

Assessing A Firm's Future Financial Health

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ABSTRACT

The purpose of this article is to explain a step-by-step process that can assess whether a firm will remain in balance over the next two to three years. Various financial ratios will be discussed as a critical aspect of this process analysis. A case study of assessing the future health of the Harley Davidson, Inc. using a ratio analysis is included in the article to explain the step-by-step process used by managers to ensure a firm's success.

A great analogy comes to mind when considering the effects of assessing your firm's future health. It is helpful to think of your firm as a three-legged stool. The legs are operations, marketing, and finance/accounting. As you, the leader, try to sit atop the stool, it must be balanced so that you can shift your position and sit comfortably. However, if one of the legs of the stool is too short or too long, then the stool is difficult to manage and unstable (<http://www.thefullermangroup.com>).

Here is an example of an unbalanced firm. A firm borrows cash in order to expand its facility and operating capacity. However, sales remain constant resulting in a cash shortage. Consequently, the increased overhead costs diminish the working capital. Purchase discounts are missed resulting in decreased margins. The firm is in a state of crisis which could have been avoided through proper planning and utilizing sound financial measures (<http://www.thefullermangroup.com>).

A second example of an unbalanced firm includes a firm with an aggressive marketing approach that outpaces the firm's operational capability and working capital. This results in high returns, yet unsatisfied customers will leave and will be replaced with less desirable customers. In turn, margins will suffer, accounts receivables will slow down, and the collection period will increase. This downward cycle will continue as cost cutting will occur resulting in more dissatisfied customers and a loss of market share. Therefore, balance is the key to long-term success (<http://www.thefullermangroup.com>).

In order to avoid disastrous business situations such as the examples mentioned earlier, it is an important task for management to assess the long-term financial health of a firm in its formulation of its goals and strategies. In addition, outsiders will also consider the long-term health of the company when deciding on extensions of credit, long-term supplier arrangements, or investment in the firm's equity. There are many examples of companies that have initiated overly ambitious programs, hence, to discover that the programs could not be financed on acceptable terms. Consequently, the programs were abandoned resulting in wasted cash expenditures as well as high organizational and human costs (<http://www.thefullermangroup.com>).

The purpose of this article is to show a suggested step-by-step process that can assess whether a firm will remain in balance over the next two to three years. Various financial ratios will be discussed as a critical aspect of this process analysis.

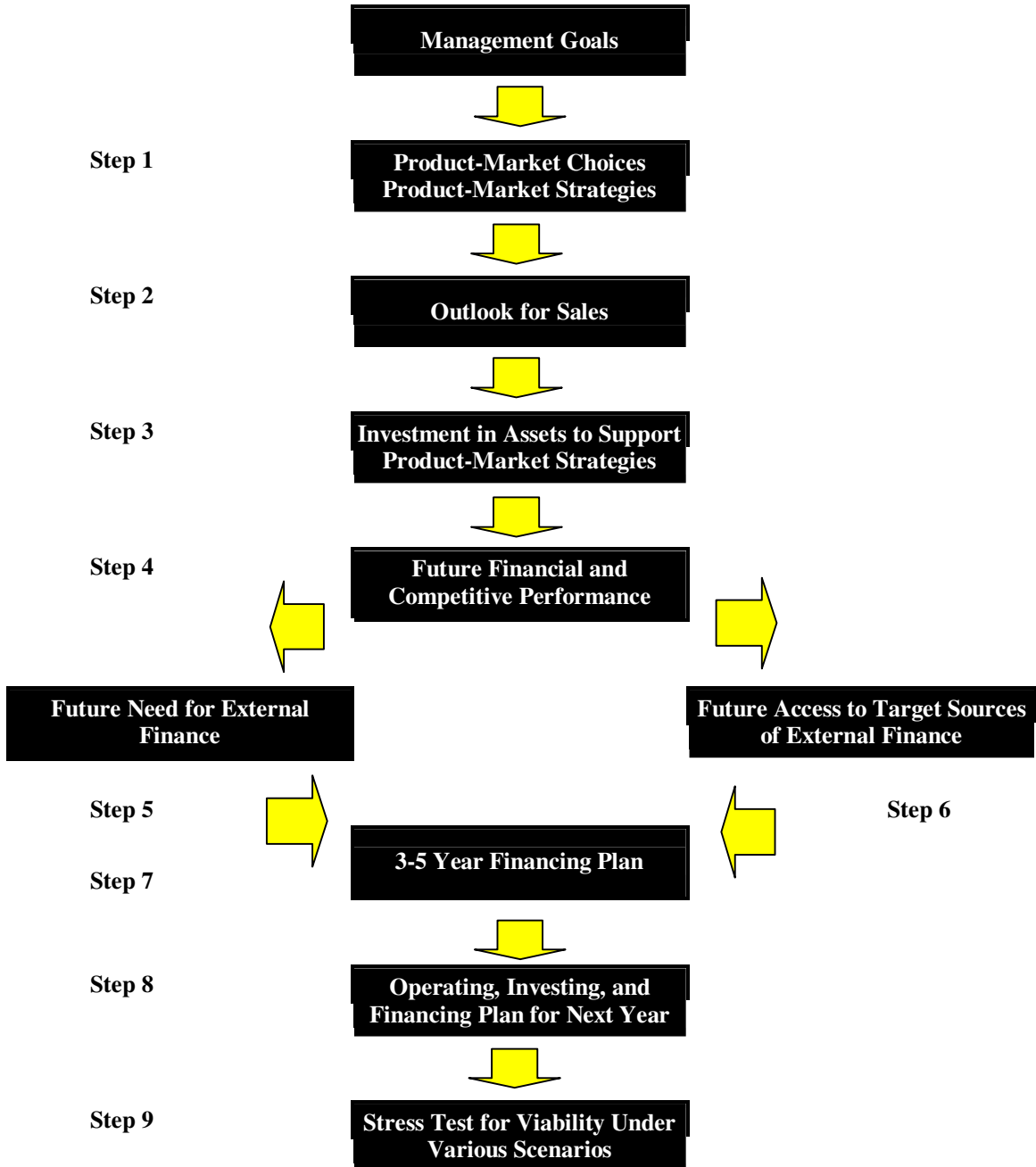
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Management must accept the responsibility of anticipating future imbalance of their firm. In other words, management should be proactive and continuously assess a firm's future financial health before it is reflected in the firm's financial statements. They should consider corrective action before both time and money are needlessly expended. In today's society, simply the avoidance of bankruptcy is no longer an acceptable business standard. The bar has been raised. It is a vital strategic element of ensuring that businesses are healthy in the long-term through management guiding ample cash flow of funds to the firm's critical programs (Harvard Business School p.1).

This section of the article describes a step-by-step process that can assess whether a firm will remain in balance over the next two to three years. Figure 1 guides the reader through the suggested steps of the corporate financial system.

Figure 1

The Corporate Financial System



Step 1 – Goals, Strategies, and Operating Characteristics

The starting point for assessing a firm's future health begins with step 1 or an investigation of the firm's goals, strategies, and operating characteristics. A thorough investigation should be conducted to fully understand management's goals for the firm and each of the product lines in which it chooses to compete. The goals should be aligned accordingly with the firm's strategy for each product line (Harvard Business School p.3).

A firm's operating characteristics play a major role in the financial health of a company. Management should ensure that all assets are being used efficiently. In most cases, the investment of technological improvements can increase operational efficiency. Management should stay atop of regulatory changes that may affect business conditions and operational policies. Fines or the possibility of temporary plant closure can result from the failure to meet regulatory guidelines (Harvard Business School p.3).

Step 2 – Outlook for the Firm's Sales

The outlook for the market should be heavily weighed. The market must have potential for growth to facilitate an increase in sales and revenue in the future. In addition, competitive forces should be considered. A market that is too heavily saturated can force a firm to lower prices, thus, cutting into margins. The market's volatility and predictability should also be taken into account (Harvard Business School p.3).

Management should spend a considerable amount of time exploring the areas of the corporate financial system that are driven by the firm's goals, strategies, market conditions, and operating characteristics. Each area of the corporate financial system has a direct impact on major financial decisions that can affect other areas throughout the firm. For example, the firm's strategy and sales growth in each of the firm's product lines will help determine the investment in assets needed to support these strategies. This involves making decisions on whether to accept or reject certain project within a limited financial budget taking into account the riskiness of the project. Furthermore, the effectiveness of these strategies coupled with the response of their competitors will influence the firm's profitability and the ability to attract acceptable credit terms for future projects and investments (<http://www.forbes.com/business>).

Step 3 – Investments to Support the Product-Market Strategy

The third step of assessing a firm's future financial health involves estimating the current value of the investments that have been made to support the firm's product-market strategy. The product-market strategies require investments in accounts receivable, inventories, equipment, or possibly acquisitions. In addition, the value of these assets over the next two to three years should also be estimated. These estimates can be made from studying the firm's past patterns. Good ratios or indicators derived from current financials and studying the firm's past include: the collection period, days of inventory, and plant and equipment as a percent of cost of goods sold. A "reasonable value" should be applied to the sales and the cost of goods sold when trying to develop an accurate forecast (Harvard Business School p.4).

Step 4 – Future Profitability and Competitive Performance

A firm must have a profitable outlook for the future. The level of profitability has a strong influence over several vital financial elements. First, the firm's access to debt finance is heavily influenced. Second, the value of the firm's common stock and the willingness to issue it is affected. Third, the firm's "sustainable sales growth" looms upon the level of profitability. The firm's past financial performance is an indicator on how the firm will perform in the future (Harvard Business School p.4).

Management should ask several questions when analyzing the firm's future profitability. They include:

1. What are the average level, trend, and volatility of the firm's profitability?
2. Is this level of profitability sustainable? What effect does competition and regulatory guidelines have on profitability? In the event that market conditions and competition improve, will profitability also improve?
3. Does management plan on implementing any profit improvement programs? If so, what do they plan on doing?
4. Do any inefficiencies such as large inventory build-ups or lower than industry average accounts receivables exist?
5. Is the current level of profitability at the expense of future growth and profitability?

Step 5 – Future External Financing Needs

External financing can be in the form of loans, debt issues, or the sale of shares of stock. The firm's need to engage in external financing in the future depends on several business conditions mentioned in steps 1-4. These business conditions are the firm's future sales growth, the length of its cash cycle, future profitability, and profit retention. A company that experiences rapid sales growth with a long cash cycle (a long collection period + high level of inventory + high equipment relative to sales) and low profitability or low profit retention is a strong candidate to request external financing in the future. The rapid sales growth causes an increase in the level of total assets. The increase in total assets is offset by an increase in accounts payable, an increase in accrued expenses, and an increase in owners' equity. This results in a substantial financing gap (www.fidelity.com). Table 1 illustrates a firm that will require external financing in the future to support a 25 percent per year increase in sales in an industry that is asset intensive.

Table 1
Assuming a 25% Increase in Sales
(\$ In Millions)

Assets	2005		2006
Cash	\$8	Increase 25%	\$10
Accounts Receivable	\$200	Increase 25%	\$250
Inventories	\$280	Increase 25%	\$350
Plant and Equipment	\$400	Increase 25%	\$500
Total	\$888		\$1,110
Liabilities and Equity			
Accounts Payable	\$120	Increase 25%	\$150
Accrued Expenses	\$100	Increase 25%	\$125
Long-Term Debt	\$248	unchanged	\$248
Owners' Equity	\$420	unchanged	\$415
Total	\$888		\$938
External Financing need	\$0		\$172
Total	\$888		\$1,110

Thus, this firm must borrow \$172 million in the year 2006 in order to be able to support a 25 percent per year sales growth (Harvard Business School p.5).

Management should develop pro forma income statements and balance sheets for the next two to three years. These financial statements are used to estimate the dollar amount, timing, and the duration of future external financing needs (<http://www.ml.com>).

Step 6 – Access to Target Sources of External Finance

After step 5 has been completed and the firm's future external financing needs have been estimated, management must identify the target sources for their financing. These target sources can include: banks, public debt markets, public equity markets, or insurance companies. Management also needs to establish sound financial policies that will enable them to secure funds on acceptable terms (Harvard Business School p.6).

The firm's target sources will ask several questions when evaluating if the firm is a "good fit" for their lending establishment. The answers to the questions will also help the lending establishments determine their interest rate and lending terms. Some of the questions that lending establishments may ask include:

1. How soundly is the firm financed? This includes the firm's profitability level, cash flow, risk, and future need for financing?
2. Does the firm have the capacity to service its debt? Does the firm have a good history of paying its suppliers?
3. What is the firm's debt ratio? Is the firm close to its borrowing limits?
4. Does the firm have assets that can be sold in the event of financial trouble in order to raise needed funds? What is the value of these assets that can be sold?

Step 7 – Viability of the Three to Five Year Plan

In step seven of assessing a firm's future financial health, two questions should be answered. They are:

1. Is the firm's mix of debt and equity compliant with the firm's debt policy? If it does not meet the firm's debt policy, action should be taken at this time.
2. Are the firm's investment needs, product strategies, and goals in line with its financing capabilities over the next three to five years? If the answer to this question is no, then the first six steps of assessing the firm's future financial health should be revisited (Harvard Business School p.7).

Step 8 – Current Year Financing Plan

Step eight involves the evaluation of how the firm plans on meeting the current year's finance plan. The goal is to balance the benefits of future financing flexibility with realizing a higher stock price. Future financing flexibility can be accomplished by selling equity now. On the other side, management can have the hope of realizing a higher share

price by waiting to sell the equity later. Either way, a balance must be maintained depending on market conditions and future forecasting (Harvard Business School p.7).

Step 9 – Stress Test under Scenarios of Adversity

A stress test should be conducted to see if the three to five year plan is sound and if the flow of funds to strategic programs can be maintained in times of adversity. Most three to five year plans, if properly planned and researched, meet the firm's expectations. However, there have been events that have reduced the reliability of a firm's plans. Performing a stress test can reduce the probability of a negative occurrence due to adversity (Harvard Business School p.7).

Application: Ratio Analysis as a Indicator of Future Financial Health

Many of the answers to the questions that the nine steps of assessing a firm's future financial health ask cannot be found on a firm's financial statements. A thorough understanding of the firm's long-term goals, competition, regulatory guidelines, operations, and efficiency of management is needed to accurately assess a firm's future health. This information is usually not readily available to outsiders or investors that are interested in the firm. In this case, ratio analysis is helpful (Intermediate Financial Management p.230).

Investors use financial analysis to predict the future. Managers use financial analysis to help anticipate future conditions and as a starting point for planned actions that will improve the firm's future performance. Ratios can be computed from information found on a firm's income statement and balance sheet. There are five categories of ratios that can help evaluate a firm's future health. The ratio categories are: liquidity ratios, asset management ratios, debt management ratios, profitability ratios, and market value ratios (Intermediate Financial Management p.230)

Case Study: Assessing the Future Health of Harley Davidson, Inc. Using Ratio Analysis

Harley-Davidson, Inc. is the parent company for three businesses operating under its umbrella. The businesses include: Harley-Davidson Motor Company (Motor Company), Buell Motorcycle Company (BMC), and Harley-Davidson Financial Services (HDFS). The Motor Company produces heavyweight motorcycles and offers a line of

motorcycle parts, accessories, apparel, and general merchandise. The Motor Company manufactures five families of motorcycles. They are: Touring, Dyna Glide, Softail, VRSC, and Sportster. BMC produces sport motorcycles. BMC also offers a line of motorcycle parts, accessories, apparel, and general merchandise. HDFS provides wholesale and retail financing and insurance programs primarily to Harley-Davidson/Buell dealers and customers. The company operates in two principal business segments: Motorcycles and Related Products and Financial Services (www.hoovers.com).

Table 2 – Annual Income Statement

Annual Income Statement (Values in Millions)	Dec-04	Dec-03	Dec-02	Dec-01	Dec-00
Sales	5,015.20	4,624.30	4,091.00	3,363.40	2,906.40
Cost of Sales	2,901.50	2,761.80	2,497.40	2,030.30	1,782.20
Gross Operating Profit	2,113.70	1,862.50	1,593.60	1,333.10	1,124.20
Selling, General & Admin. Expense	820.6	774.1	725.3	578.8	513
Other Taxes	0	0	0	0	0
EBITDA	1,293.10	1,088.40	868.3	754.3	611.2
Depreciation & Amortization	214.1	196.9	175.8	153.1	133.3
EBIT	1,079.00	891.5	692.5	601.2	477.9
Other Income, Net	323.3	292.1	208.4	72.2	70.8
Total Income Avail for Interest Exp.	1,402.30	1,183.60	900.9	673.4	548.7
Interest Expense	22.7	17.6	15.1	0	0
Minority Interest	0	0	0	0	0
Pre-tax Income	1,379.60	1,166.00	885.8	673.4	548.7
Income Taxes	489.7	405.1	305.6	235.7	200.8
Special Income/Charges	0	0	0	0	0
Net Income from Cont. Operations	889.8	760.9	580.2	437.7	347.7
Net Income from Discont. Opers.	0	0	0	0	0
Net Income from Total Operations	889.8	760.9	580.2	437.7	347.7
Normalized Income	889.8	760.9	580.2	437.7	347.7
Extraordinary Income	0	0	0	0	0
Income from Cum. Eff. of Acct. Chg.	0	0	0	0	0
Income from Tax Loss Carry forward	0	0	0	0	0
Other Gains (Losses)	0	0	0	0	0
Total Net Income	889.8	760.9	580.2	437.7	347.7
Dividends Paid per Share	0.41	0.2	0.14	0.11	0.1
Preferred Dividends	0	0	0	0	0
Basic EPS from Cont. Operations	3.02	2.52	1.92	1.45	1.15
Basic EPS from Discont. Operations	0	0	0	0	0
Basic EPS from Total Operations	3.02	2.52	1.92	1.45	1.15
Diluted EPS from Cont. Operations	3	2.5	1.9	1.43	1.13
Diluted EPS from Discont. Operations	0	0	0	0	0
Diluted EPS from Total Operations	3	2.5	1.9	1.43	1.13

<http://finance.yahoo.com>

<http://moneycentral.msn.com/investor/research>.

Table 3 – Cash from Operating Activities

	Dec-04	Dec-03	Dec-02	Dec-01	Dec-00
Cash Flow from Operating Activities					
Net Income (Loss)	889.8	760.9	580.2	437.7	347.7
Depreciation and Amortization	214.1	196.9	175.8	153.1	133.3
Deferred Income Taxes	-41.5	42.1	38.6	-3.5	1.4
Operating (Gains) Losses	-67.8	-45.8	-68.8	92.2	33.5
Extraordinary (Gains) Losses	0	0	0	0	0
Change in Working Capital					
(Increase) Decr. in Receivables	-36.4	-58.5	10.1	0	0
(Increase) Decr. in Inventories	-19.2	10.4	-37	0	0
(Increase) Decr. in Other Curr. Assets	0	13.9	-13.3	0	0
(Decrease) Incr. in Payables	39.6	15.5	94	0	0
(Decrease) Incr. in Other Curr. Liabs.	0	0	0	0	0
Other Non-Cash Items	-8.9	0	0	77.8	49.6
Net Cash from Cont. Operations	969.7	935.6	779.5	757.3	565.5
Net Cash from Discont. Operations	0	0	0	0	0
Net Cash from Operating Activities	969.7	935.6	779.5	757.3	565.5
Cash Flow from Investing Activities					
Cash Flow Provided by:					
Sale of Property, Plant, Equipment	0	0	0	0	170.1
Sale of Short Term Investments	742.3	1,145.00	1,190.10	52	0
Cash Used by:					
Purchase of Property, Plant, Equip.	-213.6	-227.2	-323.9	-292.3	-222.4
Purchase of Short Term Investments	-1,091.30	-1,143.90	-1,508.30	-248	0
Other Investing Changes Net	-145.2	-258.5	-376	-283.7	-118.8
Net Cash from Investing Activities	-707.8	-484.7	-1,018.00	-772	-171
Cash Flow from Financing Activities					
Cash Flow Provided by:					
Issuance of Debt	305	400	165.5	152.5	0
Issuance of Capital Stock	62.2	19.4	12.7	28.8	14.6
Cash Used for:					
Repayment of Debt	0	-175.8	0	0	-16.7
Repurchase of Capital Stock	-564.1	-103.9	-56.8	-111.6	-126
Payment of Cash Dividends	-119.2	-59	-41.5	-35.4	-30.1
Other Financing Charges, Net	0	0	0	0	0
Net Cash from Financing Activities	-316.1	80.6	79.9	34.4	-158.1
Effect of Exchange Rate Changes	0	0	0	0	0
Net Change in Cash & Cash Equivalents	-54.2	531.5	-158.5	19.7	236.3
Cash at Beginning of Period	329.3	280.9	439.4	419.7	183.4
Free Cash Flow	636.9	649.4	414.1	429.6	313

<http://finance.yahoo.com>

<http://moneycentral.msn.com/investor/research>.

Table 4 – Annual Balance Sheet

Annual Balance Sheet (Values in Millions)	Dec-04	Dec-03	Dec-02	Dec-01	Dec-00
Assets					
Current Assets					
Cash and Equivalents	275.2	812.4	280.9	439.4	419.7
Receivables	1,328.50	1,114.40	964.5	775.3	629.2
Inventories	226.9	207.7	218.2	181.1	191.9
Other Current Assets	1,435.70	594.6	603	269.4	56.4
Total Current Assets	3,266.30	2,729.10	2,066.60	1,665.30	1,297.30
Non-Current Assets					
Property, Plant & Equipment, Gross	2,193.40	2,191.20	2,006.30	1,705.30	1,424.50
Accum. Depreciation & Depletion	1,168.70	1,144.90	973.7	813.5	670.4
Property, Plant & Equipment, Net	1,024.70	1,046.30	1,032.60	891.8	754.1
Intangibles	59.5	53.7	49.9	49.7	54.3
Other Non-Current Assets	1,132.90	1,094.00	712.1	511.7	330.7
Total Non-Current Assets	2,217.10	2,194.00	1,794.60	1,453.20	1,139.10
Total Assets	5,483.30	4,923.10	3,861.20	3,118.50	2,436.40
Liabilities & Shareholder's Equity					
Current Liabilities					
Accounts Payable	244.2	223.9	227	194.7	169.8
Short Term Debt	495.4	324.3	382.6	217.1	89.5
Other Current Liabilities	433.1	407.6	380.5	304.4	238.4
Total Current Liabilities	1,172.70	955.8	990.1	716.1	497.7
Non-Current liabilities					
Long Term Debt	800	670	380	380	355
Deferred Income Taxes	51.4	125.8	29.5	17.8	15.6
Other Non-Current Liabilities	240.7	213.8	228.8	248.3	162.4
Minority Interest	0	0	0	0	0
Total Non-Current Liabilities	1,092.10	1,009.60	638.3	646.1	533
Total Liabilities	2,264.80	1,965.40	1,628.40	1,362.30	1,030.70
Shareholder's Equity					
Preferred Stock Equity	0	0	0	0	0
Common Stock Equity	3,218.50	2,957.70	2,232.90	1,756.30	1,405.70
Total Equity	3,218.50	2,957.70	2,232.90	1,756.30	1,405.70
Total Liabilities & Stock Equity	5,483.30	4,923.10	3,861.30	3,118.60	2,436.40
Total Common Shares Outstanding	294.3 Mil	301.5 Mil	302.7 Mil	302.8 Mil	302.1 Mil
Preferred Shares	0	0	0	0	0
Treasury Shares	35.6 Mil	25.0 Mil	22.6 Mil	21.6 Mil	19.1 Mil

Table 5 – Key Ratios

Harley Davidson, Inc. - Key Ratios		
	HDI	
Employees	8900	
Current Market Price	\$8.94	
52 Week High	63.75	
52 Week Low	50.52	
Market Cap	17.21 Bil	
Tot. Shares Out.	292 Mil	
Revenue/Share	17.18	
Earnings/Share	3.00	
Book Value/Share	11.02	
Dividend Rate	0.5	
Payout Ratio	14%	
Volatility (Beta)	1.1	
Analyst Consensus	Moderate Buy	
Sales (per 2004 Annual Income Statement)	5,015.2 Mil	
Net Income (per 2004 Annual Income Statement)	889.8 Mil	
Key Ratios	HDI	Industry
Growth Rates (%)		
Sales (Qtr vs. year ago qtr)	5.4	4.1
EPS (YTD vs. YTD)	16.9	23.9
EPS (QTR vs. year ago quarter)	14.5	-17.3
Sales (5-Year Annual Avg.)	15.9	7.64
EPS (5-Year Annual Avg.)	28.79	12.22
Dividends (5-Year Annual Avg.)	32.03	5.46
Price Ratios		
Current P/E Ratio	19.65	21.3
P/E Ratio 5-Year High	44.8	57.5
P/E Ratio 5-Year Low	14	15.9
Price/Sales Ratio	3.43	1.53
Price/Book Value	5.35	4.58
Market/Book Ratio (M/B)	5.39	N/A
Profit Margin (%)		
	17.74%	25.60%
Financial Condition		
Debt Ratio	0.41	0.24
Current Ratio	2.79	2.1
Quick Ratio	1.56	1.5
Interest Coverage	61.7	22.6
Leverage Ratio	1.7	1.9

Investment Returns (%)		
Return on Equity	27.65%	22.00%
Return on Assets	16.23%	11.70%
Return on Capital	22.10%	17.80%
Return on Equity (5-Year Avg.)	26.10%	18.30%
Return on Assets (5-Year Avg.)	15.20%	9.60%
Return on Capital (5-Year Avg.)	21.30%	15.70%

Management Efficiency		
Income/Employee	100000	22000
Revenue/Employee	564000	302000
Inventory Turnover	3.49	8.4
Days Sales Outstanding (DSO)	96.69	N/A
Fixed Asset Turnover	4.89	N/A
Total Asset Turnover	0.91	1.7

(<http://www.reuters.com>)

Liquidity Ratios

Liquidity ratios are used to measure a firm's ability to meet its current obligations. The current ratio, the most commonly used measure of short-term solvency, measures the extent to which the claims of short-term creditors are covered by assets that can be converted to cash relatively fast. It is determined by dividing current assets by current liabilities. In general, creditors like to see a high current ratio. On the other hand, the shareholder has a different perspective on a company with a high current ratio. In this case, the shareholders may believe that the company has a lot of money tied up in nonproductive assets. Harley Davidson's current ratio of 2.7853 is well above the industry average of 2.1. Therefore, Harley Davidson will look very appealing to creditors and it will be very likely that the firm will be able to agree to favorable lending terms (Intermediate Financial Management p.231).

$$\begin{aligned} &\text{Current Assets/Current Liabilities} \\ &3,266,300,000/1,172,700,000 = 2.7853 \\ &\text{Industry Average} = 2.1 \end{aligned}$$

The quick, or acid test, ratio can be calculated by deducting inventory from current assets and then dividing the remainder by current liabilities. Inventories should be excluded because it is typically more difficult to convert them to cash than the firm's other current assets. Hence, losses are most likely to occur on these assets in the event of liquidation. Therefore, Harley Davidson is in a good position to pay off its liabilities without having to liquidate its inventories (Intermediate Financial Management p.232).

Current Assets-Inventory/Current liabilities
 $3,266,300,000 - 1,435,700,000/1,172,700,000 = 1.5610$
 Industry Average = 1.5

Asset Management Ratios

Asset management ratios are used to measure how effectively a firm is managing its assets. In addition, they also show whether or not the assets are proportional to the level of operations which is measured by sales. Inefficient use of assets results in the need for additional financing, unnecessary interest costs, and a lower return on capital. They can also indicate uncollectible accounts receivables or obsolete inventory (Intermediate Financial Management p.232).

The inventory turnover ratio is defined as sales divided by inventories. Harley Davidson is well below the industry average inventory ratio. This data suggests that the firm is not productively “turning” its inventory over possibly leading to an inadequate rate of return in the near future (Intermediate Financial Management p.233).

Sales/Inventories
 $5015200000/1435700000 = 3.4932$
 Industry Average = 8.4

The days sales outstanding (DSO), commonly referred to as the “average collection period” (ACP), is used to appraise accounts receivable. This ratio can be calculated by dividing accounts receivable by average daily sales to find the number of days’ sales tied up in receivables. Thus, the DSO represents the average length of time that the company waits after completing a sale and before receiving payment. The firm’s DSO is 96.68. This is probably due to the fact that a new Harley Davidson motorcycle costs a minimum of twenty thousand dollars on up depending on the features that can be added to the bike. Consequently, this does not allow the firm to invest in productive assets because its cash is tied up elsewhere (Intermediate Financial Management p.234).

Accounts receivable/ (annual sales/365)
 $1328500000/(5015200000/365) = 96.6866$

The fixed assets turnover ratio can be calculated by dividing sales by net fixed assets. This ratio shows how effectively the firm utilizes its plant and equipment. Harley Davidson has a fixed asset turnover ratio of 4.89. This means that the firm is moderately utilizing its fixed assets. There is room for improvement in this aspect of financial performance (Intermediate Financial Management p.234-35).

Sales/Net fixed Assets
 $5015200000/1024700000 = 4.8943$

The total assets turnover ratio can be calculated by dividing sales by total assets. The turnover of all of the company's assets is measured by this ratio. Harley Davidson's total assets turnover ratio of 0.91 falls below the industry average benchmark. This indicates that the firm is not generating a sufficient volume of business given its total asset investment. This can be remedied by increasing sales, selling some assets, or a combination of these actions (Intermediate Financial Management p.235).

$$\begin{aligned} &\text{Sales/Total Assets} \\ &5015200000/5483300000 = 0.9146 \\ &\text{Industry Average} = 1.7 \end{aligned}$$

Debt management ratios

The extent to which a firm utilizes debt financing, or financial leverage, can be measured by debt management ratios. The use of borrowed funds by profitable companies can improve the return on equity. However, the riskiness of the firm will increase, and if used excessively, can lead to financial embarrassment (Intermediate Financial Management p.236).

The debt ratio can be calculated by divided a company's total liabilities by its total assets. This ratio measures the degree that creditors provide funds to the company. Total debt includes both current liabilities and long-term debt. Creditors like to see a low debt ratio which offers them protection in the event of liquidation or times of hardship. Harley Davidson's debt ratio exceeds the industry average of 0.24. Thus, a red flag is raised. A high debt ratio makes it costly for the firm to borrow additional funds without having to first raise equity capital. Furthermore, creditors will be hesitant to loan the firm additional funds (Intermediate Financial Management p.236).

$$\begin{aligned} &\text{Total Liabilities/Total Assets} \\ &2264800000/5483300000 = 0.4130 \\ &\text{Industry Average} = 0.24 \end{aligned}$$

Profitability Ratios

The combined effects of liquidity, asset management, and debt can be shown by the use of profitability ratios. The profit margin on sales can be calculated by dividing net income by sales. Harley Davidson's profit margin on sales (17.74%) is well below the industry average of 25.60%. This sub-par result can occur because costs are too high and the firm is moderately leveraged by debt. These high costs signal inefficient operations (Intermediate Financial Management p.238).

Net Income available to common stockholders/Sales
 $889800000/5015200000 = 17.74\%$
Industry Average = 25.60%

The return on total assets (ROA) can be calculated by divided by net income by total assets. It measures the level of return on all of the company's assets after both interest and taxes. Harley Davidson's ROA (16.23%) is well above the industry average of 11.70%. This high ratio can result from (1) the company's high BEP, (2) lower interest costs associated with the utilization of debt, or (3) a combination of the two (Intermediate Financial Management p.240).

Net Income available to common stockholders/Total Assets
 $889800000/5483300000 = 16.23\%$
Industry Average = 11.70%

Stockholders expect to receive a return on their investments. The return on common equity (ROE) measures how well companies are returning on their investors' money. The ROE is calculated by dividing net income by common equity. Once again, Harley Davidson's ROE (27.65%) is well above the industry average of 22%. The firm is doing a good job on giving an adequate return to their shareholders (Intermediate Financial Management p.240).

Net Income available to common stockholders/Common equity
 $889800000/3218500000 = 27.65\%$
Industry Average = 22.00%

Market Value Ratios

Market value ratios compare a company's stock price to its earnings and book value per share. It serves as an indicator of how investors think of the company's past performance and future growth. In effect, the market value ratio and stock price will be high, if the liquidity, asset management, debt management, and profitability ratios are favorable (Intermediate Financial Management p.241).

The price/earnings (P/E) ratio can be computed by dividing the price per share divided by earnings per share. This ratio shows how much investors are willing to pay for each dollar of the company's profits. This ratio is higher for a company with strong growth prospects, but is lower for a riskier firm. Therefore, Harley Davidson is viewed as being somewhat riskier than most, having poorer growth prospects, or both (Intermediate Financial Management p.241).

Price per share/Earnings per share
 $58.94/3.00 = 19.6467$
Industry Average = 21.3

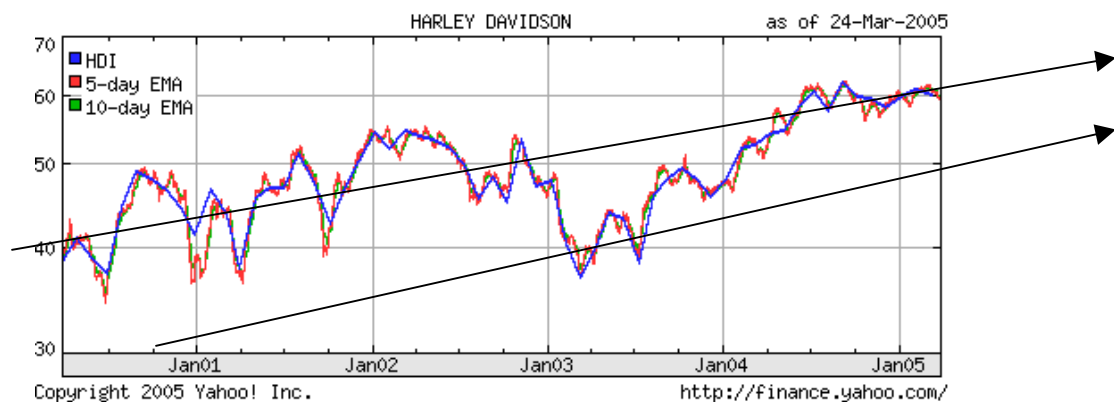
The market/book (M/B) ratio shows how the investor regards the company. This ratio can be calculated by dividing the market price per share by the book value per share. A higher M/B ratio is associated with firms with relatively high rates of return on common equity because investors see this as a positive effect. This means that investors expect Harley Davidson's success to continue and are willing to pay more for these stocks than their accounting value (Intermediate Financial Management p.242).

Market price per share/Book value per share (common equity/shares outstanding)
 $58.94/10.9361 = 5.3895$

Stock Price - Technical Analysis

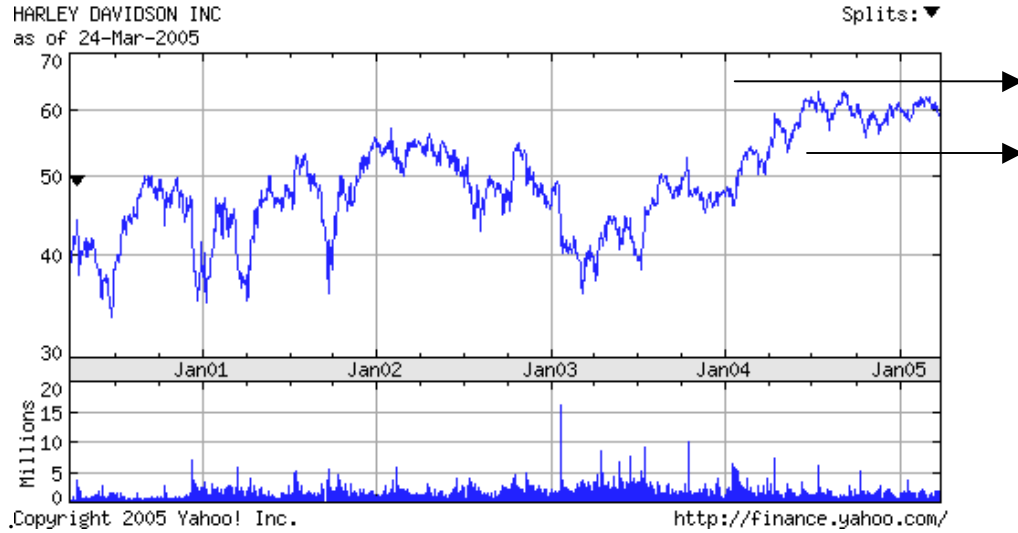
Technical "High - Low" analysis shows a near term High of \$70 and a near term Low of \$59.

Table 6 – "High-Low Analysis"



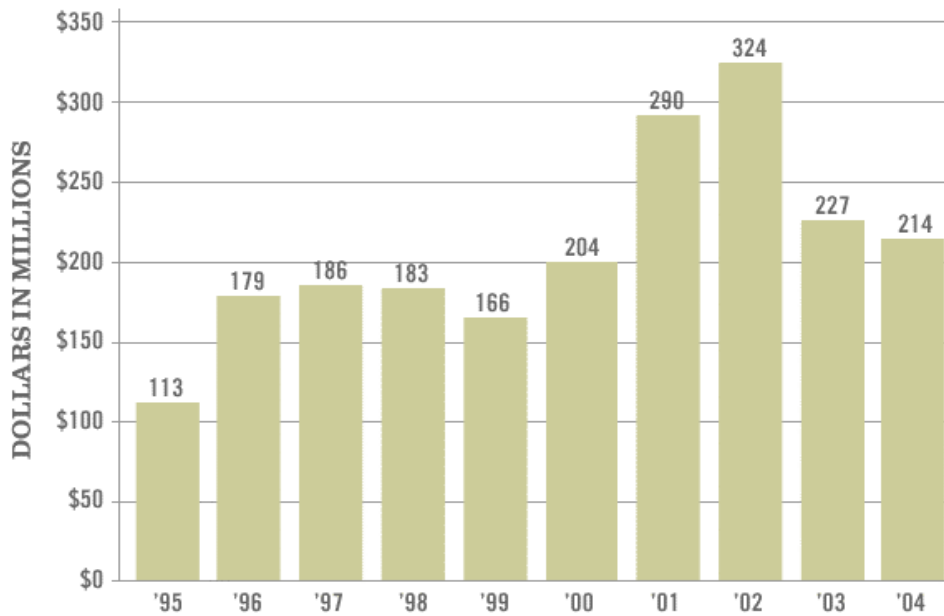
Technical "Head and Shoulder" analysis shows a near term High of \$64 and a near term low of \$50.

Table 7 – “Head and Shoulders” Analysis



(<http://finance.yahoo.com>)
(<http://investor.harley-davidson.com>)

Table 8 - Capital Expenditures of Harley Davidson



In 2002, Harley Davidson peaked in its capital expenditures at \$324 Million. This high level of investment was due to international expansion. Many new facilities were opened worldwide in order to capture market share and gain international exposure. In 2003 and 2004, capital expenditures were \$227 million and \$214 million respectfully. Equipment expenditures were needed because eight new motorcycle models were introduced to market in 2004 (<http://investor.harley-davidson.com>).

For the fiscal year ended 12/31/04, Harley Davidson recorded its 19th consecutive year of record revenue and earnings. Consolidated revenue for the company was \$5.02 billion which is a 5.2% increase over 2003. Sales rose 8% to \$5.32B and net income rose 17% to \$889.8M. Diluted earnings per share rose to \$3.00 which was a 20% increase over 2003. Finally, Harley Davidson shipped 317,289 motorcycles which was a 9% increase from the preceding year. The jump in revenues reflects increased Harley Davidson unit shipments and an increase in financing income. The net income also reflects improved operating margins (<http://investor.harley-davidson.com>).

Harley Davidson's investors were handsomely rewarded in 2004. The price of the stock increased by 27.8% and closed at \$60.78 at year-end. The dividend payout doubled to \$119 million including two quarterly dividend increases of 25% each (<http://investor.harley-davidson.com>).

The company also repurchased 10.6 million shares in 2004. Harley Davidson also plans on repurchasing 20 million shares in the near future. This is a good indicator of good future financial health (<http://investor.harley-davidson.com>).

The company's goal for 2005 is to ship 339,000 motorcycles to dealers and distributors worldwide. It is highly likely that the company will surpass its goal. Harley Davidson has a very loyal customer base. In fact, eighty percent of sales are from existing Harley Davidson owners. On another positive note, the company is penetrating new markets internationally and capturing new customers by ensuring customer satisfaction and continuous product development (<http://investor.harley-davidson.com>).

Table 9 – Expected Growth Rates

Growth Rates	1 Year	3 Year	5 Year
Revenue %	8.5	14.03	15.53
EPS %	19.93	28	28.27
Dividend %	107.69	52.14	35.86

After carefully reviewing Harley Davidson's past financial performance through ratio analysis, goals, and strategies for the future, I estimate a strong growth rate for the company within the next five years. The company has built long-term strategies to decrease their debt ratio, manage their inventories more efficiently, and increase sales. A sound history of financial success coupled with the company buying down their debt is a strong indicator of good future financial health.

Conclusion

Management may be able to avoid disastrous business situations by assessing their firm's long-term financial health. Setting goals and strategies to reflect market conditions, competition, and operational capability are vital elements in maintaining growth and ensuring a healthy business. In addition, management must guide ample cash flow of funds to the firm's critical programs. The step-by-step process described in this article provides a great tool for managers to use when assessing the long-term health of the business.

A thorough understanding of the firm's long-term goals, competition, regulatory guidelines, operations, and efficiency of management is needed to accurately assess a firm's future health. This information is usually not readily available to outsiders or investors that are interested in the firm. Therefore, ratio analysis is a useful tool to analysts because many of the answers to the questions that the nine steps of assessing a firm's future financial health ask cannot be found on a firm's financial statements.

Managers should utilize the nine-step process as well as ratio analysis to assess a firm's future financial health. Through spending ample time on these two vital elements to ensure a firm's success, leaders are balancing their own stools in order to sit comfortably and manage affectively. Balance is the key to long-term success.

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