttgart particularly is the automotive capital in Germany because the Daimler Chrysler and the Porsche headquarters are located in there. The automakers depend on the Original Equipment Manufacturers' (OEM) who are the direct suppliers for the automakers in the supply chain. The outsourcing method used by the automakers gives chance to many businesses to form and be specialize in a specific field in the manufacturing process.

BOS Group Profile

BOS was founded in 1910 by Wilhelm Baumeister in Stuttgart Germany. The first rear window sunshade was introduced in 1934, and the first power window sunshade was introduced in 1984. The company started the first expansion in 1991 when it opened another plant in Leuthirch Germany. In 1993 the company opened an overseas plant in Hungary which is now the main arm of the group in terms of sales. In 1995 the company founded BOS sales office in USA and later in 1998 they opened the first plant in USA. The general strategy of the group changed in the 2001 when they started to acquire suppliers and later on competitors. In 2001 the group acquired a supplier called Alpha plastic GmbH in Germany, and in 2002 the group acquired another supplier called Volts group. The last acquisition was in 2003 when BOS tookover Butz-leper groups a competitor with five locations in Germany, Poland, Czech Republic, Mexico and Belgium. The group realized the Asian markets early since the 1990s they have sales offices in Japan, South Korea but they opened the first plant in 2002 in China. The group's new production strategy since 2001 is to shift the production facilities to Eastern Europe and keep the development and the engineering facilities in Germany and this is because the cheap operating and labor activities in Eastern Europe, and the group desire to keep the development and the engineering operations near to the headquarter.

II. Literature review

Financial statement analysis involves a comparison of a firm's performance with that of other firms in the same line of business. Financial analysis (Moyer, McGuigan, & Kretlow, 2009) identifies a firm's relative strengths and weaknesses and suggests actions the firm might enact to take advantage of its strengths and correct its weaknesses in the future. Financial statement analysis (Pandey, 2007) is not only important for the firm's managers, it is also important for the firm's investors and creditors. Internally, financial managers use the

information provided by financial analysis to help making financial and investment decisions to maximize the firm's value. Externally, stockholders and creditors use financial statement analysis to evaluate the attractiveness of the firm as an investment by examining its ability to meet its current and expected future financial obligations.

Financial statement analysis (Khan, Jain, 2011) involves a study of the relationships between income statement and balance sheet accounts, how these relationships change over time (Trend Analysis), and how a particular firm compares with other firms in industry (Comparative Ratio Analysis). Although financial analysis has limitations, when used with care and judgment, it can provide some very useful insights into the operations of a company.

A firm's annual report (Lawence, Daniel, W Bruce, 2004) to shareholders presents two types of information. The first is a verbal statement of the company's recent operations and its expectations for the coming year. The second is a set of quantitative financial statements that report what actually happened to the firm's financial position, earnings, and dividend over the past few years. The information contained in an annual report is used by investors to form expectations about future earnings and dividends.

The income statement (Larson, Miller Paul, 1993) summarizes the firm's revenues and expenses during the accounting period. It's important to note that not all the amounts shown in the income statement represent cash flows. Revenues are recognized when they are earned, not when the cash received, and the expenses are realized when they are incurred not when the cash is paid. The primary purpose of the income statement is to report a company's earnings to investors over a specific period of time.

Ratio Analysis:

A financial ratio (Gibson, Charles, 1995) is a relationship that indicates something about an industry's activities, such as the ratio between the industry's current assets and current liabilities or between its accounts receivable and its annual sales. The basic sources for these ratios are the company financial statements within the industry that contain figures on assets, liabilities, profits, and losses. Industry ratios are only meaningful when compared with other information. Since individual companies are most often compared with industry data, ratios help an individual understand a company's performance relative to that of competitors and are often used to trace performance over time.

Ratio analysis can reveal much about an industry. However, there are several points to keep in mind about ratios. First, financial ratios are "flags" indicating areas of strength or weakness. One or even several ratios might be misleading, but when combined with other knowledge of an industry, ratio analysis can tell much about that industry. Second, there is no single correct value for a ratio. The observation that the value of a particular ratio is too high, too low, or just right depends on the perspective of the analyst. Third, a financial ratio is meaningful only when it is compared with some standard, such as another industry trend, ratio trend, a ratio trend for the specific industry being analyzed.

In trend analysis, (Bernstin, Leopold, Wild, 2001) industry ratios are compared over time, typically years. Year-to-year comparisons can highlight trends and point up the need for action. Trend analysis works best with five years of ratios.

III. Methodology

In this case study various parameters are required for the evaluation of the financial performance of the Mexico and China Branches. Both Primary and secondary data is used. Primary data is the main source of information. The annual reports of BOS branches for 2013 and 2014 were used as the input data for the ratio analysis and comparison. The main ratios tested were the liquidity ratios, Solvency ratios, and profitability ratios. Total 10 ratios were tested.

IV. Performance Analysis

This part of the study is devoted to interpret the result of the ratios tested for both branches. Table-1 shows ratio analysis calculation results for Mexico branch. And Table-2 shows the results for China branch.

Name of Ratio	2014	2013
Current Ratio	1.41	1.01
Quick Ratio	1.09	0.71
Inventory Turnover	4.95	4.43
Fixed Assets Turnover	11.09	7.72
Total Assets Turnover	1.24	1.36
DSO	147.46 Days	91.93 Days
Debit Ratio	0.90	0.78
Net Profit Margin	-0.02	0.02
ROA	-0.03	0.02
ROE	-0.27	0.11

Name of Ratio	2014	2013
Current Ratio	1.99	2.73
Quick Ratio	1.47	2.25
Inventory Turnover	2.84	3.06
Fixed Assets Turnover	14.26	12.00
Total Assets Turnover	1.49	1.1
DSO	99.9 Days	152.95 Days
Debit Ratio	0.44	0.32
Net Profit Margin	0.18	0.31
ROA	0.27	0.34
ROE	0.48	0.50

The first group of ratios tested was the Liquidity ratios. The first ratio of this group is the current ratio. This ratio measures the ability of the company pay its bills as they come due. The acceptable current ratio is the one that its current assets can cover its current liabilities with additional surplus of current assets. Current ratio for the Mexico branch for the year 2013 as Table-1 shows is 1.01 times, and it's improving the year 2014 to become 1.41 which reflects an improvement of liquidity in the year 2014, but still it's below the industry average of 1.54. The current ratio for the China branch for the year 2013 as Table-2 shows is 2.73 which above the industry average of 1.54, but it's declining to 1.99 in the year 2014, however its still above the industry average. It's clear from the current ratio results that China branch

current ratio is better than the Mexico branch. China branch is more able to pay its daily bills than Mexico.

The second ratio of this group is the Quick ratio. This ratio is more stringent measures of liquidity than the current ratio. By subtracting inventories from current assets, this ratio recognizes that the firm's inventories are often one of its least-liquid current assets. The Industry Quick ratio is 0.74. Quick ratio for the Mexico branch for the year 2013 as Table-1 shows is 0.71 times, and it's improving the year 2014 to become 1.09 which is around the industry average in the year 2013 and above the average in the year 2014. The Quick ratio for the China branch for the year 2013 as Table-2 shows is 2.25 for the year 2013 and dropping to 1.47 in the year 2014, which is higher than the industry average. It's clear from the Quick ratio results that China branch Quick ratio is better than the Mexico branch

The second group of ratios tested was the Assets Management ratios. The first ratio of this group is the Inventory turnover ratio. This ratio measures the amount of investment in the company's inventory. Inventory turnover ratio for the Mexico branch for the year 2013 as Table-1 shows is 4.43 times, and it's improving the year 2014 to become 4.95 which reflects an improvement of Inventory turnover in the year 2014, but still its below the industry average of 5.89. The Inventory turnover ratio for the China branch for the year 2013 as Table-2 shows is 3.06 which below the industry average, but its declining to 2.84 in the year 2014, however it's still below the industry average and it's indicating that China branch has a larger investment in inventory relative to the sales being generated than the average firm. It's clear from the current ratio results that Mexico branch inventory turnover ratio is better than the China branch.

The second ratio of this group is the Fixed-assets turnover ratio. This ratio indicates the extent to which a firm is using existing property, plant, and equipment to generate sales. Fixed-assets turnover ratio for the Mexico branch for the year 2013 as Table-1 shows is 7.72 times, and it's improving the year 2014 to become 11.09 which reflects an improvement of Fixed-assets turnover in the year 2014. The Fixed-assets turnover ratio for the China branch for the year 2013 as Table-2 shows is 12, but it's increasing to 14.26 in the year 2014, however it's still higher than Mexico branch and it's indicating that China branch is making sufficient use of its property, plant and equipment.

The third ratio of this group is the Total assets turnover ratio. This ratio indicates how effectively a firm uses its total resources to generate sales and is a summary measure influenced by each of the asset management ratios. Total assets turnover ratio for the Mexico branch for the year 2013 as Table-1 shows is 1.36 times, and it's decreasing the year 2014 to become 1.24 which reflects a decline of Total assets turnover in the year 2014. The Total assets turnover ratio for the China branch for the year 2013 as Table-2 shows is 1.10, but it's increasing to 1.49 in the year 2014, however it's still higher than Mexico branch in the year 2014 and it's indicating that China branch is generating higher level of sales from its assets compared by the Mexico branch.

The Fourth ratio of this group is the Days Sales Outstanding or DSO ratio. This ratio is also called by the Average collection period, and it measures the average number of days accounts receivable remains outstanding. DSO ratio for the Mexico branch for the year 2013 as Table-1 shows is 91.93 days, and it's increasing in the year 2014 to become 147.46 days. The DSO ratio for the China branch for the year 2013 as Table-2 shows is 152.95 days, but it's decreasing to 99.91 days in the year 2014. The industry average for the DSO ratio is 51 days.

While comparing the industry average by the Mexico results it indicates that a significant portion of Mexico branch customers are not paying bills on time, and it also indicates than the Mexico branch has allocated a greater proportion of total resources to receivables than the average firm in the industry. However, China branch is managing its receivables more effectively than the Mexico branch.

The Third group of ratios tested was the Financial Leverage Management ratios. The only ratio of this group to be tested is the Debt ratio. This ratio measures the proportion of a firm's total assets that is financed with creditors' funds. Debt ratio for the Mexico branch for the year 2013 as Table-1 shows is 0.78 times, and it's improving the year 2014 to become 0.90 which means that the creditors are financing 90 percent of the firms total assets. The Debt ratio for the China branch for the year 2013 as Table-2 shows is 0.32, but it's increasing to 0.44 in the year 2014. It's clear from the Debt ratio results that the Mexico branch is having better structure of its debt than the China branch.

The Fourth group of ratios tested was the Profitability ratios. The first ratio of this group is the Net Profit ratio. This ratio measures how profitable a company's sales are after all expenses, including taxes and interest, have been deducted. Net Profit ratio for the Mexico branch for the year 2013 as Table-1 shows is 0.02 times, and it's declining in the year 2014 to -0.02 which reflects a loss in the year 2014, but still it's below the industry average of 2.38. The Net Profit ratio for the China branch for the year 2013 as Table-2 shows is 0.31 which below the industry average, but its declining to 0.18 in the year 2014, however its still below the industry average and it's indicating that China branch is having difficulties in controlling its expenses or the prices of products. It's clear from the Net Profit ratio results that China branch is more efficient than the China branch.

The second ratio of this group is the Return on Assets or ROA ratio. This ratio measures a firm's net income in relation to the total asset investment. ROA ratio for the Mexico branch for the year 2013 as Table-1 shows is 0.02 times, and it's declining in the year 2014 to -0.03 which reflects a loss in the year 2014, but still it's below the industry average of 2.16. The ROA ratio for the China branch for the year 2013 as Table-2 shows is 0.34 which below the industry average, but its declining to 0.27 in the year 2014, however its still below the industry average. It's clear from the ROA ratio results that China branch is more efficient than the China branch, but both branches are having problems as a direct result of low asset management ratios and low profit margins.

The third ratio of this group is the Return on Equity or ROE ratio. This ratio measures the rate of return that the firm earns on stockholders' equity. ROE ratio for the Mexico branch for the year 2013 as Table-1 shows is 0.11 times, and it's declining in the year 2014 to -0.27 which is a result of the loss in the year 2014, but still it's below the industry average of 2.93. The ROE ratio for the China branch for the year 2013 as Table-2 shows is 0.50 which below the industry average, but its declining to 0.48 in the year 2014, Although it's below the industry average but it is considered satisfactory to the shareholder as it's above 10 percent. It's clear from the ROE ratio results that China branch is more efficient than the China branch, but both branches are having problems as a direct result of low asset management ratios and low profit margins and also the effects of debt financing.

Industry Norms: Table - 3

Current Ratio	Quick Ratio	Debt to Equity	Sales to Inventory	DSO	Profit Margin %	ROA	ROE
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Agriculture	1.31	0.39	1.33	2.52	19.00	2.58	2.98	2.75
Mining	1.19	0.77	0.48	0.00	52.00	0.00	0.00	0.00
Construction	1.44	0.98	1.31	4.74	43.00	1.74	1.22	1.46
Manufacturing								
Leather/Textile/App	1.50	0.62	1.48	6.05	34.00	1.64	1.72	1.65
Chem. Petrol. Metal	1.54	0.75	1.33	6.94	48.00	2.23	2.11	2.03
Wood Related Prod	1.43	0.62	1.41	6.46	33.00	2.16	1.95	2.00
Mach-trans equipment	1.54	0.74	1.34	5.89	51.00	2.38	2.16	2.93
Trans-Comm.	1.03	0.70	1.64	0.00	34.00	1.84	1.55	1.32

Source: Credit Guru.Com

Name of Ratio	Mexico	Mexico	China	China	Industry Norms
	2014	2013	2014	2013	
Current Ratio	1.41	1.01	1.99	2.73	1.54
Quick Ratio	1.09	0.71	1.47	2.25	0.74
Inventory Turnover	4.95	4.43	2.84	3.06	5.89
Fixed Assets Turnover	11.09	7.72	14.26	12.00	-
Total Assets Turnover	1.24	1.36	1.49	1.1	-
DSO	147.46 Days	91.93 Days	99.9 Days	152.95 Days	51
Debit Ratio	0.90	0.78	0.44	0.32	1.34
Net Profit Margin	-0.02	0.02	0.18	0.31	2.38
ROA	-0.03	0.02	0.27	0.34	2.16
ROE	-0.27	0.11	0.48	0.50	2.93

V. Recommendations & Conclusions

As the financial performance analysis of the two branches Mexico and China was conducted in the previous section, it can be noted that there is many advantageous points in favor of the China branch. Ratio analysis as noted in (Table - 4) of current ratio, Quick ratio, Debt ratio, Net profit ratio, ROA ratio, and ROE ratio are all showing that the China branch is more efficient than the Mexico branch.

The Conclusions derived from the analysis of the current ratio enforce two ideas; the first one is management efficiency of the China branch because current ratio is almost perfect as it's above the industry average. The second idea is that, the China branch is having idle liquidity and its not investing it in the right manner.

DSO is one of the efficiency ratios, and it's analysis for the year 2014 indicates that China branch is more efficient than the Mexico branch and that is due to reduction of the outstanding days from 152 days in the year 2013 to 99 days in the year 2014. The opposite results is found in the Mexico branch, instead of keeping on the same level of efficiency in 2014, the company lost its control on its receivables and increased the gap to reach 147 days.

It's recommended to keep the 2013 level of DSO and to on eliminating the inefficiencies occurred in the year 2014.

Although there is a favorable point of the China Branch, still there are some ratios that show better performance in the Mexico branch, and this is clear in the Inventory turnover ratio. From an investor's point of view it's recommended to invest in the China branch rather than the Mexico branch, and that is due to the returns which the investor can attain on his investment as it's shown in ROA ratio, and the ROE ratio.

From a creditor's point of view it's recommended to invest in the China branch rather than the Mexico branch, and that is due to the less amounts of debts in the structure of China branch. Such results encourage bankers to grant money to such business.

From a shareholder's point of view it's recommended to invest in the China branch rather than the Mexico branch, and that is due to the positive earnings of the branch. Such earnings encourage shareholders to keep on holding the company stock and also enhance the firm's wealth.

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