

# Strategic Report for Harley Davidson

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## Executive Summary

Harley Davidson remains a financially strong and stable company. During 2005 the company reported the 19<sup>th</sup> consecutive year of record revenues and record earnings. While Harley Davidson's growth has slowed over the past several years the decline in growth rates are primarily attributable to a maturing market, which results in lower growth rates for all member of the motorcycle sub-industry. During 2006 Standard and Poor's predicts that the motorcycle sub-industry will grow between 1% and 3%, a much slower rate than the double digit annual gains the sector saw throughout the 90's and late 80's.

Despite the company's strong financial outlook the stock price has not been performing well over the past year. The stock price fell dramatically in April 2005 when Harley Davidson management lowered guidance of new motorcycle shipments to the network of independent dealers. Wall Street analysts proceeded to predict doom for the company as it appeared that it would be unable to continue its trend of strong growth. Although the company actually produced results that were in the upper bound of its guidance and within the guidance from before April the stock price has yet to recover to its earlier levels. It seems that Harley Davidson management's strategy of under-promising and over-delivering has backfired, especially because analysts remain wary of the company's prospects despite Harley exceeding their expectations.

Another reason for analysts' pessimism about Harley Davidson is that recently the company seems to be resting on its laurels, content with its current market position and doing little to attract new, younger customers or to offer new motorcycle designs to appeal to previous customers. One sign of this is that Harley Davidson's dollar amount spent on advertising and research and development has actually been decreasing over

the past couple of years. To some it might seem that management is sacrificing the future of the company by not attracting new riders in order to boost financial performance today.

## Company History

In 1903 William Harley and Arthur Davidson made the first Harley-Davidson motorcycle available to the public. It was built in a small wooden shed with the words “Harley-Davidson Motor Company” scrawled on the door. The next year, in 1904, C.H. Lang opened the first Harley-Davidson dealership in Chicago, selling one of the first 3 Harley’s ever made. In 1906 the company opened a new factory, measuring only 28x80 feet in Milwaukee, Wisconsin. The next year, in 1907 the company doubled its factory space. Also in 1907 the Harley Davidson Motor Company was incorporated, with the stock being split between the 4 owners, including William and Walter Davidson (Arthur’s brothers). By 1920 Harley Davidson is recognized as the largest motorcycle manufacturer in the world, supported by over 2,000 dealers in 67 countries. In 1953, one of Harley Davidson’s competitors, Hendee Manufacturing (makers of the Indian motorcycle line), goes out of business. For the next 46 years Harley Davidson is the only American manufacturer of heavyweight motorcycles.

In 1912 Harley Davidson built a six story building on Juneau Avenue in downtown Milwaukee, Wisconsin. This building would become the main offices and factory for Harley Davidson. In 1947, to supplement existing manufacturing facilities Harley Davidson purchased the old A.O. Propeller plant, which the company subsequent converted from wartime manufacturing into a large machine shop. In 1962, in response to a growing trend of including fiberglass in motorcycle production Harley Davidson purchases a 60% equity share in the Tomahawk Boat manufacturing company. Harley

uses the companies existing equipment to manufacture its own fiberglass parts, beginning in 1963 with the official opening of the Tomahawk division of the company.

In 1973 Harley Davidson upgraded its production facilities with the opening of a new 400,000 square foot plant in York, Pennsylvania. The companies manufacturing operations are now located in York, Tomahawk, and Milwaukee, where the new Capitol Drive factory begins to manufacture engines that same year. Harley Davidson's expansion into York continued in 1992, with the opening a new \$31 million paint facility to complement the manufacturing facilities already located in the town.

Today Harley Davidson's manufacturing base includes those existing plants plus several new plants opened in the late 1990's including a distribution center in Franklin, Wisconsin, a development center in Milwaukee, and a manufacturing plant in Kansas City. The manufacturing ability of Harley Davidson was also further enhanced in 1982 by the implementation of the MAN (Materials As Needed) program. Similar to today's "just in time" inventory management methods the MAN program ensured that parts and raw materials are only built and purchased as they are required. This method has helped Harley Davidson drastically reduce its manufacturing costs and improve quality.

In 1909 Harley Davidson developed and marketed the first V-twin powered motorcycle, which would become a staple of the Harley Davidson product until this day. The first V-Twin developed in 1909 boasted a whopping seven horsepower. Since the first V-Twin Harley Davidson has improved upon the design many times, but the V-Twin engine is still the standard in the company's motorcycles today. In 1910 Harley introduced its first two speed rear transmission, but this was quickly replaced by the introduction of the three speed transmission in 1915. Other important improvements for Harley

Davidson motorcycles include the introduction of hydraulic front and rear suspensions in the 1940's and 1950's, the electric starter in 1964, and Kevlar drive train belts in 1980.

Harley Davidson Motorcycles were used extensively by the United States Military during both World Wars. During 1917 the military purchased one third of all Harley Davidsons manufactured that year. In 1918 that fraction rose to half. To support the military's use of the motorcycles Harley opens it Quartermasters School in 1917 to teach military mechanics how to maintain the motorcycles. This Quartermasters School later became the Service School. During the second World War Harley Davidson almost completely suspended civilian production of motorcycles in order to focus on military production. By the time the war ended in 1945 nearly 90,000 motorcycles had been produced for military use.

Over the years Harley Davidson motorcycles have become an American icon, with numerous Harley rallies all around the country. The most famous of these rallies is the Black Hills rally in Sturgis, South Dakota. The Sturgis rally was started in 1938 by the Jack Pine Gypsies Motorcycle Club. Sturgis is now a legendary annual event, drawing thousands of Harley riders to a small town in western South Dakota each summer. In 1980, in honor of the historic Sturgis motorcycle rally, Harley-Davidson releases the FXB Sturgis model, employing belt drive, black chrome appointments and 80 cubic inch engine.

In 1969 Harley Davidson merged with the American Machine and Foundry company (AMF), a well known leisure products manufacturer. From that point until 1981 Harley Davidson was effectively a subsidiary of AMF. In 1981 thirteen Harley Davidson executives organized and bought Harley Davidson from AMF, making it an independent company again. In 1986 the company management took Harley public (it

had not been a publicly traded company since the 1969 merger with AMF). In 1987 Harley Davidson was listed on the New York Stock Exchange.

In 1993 Harley Davidson purchased a minority interest in Bluell Motorcycle Company, which had been created to build sport motorcycles using Harley Davidson manufactured engines. In 1998 Harley Davidson purchased another 49% of Bluell, giving Harley management control of the company. Management retained Erik Bluell, the founder of the company as the chairman for the new Harley Davidson subsidiary. Bluell remains a major division of Harley Davidson today.

Harley Davidson remains a dominant force in the heavyweight motorcycle industry, maintaining a 50% share in the market for heavyweight motorcycles. Harley Davidson is the only major motorcycle manufacturer to focus entirely on motorcycles. The other major players in the industry, Honda, Yamaha, and Suzuki, each have other major product lines including cars, watercraft, and musical equipment. In 2005 Harley Davidson recorded its 19<sup>th</sup> consecutive year of record revenues and record earnings and seems poised to continue to grow into the future.

## Five Forces Analysis

### Internal Rivalry

The market for heavyweight motorcycles is fairly concentrated: there are only four major firms producing these motorcycles. In addition to Harley Davidson the other three are Honda, Suzuki, and Yamaha, all Japanese companies. Over the last ten to fifteen years the market for heavyweight motorcycles has seen double digit annual growth, but many experts predict that the market is maturing and growth will slow down in coming years, perhaps falling to low single digits.

Harley Davidson has traditionally been the dominant player in this market with a market share well in excess of 50% in the past. Today this market share has fallen to about 50% due to the other companies expanding their heavyweight motorcycle production and stepping up marketing, especially to American consumers. One of the reasons that Harley Davidson's market share has been falling is that the different products from the different companies are becoming less differentiated. In the past it was easy to recognize the distinctive style of a Harley Davidson motorcycle, but the Japanese manufacturers have begun to incorporate popular design features into their products. Any differences in the quality of the products are also less of a concern today than it might have been in the past. The result is that motorcycles from each of the manufacturers are becoming less differentiated over time. As this happens Harley Davidson is relying more and more on their brand name to maintain and build its customer base. This is still a major factor when purchasing a heavyweight motorcycle



for many people. Many people would rather own a Harley than a Honda, but the number of these people has been falling, due in no small part to the improvements that Honda has made in its products.

## Entry

The heavyweight motorcycle industry is very capital intensive. Like most other manufacturing industries there are significant economies of scale involved in building motorcycles. Even ignoring the falling marginal costs as production increases, the capital requirements for manufacturing a similar product are extremely high, even on a small scale. Such significant economies of scale is the major reason that there are only four major players in the market.

There are some small scale motorcycle builders whose business is based heavily on reputation and appeal to serious motorcycle enthusiasts, mainly focused on completely custom bikes. These small custom builders do not produce enough motorcycles to threaten Harley Davidson's market position, but they do help the industry as a whole by helping to increase interest in motorcycles in the general public.

## Substitutes and Complements

Heavyweight motorcycles are a luxury item for the vast majority of consumers so there are few close substitutes for heavyweight motorcycles that could seriously affect the market. Honda, Yamaha, and Suzuki all also manufacture smaller, quicker motorcycles, which are the closest substitute followed by passenger cars and scooter bikes. However, for most people considering purchasing a heavyweight motorcycle are not also seriously considering one of these options. Heavyweight motorcycles project a certain image which is part of the consumer's decision to purchase a motorcycle. Also

smaller motorcycles require a different riding style, more hunched over the bike as opposed to sitting upright on a heavyweight motorcycle.

Passenger cars are weak substitutes for heavyweight motorcycles because consumers rarely purchase them to satisfy transportation requirements. These bikes are more of a luxury item than a necessity for traveling from point A to point B. Even though motorcycles may be better through traffic and use less gasoline than a car a consumer purchasing a motorcycle for these reasons would be more inclined to purchase a lighter motorcycle, which would be more maneuverable and fuel-efficient than a heavyweight bike.

The most obvious complement for heavyweight motorcycles is gasoline. If the price of fuel is high then consumers will be less likely to purchase a heavyweight bike due to the fact that most trips taken on such a motorcycle is largely discretionary and taken for pleasure rather than through a need for transportation. However, if consumers are willing to pay between \$8 thousand and \$25 thousand for a luxury item like a heavyweight motorcycle then they are probably not troubled by paying a slightly higher price for gasoline.

## Buyer and Supplier Power

Harley Davidson operates nearly every stage of the production of a motorcycle, taking raw materials such as steel and basic electrical components and shipping completed motorcycles to its extensive independent dealership network. Because there are many suppliers of all inputs that Harley Davidson requires for its manufacturing operations there is very little that any single supplier can do the exact rents from Harley. If one supplier attempted to increase its profits by charging Harley a higher price it would not

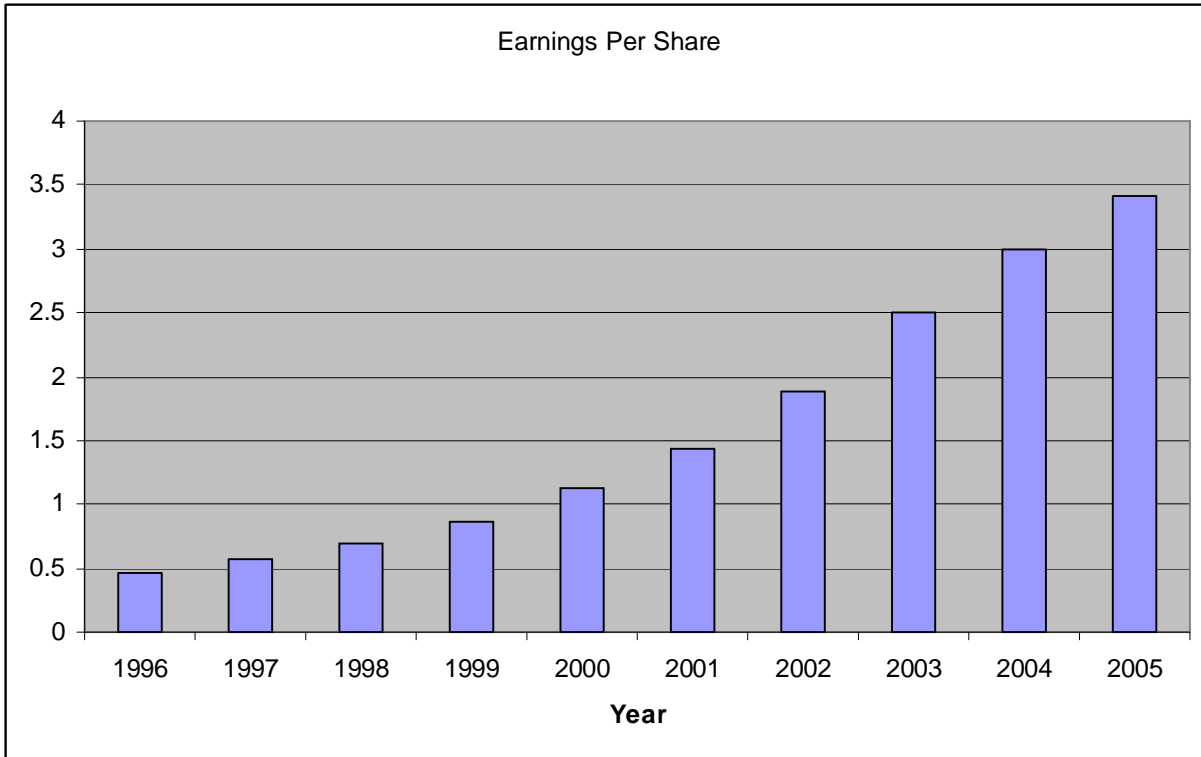
be difficult for Harley to switch suppliers without a significant disruption in production.

Similarly, Harley Davidson's customers are largely individual consumers, making it difficult for them to seriously affect Harley Davidson's financial situation by refusing to cooperate. Since Harley Davidson dealerships are independently owned and operated the company's customers are technically its licensed dealers, but the sheer number of dealers that Harley Davidson has throughout the world makes the situation for dealers not much better than individual riders.

## Financial Analysis

### Earning Per Share

Harley Davidson's EPS has been growing at a very strong rate for the last decade. Since 1996 the company's EPS has grown at an extremely fast 22% annual rate. From 2004 to 2005 EPS grew from \$3.00 to \$3.41, an increase of 13.7%. The growth rate in EPS peaked in 2002 at 33%, and has since been 32% and 20% in 2003 and 2004, respectively.



## Margin Analysis

Harley Davidson has consistently enjoyed higher margins than any of its biggest three competitors, Honda, Yamaha, and Suzuki. It is difficult, however, to compare the margins of Harley Davidson to its competitors because all of its three biggest competitors are also in other business besides the manufacture of heavyweight vehicles. Given the limited information available to non-insiders the separation of the heavyweight motorcycle information from other business pursuits is not possible. Given that, we can still examine the margin differences between Harley Davidson and the other three companies.

Table 1

<i>Gross Margins</i>	<i>Harley Davidson</i>	<i>Honda</i>	<i>Suzuki</i>	<i>Yamaha</i>
2003	.36	.327	.261	.355
2004	.379	.312	.268	.37
2005	.38	.302	.267	.37

As is clearly visible in Table 1, Harley Davidson has the highest gross margins of all the companies, but is not much higher than Yamaha, and is not far and away higher than Honda either. This means that Harley Davidson's cost of goods sold as a percentage of net revenue is the highest of any of the companies. This could be caused by two things. First, Harley has lower manufacturing costs than any of the three others, allow them to make bikes that sell for the same price at lower cost. The second is that Harley is able to charge a higher premium on its motorcycles above what it costs to make them than Honda, Suzuki, or Yamaha.

Net margins are where Harley Davidson really outshines its competitors. Harley has much higher net margins than any of the three major competitors, as can be seen in Table 2.

Table 2

<i>Net Margins</i>	<i>Harley Davidson</i>	<i>Honda</i>	<i>Suzuki</i>	<i>Yamaha</i>
2003	.165	.054	.015	.034
2004	.177	.057	.020	.080
2005	.180	.056	.026	.040

The profits that Harley – Davidson earns per dollar of revenue are much higher than any of its three major competitors. This shows that Harley Davidson has its cost structure under control and is able to cover its manufacturing, administrative, and distribution costs much more easily than Honda, Suzuki, and Yamaha. In addition, the profit margin that Harley receives on its motorcycles has been increasing over the past several years. This is a promising trend, but many analysts view the margin improvements as unsustainable, predicting that Harley’s margins will stabilize or even shrink in coming years. This would be due to increased competition from the three major Japanese companies as well as the increasing popularity of chopper bikes and fully customized motorcycles.

### Return on Assets and Equity

Harley Davidson has much better return on assets than any of its competitors. Over the last few years Harley has also been increasing its return on assets. One way it has been able to do that is by using excess cash in a stock buy-back program. By using the excess cash in this way Harley’s management is reducing the amount of assets on the company’s balance sheet, so the total earnings are divided by a smaller number when calculating the return on assets. The return on assets for Harley Davidson and the other three major motorcycle manufacturers can be seen in Table 3.

Table 3

<b>Return on Assets</b>	<b>Harley Davidson</b>	<b>Honda</b>	<b>Suzuki</b>	<b>Yamaha</b>
<b>2003</b>	15.50%	5.60%	2%	3.50%
<b>2004</b>	16.40%	5.60%	2.80%	8.50%
<b>2005</b>	18.20%	5.20%	3.60%	3.90%

Among the four major heavyweight motorcycle manufacturers Harley Davidson also has the highest return on equity of the group. And again, Harley Davidson has been improving its return of equity over the past few years. This is again due in part to Harley's buying back some of its stock with excess cash. However, Harley Davidson's return on equity does not increase by the same factor from return on assets as any of the other three companies. This is because Harley Davidson has a less levered capital structure. Their operations are financed by a lower percentage of debt than the other three companies. Because they have a lower debt to equity ratio their earnings are divided over a relatively large amount of equity in order to find the return.

Table 4

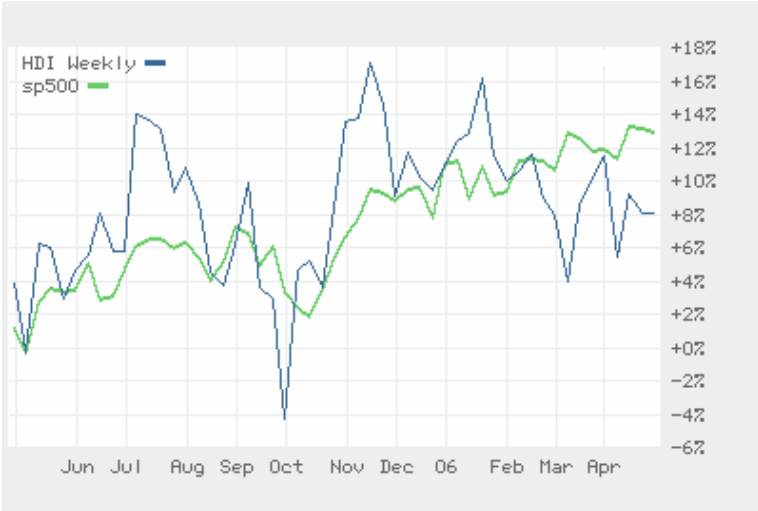
<b>Return on Equity</b>	<b>Harley Davidson</b>	<b>Honda</b>	<b>Suzuki</b>	<b>Yamaha</b>
<b>2003</b>	25.70%	16.20%	4.80%	8.6%
<b>2004</b>	27.60%	16.20%	6.30%	18.4%
<b>2005</b>	31.10%	14.80%	8.10%	7.40%

## Stock Analysis

Harley Davidson's stock has been relatively flat over the last 12 months as a whole, underperforming the S&P 500, indicating the market sentiment that Harley Davidson will not be able to maintain its current growth trend which has yielded record revenues, profits, and earnings per share each year for the past 19 years. The 12 month stock prices can be seen in Figure 1, along with returns on the S&P 500. The stock has been quite volatile over that period indicating that the market as an institution may be having a hard time making up its mind about the prospects for Harley Davidson. In April 2005 Harley Davidson share prices dropped by nearly 1/3 when the company announced that it was lowering its guidance on motorcycle shipment growth due to

increasingly clogged retail channels and building inventories. A two year record of Harley Davidson share prices can be seen in Figure 2. In the wake of that announcement many analysts began to predict doom for the company, especially for its fourth quarter. Citigroup analysts even predicted growth of less than 1% for Harley's motorcycle shipments in the fourth quarter, even though guidance from the company's management predicted growth between 4 and 6 percent. Harley Davidson's actual shipment growth was within its guidance range, a much better result than many analysts had predicted.

Figure 1





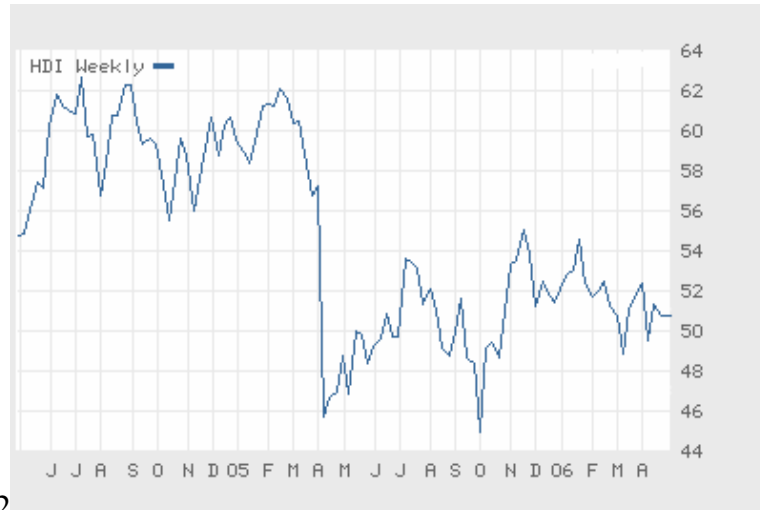


Figure 2

Harley Davidson’s stock has recently been trading at a slight premium to the stock of Honda. Harley Davidson’s recent price to earnings ratio has been 15.51 versus 15.16 for Honda. Comparable P/E ratios and share prices were not available for Suzuki or Yamaha due to the fact that neither company is traded in US stock exchanges.

## Strategic Issues and Recommendations

Overall Harley Davidson is a strong company with excellent margins and constantly growing revenues. In 2005 Harley Davidson recorded its 19<sup>th</sup> consecutive year of record revenues and record profits. The main concern for Harley is whether or not they can sustain their growth in the face of improvements in their competitors’ products and a maturing market. Some analysts are concerned that Harley Davidson is not pushing the envelope in the market anymore and is not on the cutting edge of new styles and motorcycle designs. Even a company as dominant in its market as Harley Davidson can ill afford to sit back and let competitors steal market share because of inaction.

One major trend facing Harley Davidson is that average age of a Harley Davidson is getting higher, meaning the company is not as successful now as it has been in the past at attracting new and younger riders. This is also evidenced by the slightly weaker sales in less powerful entry level bikes. These bikes are usually the ones purchased by younger riders when they are just learning to ride a motorcycle, before they can handle a bike with more power.

Another concern that many analysts have is that Harley Davidson's margins have peaked and will probably fall in the future as stiffer competition from Japanese manufacturers not only puts some price pressure on Harley, but the company will also lose some its economies of scale as certain lines of motorcycles may have to be produced in lower quantities. The main question for Harley Davidson is how does management maintain at least a 50% market share and at the same time keep the market growing at a rate that will allow them to continue to grow their earnings at a rate that will silence the doubters that have recently arisen on Wall Street.

The basic solution is to sell more motorcycles. In order to do so Harley Davidson must not only keep making motorcycles that are attractive to consumers faced with a growing number of options but also strengthen its brand name in order to further differentiate its product from those made by its competitors. One reason that analysts predict sales growth will soften in the future is the lack of significant changes between bike model years. Instead of redesigning certain aspects of certain models or completely redesigning whole lines of motorcycles between model years Harley Davidson has recently been content to leave models essentially the same and instead tweak little things like the speedometer design or the radio. By not significantly changing bike designs from year to year Harley Davidson is removing incentive for people to buy the latest models. Instead of buying a bike new from a dealer a consumer

could by a used bike instead and would be essentially buying the same machine. Harley Davidson needs to refocus on producing cutting edge bike designs that will continue to be attractive to existing Harley Davidson owners and still bring new riders in the Harley Ownership Group.

Another important aspect on which Harley Davidson needs to focus is maintaining the average consumers good opinion of and preference for the Harley Davidson brand. In the past Harley Davidson was the heavyweight motorcycle, but since the expansion of Honda, Suzuki, and Yamaha into the heavyweight segment consumers have more choices without sacrificing quality. Although Harley Davidson has had image problems in the past, such as Hell's Angels and other biker gangs, recently the weekend pleasure rider has replaced the unattractive images. The problem is that consumers no longer see Harley Davidson at the pinnacle of the industry. Harley needs to make an effort to show consumers that a Harley Davidson is still the best bike you can own and the best bike for the money. Part of the appeal of the Harley Davidson is the image that owning a Harley projects. Some of that image has faded over the past few years and needs to be revived if Harley is to continue its success.

One thing that should set off a warning for analysts is the fact that over the past few years the total dollar amount spent on advertising and research and development has actually been decreasing. This has boosted the current financial picture of the firm, but without adequate new product development and a marketing focus to sell that product the future of the company will not live up to its potential. An increase in both product development and advertising spending would be a start for Harley Davidson in keeping its growth going.

Instead of resting on its laurels Harley Davidson needs to get back to what made it a powerhouse in the first place. Harley Davidson has historically made the highest quality bikes with unique and cutting edge design features and old fashioned American muscle. That is the image that has made Harley successful in the past and hopefully will make the company successful in the future. Harley Davidson needs to refocus on producing new and innovative design elements not only to significantly change motorcycle lines from model year to model year but also to renew the company's image as one that can still come up with new bikes of the highest quality and design. The other step to helping renew the image is through increased advertising and event promotion. Rallies like the Black Hills Rally in Sturgis do great things to demonstrate and promote Harley's image, but more could be done in that department. Organizing additional rallies and other promotional events would go a long way in demonstrating new products but also helping to stimulate the overall market growth that Harley Davidson will need to continue its growth trends.