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This paper provides a financial evaluation and comparison of two theoretical companies - Blake International and Scott Corporation - in terms of their financial performance over the 5 years of data provided.

General Comments / Overall Conclusions: While the Balance Sheet and the Statement of Income are good starting points for successful financial management, ratio analysis helps management to spot trends in a business and to compare its performance and condition with the average performance of similar businesses in the same industry or during different time periods, watching especially for any unfavorable trends that may be starting.

Important Balance Sheet Ratios measure liquidity and solvency (a business's ability to pay its bills as they come due), profitability (the amount of money garnered from sales which accrues to the owners, and how well inventory is managed and how rapidly money from sales is collected), and financing (the extent to which the business is dependent on creditors' funding).

The financial ratios garnered from the Statements of Operations and Balance Sheets for Blake International and Scott Corporation help compare and contrast the financial health of the two companies during a five year period. Based on the findings, it is apparent that Blake, although holding the line on expenses, experienced a downward trend in its sales (-17% during the period), which depressed its net profits by nearly 90%, as well as its shareholder equity by over 40%. Scott, meanwhile, increased its sales by 84%, its pre-tax income by 15% and its shareholder value by nearly 70%. However, Scott did not manage its overhead with the same efficiency as it managed sales, since its fixed costs increased 200%. Shareholders of Blake stock are experiencing a dramatic decline in the worth of their holdings; conversely, those owning equity in the Scott Corporation are enjoying healthy, albeit reduced, earnings, with bright prospects.

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Click here to see a spreadsheet containing the composite ratios. Histograms that provide a visual depiction of the ratios can be seen by clicking on the individual paragraph headings. The results of the analysis yielded the following general observations and conclusions.

1. **Liquidity** ratios indicate the ease with which Blake and Scott are able to turn assets into cash.

   a. Current Ratio is one of the best indicators of financial strength, gauging a business' ability to meet its current obligations by measuring if it has enough assets to cover its liabilities. The standard ratio for a healthy business is 2, meaning it has twice as many assets as liabilities.

      Blake has been trending downward from 3.11 to 1.99, but remains healthy.

      Scott has steadily improved and is now a very healthy 2.26.

   b. Acid Test: The Quick Ratio, sometimes called the "acid-test" ratio, and is one of the best measures of liquidity. Many financial planners consider it a tougher measure than the current ratio because it excludes inventories when counting assets. It calculates a business' liquid assets in relation to its liabilities. The higher the ratio is, the higher the business' level of liquidity, which usually corresponds to its financial health. The optimal quick ratio is 1 or higher.

      Blake's level of liquidity has plummeted drastically and the company may have trouble meeting current obligations. When comparing the acid test to the current ratio, it appears that Blake may have excess inventory, which becomes even more apparent when evaluating the company's inventory turnover.

      Scott will have no trouble meeting its short-term obligations.

   c. Average Collection Period determines how rapidly a firm is collecting its debt. The smaller the accounts receivable period, the more effectively a company is managing and collecting money from customers. As espoused by Keown's (et all,

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(2005) third principle of financial management, profits are not realized until money is in hand, thus both the opportunity cost and the risk of bad debt are reduced when accounts receivable are collected sooner.

Blake's trend of A/R collection days has held fairly steady.

Scott's collection days have dropped steadily during the five year period.

Compare and Contrast - Scott has now outdistanced Blake it its ability to meet its current obligations. Blake's current liabilities are putting severe pressure on its cash flow; whereas, Scott has excess current assets and could easily incur more debt or transfer reserves into investments. Blake appears to have adequate policies regarding terms of payment, credit, and collections; and Scott appears to have instituted rigorous new payment terms and credit policies.

2. Operating Profitability

a. OIROI: Operating income return on investment (OIROI) indicates the effectiveness of management at generating operating profits on the firm's assets. The higher the figure, the more income on $1 of assets the firm is generating.

Blake's return has dropped from 22 cents to 9 cents of income relative to assets.

Scott's OIROI has decreased by almost 25%, from .21 to .16.

Compare and Contrast: Although both firms have experienced a decline, Blake's is much more dramatic than Scott's, indicating that Blake's management has done a relatively inferior job of generating revenue.

b. Accounts Receivable Turnover: The A/R turnover ratio indicates how well accounts receivable are being collected. If receivables are excessively slow in being converted to cash, liquidity could be severely impaired.

Blake, probably because of its fairly good collections policy**,** has steady A/R turns, with a high degree of credit sales relative to its A/R.

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Scott's A/R turns have been trending upward, in proportion to its declining collection days, reaffirming the observation that it has improved its collection procedures.

Compare and Contrast: Both companies are managing their credit policies well and collecting receivables in a fairly timely fashion.

c. Inventory Turnover reveals how well inventory is being managed. It is important because the more times inventory can be turned in a given operating cycle, the more efficiently a company is able to grow sales volume and thereby increase its revenues. An extremely low inventory turnover value is undesirable because this implies that capital is being tied up in inventory. Alternatively, an abnormally high inventory turnover could mean inadequate inventory, which could lead to slow delivery to customers, thereby adversely affecting sales.

Blake's inventory turns have been declining dramatically. When this ratio is combined with its acid test and current ratios, it becomes obvious that huge amounts of capital are being tied up in inventory.

Scott has a maintained a fairly high inventory turn rate, in excess of 4-to-1 with its variable costs, which may indicate very aggressive sales cycles, coupled with just-in-time inventory policies.

Compare and Contrast: While Blake is burdened with excess inventory, Scott has relatively little. An analysis of Blake's sales and MRP processes is indicated.

d. Gross Profit Margin indicates managements' effectiveness in managing the firm's direct (variable) costs. The higher the GPM the better pricing flexibility and cost management controls a firm has in its operations.

Blake's GPM has remained steady at approximately 40%, indicating that its direct costs have been managed consistently,

Scott' GPM has also remained fairly steady at approximately 40%.

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Compare and Contrast - Although the GPM of both companies remained steady during the period, indicating that variable costs are fluctuating at the same pace as sales, Blake's revenues have declined by over 17%, while Scott's have increased by approximately 78%. While the GPM is an indicator of both firm's proper management of direct costs, it alone does not tell the story of how well Scott is doing compared with Blake.

e. Operating Profit Margin indicates managements' effectiveness in managing the firm's fixed costs. The higher the operating profit margin, the greater pricing flexibility a firm has in its operations. However, it could also indicate the degree of cost control management a firm possesses.

   Blake's OPM has decreased dramatically, by over 50%, during the 5 year period. The operating statement indicates that the cause has been declining revenues, as fixed costs have not trended upward.

   Scott's operating profit margin has declined by about 20% during the most recent 2 years, but is not worrisome, since sales have nearly doubled. The concurrent rise in long term debt would seem to indicate that additional capital equipment and/or facilities have been purchased to accommodate increased production to keep pace with sales, which would naturally have an upward effect on operating costs.

   Compare and Contrast - Blake's decline in OPM is the result of lost sales. Conversely, Scott's OPM differential is due to increased sales.

f. Total Assets Turnover measures the dollar sales per dollar of assets and indicates how efficiently a firm is using its assets in generating sales. The figure is similar to the fixed assets turnover but includes all assets. The higher the total asset turnover ratio, the more efficiently a firm's assets have been used.

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Blake - The company's ratio has declined 12% during the period, indicating that the firm is not using its assets during the latter reporting period as efficiently as previously.

Scott's ratio has increased 10.6%, signifying that its combined short- and long-term assets are being managed efficiently.

Compare and Contrast - Even though Scott has significantly increased the amount of its long term assets, its sales have risen even more rapidly, such that its total assets turnover ratio is very favorable. Blake's ratio has declined due to reduced sales.

g. Fixed Asset Turnover The fixed assets turnover is a measure of how efficiently a company uses its fixed assets to generate sales. The higher the fixed asset ratio the better.

Blake's fixed asset turnover ratio has declined along with its sales, indicating excess capacity.

Scott's ratio has declined due to expansion designed to keep pace with increased sales.

Compare and Contrast - The fixed asset turnover ratio for the two companies are diametrically opposite. While Blake requires fewer fixed assets to produce revenue, it has not eliminated assets as sales have declined. Scott devotes 2-3 times more of its revenues to the purchase of fixed assets and is acquiring more to keep pace with demand for its products.

3. Financing Assets

Equity and debt are two key figures on a financial statement, and lenders or investors often use the relationship of these two figures to evaluate risk, providing a window into how strong its finances are.

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a. Debt Ratio: The Debt-to-Worth (Total Assets) Ratio indicates the extent to which the business is reliant on debt financing (creditor money versus owner's equity). Generally, the higher this ratio, the more risky a creditor will perceive its exposure in the business, making it correspondingly harder to obtain credit. A high ratio could indicate that the company may be over-leveraged, and should look for ways to reduce its debt. Generally, creditors prefer a lower ratio to decrease financial risk, while investors prefer a higher ratio to realize the return benefits of financial leverage.

   Blake - Blake does not show significant debt, relative to its assets, but with declining sales and plummeting operating income, it may soon have trouble meeting its credit obligations.

   Scott - Scott's debt ratio has been trending upward, primarily due to a significant spike in long-term debt, probably resulting from the acquisition of additional capital equipment or facilities to support its burgeoning sales.

   Compare and Contrast - Scott is an attractive company, both to creditors as well as to investors; whereas, Blake's debt ratio presents a picture of a company that is stagnant and perhaps in severe decline.

b. Times Interest Earned indicates' a firm's ability to cover its interest expense. The figure will indicate how many times a company can cover its fixed contractual obligations to its creditors. The higher the times interest earned, the more likely the firm can meet its obligations.

   Blake's TIE is only 20% of what it was 5 years earlier. Coupled with its debt ratio, Blake is just hanging on and continuation of the downward trend in its sales would severely hamper its ability to cover its contractual obligations to creditors.

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Scott - The significant increase in Scott's long term debt, resulting from capital expenditures to meet sales demand, has resulted in a 40% reduction in the company's TIE.

Compare and Contrast - Scott's TIE trend has resulted from a considerable increase in business; contrasted by Blake's decline, resulting from a severe decrease in operating income.

4. **Shareholder (Common Equity) Return on Investment**

   a. Return on (common) Equity indicates the accounting rate of return on the stockholder's investment. The higher the rate the better the firm has increased wealth to shareholders.

   Blake - The ROE for Blake has dropped from a 5-year high of 26.82% (2001) to 2.05% (2003). The precipitous drop resulted from a 17% decrease in sales and a 41% decrease in common equity.

   Scott - Although the ROE for Scott fell 34% during the period, sales increased 84% and common equity increased 59%. The differential between revenues and equity is attributed to the increase in long term debt, incurred by the acquisition of additional fixed assets to support sales.

   Compare and Contrast - Shareholders of Blake stock are experiencing a dramatic decline in the worth of their holdings; conversely, those owning equity in the Scott Corporation are enjoying healthy, albeit reduced, earnings, with bright prospects.

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Blake International						
Liquidity	**1999**	**2000**	**2001**	**2002**	**2003**	
Current ratio	3.11	2.83	2.54	2.23	1.99	= current assets / current liabilities
Acid-test	1.65	1.03	0.22	(0.06)	0.07	= (current assets - inventories) / current liabilities
Average Collection Period	53.16	62.00	56.29	58.63	52.48	= (accounts receivable) / daily credit sales
Profitability						
OIROI	0.22	0.15	0.16	0.08	0.09	= operating income / total assets
Gross Profit Margin	40.16%	39.38%	38.12%	38.08%	39.79%	= gross profit / revenues
Operating Profit Margin	10.46%	7.62%	7.57%	4.34%	4.79%	= operating income / sales
Total asset turnover	2.10	1.95	2.08	1.85	1.85	= sales / total assets
A/R turnover	6.87	5.89	6.48	6.23	6.95	= credit sales / accounts receivable
Inventory turnover	3.31	2.27	1.68	1.43	1.46	= cost of goods sold / inventory
Fixed asset turnover	18.13	18.81	23.21	18.64	16.29	= sales / fixed assets
Financing						
Debt ratio	0.43	0.79	0.71	0.69	0.66	= total debt / total assets
Times interest earned	14.00	6.31	4.31	2.30	2.78	= operating income / interest expense
Return on Equity						
ROE	18.44%	36.48%	26.82%	4.58%	2.08%	=net income / common equity

Scott Corp.						
Liquidity	**1999**	**2000**	**2001**	**2002**	**2003**	
Current ratio	1.85	1.86	2.05	2.07	2.26	= current assets / current liabilities
Acid-test	1.28	1.22	1.33	1.25	1.43	= (current assets - inventories) / current liabilities
Average Collection Period	80.73	75.92	69.69	63.96	64.71	= (accounts receivable) / daily credit sales
Profitability						
OIROI	0.21	0.24	0.25	0.16	0.16	= operating income / total assets
Gross Profit Margin	41.06%	40.89%	41.60%	38.44%	39.67%	= gross profit / revenues
Operating Profit Margin	13.88%	14.50%	14.80%	8.83%	9.54%	= operating income / sales
Total asset turnover	1.51	1.64	1.71	1.77	1.67	= sales / total assets
A/R turnover	4.52	4.81	5.24	5.71	5.64	= credit sales / accounts receivable
Inventory turnover	4.45	4.11	4.01	4.21	4.42	= cost of goods sold / inventory
Fixed asset turnover	8.58	10.06	9.96	8.29	6.93	= sales / fixed assets
Financing						
Debt ratio	0.71	0.85	1.26	1.23	1.22	= total debt / total assets
Times interest earned	27.54	23.45	24.73	12.60	16.41	= operating income / interest expense
Return on Equity						
ROE	20.36%	22.74%	25.22%	12.27%	13.52%	=net income / common equity

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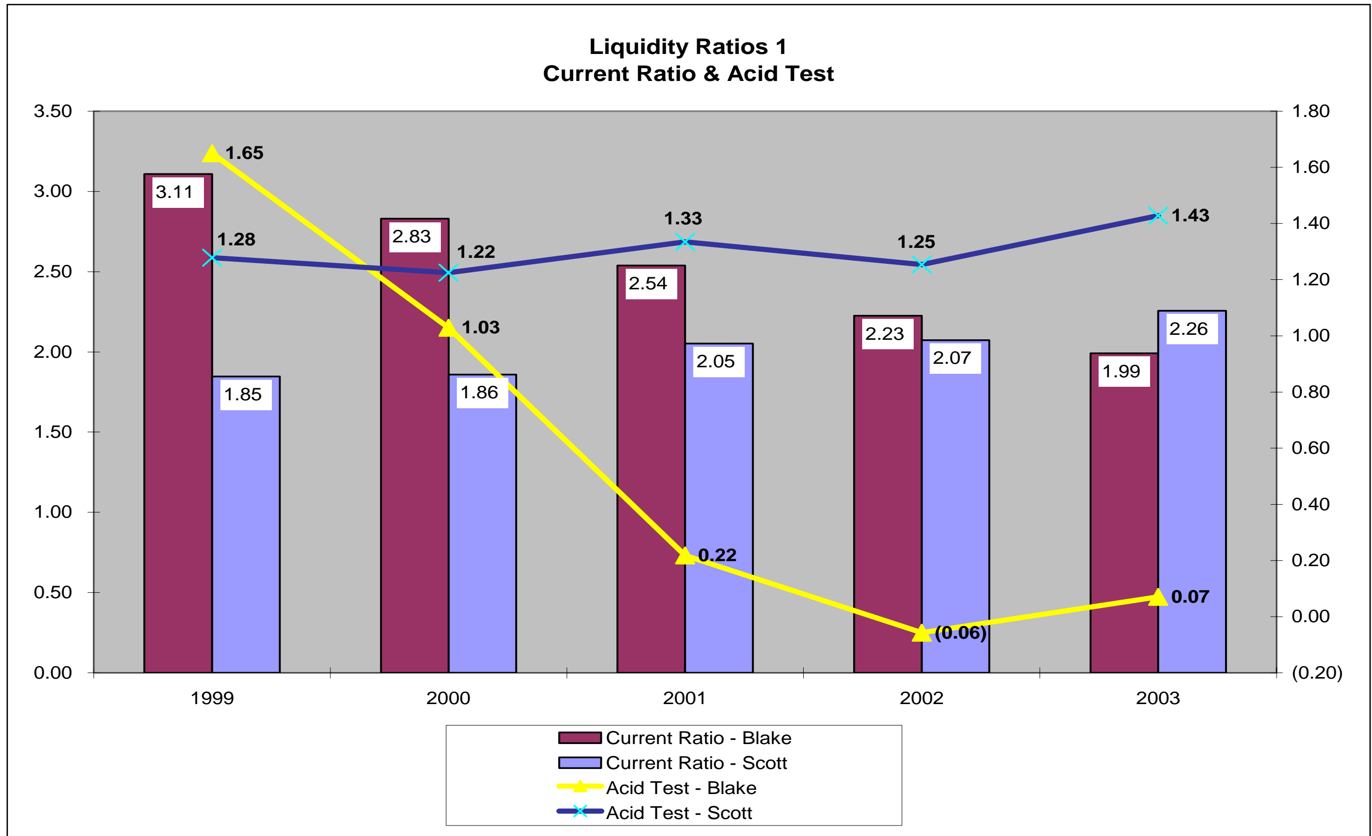

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Liquidity 2 - Average Collection Days

90.00
80.00
70.00
60.00
50.00
40.00
30.00
20.00
10.00
0.00

53.16
80.73
62.00
75.92
56.29
69.69
58.63
63.96
52.48
64.71

1999
2000
2001
2002
2003

Blake
Scott
Trend - Blake
Trend - Scott

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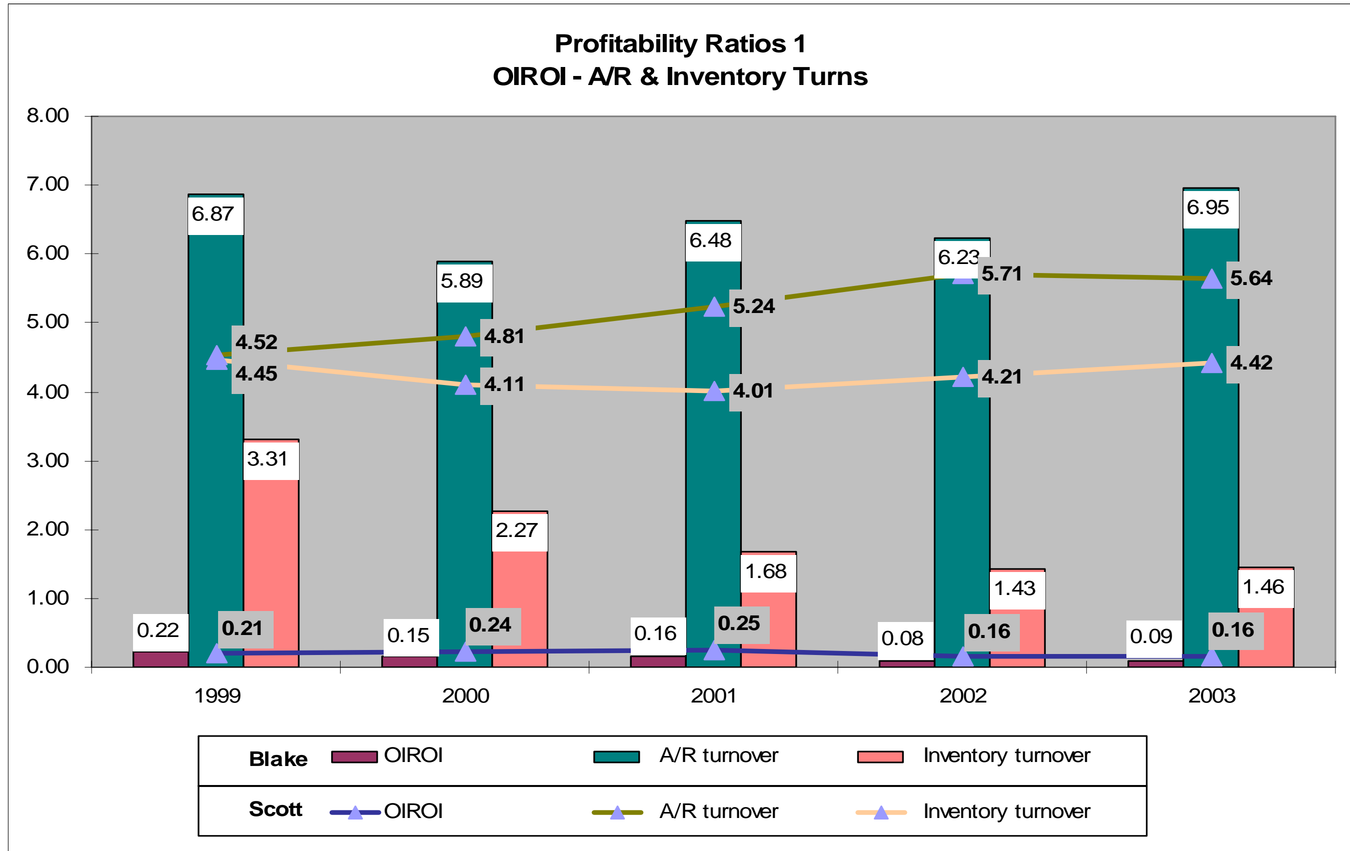

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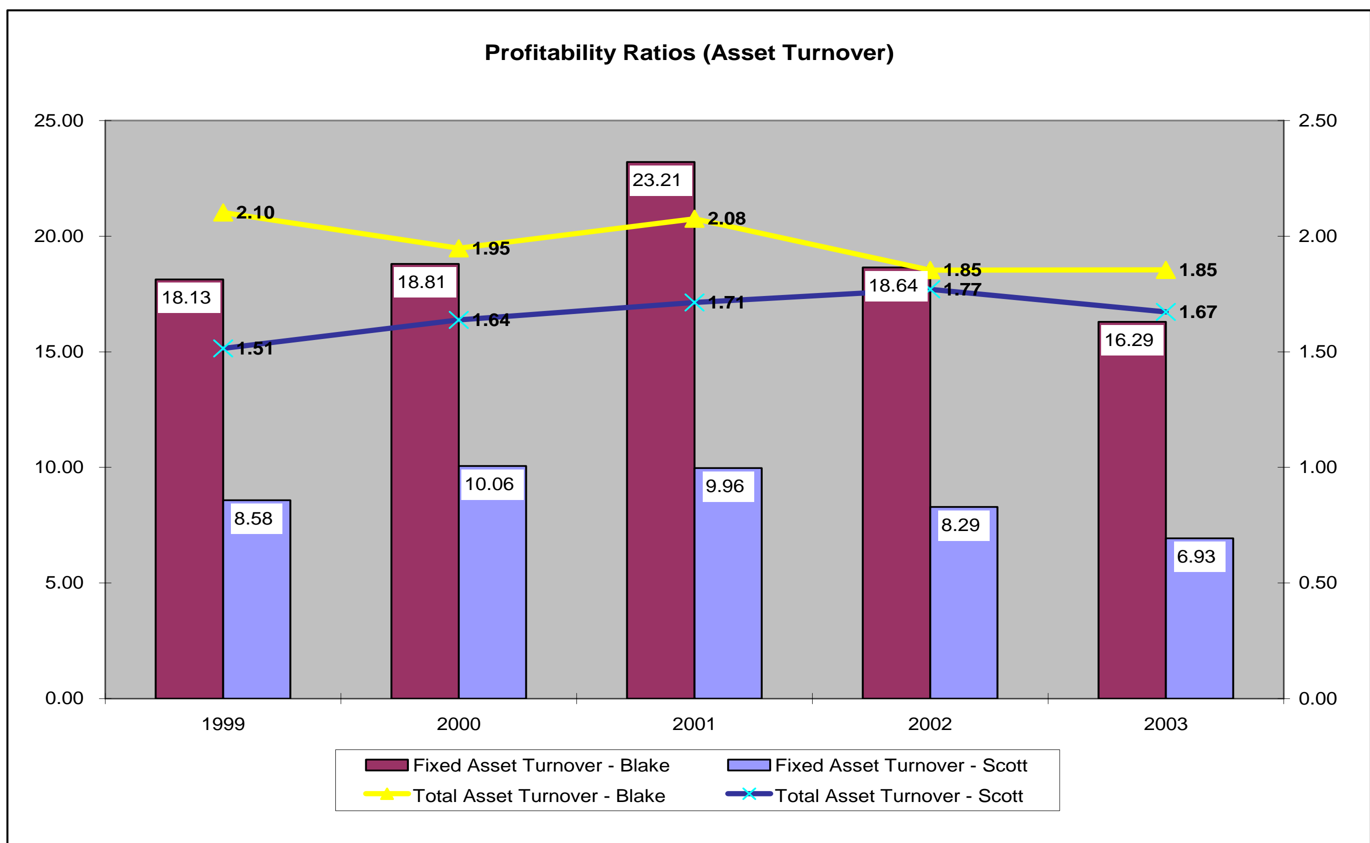

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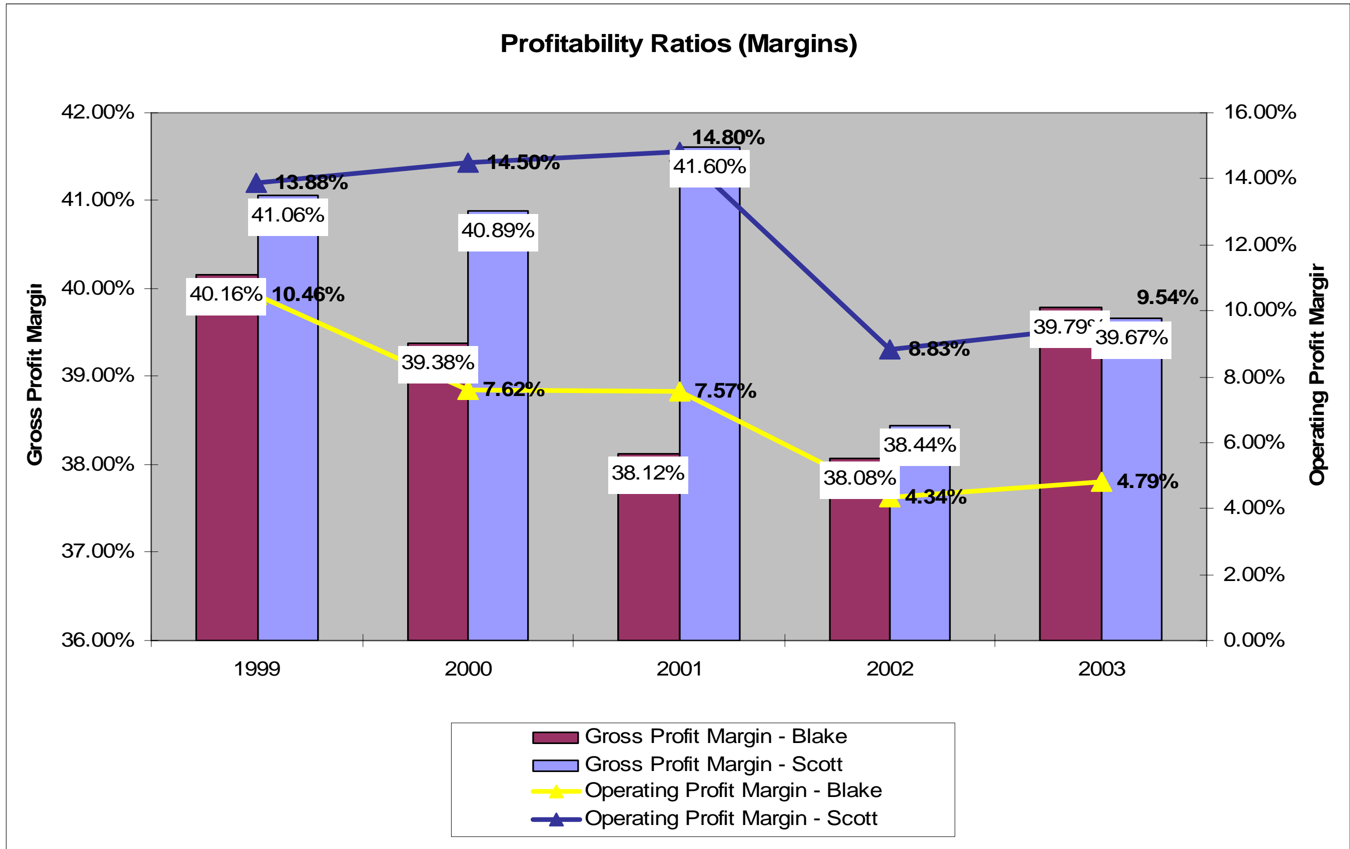

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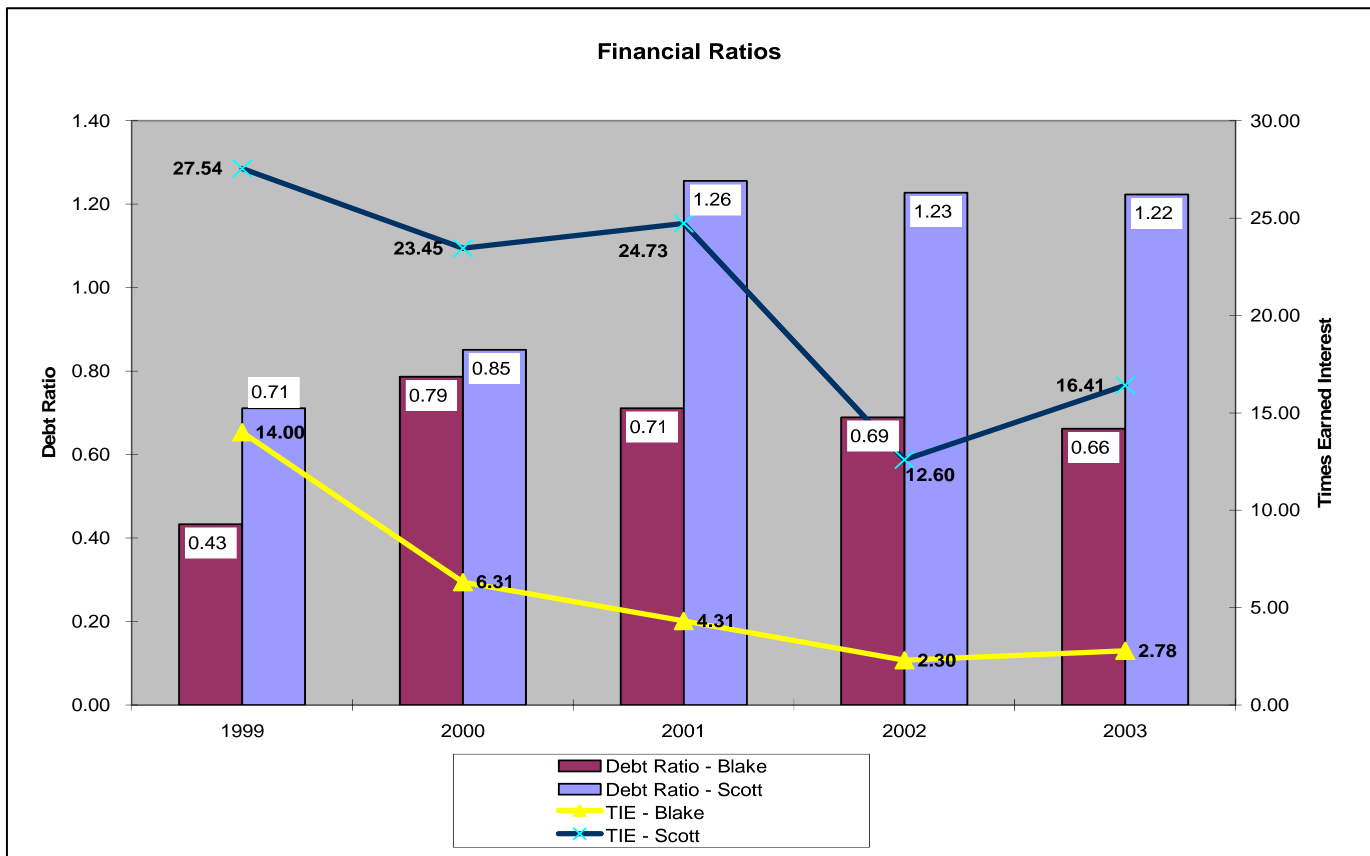

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