Collection: Driggs, Michael: Files
Folder Title: Harley Davison
Box OA 12241

Harley Davidson

UNITED STATES DEPARTMENT OF COMMERCE
International Trade Administration
Washington, D.C. 20230

April 7, 1987

Mr. Michael A. Driggs
Special Assistant to the President for
Policy Development
Executive Office Building
17th & Pennsylvania Avenue N.W.
Washington, D.C. 20500

Dear Michael:

Enclosed are some materials on Harley-Davidson and the motorcycle industry as you requested.

Our office has not compiled any information since the November briefing paper when early termination was being considered by the TPSC. Note that at that time, Harley-Davidson was arguing against early termination of import relief. Please let me know if I can be of further assistance, or contact Kevin Ellis (377-1140).

Sincerely,

Hayden

J. Hayden Boyd
Director
Office of Consumer Goods

Enclosures

Review of Heavyweight Motorcycles Import Relief

Background:

o In April 1983, following a determination by the U.S. International Trade Commission (ITC) that increased imports of heavyweight motorcycles were threatening serious injury to the domestic industry, the Administration imposed a tariff increase on imports of heavyweight motorcycles that exceed specific country quotas. The additional tariffs were to be in effect for 5 years with scheduled reductions in duties as follows:

Tariff rates for Heavyweight Imports
(Effective dates as of April 15)

	1983	1984	1985	1986	1987	1988
MTN	4.4	4.2	4.0	3.9	3.7	3.7
Surcharge	45.0	35.0	20.0	15.0	10.0	0.0
Total	49.4	39.2	24.0	18.9	13.7	3.7

o One American-owned firm, Harley-Davidson, and two Japanese-owned firms, Honda and Kawasaki, are the major U.S. producers of motorcycles. U.S. production is predominately in the heavyweight class (engines over 700cc).

o Honda and Kawasaki also import motorcycles from Japan along with Suzuki and Yamaha. The Japanese firms import all sizes of motorcycles. These four brands account for approximately 94 percent of U.S. sales. In 1985, imported motorcycles and parts accounted for an estimated two-thirds of apparent consumption. Imports from Japan accounted for 94 percent of total imports for the first half of 1986.

o The President's directive imposing the tariffs also requested USTR to keep the issue under review and if necessary, propose changes in the relief. USTR solicited comments from interested parties on the relief in a March 31, 1986 Federal Register Notice.

11/07/86

Summary of Arguments:

Harley Davidson

o The first 3 years of relief have been effective and have allowed H-D to implement its adjustment plans.

- Imports and inventories have decreased resulting in a more stable market.

- H-D has begun its adjustment plan and has become more competitive, e.g. increased market share, introduced new engine, new 880cc model, improved quality, increased productivity, reduced breakeven, improved financial position.

o Full 5 years of relief is necessary because of tariff evasion and evidence of unfair pricing.

- Japanese began exporting 699cc motorcycle to evade tariff so H-D has not had full effect of relief.

- Some evidence of dumping by Yamaha and Honda (may not be valid).

o Early termination would have an adverse impact on the domestic industry.

- Early termination would result in discounting of old models still in inventory.

- Early termination would result in increased imports.

- H-D is still in precarious financial position--has had losses on motorcyle operations from 1981 through 1985; expects to break even in 1986 and report slight operating profit in 1987.

o Remaining 2 years of relief is needed to complete its readjustment plan.

- Plans to introduce 3 new state-of-the-art production methods: injection molding process, high-pressure die casting, and new crankcase machinery system.

- Further cost savings in 1986 and 1987 of $293 per motorcycle.

Yamaha and Suzuki

Yamaha suggest that USTR should terminate relief and Suzuki suggests that USTR request an investigation by the ITC of the import relief and subsequently the President should terminate the relief.

o Import relief has accomplished its purpose of dissipating the threat of injury due to the inventory build-up and subsequent depressed prices.

- Inventories of imported motorcycles have returned to normal levels.

	Importer	Dealer	Total
Dec. 1982	130,492	97,537	228,029
Dec. 1983	94,629	83,135	177,764
Dec. 1984	59,063	66,769	125,832
Dec. 1985	23,082	58,154	81,236
June 1986	17,609	40,134	57,743
Dec.'82-June'86	-87%	-59%	-75%

- Prices of imported motorcycles have increased.

	Unit Value
Oct.-Dec. 1982	$2,081
Jan.-Dec. 1983	$2,427
Jan.-Dec. 1984	$3,215
Jan.-Dec. 1985	$3,398
Jan.-Dec. 1986	$3,664
4th Qtr. '82 (-1st Half '86)	+76%

o Harley-Davidson has regained competitiveness and U.S. producers have increased market share.

Market Share Held by U.S. Producers

	H-D	Honda	Kawasaki	Total
Oct.-Dec. 1982	15.7	21.5	1.8	39.0
Oct.-Dec. 1983	18.2	15.2	3.0	36.4
Oct.-Dec. 1984	18.7	26.8	9.7	55.2
Oct.-Dec. 1985	16.7	54.2	8.2	79.1
Jan.-Mar. 1986	24.5	16.9	9.2	50.7
Apr.-Jun. 1986	21.5	23.9	12.8	58.1

Source: ITC Quarterly Reports

- There is no evidence that discounting would occur as H-D claims.
  - Inventories are at their lowest levels since 1977.
  - Because of the substantial increase in the value of the yen, there is pressure to increase prices on imports and in fact this has been occuring.

Pros and Cons of Ending Relief:

Pros

- Lower consumer costs in the final year of relief
- Ending relief would likely result in a large variety of motorcycles being available, particularly in the 750cc class, which were modified to avoid the tariff surcharge.
- Give Harley-Davidson an opportunity to compete in a free market and test its adjustment efforts.
- Would be viewed as consistent with free trade policy.

Cons

- Harley-Davidson is seen as a paradigm of a successful escape clause case -- i.e., an industry revitalizing to successfully compete with imports. Ending relief early could be viewed as not in keeping with intent of Congress.
- The motorcycle industry as a whole is experiencing declining demand. Ending relief in such an environment could have adverse impact on the domestic industry.
- Final year of relief is only 10 percent surcharge on imports over 10,000 unit quota. Probably not much cost.
- May appear as not being tough on Japan at a time when there is strong political pressure to take action on trade imbalance with Japan.

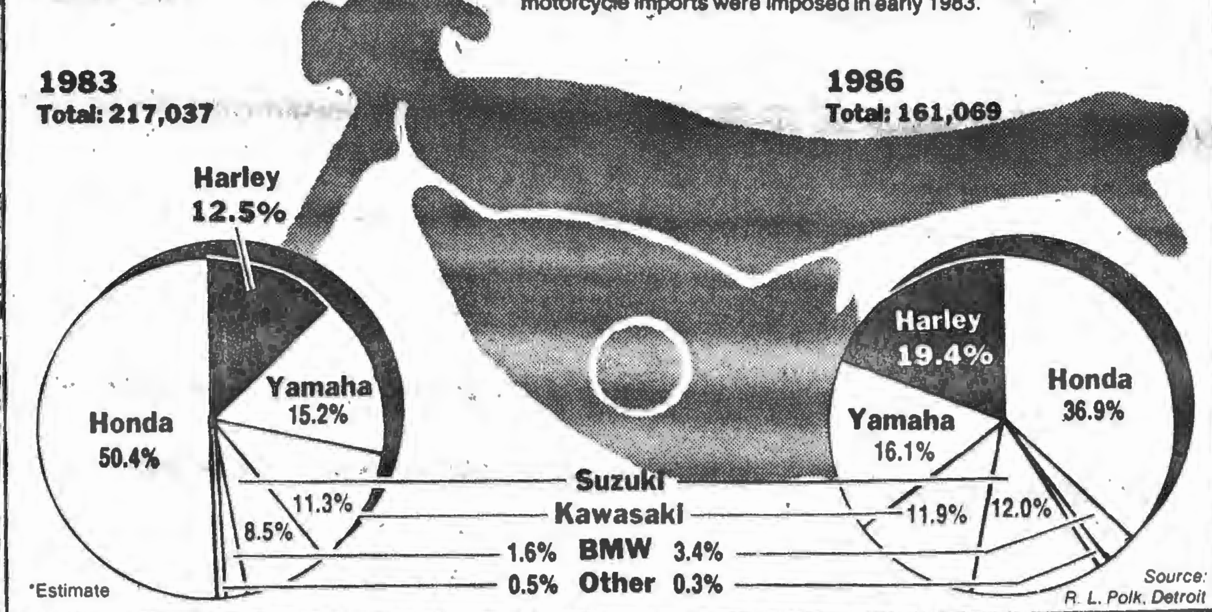
U.S. Market for Heavyweight Motorcycles

	Domestic Shipments	Imports Units	Apparent Consumption	Imports to App. Cons. Percent
1983	70,229	94,443	154,260	61.2
1984	102,139	38,314	127,763	30.0
1985	80,965	31,037	101,475	30.6
Jan.-June'85	39,889	21,162	55,566	38.1
Jan.-June'86	43,259	29,816	66,860	44.6
% Change 1st Half'85-'86	+8.4	+40.9	+20.3	+17.1

Source: ITC Quarterly Reports

With Tariffs in Place, Harley Gains Market Share

Market share for motorcycles with engine size of 700 cubic centimeters or greater, based on new motorcycle registrations. Tariffs on motorcycle imports were imposed in early 1983.



Harley Asks End to Tariff Aid

By BARNABY J. FEDER

Harley Davidson Inc., the sole surviving motorcycle manufacturer in the United States, roared into the international trade spotlight yesterday with a surprise request that the Government withdraw tariff protections granted four years ago to save it from Japanese competitors.

"We're profitable again. We're recapitalized. We're diversified. We don't need any more help," said Vaughn L. Beals, the Milwaukee-based company's chairman and chief executive, explaining the request to the United States International Trade Commission to terminate tariffs on large Japanese motorcycles.

Trade experts said the move could influence trade debates in Congress. "It will strengthen those who argue that temporary protectionism can lead to successful adjustment," said I. M. Destler, who follows trade issues at the Institute for International Economics in Washington.

However, Mr. Destler added, skeptics would argue that saving a single threatened company that occupies one niche of a market, as Harley does with its high-powered cycles known as "hogs," is not the same as protecting an entire industry. Moreover, Harley enjoyed the advantage of an especially loyal following among motorcycle aficionados who often regard the lower-cost Japanese models as imitations, however advanced they are technically.

"It's not surprising that Harley weathered the storm," said Paul Dean, editor of Cycle World, a magazine based in Newport Beach, Calif. Harley's cycles cost from $4,000 to more than $10,000 and are up to 50 percent more expensive than competitive Japanese models. "The pe ple who ride them are fanatical," h added.

The special tariffs were impose for a five-year period by Presider Reagan in April 1983 as Harley skidded toward bankruptcy. Aimed giving Harley time to carry o planned changes in manufacturin practices and product improvement the tariffs followed a sliding sca that added 45 percent to the cost the Japanese imports with engin larger than 700 cubic centimeters 1983 with a decline to 10 percent in t year ending April 1, 1988.

In addition to modernizing, Harl also used the breathing room to duce its debts with a public offering shares last summer and to divers by acquiring the Holiday Ramb

Continued on Page D26

Harley Asks U.S. to End Tariff Aid

Continued From First Business Page

Company, a maker of recreational vehicles.

It was not clear yesterday how quickly the trade commission would act to remove the tariffs. The Japanese manufacturers had no immediate comment on Harley's announcement, but experts doubted that the change would lead to lower prices. Japanese importers, who had passed on only part of the tariff to consumers, have seen profit margins shrivel as the yen strengthened against the dollar and they are expected to use relief from the tariffs to partially offset the impact of the currency swing.

Whatever the strategic implications, Harley's move was widely regarded as a masterful stroke of public relations. It called attention to changes Harley has made in its manufacturing operations that are widely admired in engineering circles and to Harley's confidence that it had overcome quality problems that had made it vulnerable to the Japanese onslaught in the early 1980's.

Harley said that its market share of the heavyweight part of the market in which it competes rose from a record low of 12.5 percent in 1983 to 19.4 percent last year. Mr. Beals said that Harley's motorcycle business was profitable last year for the first time since the company's managers bought it from AMF Inc. in 1981 for $80 million.

"We're taking this action now because we believe we're sending a strong message out to the international industrial community: U.S. workers, given a respite from predatory import practices, can become competitive in world markets," Mr. Beals said.

Harley, which was founded in 1903, at one time had more than 150 American competitors. It sought Government protection in 1982 when Japanese importers refused to cut production in the face of a declining market. The Japanese overproduction led to a price war at a time when Harley could not afford it.

"We were very, very fragile in 1982," said Richard Teerlink, Harley's chief financial officer and head of its motorcycle operations.

With the protection of tariffs, Harley introduced practices such as just-in-time manufacturing, in which parts are made only when needed, and statistical process control of operations, which catches production errors before they have become embedded in products. The company raised the percentage of motorcycles leaving its production lines without defects from about 50 percent to more than 98 percent and became a mecca for engineers from other industries.

At the same time, Harley redesigned many of the parts in its cycles without changing its basic design. The changes rid the products of such defects as bone-jarring vibration.

Other Considerations Noted

While Harley officials described their action yesterday as nothing more than a sensible move to avoid abusing the aid they had been given, experts speculated that other considerations might also have played a role. They pointed out, for instance, that Honda and Kawasaki, which have established American assembly operations to avoid the tariffs, have been able to find shelter under the same price umbrella that protected Harley.

"Tariff protection was vital to Harley," said Richard J. Schonberger, a Seattle-based manufacturing consultant. "But it was inducing Kawasaki and Honda to build big bikes in America to compete with them."

Mr. Beals said that the growing American operations of the two Japanese giants had not been a factor. But he conceded that Harley had noted that they had been notably silent while Suzuki and Yamaha, two Japanese motorcycle manufacturers without American plants, protested vociferously in a 1985 review of the tariffs. Coincidentally, the Honda Motor Company Ltd., the world's largest cycle manufacturer, announced yesterday in Japan that it was shifting engine production for its large motorcycles to its Marysville, Ohio, plant.

Trade experts said the move could influence trade debates in Congress. "It will strengthen those who argue that temporary protectionism can

zine based in Newport...

Harley's cycles cost from $4,000 to more than $10,000 and are up to 50 percent more expensive than com-

Peru Will Sell 40 Companies

LIMA, Peru, March 17 (Reuters) — Peru plans to sell about 40 state-owned companies to the private sector to trim a projected $740 million loss this year from those companies, a Government spokesman said today.

Some concerns will be sold entirely and others only partially, according to José Palomino, president of the Government's state-concern holding company, the National Development Council. He said that the aim was to reduce a projected deficit from public sector companies of 11 billion intis, or about $757 million.

Independent economists have warned the Government that the deficit, if unchecked, risked accelerating inflation to between 60 and 100 percent in 1987, compared with the Government target of 40 to 50 percent for the calendar year. Last week, President Alan García's Government was criticized in a confidential World Bank report that said its strategy did not offer good prospects for medium- and long-term growth and was likely to lead to inflation.

by acquiring ... Number

Continued on Page D26

* * *

WHO'S NEWS

Beals Takes Harley-Davidson on New Road

NAME: Vaughn L. Beals Jr.

AGE: 59

POSITION: Chairman, CEO, Harley-Davidson

CAREER PATH: After working for an engine maker and a logging equipment manufacturer, he joined AMF Inc. in 1975 and in 1981 led the leveraged buyout of its Harley unit.

CHALLENGE: To keep the still pint-sized Harley from being run off the road by the Japanese.

By JEFF BAILEY

Staff Reporter of THE WALL STREET JOURNAL

Vaughn L. Beals Jr. got up at a Washington news conference earlier this week and offered to give up what many U.S. chief executives would dearly love to have—a stiff tariff against foreign competitors.

The chairman and chief executive officer of Harley-Davidson Inc., the Milwaukee-based motorcycle maker, said his company doesn't need the final year of a five-year tariff aimed at big Japanese motorcycles, and he asked the International Trade Commission to cancel it.

The move brought immediate praise from Congress and gave a boost to controversial efforts to aid other battered domestic industries with trade legislation. Mr. Beals's offer to drop the tariff early "is the kind of attitude in American business that we need," says an aide to Sen. John Heinz of Pennsylvania, a Republican who backed Harley's efforts to get the tariff in 1983. Harley's move shows that a tariff can be a short-term tonic to a company, Sen. Heinz feels, and needn't become a permanent lifeline, as opponents to such measures have warned.

Competitive Advantages

But the 59-year-old Mr. Beals didn't bring his company back from the brink of collapse by giving away competitive advantages, nor is he doing so now. His plea to terminate the tariff is more intended to portray Harley as a Chrysler Corp. on two wheels.

Mr. Beals concedes that the tariff, which falls to 10% from 15% April 1, is at this point worth little or nothing to Harley, the only remaining U.S. motorcycle maker. And some say it was never essential to Harley's survival. "I think they could have pulled it off without the tariff," says Kevin Bahr, a securities analyst who follows Harley at Robert W. Baird & Co. in Milwaukee.

Rather, Mr. Bahr says, it was Harley's streamlining of its manufacturing process and improvement of quality that saved the company. Some of the measures, such as so-called just-in-time inventory control, are patterned after Japanese industrial practices.

Though Mr. Beals was saying in Washington that the tariff had given Harley a "respite from predatory import practices," the company noted in its stock offering last summer that "the benefits . . . from the special tariff have been limited."

A spokeswoman at the trade agency said yesterday that Harley hasn't yet filed its request to cancel the tariff and that, when it does, the agency will need at least three months to research the request and then make a recommendation to President Reagan.

Mr. Beals says that making such a request has been under consideration for several months, but that he wanted to wait until just before the tariff levels were lowered to 10%, when the tariff won't be "worth a whole bunch."

Ant Among Elephants

Mr. Beals, himself an avid rider of Harley's big Electra Glide, or "hog" cycles, led a management buyout of Harley from its then-parent, AMF Inc., in 1981. Almost immediately, high interest rates, a soft market for big cycles and a global war for market share among the much bigger Japanese motorcycle brands, Honda and Yamaha, threatened to send Harley to the junkyard.

The two Japanese makers were rapidly introducing new models and cutting prices. Their U.S. inventories were bulging, threatening still more price cuts. "When the elephants dance, the ants get trampled," Mr. Beals says. Harley also was still dogged by a 1970s reputation for uneven workmanship.

President Reagan granted the company tariffs on imported cycles with engines of 700 cubic centimeters or bigger, known as heavyweight cycles, beginning at 45% of wholesale prices and falling year by year to 35%, 20%, 15%, 10%, and ending in April 1988.

But, Mr. Beals notes, that was easily skirted. Japanese makers quickly began building so-called "tariff busters"—cycles with engines between 690 and 699 cubic centimeters. And the glut of Japanese cycles already in the country wasn't affected. "I'd bet my net worth," Mr. Beals says, that some Japanese dealers are still selling "new" cycles that were imported before the tariff.

As a result of the improved manufacturing techniques he installed at Harley, Mr. Beals's net worth is now considerable. His 15.9% stake in Harley's almost six million shares, which went public last summer, had a value of about \$12 million at yesterday's closing price of \$13.50, up 25 cents, in American Stock Exchange composite trading.

Mr. Bahr says that's a rich price—almost 16 times 1986 operating earnings of 82 cents a share, or \$4.3 million—for a company in a mature industry, but adds that "there is still kind of a mystique—the only motorcycle company in America." Sales last year were \$295.3 million and market share rose to about 19% from a 1983 low of 12.5%, Mr. Beals says.

Mr. Beals monitors quality by doing his business travel, weather permitting, on a "hog." On a recent trip from San Francisco to Denver with his wife, Eleanor, he discovered a defect in the 1986-model seat: the rear, or passenger, seat tilted forward and Mrs. Beals's helmet kept bumping his whenever he hit the brakes. They stopped in Reno, Nev., to call the factory, but test riders there had already found the flaw.

Harley-Davidson, Inc., 3700 W. Juneau Ave., P.O. Box 653, Milwaukee, WI 53201

NEWS

414/935-4538

Contact: Kathryn B. Molling

NEWS CONFERENCE ANNOUNCEMENT

Vaughn L. Beals

Good afternoon, (State Officials by Name), Ladies and Gentlemen. I'm Vaughn Beals, Chairman of the Board & Chief Executive Officer of Harley-Davidson, Inc., and I'd like to welcome all of you here for this historic occasion.

I'd like to open with a brief statement, then I'll turn the mike over to the head of our Motorcycle Division. A copy of my remarks and additional background materials are available in the media kit.

Since 1954, Harley-Davidson has been the only manufacturer of heavyweight motorcycles based in the United States. By heavyweight, I mean motorcycles with engine displacement of more than 700cc. Our motorcycles are known as the world's best and most respected line of custom and touring motorcycles.

For decades we virtually had the market all to ourselves. In 1969, though, the Japanese started to enter the heavyweight market with lower-priced products -- in fact, so low priced that the U.S. Treasury Department found that they were dumping.

Shortly thereafter, despite testimony to the International Trade Commission that they really didn't compete with Harley-Davidson, all of the Japanese manufacturers embarked upon a program of copying our design and styling right down to the last detail, and of copying virtually every aspect of our advertising and marketing.

Then, in early 1982, we noticed the Japanese were importing motorcycles at twice the rate of retail sales. At a time when the motorcycle market was declining and Harley-Davidson was laying off long-term employees and cutting production, the Japanese increased their production levels. This resulted in huge amounts of unsold inventory in the United States.

We were concerned that Harley-Davidson would be swept away when the dam broke on this excess inventory, interrupting our efforts to improve our competitive position which were launched some years earlier. Something had to be done to restore order before it was too late. And, something was done.

In September, 1982, we filed a petition with the International Trade Commission alleging that Harley-Davidson, which was synonymous with the U.S. motorcycle industry, was being injured by increasing imports.

We proved to the ITC that the U.S. motorcycle industry faced the threat of serious injury as a result of this deliberate flooding of the U.S. market by our Japanese competitors. The Reagan Administration responded by following the ITC's recommendations to impose additional tariffs on imported motorcycles, under Section 201 (The Escape Clause) of the Trade Act of 1974. The tariffs were to last for five years, at annually declining rates, ending in April of 1988.

The special tariffs were imposed to give Harley-Davidson time to complete our revitalization programs and to regain our competitiveness. The tariffs sent a loud and clear message to Japan that said Harley-Davidson was not going to simply sit back and watch them destroy our market.

The special tariffs also sent a very strong message that the 201 "Escape Clause" was alive and well, and that the Reagan Administration was willing to use that law to give U.S. industry an opportunity to regain its competitiveness.

Harley-Davidson was and remains very thankful to the President and his Administration for their support. In all likelihood, it saved Harley-Davidson, and the U.S. motorcycle industry, from extinction.

As important and helpful to us as the tariffs have been, we're gathered here today so that I can announce that we have informed the International Trade Commission that we no longer need the special tariffs in order to compete with the Japanese and that the special tariffs can be lifted.

The special tariffs afforded us the time to continue one of the country's most successful revitalization programs. While we're not finished, we've made sufficient progress in the last four years that we've regained our competitiveness. I'm very proud to say that by being able to complete the modernization of our product line and by improving our manufacturing and marketing, Harley-Davidson moved into second place in the heavyweight market, increasing our share from a low of 12.5% in 1983 to 19.4% last year, a level we hadn't enjoyed since 1979. We've attained this strong market position despite the fact that our product line only covers 60% of this market.

In the super-heavyweight market (over 850cc), where Harley does have a full product line, we regained the number one position for the first time since 1980. After hitting a low of 23% market share in 1983, and seeing Honda soar to 44% that year, we recovered to 34%, two points above Honda in 1986. Believe me, being back on top is a damn fine place to be.

And, our market share is up in virtually every country in the world - our exports last year were up 45% from the 1983 level, growing from 13% to nearly 19% of shipments. In short, the improvements in product design and quality that we have been able to make during the last four years have returned us to the forefront of the motorcycle industry.

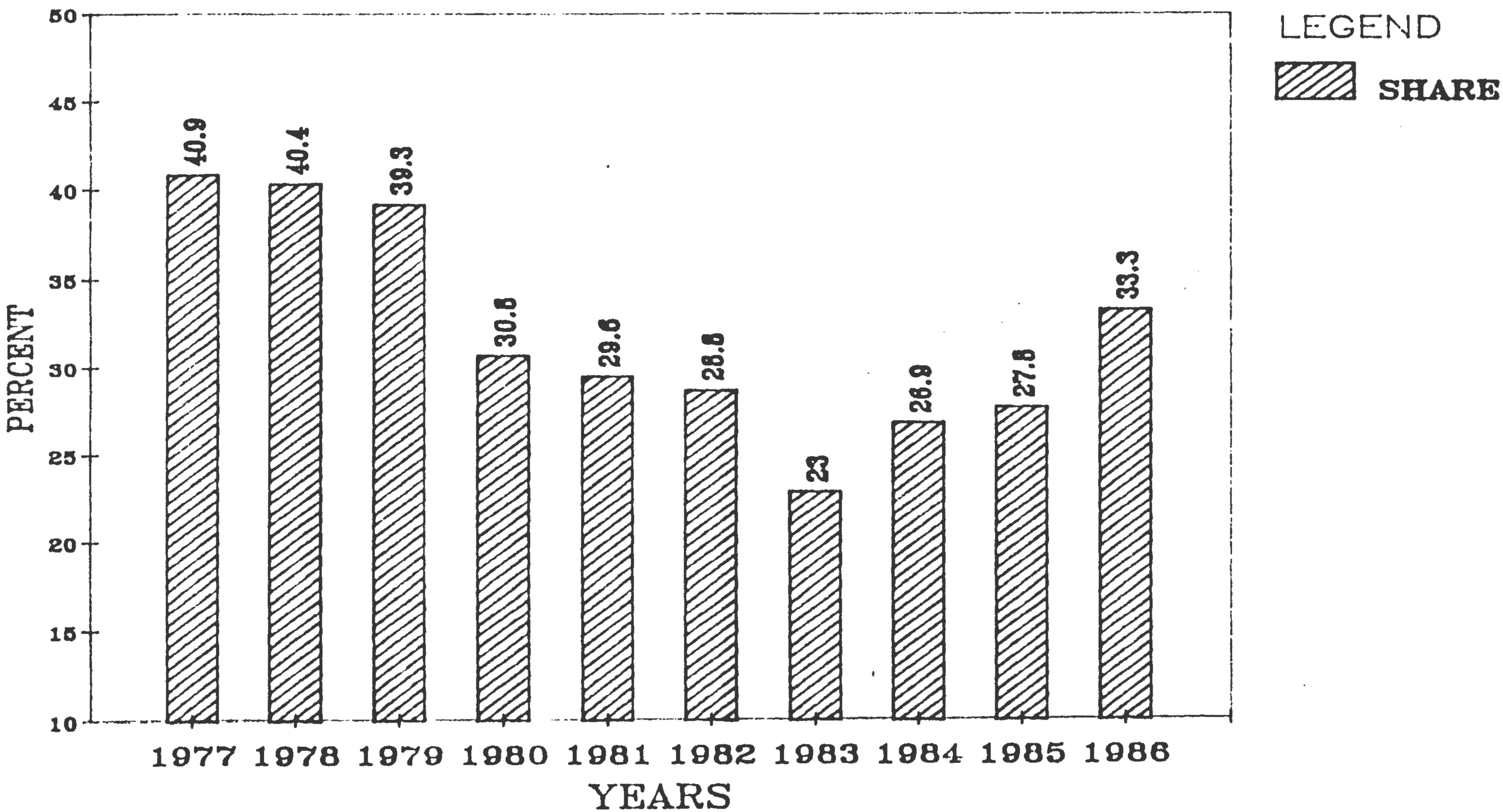
We've taken a company that had been driven to the brink of disaster by our Japanese competitors' predatory practices, and transformed it into a company that is not only financially viable, but a market leader as well. Our marketing and manufacturing successes allowed us to make a highly successful public offering in July of last year-- selling 40% more common stock and bonds than we originally anticipated. This additional capital permitted us to diversify Harley-Davidson by purchasing the Holiday Rambler Corporation, a leading producer of premium recreational vehicles and specialized commercial vehicles.

In short, with Harley-Davidson now restored to market leadership and profitability and with the Company recapitalized and well diversified, we have no further need for special tariff protection.

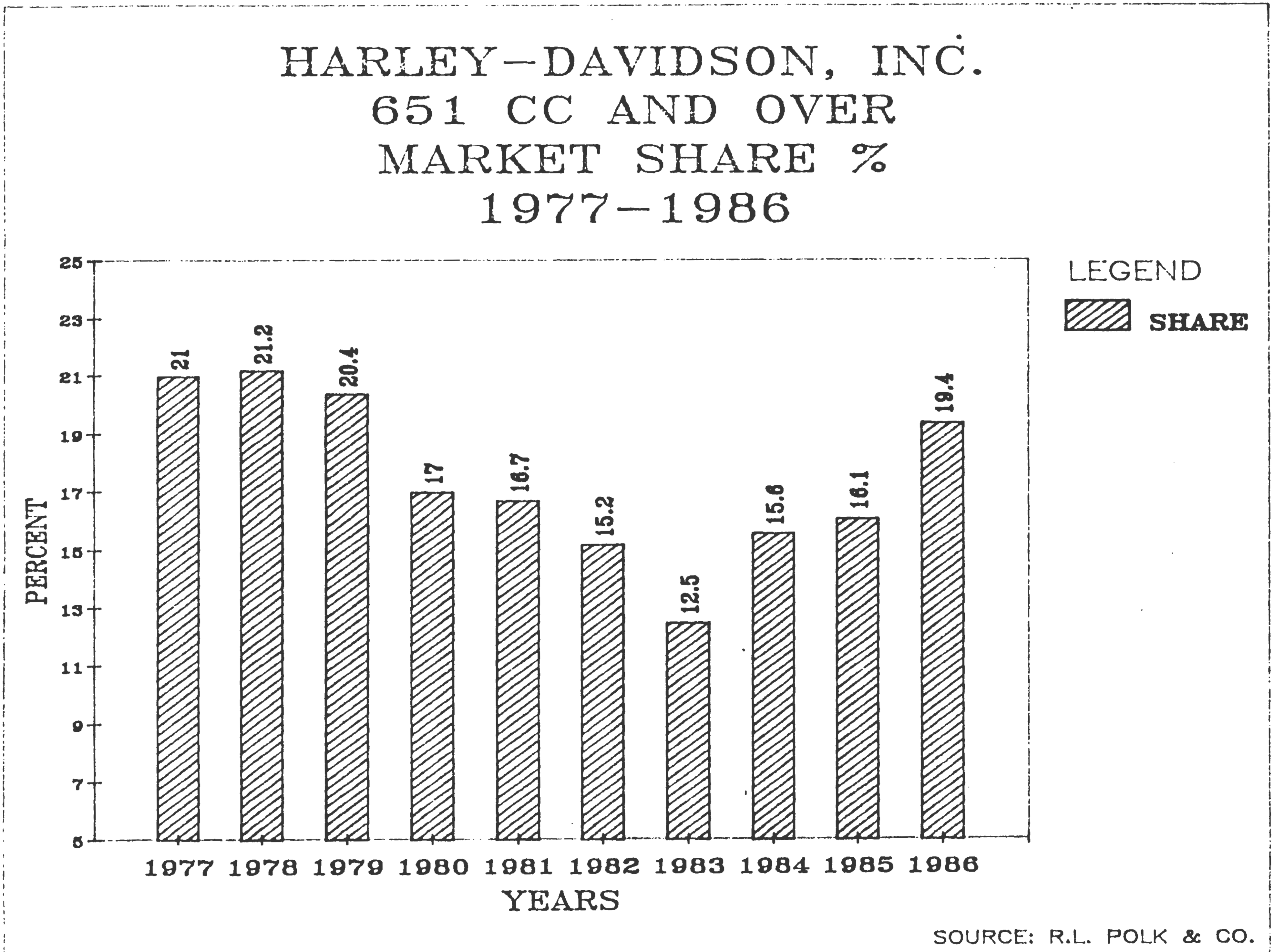
By asking the International Trade Commission to remove these special tariffs, we're sending a very strong message to our competitors and to the international industrial community that U.S. workers, given a respite from predatory import practices, can become competitive in a world market. Harley-Davidson is proof of that.

Rich Teerlink, President and Chief Operating Officer of our Motorcycle Division, will now give you the details on what we did to regain our competitiveness and regain our leadership position in the market. Rich. . .

HARLEY–DAVIDSON, INC.
851 CC AND OVER
MARKET SHARE %
1977–1986



SOURCE: R.L. POLK & CO.


HARLEY-DAVIDSON, INC.
651 CC AND OVER
MARKET SHARE %
1977-1986
LEGEND
SHARE
PERCENT
25
23
21
19
17
15
13
11
9
7
5
21
21.2
20.4
17
16.7
15.2
12.5
15.6
16.1
19.4
1977
1978
1979
1980
1981
1982
1983
1984
1985
1986
YEARS
SOURCE: R.L. POLK & CO.

RICH TEERLINK REMARKS

Thank you, Vaughn, and good afternoon everyone. As Vaughn said, our revitalization program has been enormously successful. It has catapulted Harley-Davidson to the top of the ranks in terms of product quality and manufacturing innovation the world over. The motorcycle press - and Harley-Davidson riders - are touting the praises of our motorcycles. And, as our market share shows, former owners of Japanese products are now buying American-made Harley-Davidsons. Our competitors, too, obviously like what we're doing as they are continuing to clone our motorcycles to the smallest detail.

What has Harley-Davidson done to completely revitalize a company that was on the brink of failure?

Harley-Davidson has implemented advanced management and manufacturing techniques such as employee involvement, just-in-time inventory principles and statistical process control. In fact, Harley-Davidson was one of the first companies in the U.S. to study and implement these techniques which were long associated with Japanese manufacturers. We're also one of the few companies we know of that's using all three methods simultaneously.

Harley-Davidson is now recognized as a national leader in the implementation of these methods. As such, we are often asked to share our knowledge with other manufacturers. To date, we've conducted paid training sessions on these techniques for more than 100 companies, including all domestic automobile manufacturers, as well as many leading-edge Fortune 500 companies.

We've also been extensively training our suppliers in these methods, with outstanding results.

As part of the Company's revitalization program, the motorcycle product line has been completely redesigned and revamped. The program has resulted in the introduction of industry-leading innovations such as the first electronic and computer-controlled ignition system, belt drive, computer-designed frames and suspension systems. With the respite granted us under the escape clause, we were able to introduce a totally new line of engines between 1983 and 1985 -- our highly acclaimed V2 Evolution Engine.

One of the major lessons we learned while improving our manufacturing processes is that there is a direct correlation between efficiency and quality. Since 1981, our productivity is up nearly 50%, we're operating our plants with two-thirds less inventory and our manufacturing errors are down about 70%. And, annual revenues per employee have doubled.

During the last four years, we've also strengthened our marketing efforts. Today, all motorcycle manufacturers are routinely offering demonstration rides, following Harley's introduction of the practice in 1983. Our Harley Owners Group -- a Company sponsored organization of Harley owners formed in early early 1983, has grown to over 65,000 members, while Honda's copycat club was recently shut down. And this year, we introduced an industry first -- with our program that permits a trade-in of our new 883 Sportster at its full purchase price on a new larger Displacement Harley.

There's a spirit of renewed faith among our employees that is unlike anything I've ever seen. The company-wide commitment to quality is evident everywhere from the board room to the computer-aided design labs and to the manufacturing floor.

Because all Harley-Davidson employees are involved in decisions that have direct bearing on the way they do their jobs, our employees have an improved sense of contribution to the overall success of the Company. I can't think of anywhere in the country where pride of workmanship is more evident than at Harley-Davidson. They're putting their hearts and souls into making a product that they love and use.

What our management and manufacturing improvements and a major value analysis effort started in 1983 mean to Harley-Davidson is better utilization of our assets, vastly improved quality and improved profitability -- all of which make us more competitive and more successful. The gains we've made in this area permitted us to cut the price of our popular Sportster by 20% in 1985. By holding our entry-level Sportster price at $3,995 for three consecutive model years, we've increased sales of this product line by nearly one-third over 1983 levels.

While we're not done yet with our manufacturing improvements, we've made great strides. Our quality and reliability are now fully competitive, and we're inching our way up to cost parity with our Japanese competitors and this means we can continue to narrow the price gap, which results in more profitable sales both for us and our dealers.

For decades, Harley-Davidson was an industry innovator. Once again we are being recognized by the motorcycle community for innovations in our new products, in our manufacturing methods and our marketing programs. And, we will continue to seek innovative strategies in all aspects of our business.

Harley-Davidson is now on very firm financial footing, and we are forging into the future. We foresee Harley-Davidson remaining a competitive force in American industry well into the 21st century.

Vaughn. . .

VAUGHN BEALS' CLOSING REMARKS

Thanks, Rich. Before I open the floor to questions, I'd like to thank Ambassador Smith of the U.S. Trade Representative's Office; Senators Kasten, Heinz and Proxmire; Congressmen Aspin, Goodling, Moody (other officials present by name) for joining us here today for this great occasion. I'd also like to publicly thank President Reagan and his Administration for the support they offered Harley-Davidson. Without their decisive action at a critical time, Harley-Davidson might not be here today. And, that's extremely important because, to many people throughout the world, Harley-Davidson is synonymous with America.

I'd also like to state publicly that Harley-Davidson made it clear from the beginning that the special tariffs were not aimed at preventing free market competition. We simply wanted the U.S. Government to restore order to a motorcycle market that was under siege by Japanese manufacturers that refused to restrain their production, and the Government responded.

Everyone contributed to Harley-Davidson's successful turn-around. But, I'd like to extend a special note of thanks to all of our employees who took salary cuts -- which, by the way, we were able to restore on March 1st of this year; to our hourly employees, represented by the Allied Industrial Workers and the International Association of Machinists, who extended contracts without wage increases and then accepted modest wage increases -- all of you made a major difference in our ability to survive by accepting painful decisions which created personal difficulties for you and still you responded by renewing your efforts to improve quality and productivity.

I'd also like to thank our dealers and suppliers who worked with us when times were tough -- and our customers who continued to have faith in Harley-Davidson.

We've learned to operate lean and mean, and we're going to continue to do so. We're proud to say that we were the only major motorcycle manufacturer in the world to increase production in 1986. All four Japanese manufacturers reduced their production by more than 20%, and BMW by 14%.

While we're delighted that we are a year ahead of schedule in regaining our competitiveness, we might have been here sooner if our Japanese competitors had not found ways to evade much of the tariff. All four Japanese manufacturers quickly down-sized most of their 750cc motorcycles to 690-699cc models, without changing any other features; thus, evading the tariff on about 50% of imported heavyweight motorcycles. Two of our Japanese competitors expanded their assembly operations in the U.S. importing parts that were not subject to tariffs and completing final assembly in the U.S.

And finally, they sold and are continuing to sell motorcycles at extremely low prices. I recently saw new 1983 Yamaha Ventures advertised for $3,998 - a motorcycle that sold for $7,099 in 1983. That's a 44% decrease in sales price. Yamaha Virago 920's were also offered for $1,995 -- 41% below its original price of $3,399 in 1983. While I feel for any manufacturer that is still trying to sell his 1983 product line. I must publicly denounce this blatant dumping of products in U.S. markets.

The purpose of mentioning these evasions and dumping here is to focus attention on a key problem facing trade regulators. Harley could have recovered even sooner absent these evasions and dumping. For those industries who qualify for support under the escape clause, I would suggest that the International Trade Commission, Congress and the Administration consider three actions!

1. Apply these special tariffs to imported components so that simply moving assembly of imported components on-shore can't end-run the International Trade Commission's intent.
2. Provide for a quick remedy to counter blatant attempts to evade the tariffs; such as the minor downsizing of engines.
3. Where high inventories are an issue, provide a prompt remedy for dumping. The problem of liquidating excess inventories should be the importer's problem -- not his U.S. competitor's.

On behalf of all of us at Harley-Davidson, I would like to conclude by once again thanking President Reagan and all those in the Administration and Congress who supported us and gave us the opportunity to regain our competitiveness. We are prepared to support President Reagan's competitiveness initiative in any way possible. As beneficiaries of the Administration's support, We feel a strong obligation to help those who have helped us.

Thank you all for your time and interest. Please tell the world that Harley's back and thriving --as a well capitalized, well diversified market leader, and that the escape clause is alive and well.

I'll be happy to answer your questions now.

Harley-Davidson, Inc., 3700 W. Juneau Ave., P.O. Box 653, Milwaukee, WI 53201

NEWS

414/935- 4538

Contact: Kathryn B. Molling

For Immediate Release

HARLEY-DAVIDSON, INC. PETITIONS ITC FOR REMOVAL OF TARIFFS AGAINST JAPANESE MOTORCYCLE MANUFACTURERS

Washington, D.C., March 17, 1987...Harley-Davidson, Inc., (AMEX: HDI) the only U.S.-based motorcycle manufacturer, today announced in an unprecedented action that it is petitioning the International Trade Commission (ITC) for termination of import relief for heavyweight motorcycles. The tariffs were imposed in April, 1983 by President Reagan in a landmark decision after Harley-Davidson proved to the ITC that the deliberate flooding of the U.S. motorcycle market by Japanese competitors, in the face of a sharp market decline, was threatening the American motorcycle industry.

"We have informed the ITC that we no longer need tariff relief to compete with the Japanese," said Vaughn L. Beals, Jr., chairman and chief executive officer, Harley-Davidson, Inc. "We're taking this action now because we believe we're sending a strong message out to the international industrial community: U.S. workers, given a respite from predatory import practices, can become competitive in world markets. But, I want to stress that U.S. industry must also be aggressive and take the initiative to regain competitiveness," said Beals.

In 1982, Harley-Davidson was able to prove threat of injury to the ITC, showing that its Japanese competitors had substantially increased their inventories of heavyweight motorcycles (700cc and above) in the U.S. market at a time when market demand declined sharply. Harley-Davidson had already taken painful steps and layed off employees to bring production and inventories into line with market conditions, yet the Japanese continued to export motorcycles to the U.S. in record numbers. A nearly two-year glut of unsold Japanese motorcycles in the U.S. resulted in price cutting which, if permitted to go unchecked, could have destroyed the American motorcycle industry, Beals said.

Upon ITC recommendation, President Reagan imposed additional tariffs on imported heavyweight Japanese motorcycles, under Section 201 of the Trade Act of 1974.

The additional tariff was to be effective for a five-year period ending in April of 1988, at annually declining rates of 45 percent, 35 percent, 20 percent, 15 percent and 10 percent. The tariff rate quota was applicable to countries which imported more than 5,000 motorcycles with engine displacements of 700cc and above.

"At the time of our original petition in 1982, we promised the government that we would return to competitiveness with the Japanese if we were given some time and breathing room to finish the revitalization programs we began prior to the Japanese disrupting the market with excessive inventories. We've accomplished what we set out to and we simply don't need tariff relief any longer," said Beals.

"As a result of our revitalization programs, Harley-Davidson's share of the heavyweight motorcyle market has climbed 50 percent from a record low of 12.5 percent in 1983 to 19.4 percent in 1986," Beals said. "This share includes that portion of the motorcycle market from 650cc and up. And at the premium end of the heavyweight market (over 850 cc), Harley-Davidson is now the market leader, with 34 percent of the market share. Our market shares are up on virtually every continent," Beals continued. "We've proven that we no longer need the additional tariff relief to be competitive with the Japanese, and we want to thank our friends in Washington and the Reagan administration for providing the time we needed to return to competitiveness."

A major element of Harley-Davidson's revitalization program was the incorporation of leading-edge manufacturing techniques such as Just-In-Time inventory principles, Employee Involvement and Statistical Process Control, Beals said. "We were among the first companies in the U.S. to study and implement these techniques, long associated with Japanese manufacturers," Beals said. "These techniques, paired with a company-wide commitment to improved quality, resulted in a new Harley-Davidson that is recognized the world over for premium quality products."

This "new Harley-Davidson" runs its plants with two-thirds less inventory than in 1981, has improved productivity by 50 percent, scrap and rework is down two-thirds and defects per unit are down 70 percent. The company's annual revenues per employee have doubled since 1981. "We've taken a company that was on the brink of disaster and transformed it into a successful and financially viable company," Beals said.

Japanese motorcycle manufacturers responded to the special tariffs in two ways: two companies increased assembly at their U.S manufacturing plants to avoid the tariffs, and; all major manufacturers down-sized some of their standard production 750cc motorcycles to 690-to-699cc models to evade the tariffs.

"The special tariffs helped stabilize the market and sent a very strong message to our competitors. We were not going to sit back and watch them destroy our market. If they refused to curtail production to meet market conditions, they weren't going to send their excess inventory to the U.S., unload it at 'fire sale' prices, disrupt the market and our ability to compete, without paying a price for that privilege," Beals said.

Harley-Davidson made it clear from the beginning that the special tariffs were not aimed at preventing free market competition. "We simply wanted the U.S. government to restore order to a motorcycle market under siege by Japanese manufacturers that increased production in the face of a sharp market decline," Beals said.

On the basis of its recovery, Harley-Davidson went public in July of 1986 in a well-received public stock offering and subsequently acquired Holiday Rambler Corporation, the nation's largest independent producer of recreational vehicles and a major supplier of specialized commercial vehicles.

Harley-Davidson, Inc. is the sole American manufacturer of heavyweight motorcycles and offers a complete line of motorcycle parts and accessories. Its Holiday Rambler subsidiary is a leading manufacturer of premium motorhomes, travel trailers and specialized commercial vehicles, and a diverse range of related products. Harley-Davidson, Inc. is also a supplier to the U.S. Defense industry.

# # #

FOR RELEASE FEBRUARY 27, 1987

CONTACT: Deborah C. Ladomirak
202-523-0131
USITC 86-011

USITC REPORTS RESULTS OF SURVEY OF HEAVYWEIGHT MOTORCYCLES FOR CALENDAR YEAR 1986

Inventories of imported heavyweight motorcycles held by both the importers and their dealers decreased from 81,236 units as of December 31, 1985 to 48,103 units as of December 31, 1986, according to a report released today by the U.S. International Trade Commission. The report is the public version of the confidential report submitted to the United States Trade Representative as required by Presidential Proclamation No. 5050 (issued April 15, 1983).

The following are highlights of the economic data collected on the heavyweight motorcycle industry for calendar year 1986, compared with data collected for calendar year 1985.

- U.S. producers' and dealers' inventories of heavyweight motorcycles decreased as of December 31, 1986, compared with December 31, 1985.
- Unfilled orders as of December 31, 1986, increased somewhat when compared with December 31, 1985.
- U.S. production capacity increased slightly during the comparative periods, however, capacity utilization decreased.
- Inventories held by dealers of imported heavyweight motorcycles declined from 58,154 units as of December 31, 1985 to 31,821 units as of December 31, 1986, or by 45 percent.
- The average net selling price of imported heavyweight motorcycles increased from $3,939 during October-December 1985 to $5,526 during October-December 1986.

Copies of the public report (USITC Publication 1947) can be obtained by calling 202-523-5178 or from the Office of the Secretary, U.S. International Trade Commission, 701 E Street NW., Washington, DC 20436.

oOo

FOR RELEASE February 27, 1987

CONTACT: Deborah C. Ladomirak
202-523-0131
USITC 87-010

USITC REPORTS RESULTS OF SURVEY OF HEAVYWEIGHT MOTORCYCLES FOR FOURTH CALENDAR QUARTER OF 1986

Retail sales of domestic and imported heavyweight motorcycles decreased to a level of 13,228 units during the fourth quarter of 1986, a drop of 42.6 percent when compared with the fourth quarter of 1985, according to a report released today by the U.S. International Trade Commission. The report is the public version of the confidential report submitted to the United States Trade Representative as required by Presidential Proclamation No. 5050 (issued April 15, 1983).

The following are highlights of the economic data collected on the heavyweight motorcycle industry for the fourth quarter of 1986, compared with data collected for the fourth quarter of 1985.

- U.S. production of heavyweight motorcycles decreased to 18,084 units during October-December 1986 from 29,451 units during October-December 1985, or by 38.6 percent. U.S. producers' shipments of heavyweight motorcyles decreased from 21,948 units, during October-December 1985 to 15,596 units, during October-December 1986.

- The average unit net selling price for U.S.-produced heavyweight motorcycles increased from $4,494 during October-December 1985, to $5,230 during October-December 1986.

- U.S. shipments of imported heavyweight motorcycles rose from 3,983 units in October-December 1985 to 4,693 units in October-December 1986, or by 17.8 percent.

- Combined importers' and dealers' inventories of imported heavyweight motorcycles decreased from 81,236 units as of December 31, 1985, to 48,103 units as of December 31, 1986, or by 40.8 percent.

more

Copies of the public report (USITC Publication 1946) can be obtained by calling 202-523-5178 or from the Office of the Secretary, U.S. International Trade Commission, 701 E Street NW, Washington, DC 20436.

oOo

FOR RELEASE NOVEMBER 30, 1986

CONTACT: Diane Manifold
202-523-0467
USITC 86-088

USITC REPORTS RESULTS OF SURVEY OF HEAVYWEIGHT MOTORCYCLES FOR THIRD CALENDAR QUARTER OF 1986

Retail sales of domestic and imported heavyweight motorcycles decreased to a level of 30,905 units during the third quarter of 1986, a drop of 35.4 percent when compared with the third quarter of 1985, according to a report released today by the U.S. International Trade Commission. The report is the public version of the confidential report submitted to the United States Trade Representative as required by Presidential Proclamation No. 5050 (issued April 15, 1983).

Total retail sales of heavyweight motorcycles decreased by 35.4 percent from 47,826 units in July-September 1985 to 30,905 units in July-September 1986. Between the same periods, the average unit selling price for U.S.-produced heavyweight motorcycles increased by 23.3 percent, from $4,410 to $5,439. Despite the decrease in retail sales and price increases for domestic products, the market share held by the three domestic producers increased from 48.3 percent in the third quarter of 1985 to 56.0 percent in the same period of 1986.

U.S. production and producers' shipments declined during this period. Total employment in the U.S. heavyweight motorcycle industry decreased by 9.9 percent, from 3,095 workers as of September 1985, to 2,789 workers as of September 1986.

more

Importer shipments to dealers were down 72.6 percent, from 19,305 units in the third quarter of 1985 to 5,296 in the third quarter of 1986. There was a 20 percent decrease in inventories of imported heavyweight motorcycles held by importers and dealers as of September 30, 1986 when compared with the 57,743 units held in inventory as of June 30, 1986. However, comparing year-to-year data, inventories of imported heavyweight motorcycles fell 47.0 percent, dropping from 86,977 units as of September 30, 1985, to 46,056 units held as of September 30, 1986. This reflects a drawdown in importers' inventories during the fourth quarter of 1985 and the first three quarters of 1986 that was not offset by a corresponding increase in U.S. imports.

Copies of the public report (USITC Publication 1909) can be obtained by calling 202-523-5178 or from the Office of the Secretary, U.S. International Trade Commission, 701 E Street NW, Washington, DC 20436.

oOo

FOR RELEASE SEPTEMBER 2, 1986

CONTACT: Diane Manifold
202-523-0467
USITC 86-068

USITC REPORTS RESULTS OF SURVEY OF HEAVYWEIGHT MOTORCYCLES FOR SECOND CALENDAR QUARTER OF 1986

U.S. imports of heavyweight motorcycles decreased to 11,704 units in the second quarter of 1986 compared with 12,372 units in the second quarter of 1985, or by 5.4 percent, according to a report released today by the U.S. International Trade Commission. The report is the public version of the confidential report submitted to the United States Trade Representative as required by Presidential Proclamation No. 5050 (issued April 15, 1983).

U.S. shipments of heavyweight motorcycles decreased from 22,858 units in April-June 1985 to 22,357 units in the same period of 1986. Retail sales of domestic heavyweight motorcycles decreased during April-June 1986 while the value of U.S. exports increased. The average unit net selling price for U.S.-produced heavyweight motorcycles increased from $4,213 in April-June 1985, to $5,160 in April-June 1986. Total employment decreased from 3,115 workers during June 1985, to 2,957 workers in June 1986.

Shipments of imported heavyweight motorcycles decreased from 25,205 units in April-June 1985, to 12,628 units in April-June 1986. Retail sales of imported heavyweight motorcycles decreased from 38,911 units during April-June 1985, to 25,653 units in April-June 1986, or by 34.1 percent. Combined importers' and dealers' inventories of imported heavyweight motorcycles dropped from 101,748 units as of June 30, 1985, to 57,743 units as of June 30, 1986, or by 43.2 percent.

more

USITC REPORTS RESULTS OF SURVEY OF HEAVYWEIGHT MOTORCYCLES FOR FIRST CALENDAR QUARTER OF 1986

Copies of the public report (USITC Publication 1846) can be obtained by calling 202-523-5178 or from the Office of the Secretary, U.S. International Trade Commission, 701 E Street NW., Washington, DC 20436.

oOo

Outdoor and Athletic Equipment

Shipments of selected outdoor and athletic equipment are expected to increase 2.1 percent in 1987, in constant dollar terms, after increases of 1.4 percent and 1.9 percent in 1985 and 1986, respectively. This modest industry growth, following a strong post-recession rebound in 1983-84, reflects the return of the economy and real disposable income to more moderate growth rates.

Outdoor and athletic equipment industries include lawn and garden equipment (SIC 3524); motorcycles, bicycles, and parts; (SIC 3751), and sporting and athletic goods (SIC 3949). The current moderate growth rate of shipments reflects the general economic slowdown since 1984. Real disposable income has made small gains since 1984, and it is forecast to rise 2.4 percent in 1987. Both inflation and unemployment seem to be holding at their current levels. However, consumer debt has surged to record high levels in relation to income and the personal savings rate, which has sunk to a record low. Personal savings are not expected to increase in 1987.

There are a number of specific factors, in addition to the macroeconomic variables, directly influencing the demand for outdoor and athletic equipment. A major influence is the competition from consumer expenditures on other durable goods. Promotional activities by car dealerships, for instance, will boost consumer expenditures on automobiles an estimated 8.7 percent. The maturation of the "baby boom" generation is one of a number of favorable demographic trends. Baby boomers are entering a critical age period for the outdoor industry. Families in this group are becoming homeowners, most earn two incomes, and they desire quality leisure time. Another favorable trend is the migration of population to the South and the West where the outdoor activities season is longer. Equally significant are some nonquantifiable factors, including weather, access to recreational areas, and availability of leisure time.

A historical analysis of U.S. trade in outdoor and athletic equipment reveals long-standing surpluses in high-tech sectors of the economy but chronic deficits in more labor-intensive areas. The consumer goods sector, and in particular the outdoor and athletic equipment industry, has witnessed a surge in imports from countries whose wage rates are below those of the United States. This competition was accentuated by the recent overvaluation of the dollar in international currency markets, with the result that other countries made further inroads in the U.S. market. The major competitors of domestic manufacturers in the outdoor and athletic equipment industries are Japan, South Korea, and Taiwan.

The declining value of the dollar now is exerting upward pressure on import prices for such products as motorcycles and bicycles from Japan; however, for other outdoor products, profit margins are being squeezed. The full effect of the depreciation of the dollar relative to the yen is not complete on these products, and imports have not subsided. Moreover, imports have not declined from South Korea and Taiwan, whose currencies are pegged to the dollar. As exchange rate realignment causes Japan to lose its competitive edge, South Korea and Taiwan will become substitute suppliers, and U.S. imports from these countries will leap. The net result will be further import growth in 1987.

Currency realignment has provided new opportunities for U.S. exporters, pointing to a gain in exports of outdoor and athletic equipment in 1987. The depreciation of the dollar against the currencies of the major industrialized countries strengthened U.S. manufacturers' competitiveness in those markets, and in some cases the products of U.S. manufacturers are now less expensive than those of local producers. Furthermore, sharply reduced prices for crude petroleum are helping to revive the economies of Europe, and foreign consumer demand is rebounding. However, U.S. manufacturers have extensive ground to make up. The sustained overvaluation of the dollar during the past few years closed many markets to U.S. outdoor products, allowing local manufacturers to increase their market shares and consolidate their positions in the marketplace.

Finally, a crucial concern confronting manufacturers of outdoor and athletic equipment today is product liability. Skyrocketing insurance premiums have significantly raised the costs of production, forcing some manufacturers to drop certain high-risk products and others to shut down completely. How domestic producers and U.S. legislators manage this insurance problem will not only affect manufacturers' competitiveness, but consumer choice as well.—*Patrick C. Hughes, Office of Consumer Goods, (202) 377-5479, October 1986.*

LAWN AND GARDEN EQUIPMENT

The lawn and garden industry is relatively new when compared to other consumer goods industries, with most of its growth occurring since the 1950s in line with the rapid development of suburbs and subdivisions. Since then, the lawn and garden industry has gained momentum, competition has increased, and the market has expanded.

In 1986, the constant-dollar value of industry shipments rose 1.5 percent, after having risen 3.2 percent in 1985 to surpass the 5-million-unit mark for the first time since 1979. The industry started 1986 with depleted inventories, but at mid-year some companies reported that inventories of certain products were well above the 1985 levels. Unit shipments in 1986 increased slightly for all categories except walk-behind tillers, which continued the decline that began in 1980. Industry statistics show especially significant growth—an estimated 5.5 percent—in unit shipments of lawn tractors and riding mowers.

Factors directly influencing consumer shipments of lawn and garden equipment (also referred to as outdoor power equipment) include levels of personal disposable income and single-family residential construction. Real personal disposable income rose 2.3 percent in 1985 and an estimated 1.4 percent in 1986. These increases provided consumers with more discretionary dollars to purchase consumer durables such as outdoor power equipment. The downward trend of interest rates has spurred growth in the housing sector, with completions of single-unit housing increasing 4.6 percent in 1985 and about 3 percent in 1986. Housing completions have a positive effect on shipments of lawn and garden equipment, which generally lag housing completions by 1 year.

Several additional factors have influenced the lawn and garden equipment market. Competition has intensified from other household durables, such as automobiles and household appliances. Promotional activities by automobile dealerships, for instance, siphoned off much of the consumer's discretionary income in 1986. Yet, there also has been some reassertion of demand that was suppressed in reaction to the 1982 recession and the imposition that year of safety requirements, which initially sparked consumer resistance to the safety devices and higher prices. The industry responded through advertising campaigns that stressed the benefits of these new requirements and the new technology, targeting high-income consumers who were service- and quality-oriented. Finally, sales of lawn and garden products are seasonal. The large amounts of snowfall in the Northeastern and Midwestern states boosted sales of walk-behind snowthrowers in 1986. However, the summer drought in the Southeast and large amounts of rain elsewhere in the country stunted grass growth and depressed the buying of summer lawn/garden care products.

Although domestic manufacturers' main focus is on consumer products, expansion of the commercial sector also has presented new opportunities for producers of commercial outdoor power equipment. Favorable trends in demographics, multifamily housing, and development projects have generated this increased demand. The number of multifamily housing units rose steadily during 1980-85, from 440 million to 669.4 million, and their share of total housing starts climbed to 38.4 percent in 1985 from 34 percent in 1980. Many members of the "baby boom" generation, now entering its third decade, are becoming homeowners. These households usually are composed of two wage-earners and tend to use outside contractors to maintain and upgrade their property. Additionally, business developers and municipalities are spending more on landscaping their projects and park systems.

The increasing demand for professional lawncare has led to a rise in unit shipments of commercial turf and ground equipment. The lawncare organizations purchase durable, heavy-duty commercial walk-behinds and riding mowers for these tasks. The unit shipments of walk-behind rotary mowers dipped 2 percent in 1985 and then rose 1.2 percent in 1986, while those of riding rotary turf mowers climbed 43 and 5.5 percent, respectively, in the 2 years.

The commercial sector will not overtake the consumer sector in size or importance. The total volume of commercial turf and ground products accounted for only 1.8 percent of the lawn and garden market. In fact, manufacturers for the consumer market benefit from elevated demand for lawncare services. Many of these service organizations purchase consumer-market riding or walk-behind mowers for the smaller, home-maintenance projects. Commercial products are used primarily for larger projects such as parks and golf courses. However, even at a golf course a consumer walk-behind or riding mower is used to maintain the land adjacent to the clubhouse.

Total employment in the lawn and garden equipment industry was 27.5 million in 1986, an increase of 11.3 percent. Employment of production workers rose 6.3 percent to 20.3 million. The industry's failure to become more automated has continued to provide employment opportunities. Unlike the Japanese, the U.S. industry does not make widespread use of labor-saving devices such as robotics or automated materials handling.

Recent Performance and Forecast: Lawn and Garden Equipment (SIC 3524)

(in millions of dollars except as noted)

					Percent Change				
					Compound Annual		Annual		
	1984	1985[1]	1986[2]	1987[3]	1972-84	1979-84	1984-85	1985-86	1986-87
Industry Data									
Value of shipments[4]	3,240	3,365	3,483	—	9.8	5.0	3.9	3.5	—
Value of shipments (1982$)	2,932	3,026	3,071	3,120	2.3	−2.0	3.2	1.5	1.6
Total employment (000)	23.2	24.7	27.5	—	1.0	−1.3	6.5	11.3	—
Production workers (000)	17.9	19.1	20.3	—	1.4	−1.0	6.7	6.3	—
Average hourly earnings ($)	9.04	9.66	10.23	—	7.7	6.7	6.8	5.9	—
Product Data									
Value of shipments[5]	2,977	3,118	3,243	—	8.3	1.9	4.7	4.0	—
Value of shipments (1982$)	2,694	2,804	2,860	2,914	0.9	−4.9	4.1	2.0	1.9
Shipments price index[6] (1982 = 100)	110.4	111.2	113.4	—	7.2	7.1	0.7	2.0	—
Trade Data									
Value of imports	130	118	141	—	15.6	21.7	−8.6	18.9	—
Import/new supply ratio[7]	0.042	0.037	0.042	—	6.5	18.7	−12.3	13.8	—
Value of exports	149	127	158	—	10.8	−4.5	−14.2	24.1	—
Export/shipments ratio	0.050	0.041	0.049	—	2.3	−6.3	−18.1	19.3	—

[1]Estimated except for exports and imports.
[2]Estimated.
[3]Forecast.
[4]Value of all products and services sold by the Lawn and Garden Equipment industry.
[5]Value of products classified in the Lawn and Garden Equipment industry produced by all industries.
[6]Developed by the Office of Industry Assessment, ITA.
[7]New supply is the sum of product shipments plus imports.
SOURCE: U.S. Department of Commerce: Bureau of the Census, Bureau of Economic Analysis, International Trade Administration (ITA). Estimates and forecasts by ITA.

A crucial concern of outdoor power equipment manufacturers is product liability. Despite safety requirements, producers are being named more frequently in lawsuits. Insurance premiums have risen substantially, with some companies reporting 300 percent increases on their liability coverage and 400 percent on the umbrella policy. For example, the premium paid by Gilson's, a manufacturer of various outdoor power equipment, soared from $350,000 to $950,000. These huge premiums are a critical part of cost/price runup. Several companies are unable to obtain full coverage; for example, blade accidents may be excluded. Small companies cannot afford these high premiums. At least five companies have been forced to go "bare," and others have chosen to take this risk, although coverage was obtainable, because paying the premiums was not economically feasible.

In 1986, the Outdoor Power Equipment Institute (OPEI) undertook feasibility studies of captive insurance and a group insurance purchase. Captive insurance is, in effect, self-insurance by a group of companies. The companies pool their premium dollars and an additional amount to capitalize an insurance company. OPEI found that some larger members were already involved in a captive insurance program or were self-insured, such as John Deere and Toro. The burden then was placed on smaller manufacturers, for whom captive insurance offered no cost relief. In a group dividend program, a group of manufacturers who cannot obtain liability coverage approach the insurance carrier and develop a program. If losses are less than anticipated, a dividend is paid out. Because the insurer must assume the full burden of risk, the premiums are high. OPEI was unable to find an insurance carrier for such a program.

Some industry members believe that the upward trend in premiums has peaked and will even out or decline slightly. These individuals have observed recently a hesitance on the part of juries to award enormous sums.

OPEI and members of the industry are lobbying Congress for legislation to regulate product liabliity. In 1986, a bill was introduced into the Senate Small Business Committee, supported by the Administration, to establish limitations, rather than standards of liability. Products liability legislation reached the Senate in the fall of 1986. However, the Senate voted for further consideration, and the bill was sent back to the Senate Counter, which means it was effectively killed for 1986. The bill will be on the agenda in 1987.

The Engine Component Market

In 1986, small engine manufacturers became more aggressive in the market vis-a-vis both foreign producers and each other. Engines account for 50-70 percent of the total cost of outdoor power equipment. The U.S. market is dominated by three major producers: Briggs and Stratton, which controls approximately 60 percent of the small engine market; Tecumseh Power Products, with 20 percent; and Kohler Company, with about 8 percent.

Domestic manufacturers view the Japanese—Honda, Mitsubishi, and Suzuki—as their major competitors. In 1985, imports of small engines (lawnmowers, 3-5 hp, and tractors, 8 hp and above) from Japan were $81.7 million, 88.7 percent of total value of small engine imports. U.S. manufacturers of outdoor power equipment and distributors of engines have responded to the low-priced, high-quality engines offered by the Japanese. In August 1986, Honda Power Equipment announced that it would begin producing engines domesticallly rather than importing them from Honda Japan. Tanaka already provides engines for its own line in the United States, and Kawasaki manufactures engines for John Deere.

In response to heightened competition, manufacturers are expanding R&D facilities and developing innovative and less costly products. To expedite product improvements and to increase productivity, U.S. producers have begun using computer-aided design and computer-aided manufacturing (CAD/CAM). For example, Briggs and Stratton avoided price increases and sustained its strong position in the U.S. market in 1986 through use of these labor-saving devices and through frequent offerings of new and improved products demanded by outdoor equipment manufacturers and wholesalers and retailers of engines. Briggs is also offering a just-in-time delivery plan to help manufacturers cut costs and realize discounts on engine prices. Tecumseh's quality, cost-reduction, and productivity programs have resulted in overall improvement and profitability of the company. Tecumseh is dedicated to new product development programs that allow its customers to compete with off-shore manufacturers on the basis of quality and value. Domestic manufacturers continue to emphasize improvements such as engine quality, efficiency, and noise reduction.

U.S. engine manufacturers are beginning to look beyond the domestic market to the world market. Briggs and Stratton entered into two joint ventures in Japan during 1986. Mr. Fred Stratton, President and CEO, commented: "Through this joint venture, we will establish a manufacturing presence in Japan from which to serve the Japanese and Southeast Asian markets." Mr. Stratton also cited the benefits of exposure to product development techniques and production methods used by Japanese manufacturers.

Foreign Trade

In 1986, the lawn and garden equipment industry had an estimated trade surplus of $18 million. U.S. imports grew approximately 18.9 percent to $141 million, but exports grew 24.1 percent to about $158 million. Tractors continued to account for the greatest amount of import trade (about 60 percent in 1986) followed by riding mowers (24 percent). Imports of walk-behind rotary lawnmowers plunged an estimated 67 percent to about $7.4 million.

Imports from Japan, the leading foreign supplier of the U.S. market, climbed 44.5 percent to $82.5 million in 1986.

Imports from Canada, the second largest supplier, rose 20.6 percent to approximately $49.1 million, following a reduction of 32.3 percent in 1985.

Traditional recipients of U.S. exports have been Canada, the United Kingdom, and France. Exports to Canada in 1986 are estimated at $64 million, up 22.2 percent from 1985. Following the appreciation of the dollar in 1982, U.S. exports to Canada fell 16.7 percent in 1983 and 19.7 in 1985. Similarly, a sluggish performance of the European economies and depreciation of their currencies relative to the U.S. dollar contributed to reduced exports to their markets in the recent past. With the realignment of exchange rates during 1986, export opportunities developed again. The slide in U.S. exports to France since 1981 was halted with an expected 24.4 percent gain in 1986, and exports to the United Kingdom increased 8.8 percent to $14.9 million.

During 1986 the industry worked to reduce Canadian trade barriers to outdoor power equipment imports. Representatives of OPEI and member companies testified in support of reclassifying, for tariff purposes, lawn and garden tractors as "tractors." This classification would exempt the equipment from duty because agricultural equipment is not subject to a tariff. For customs purposes, Canada now classifies lawn and garden tractors as power lawnmowers, which are subject to a 12 percent duty. Resolution of this problem in a way favorable to the U.S. industry could further stimulate U.S. exports to Canada. In 1986, Canada received 78.3 percent of total U.S. exports of garden tractors.

Outlook for 1987

The real value of shipments should increase an estimated 1.6 percent in 1987. At the annual OPEI meeting in June 1986, the mood in the industry was one of "cautious optimism." Industry forecasts show improvements in all product categories except walk-behind tillers. Lawnmowers, rear-engine riding mowers, lawn and yard tractors, garden tractors, and walk-behind snowthrowers will make volume gains.

This confidence on the part of manufacturers is attributable to various factors. First, strong demand is being sustained by the continued vitality of the housing market. Single-family housing completions were up approximately 3 percent in 1986, and issuance of building permits for single-family structures grew 9.5 percent and 24 percent, respectively, in 1985 and 1986. Second, real disposable income, another critical variable, will rise by an estimated 2.4 percent in 1987. Although producer prices will move upward, resulting in higher consumer prices, the increase in real disposable income will offset these price hikes and preclude a dampening of demand. Finally, consumer expenditures on other durable goods, which exert a competitive influence on the outdoor power equipment market, will be static during the year. The lawn and garden industry will most likely benefit if this extra discretionary income is diverted to expenditures on grounds maintenance products.

Industry reports indicate that unit shipments of commercial outdoor power equipment will grow 5.8 percent in 1987. The market for riding rotary turf mowers and riding reel mowers will be even stronger, with unit shipments projected to rise 6 percent and 6.5 percent, respectively. Landscape and lawncare organizations are the fastest growing markets, according to a survey of industry regarding commercial products. Construction of multifamily housing, for which starts increased 3.1 percent in 1986, directly affects demand for these services.

Both imports and exports of lawn and garden equipment will grow in 1987. Japan will again be the leading foreign supplier of outdoor power equipment, and Japanese manufacturers will continue to attempt greater penetration of the U.S. market at the expense of domestic producers.

The depreciation of the dollar during 1986 will begin to affect U.S. exports in 1987. Economic theory postulates that there is a 12- to 18-month lag, called the J-curve effect, from the time of exchange rate changes to their impact on the current account. Weakness in the dollar throughout 1986 should be reflected in increased orders from foreign customers, based on seasonal requirements, whereas the rapid appreciation of the dollar between 1982 and 1985 injured U.S. competitiveness and dampened consumer demand in Western Europe. With the reduction of petroleum prices in 1986, the European economies are gaining momentum. However, the sustained overvaluation of the dollar allowed local manufacturers in those countries to achieve greater market control and shut out American products. Consequently, manufacturers of lawn and garden equipment are not optimistic that export sales will regain their former position of importance.

Long-Term Prospects

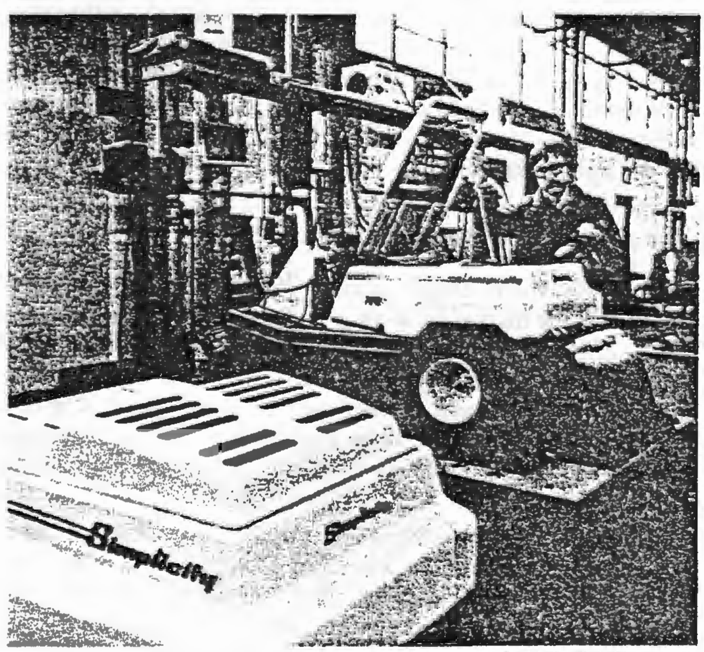
The real value of lawn and garden shipments will grow at an estimated annual rate of 1.6 percent during 1987-91. Unit shipments, based on industry data, will increase about 1 percent annually. Growth in riding units should be incrementally higher, 1.9 percent per year. Several factors are responsible for this stable growth trend.

Single-family housing starts are projected to decline 1.9 percent between 1987 and 1991 as they drop in 1988-90 but then rebound by 3 percent in 1991. This resurgence will be stimulated by a 4.1 percent increase by 1990, to 43.5 million, in the population between the ages of 25 and 34, which includes most first-home buyers.

Real disposable income will rise 2.7 percent by 1991, and population between the ages of 35 and 44 will increase 18 percent. These individuals are in their peak earning years and thus have more purchasing power than other age groups. Most members of this group are homeowners, who are likely to have more discretionary income to spend on home maintenance equipment.

There will be no geographic shift of major domestic markets for outdoor power equipment. Census data reveal that a major portion of residential building will continue in the South and the West, where the warm weather seasons are longer. Outdoor power equipment is used more in these regions compared to others.

Japan will be the major foreign compeitior in the U.S. market. Japanese companies employ the latest innovations to increase productivity and reduce costs while maintaining high quality. U.S. manufacturers will increasingly respond to the Japanese threat through the introduction of automation in their plants and the promotion of internal programs such as inventory controls.



Simplicity Manufacturing Inc.

Factory-testing a riding lawnmower. The lawn and garden equipment industry is charting a pattern of moderate growth, with total unit shipments seen rising 5.8 percent in 1987 and even faster growth forecast for riding mowers.

Future export performance of the lawn and garden industry depends on the performance of the dollar and developments in international trade policies. Given the weaker dollar, U.S. manufacturers who take a sustained and aggressive marketing approach should be able to boost export sales. U.S. manufacturers have already entered into joint agreements to be closer to the markets they serve. Toro in 1985 signed a joint venture to manufacture mowers in Venezuela with Fielsa C.A., and the Bolens Corporation established a joint marketing agreement in Australia with Morrison Industries of New Zealand.

The reduction of trade barriers will also stimulate overseas sales of U.S. lawn and garden equipment. In 1987, the United States will begin bilateral negotiations with Canada to create a free trade area, with the ultimate objective of eliminating all tariffs between the two countries by the year 2000. A free trade area would benefit U.S. manufacturers who do not have production sites in Canada. Current high Canadian tariffs protect large U.S. firms with Canadian plants, such as MTD and Toro, in addition to the Canadian industry. Also, the launching of a new round of multilateral trade negotiations under the General Agreement on Tariffs and Trade (GATT) could provide more access to overseas markets for U.S. outdoor power equipment manufacturers. The agenda of the GATT negotiations will include nontariff barriers, tariffs, subsidies, and the discussion of a standards code. The U.S. objective is to establish a uniform standards policy, which again would benefit manufacturers of U.S. outdoor power equipment. For example, France and Germany maintain more stringent requirements than the United States for noise reduction.—*Patrick C. Hughes, Office of Consumer Goods, (202) 377-5479, October 1986.*

Additional References

1982 Census of Manufactures Report, Lawn and Garden Equipment, SIC 3524, Series MC82-I-35A-4(P), Bureau of the Census, U.S. Department of Commerce, Washington, DC 20233.

Garden Supply Retailer, The Miller Publishing Company, P.O. Box 67 Minneapolis, MN 55440.

Lawn and Garden Marketing, Intertec Publishing Corporation, 9221 Quivera Road, Overland Park, KS 66212.

1987 Outdoor Power Equipment Industry Outlook, (Presented by Gilson, Plymouth, WI), 1900 L Street, NW, Washington, DC 20036.

BICYCLES

In 1986, U.S. shipments of bicycles and parts leveled off from the previous year's constant dollar shipments of about $564 million. Constant-dollar product shipments of bicycles and parts declined an estimated 2.5 percent in 1986, after dropping 2.0 percent in 1985. Contributing to this slowdown was sluggish demand resulting from slow growth in real disposable income—an estimated 1.4 percent as compared with 2.3 percent in 1985. Moreover, U.S. imports of bicycles and parts continue to capture an increasingly larger share of the domestic market.

Foreign Trade

Total U.S. imports of bicycles and parts in 1986 increased to $657.9 million, up an estimated 38 percent from the previous year. For the first 7 months of 1986, imports grew 41 percent over the comparable 1985 period. They were expected to continue rising for the remainder of the year but at a decreasing rate, despite the large inventory buildup earlier in the year. Imports' share of apparent consumption of bicycles and parts increased to 45.6 percent in 1985, and it is estimated at 54.4 percent in 1986.

Bicycle production is a labor-intensive industry, especially in the high-end lightweight bicycle market, where foreign suppliers have the competitive advantage. Foreign manufacturers use lugged frames to produce a high-quality bicycle. This type of product requires larger amounts of labor input, so foreign producers with low wage rates have an advantage. In addition, Far Eastern producers have a higher degree of vertical integration in their production, using high-quality components which come mainly from Japan and Taiwan.

U.S. imports of bicycles have risen substantially in recent years. Imports of bicycle units increased more than 42 percent in the first 7 months of 1986 and were estimated to increase 35 percent for all of 1986. U.S. imports of bicycle parts grew by an estimated 29 percent in 1986.

Taiwan, which has low production costs, remained the dominant foreign supplier of bicycle units to the U.S. market. Since 1982, Taiwan has consistently increased its share of total imports. In 1985, it accounted for nearly 82 percent of imports of

Historical Trends: Lawn and Garden Equipment (SIC 3524)

(in millions of dollars except as noted)

	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984
Industry Data													
Value of shipments[1]	1,059	1,174	1,563	1,353	1,401	1,575	1,883	2,537	2,247	2,005	2,365	2,580	3,240
Value of shipments (1982$)	2,230	2,397	2,876	2,209	2,158	2,279	2,596	3,244	2,579	2,138	2,365	2,399	2,932
Total employment (000)	20.7	21.7	25.3	19.6	18.7	19.6	21.9	24.8	20.3	18.1	17.8	18.8	23.2
Production workers (000)	15.1	16.5	19.1	14.1	13.8	14.7	16.6	18.8	14.3	12.9	12.4	13.9	17.9
Average hourly earnings ($)	3.70	4.03	4.28	4.78	4.94	5.17	5.91	6.53	7.09	7.52	8.08	8.26	9.04
Capital expenditures	47.6	29.2	40.8	46.1	33.2	28.6	39.8	55.0	56.8	35.7	51.1	43.2	65.9
Product Data													
Value of shipments[2]	1,143	1,249	1,713	1,558	1,676	1,747	2,118	2,704	2,419	2,270	2,385	2,585	2,977
Value of shipments (1982$)	2,407	2,550	3,152	2,544	2,583	2,527	2,920	3,457	2,777	2,421	2,385	2,404	2,694
Shipments price index[3] (1982=100)	48.0	48.9	54.4	61.3	65.2	69.1	72.6	78.2	87.1	93.8	100.0	107.5	110.4
Trade Data													
Value of imports	22.8	38.7	60.5	37.8	35.5	84.5	97.8	48.6	25.9	30.1	40.1	66.1	130
Import/new supply ratio[4]	0.020	0.030	0.034	0.024	0.021	0.046	0.044	0.018	0.011	0.013	0.017	0.025	0.042
Value of exports	43.6	63.7	96.5	92.8	104	111	123	187	217	202	186	131	149
Export/shipments ratio	0.038	0.051	0.056	0.060	0.062	0.063	0.058	0.069	0.090	0.089	0.078	0.050	0.050

[1]Value of all products and services sold by the Lawn and Garden Equipment industry.

[2]Value of products classified in the Lawn and Garden Equipment industry produced by all industries.

[3]Developed by the Office of Industry Assessment, ITA.

[4]New supply is the sum of product shipments plus imports.

SOURCE: U.S. Department of Commerce: Bureau of the Census, Bureau of Economic Analysis, International Trade Administration (ITA).

Recent Performance and Forecast: Motorcycles, Bicycles, and Parts (SIC 3751)

(in millions of dollars except as noted)

					Percent Change				
					Compound Annual		Annual		
	1984	1985[1]	1986[2]	1987[3]	1972-84	1979-84	1984-85	1985-86	1986-87
Industry Data									
Value of shipments[4]	1,153	1,029	1,038	—	4.8	-3.5	-10.8	0.9	—
Value of shipments (1982$)	1,109	994	978	977	-2.4	-9.0	-10.4	-1.6	-0.1
Total employment (000)	10.4	9.4	9.0	—	-4.3	-9.3	-9.6	-4.3	—
Production workers (000)	8.5	7.7	7.3	—	-4.6	-10.0	-9.4	-5.2	—
Average hourly earnings ($)	8.05	8.40	8.63	—	6.8	4.9	4.3	2.7	—
Product Data									
Value of shipments[5]	1,263	1,177	1,206	—	7.3	2.6	-6.8	2.4	—
Motorcycles & parts	634	544	573	—	15.5	13.1	-14.2	5.4	—
Bicycles & parts	574	578	566	—	3.1	-4.8	0.7	-2.0	—
Value of shipments (1982$)	1,214	1,137	1,137	1,131	0.0	-3.3	-6.3	-0.1	-0.5
Motorcycles & parts	613	521	532	533	10.9	10.4	-15.0	2.0	0.2
Bicycles & parts	576	564	550	548	-3.5	-9.4	-2.0	-2.5	-0.5
Shipments price index[6] (1982=100)	104.1	103.6	106.2	—	7.3	6.1	-0.5	2.5	—
Motorcycle price index (1982=100)	103.4	104.4	107.8	—	4.1	2.5	1.0	3.3	—
Bicycle price index (1982=100)	99.6	97.7	97.9	—	6.9	5.1	-1.9	0.2	—
Trade Data									
Value of imports (ITA)[7]	1,144	1,404	1,618	—	1.1	-1.4	22.7	15.2	—
Motorcycles & parts	713	926	960	—	-0.2	-6.5	29.8	3.7	—
Bicycles & parts	431	478	658	—	3.7	13.6	11.0	37.5	—
Import/new supply ratio[8]	0.462	0.544	0.573	—	-2.8	-2.5	17.7	5.3	—
Motorcycles & parts	0.533	0.630	0.627	—	-4.0	-6.5	18.2	-0.5	—
Bicycles & parts	0.402	0.453	0.538	—	-0.2	11.1	12.7	18.8	—
Value of exports (ITA)[9]	97.6	75.6	102	—	23.4	7.0	-22.5	34.7	—
Motorcycles & parts	85.4	67.7	77.9	—	23.9	9.3	-20.7	15.1	—
Bicycles & parts	12.3	7.9	23.9	—	20.6	-3.9	-35.8	202.5	—
Export/shipments ratio	0.073	0.065	0.085	—	14.8	3.0	-11.0	30.8	—
Motorcycles & parts	0.137	0.125	0.186	—	7.4	-3.1	-8.8	8.8	—
Bicycles & parts	0.019	0.014	0.043	—	16.6	-2.0	-26.3	207.1	—

[1]Estimated except for exports and imports.
[2]Estimated.
[3]Forecast.
[4]Value of all products and services sold by the Motorcycles, Bicycles, and Parts industry.
[5]Value of products classified in the Motorcycles, Bicycles, and Parts industry produced by all industries.
[6]Developed by the Office of Industry Assessment, ITA.
[7]Import data are developed by the chapter author.
[8]New supply is the sum of product shipments plus imports.
[9]Export data are developed by the chapter author.
SOURCE: U.S. Department of Commerce: Bureau of the Census, Bureau of Economic Analysis, International Trade Administration (ITA). Estimates and forecasts by ITA.

bicycles, while Japan and South Korea accounted for 9.6 percent and 5.5 percent, respectively. France, Italy, and Germany together accounted for only 2.2 percent. (See Figure 46-1).

In 1985, the Bicycle Manufacturers Association (BMA) continued its appeal of a U.S. International Trade Commission's finding concerning dumping charges against Taiwan bicycle imports. The ITC had determined that, despite unfair dumping by certain Taiwanese manufacturers, the domestic industry was not adversely affected. BMA's appeal is still pending.

The leading foreign suppliers of bicycle parts to the United States are Japan and Taiwan. Japan is still the top supplier, accounting for 50.8 percent in 1985 and 57.5 percent in the first 7 months of 1986. Despite the rise of import prices, consumers will continue to demand high-quality parts from Japan. Taiwan, the second largest supplier, accounted for 22.3 percent of U.S. imports in 1985 but only 19.2 percent in the first 7 months of 1986. Taiwan maintained its position as the leading supplier of tires and tubes, accounting for 59.8 percent, followed by South Korea with 20.3 percent. For the first 7 months of 1986, Taiwan's and South Korea's shares of tires and tubes dropped to 57.2 and 16.3 percent, respectively.

Efforts to Compete

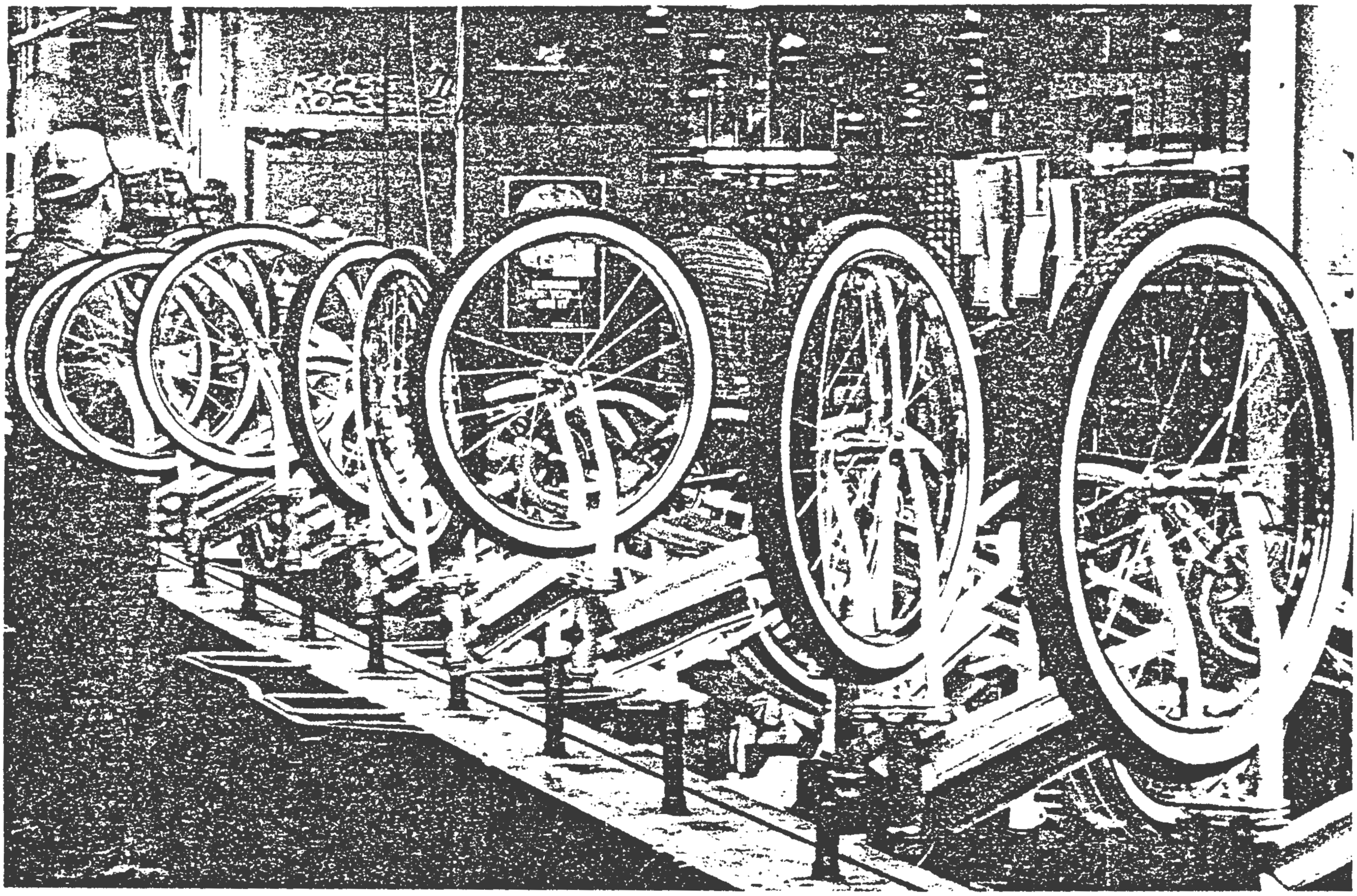
To become more competitive, U.S. bicycle producers are increasingly upgrading their technology and adopting innovative production methods. Robotics is playing a larger role in the welding and wheel production. Huffy, for example, manufactures and markets a new line, Techninum, under the Raleigh label, which features thermally bonded aluminum frames, creating a lighter but stronger low-cost bicycle.

Additionally, manufacturers are increasingly moving to offshore production sites to lower production costs. Murray Ohio Manufacturing Company reportedly plans to enter into a joint venture in South Korea. Murray will set up a facility to manufacture bicycles in the low-end of their product line. The company maintains that they could not produce these models on a competitive basis in the United States and identified lower production costs as the primary factor in their decision. Murray's joint venture in South Korea will result in a loss of approximately 400 jobs.

The Trade and Tariff Act of 1984 included a provision that excluded bicycle producers from using foreign trade zones, which would have allowed them to import parts at a lower tariff rate. This provision expired in June 1986. However, an amendment is pending before Congress to extend this provision until 1989. The amendment is expected to be approved sometime in 1987.

Prices

Import prices in recent years have mirrored the performance of the U.S. dollar. U.S. import prices for bicycles fell 15.3 percent between 1984 and 1985, when the dollar was appreciat-



Hufty Bicycle Division

Bicycles on the assembly line. Growing interest in bicycling, especially among adults, has boosted demand, but so far imports have been the beneficiaries, rising 35 percent in 1986 as U.S. industry shipments fell 2.5 percent (constant dollars).

ing, but then rose 7.4 percent in 1986, when the dollar was depreciating. With respect to domestic prices, the Bureau of Labor Statistics (BLS) producer price index (PPI) for bicycles declined 2 percent in 1985 and in 1986 was expected to rise moderately.

Unit values of imports from Taiwan, the leading supplier, showed little change in the first 7 months of 1986. The Taiwanese NT dollar, which is pegged to the U.S. dollar, has not appreciated significantly.

Imports from second-place Japan have shown price increases due to the effects of the U.S. dollar's dropping almost 35 percent in value against the yen. The average unit value of bicycles and parts from Japan increased nearly 20 percent in the first 7 months of 1986. The Japanese are concerned that higher prices will send more producers to other foreign sources such as Taiwan. However, they also expect to overcome part of this price disparity through cuts in production costs, new product innovation, and a reduction in costs of energy and raw materials.

Profitability

In 1985, many domestic bicycle manufacturers incurred earnings and profit losses. Huffy, the largest manufacturer of bicycles in the United States, incurred a 97 percent drop in net earnings and a 58.6 percent decline in operating profits as a result of reduced sales volume and lower profit margins. These losses were attributed to increased competition and relocation and startup costs at a new production and distribution facility in Kent, Washington. Other contributors to the declines were a one-time charge incurred when a physical fitness line was discontinued and a loss on the sale of a former manufacturing facility.

Murray, the second largest U.S. manufacturer of bicycles, also performed poorly in 1985. Murray increased its net sales by 1 percent, but net income dropped 40 percent as a result of price cutting to maintain market share. The major factor affecting 1985 earnings was the continued high level of imports in the U.S. bicycle market.

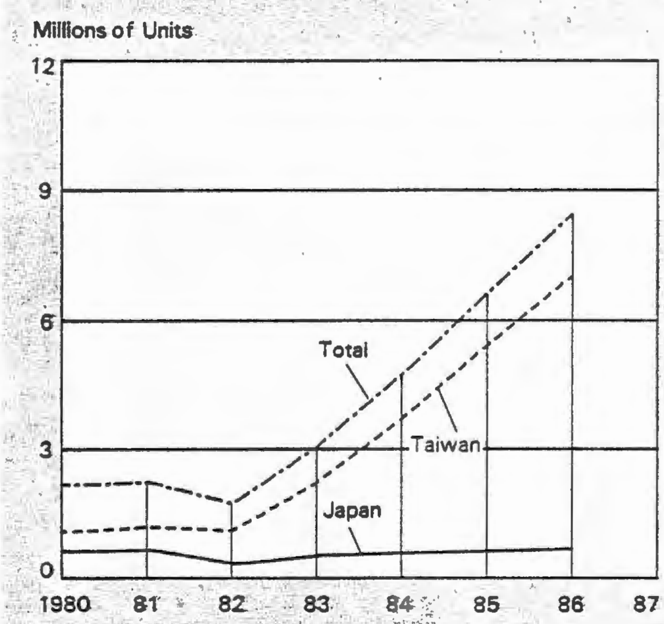
Outlook for 1987

Domestic shipments of bicycles and parts are expected to remain flat or decline slightly in 1987 as imports continue to make inroads in the market and supply the bulk of U.S. demand. The dollar is expected to stabilize in 1987, but import prices of bicycles will increase, with these price increases ultimately passed on to the consumer. Rising prices will slow, but not halt, growth in imports of bicycles and parts during 1987.

Long-Term Prospects

Although demand for bicycles has been rising, much of this growth will be captured by bicycle imports, especially from Taiwan. Improved automation, innovation, and a continued decline in the dollar should help U.S. bicycle producers compete with overseas sources and perhaps give the bicycle industry a better outlook over the next few years.

Figure 46-1
U.S. Imports of Bicycles



Source: Bureau of the Census and International Trade Administration

Bicycling is becoming more popular as the number of health-conscious adults rises. According to the Bicycle Federation of America, over 78 million people participated in bicycling in 1985. Adults (16 years old and up) represented more than half of total participation in 1986, and their share is expected to continue to grow. The ratio for adult and female cyclists is currently split 45 percent and 55 percent, respectively. In addition, there is more participation among female adult cyclists than for any other outdoor sport.

Growth in several age groups of the population will also affect bicycle sales. The Bureau of the Census projects that the 25-44 age group will grow from 75.8 million to 82.4 million during 1986-91. The 25-44 age group represents the baby boom generation and, according to industry sources, the children of these boomers could generate growth in the bicycle sector of the outdoor recreation market. The 14-17 year-old age group is projected to continue its downward trend, declining 11.1 percent, from 14.6 million to just under 13 million, during 1986-91.

Certain types of bicycles appeal to particular age groups. For example, Motorcross (BMX) bicycles used for dirt track racing are popular among 14-17 year olds. BMXs accounted for approximately 42 percent of total bicycle sales in 1985. However, their shipments are expected to decline slightly over the next 5 years, reflecting the negative demographic trends for the 14-17 year olds.

All-terrain bikes (ATB) are popular among adult bicyclists. Demand continues to increase, and sales are expected to rise in the next few years. The thick tires of the ATBs make it easier to ride on city streets as well as on dirt roads. Also, the larger seats and upright handlebars give the cyclist a more comfortable ride.

This renewed interest in bicycling and the increased sponsorship of bicycling events in the United States by corporations are expected to spur retail sales of bicycles in the coming years. Competitive bicycling events for adults and children are expected to grow 10 percent and 15 percent, respectively.

Finally, in recent years, competitive cycling has been brought to the attention of sports enthusiasts as well as all Americans. In the 1984 Olympics, American cyclists won four gold, three silver, and two bronze medals. In 1986, Greg Lemond's victory in the Tour de France, first ever by an American, also brought competition cycling to the attention of American sports enthusiasts.—*Kevin Ellis, Office of Consumer Goods, (202) 377-1140; Judith Corea, Office of Consumer Goods, (202) 377-0311, October 1986.*

MOTORCYCLES

In 1986, product shipments of motorcycles rose an estimated 2 percent, measured in constant dollars. This increase was mainly the result of expanded domestic production in response to price increases on imported heavyweight motorcycles, defined as motorcycles with engines over 700 cc. Japanese producers, who supply more than 90 percent of the imported heavyweight motorcycles, apparently boosted their U.S. production of these motorcycles when the yen appreciated sharply against the dollar. However, estimates for trade and domestic shipments indicate further market encroachment by imports, which accounted for two-thirds of U.S. apparent consumption of motorcycles and parts in 1986, compared with 63 percent in 1985.

Foreign Trade

In 1986, U.S. imports of heavyweight motorcycles continued to rise, but the growth rate of about 4 percent was much slower than the 30 percent expansion in 1985. Imports from Japan rose only 5.2 percent in the first 7 months of 1986, compared with 32.4 percent for the same period in 1985. However, Japan still accounts for over 93 percent of U.S. imports of motorcycles.

In 1985, almost one-third of U.S. imports of motorcycles had engines over 490cc but not over 700cc. Japan accounted for virtually all of these imports, which increased 25.2 percent from the previous year. However, for the first 7 months of 1986, Japan's exports in this category dropped 16.5 percent, reflecting the appreciated yen relative to the U.S. dollar.

U.S. Producers

Harley-Davidson is the only American-owned producer of motorcycles in the United States and in 1985 was the second largest producer. It has benefited from the imposition of additional duties on imported heavyweight motorcycles as a result of a 1983 investigation by the International Trade Commission (ITC). The additional duties are due to expire in April of 1988.

The ITC has been conducting a review proceeding on the special tariff on motorcycles. The review, which was to have been completed in 1986, was initiated by two major Japanese producers who are urging that the President end the tariff surcharge before 1988.

Since implementation of the special tariff in 1983, Harley-Davidson has increased its market share and improved its competitive position vis-a-vis Japanese producers of motorcycles. Harley Davidson has also expanded its product line in the heavyweight motorcycle segment of the market. In mid-1985, the company introduced a new model, the Sportster 883, which is grouped in the low end of the heavyweight motorcycle market and, with a suggested retail price under $4,000, is more price competitive with Japanese-made motorcycles. This model has allowed Harley-Davidson to enter the "trade-up" market; i.e., consumers who currently own a Sportster will most likely trade it in for a larger motorcycle.

Japanese producers have adapted to the tariff restrictions on motorcycles in several ways. Two Japanese competitors have avoided paying the special tariffs by increasing assembly in the United States and shipping engines, transmissions, and other major parts from Japan. Moreover, Japanese producers have avoided the special tariffs by replacing 750cc engines with motorcycles that have 690-699cc engines, which are not affected by the tariff restrictions.

Honda, a Japanese-owned company with a plant in the United States, currently accounts for about 60 percent of the motorcycle market. Honda's introduction of the three- and four-wheel all-terrain vehicles (ATV) has helped attain its current dominance. Honda now holds about 44 percent of the domestic markets for ATVs, which are popular with young riders who use them for recreational purposes.

Future sales of ATVs could be affected by the National ATV Safety Act (H.R. 3325) in the House Committee of Public Works and Transportation as of late 1986. The Act would require states to adopt a 16-year-old minimum age for ATV operators. According to preliminary findings of the Consumer Products Safety Commission (CPSC), 19 percent of all ATV injuries involve children under 12 years of age, and 46 percent involve children under 16. The bill also will prohibit the use of ATVs on highways and will require that riders have licenses, which would be given to them after completion of a training course. CPSC recommendations to the House Committee of Public Works and Transportation were expected by late 1986 or early 1987.

Four major Japanese motorcycle firms in the United States are the subject of a 2-year-old criminal antitrust investigation by the U.S. Justice Department. A federal grand jury is trying to determine whether these four companies were involved in price-fixing to expand markets and reduce competition in the U.S. market during the early 1980s. In 1985, these four companies accounted for about 94 percent of the $2.7-billion U.S. retail market for motorcycles.

Outlook for 1987

U.S. shipments of motorcycles are expected to remain flat in 1987. While imports gain at a slower rate than in 1986, the continued decline of the U.S. dollar against the yen will result in further price increases on U.S. imported motorcycles from Japan. To the extent that they are passed on to the U.S. consumer, these increases will contribute to rising inflation. However, tariff rates for heavyweight motorcycles will fall from 18.9 percent to 13.7 percent in 1987, offsetting some of the exchange-rate-induced price increase and thus fostering import growth.

Long-Term Outlook

The motorcycle market is forecast to increase at a compound annual rate of 3 percent during the next 5 years. U.S. product shipments are expected to grow 1.5 percent (constant dollars), while reduction of the tariff on heavyweight motorcycles in 1987 and 1988 contributes to further growth in imports and their share of the market. A number of factors affect the demand for motorcycles in the United States. Economic factors such as the downward trend of the dollar against the yen are causing prices of imported motorcycles to rise. Changing consumer tastes and preferences have altered purchasing habits. In addition, financing of motorcycles is difficult, with disproportinately high interest rates, and insurance can be prohibitively expensive. These factors, along with high prices, have turned away some prospective buyers.

Despite the negative pressures on the motorcycle industry, several favorable factors should help increase demand. Harley-Davidson's introduction of the new Sportster 883 has helped increase sales, and purchasers of these motorcycles will most likely trade up for larger models in the future. The weak dollar can be advantageous to U.S. producers by giving them the opportunity to expand their markets abroad. Changing demographics are favorable for the industry. Population in the 35 to 44 age group, the primary market for motorcycles, is expected to increase 17.8 percent from 1986 to 1991, according to the Bureau of the Census. Additionally, disposable personal income is estimated to rise 2.7 percent annually during 1986-91.—*Kevin M. Ellis, Office of Consumer Goods, (202) 377-1140; Judith Corea, Office of Consumer Goods, (202) 377-0311, October 1986.*

Additional References

1982 Census of Manufacturers Final Report, Motorcycles, Bicycles, and Parts, SIC industry 3751, Series MC82-I-37C-4(P), Bureau of the Census, U.S. Department of Commerce, Washington, DC 20233.

Heavyweight Motorcycles: Quarterly Report (Covering Second Quarter of 1986), USITC Publication 1889, August 1986, U.S. International Trade Commission, Washington, DC 20436.

American Bicyclist and Motorcyclist, Cycling Press, Inc., 80 Eighth Avenue, New York, NY 10011.

Bicycle Business Journal, Quinn Publications, Inc., 1904 Wenneca Street, Fort Worth, TX 76102.

Bicycling Magazine, "U.S. Adult Bicycle Usage and Ownership," 33 East Minor St., Emmaus, PA 18049.

1985 Motorcycle Statistical Annual, Motorcycle Industry Council, 3151 Airway Avenue, Bldg. P-1, Costa Mesa, CA 92626.

Motorcycle Business USA, HBJ Publications, 7500 Old Oak Blvd., Cleveland, OH 44130.

SPORTING AND ATHLETIC GOODS

Industry shipments of sporting and athletic goods approached a record $4 billion in 1986. However, adjusted for inflation, shipments increased only 2.6 percent, as growth in nominal disposable personal income slowed to an estimated 3.3 percent in 1986 from 5.9 percent in 1985. During 1972-84, constant-dollar industry shipments increased a moderate 10 percent.

Industry Definition

The sporting goods industry is comprised of firms producing several major categories of equipment, including fishing, golf, gymnasium and exercise, tennis, bowling, team sports, skis, scuba diving, billiards, surfing, skating, raquetball, and track and field. Sports categories not included in this industry are footwear, apparel, camping, hunting, and leisure vehicles such as motorcycles and bicycles.

Some 1,500 firms are in the sporting goods industry. These firms operate about 1,600 plants, two-thirds of which have fewer than 20 employees. In 1982, only 7 percent of these firms had

Historical Trends: Motorcycles, Bicycles, and Parts (SIC 3751)

(in millions of dollars except as noted)

	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984
Industry Data													
Value of shipments[1]	660	722	959	786	791	1,008	1,225	1,375	1,337	1,344	1,341	1,436	1,153
Value of shipments (1982$)	1,478	1,562	1,811	1,320	1,269	1,553	1,760	1,779	1,544	1,459	1,341	1,412	1,109
Total employment (000)	17.6	17.5	19.1	14.0	13.7	15.6	17.2	16.9	15.2	13.9	13.0	12.2	10.4
Production workers (000)	15.0	15.1	16.2	11.1	11.4	13.3	14.7	14.4	12.7	11.2	10.4	9.9	8.5
Average hourly earnings ($)	3.65	3.88	4.27	5.16	5.43	5.28	5.71	6.34	6.89	7.82	8.38	8.77	8.05
Capital expenditures	16.0	15.9	24.9	15.8	16.5	24.1	27.2	29.5	22.0	26.8	23.1	26.5	20.3
Product Data													
Value of shipments[2]	541	721	880	704	688	847	1,001	1,112	1,160	1,160	1,143	1,151	1,263
Motorcycles & parts	112	170	250	302	273	286	390	342	464	368	481	492	634
Bicycles & parts	397	530	623	389	406	490	540	733	649	733	602	596	574
Value of shipments (1982$)	1,211	1,561	1,663	1,184	1,105	1,306	1,438	1,438	1,340	1,259	1,143	1,132	1,214
Motorcycles & parts	176	260	333	379	344	363	464	375	503	382	481	486	613
Bicycles & parts	884	1,132	1,170	657	645	747	783	943	746	793	602	589	576
Shipments price index[3] (1982 = 100)	44.5	45.9	52.9	59.5	62.2	64.8	69.7	77.3	86.6	92.2	100.0	101.7	104.1
Motorcycle price index (1982 = 100)	63.7	65.4	75.0	79.6	79.4	78.9	84.2	91.3	92.4	96.5	100.0	102.2	103.4
Bicycle price index (1982 = 100)	44.9	46.8	53.3	59.2	62.9	65.6	69.1	77.7	87 1	92.4	100.0	99.1	99.6
Trade Data													
Value of imports (ITA)[4]	1,001	949	1,316	882	684	888	1,187	1,225	1,539	1,669	1,329	1,103	1,144
Motorcycles & parts	730	609	969	745	533	704	980	998	1,257	1,342	1,121	774	713
Bicycles & parts	279	339	347	137	151	183	207	228	281	327	208	329	431
Import/new supply ratio[5]	0.651	0.568	0.599	0.556	0.498	0.512	0.543	0.524	0.570	0.590	0.538	0.474	0.462
Motorcycles & parts	0.867	0.782	0.795	0.712	0.662	0.711	0.715	0.745	0.730	0.785	0.700	0.611	0.533
Bicycles & parts	0.413	0.390	0.358	0.260	0.271	0.272	0.277	0.237	0.302	0.308	0.257	0.330	0.402
Value of exports (ITA)[6]	7.8	11.0	14.1	21.7	27.3	39.3	49.5	69.7	111	96.9	99.1	97.8	97.6
Motorcycles & parts	6.5	8.8	10.8	18.7	22.4	29.4	37.3	54.7	91.7	77.0	87.5	85.2	85.4
Bicycles & parts	1.3	2.2	3.3	3.0	4.9	9.9	12.2	15.0	18.8	19.9	11.6	12.6	12.3
Export/shipments ratio	0.014	0.015	0.016	0.031	0.040	0.046	0.049	0.063	0.095	0.084	0.087	0.080	0.073
Motorcycles & parts	0.058	0.052	0.043	0.062	0.082	0.103	0.096	0.160	0.196	0.209	0.182	0.173	0.137
Bicycles & parts	0.003	0.004	0.005	0.008	0.012	0.020	0.023	0.021	0.029	0.027	0.019	0.019	0.019

[1]Value of all products and services sold by the Motorcycles, Bicycles, and Parts industry.
[2]Value of products classified in the Motorcycles, Bicycles, and Parts industry produced by all industries.
[3]Developed by the Office of Industry Assessment, ITA.
[4]Import data are developed by the chapter author.
[5]New supply is the sum of product shipments plus imports.
[6]Export data are developed by the chapter author.
SOURCE: U.S. Department of Commerce: Bureau of the Census, Bureau of Economic Analysis, International Trade Administration (ITA).

more than 100 employees. Requiring only small capital expenditures, firms can easily enter and exit this industry, which is becoming less concentrated as conglomerates sell off their sporting goods subsidiaries: the four largest firms had only 17 percent of the business in 1982, whereas in 1958 their share was 41 percent.

Industry Performance

According to industry sources, the divestiture of sporting goods companies by large conglomerates continued in 1986. This trend is favorably viewed by the industry because it is believed to result in a stronger, more profitable industry. New firms resulting from the spinoffs will be more responsive to new competition.

In the sporting goods industry the most efficient plant size employs between 250 and 499 employees, but only 2 percent of the firms in the industry fall within this category. The value added per dollar of production wages in these efficient plants is $4.59, compared with only $4.45 for the most efficient plant size for all manufacturing. The 2 percent of the sporting goods firms having the most efficient plants account for 30 percent of capital expenditures and 23 percent of industry shipments. These firms also account for 21 percent of the total employment and 24 percent of the total payroll while contributing 26 percent of the value added by sporting goods establishments.

In 1986, the sporting goods industry employed an estimated 35,200 production workers, up slightly from the previous year. This gain, primarily the result of increases in production for export, was in sharp contrast to the loss of 15,800 jobs between 1972 and 1985.

Reflecting the shift to off-shore production, 14,800 of the lost jobs were in production. Consequently, production workers' share of total employment has decreased significantly, to 75 percent in 1984 from 81 percent in 1978. The average wage rate in the industry, at about $7 per hour, is well below the more than $10 per hour for all manufacturing.

Product Liability

Industry sources indicate that insurance premiums and legal fees may be as high as 15 percent of sales in certain sporting goods product lines. The manufacturers most affected by these high costs are producers of football helmets and other equipment for contact sports. Producers of air guns, archery equipment, scuba diving equipment, and gymnastic equipment are also adversely affected. The industry reports that many producers are paying 3-4 percent of sales for product liability insurance and that the level of coverage provided by this insurance is inadequate.

According to the Sporting Goods Manufacturers Association (SGMA), the hard goods sector of the industry paid 0.3 of one percent of net sales in 1985 for insurance and this low ratio does not accurately reflect the effects of product liability on the industry. The SGMA explains that the ratio was small because some firms in the survey did not have product liability insurance and other firms discontinued product lines that had required very high insurance. Moreover, firms that have gone out of business,

Recent Performance and Forecast: Sporting and Athletic Goods, n.e.c. (SIC 3949)

(in millions of dollars except as noted)

	1984	1985[1]	1986[2]	1987[3]	Percent Change: Compound Annual 1972-84	Compound Annual 1979-84	Annual 1984-85	Annual 1985-86	Annual 1986-87
Industry Data									
Value of shipments[4]	3,765	3,803	3,955	4,154	6.7	6.0	1.0	4.0	5.0
Value of shipments (1982$)	3,746	3,818	3,916	4,033	0.8	1.6	1.9	2.6	3.0
Total employment (000)	46.7	45.2	46.4	47.8	−2.2	−3.6	−3.1	2.6	3.0
Production workers (000)	35.2	34.3	35.2	36.3	−2.7	−4.5	−2.5	2.6	3.0
Average hourly earnings ($)	6.73	6.89	7.01	—	6.6	7.2	2.4	1.7	—
Product Data									
Value of shipments[5]	3,284	3,317	3,450	3,624	6.5	4.5	1.0	4.0	5.0
Value of shipments (1982$)	3,267	3,330	3,416	3,518	0.6	0.1	1.9	2.6	3.0
Shipments price index[6] (1982=100)	100.6	99.7	101.0	103.0	5.0	4.2	−0.9	1.3	2.0
Trade Data									
Value of imports	1,090	1,193	1,320	1,452	13.8	12.4	9.4	10.7	10.0
Import/new supply ratio[7]	0.249	0.264	0.277	0.286	5.5	5.9	6.1	4.6	3.4
Value of exports	332	300	318	343	5.0	1.8	−9.6	6.0	8.0
Export/shipments ratio	0.101	0.090	0.092	0.095	−1.4	−2.5	−10.5	1.9	2.8

[1]Estimated except for exports and imports.
[2]Estimated.
[3]Forecast.
[4]Value of all products and services sold by the Sporting and Athletic Goods, n.e.c. industry.
[5]Value of products classified in the Sporting and Athletic Goods, n.e.c. industry produced by all industries.
[6]Developed by the Office of Industry Assessment, ITA.
[7]New supply is the sum of product shipments plus imports.
SOURCE: U.S. Department of Commerce: Bureau of the Census, Bureau of Economic Analysis, International Trade Administration (ITA). Estimates and forecasts by ITA.

such as football helmet manufacturers, were not included in the data.

Some industry observers claim the high cost of product liability insurance has significantly affected the industry's competitiveness because product lines have been dropped by some firms. Additionally, the high costs have increased prices of U.S. goods in international markets, resulting in fewer markets and fewer American jobs. Research and development of new products and new technologies have been delayed pending the outcome of this crisis.

A broad product liability bill is before both houses of Congress, but there is a high degree of uncertainty that either house will act on the legislation anytime soon. There is continued debate on the $250,000 cap on awards for "pain and suffering."

Foreign Trade

For the last 15 years the United States has had a trade deficit in sporting goods. The trade deficit grew from $47 million in 1972 to an estimated $1 billion in 1986, and more than $1.1 billion is forecast for 1987.

Imports. In 1986, U.S. imports of sporting goods for consumption increased almost 11 percent to $1,320 million. The United States imported 30 percent of its estimated apparent domestic consumption of $4,452 million in 1986.

The rapid depreciation of the U.S. dollar since 1985 so far has had only a moderate effect on U.S. imports. Of the three countries accounting for two-thirds of U.S. imports, Japan is the only one whose currency has appreciated against the U.S. dollar. Japan, which has experienced a 35 percent appreciation in its yen, accounts for only 12 percent of U.S. imports of sporting goods.

The primary sources for U.S. sporting goods imports are Taiwan, 37 percent; South Korea, 18 percent; Japan, 12 percent; Canada, 4 percent; France, 4 percent; and Haiti, 3 percent. Taiwan and South Korea have not experienced currency appreciation, and these countries receive duty-free treatment under the Generalized System of Preferences.

In 1986, imports of fishing equipment are expected to total $208 million, down about 5 percent from the record 1985 imports of $219.2 million. Over 80 percent of U.S. imports of fishing equipment came from the following three countries: Japan, 36 percent; Taiwan, 23 percent; and South Korea, 23 percent. The appreciation of the Japanese yen is certainly a factor in the slowing of these imports.

U.S. imports of golf equipment totaled an estimated $148 million in 1986, a 39 percent increase over the previous year. Since 1981, imports of golf equipment have shown continuous growth, expanding 30-40 percent annually. The leading supplying countries are Taiwan, 35 percent; South Korea, 28 percent; and Japan, 19 percent.

U.S. imports of exercise equipment have once again exhibited rapid growth. U.S. imports in 1986 are estimated at $207.4 million, 51 percent higher than in 1985. Taiwan accounted for 87 percent of the total increase.

Exports. In 1986, U.S. exports of sporting goods were an estimated $318 million, up 6 percent over 1985. This increase represented a reversal of a 3-year declining trend. Exports increased about 8 percent per year from 1972 to 1982 but then decreased about 8 percent per year from 1982 to 1985. Japan continues to be the largest export market for U.S. sporting goods. Six countries account for almost two-thirds of the exports: Japan, 24 percent; Canada, 15 percent; the United Kingdom, 8 percent; Haiti, 7 percent; Australia, 6 percent; and Germany, 5 percent.

Exports of fishing equipment, at $22.6 million in 1986, rose 8 percent from 1985, reversing the rapid decline evident since 1982. The primary export markets for these products are Canada, 26 percent; Japan, 22 percent; Australia, 6 percent; Mexico, 5 percent; and the United Kingdom, 3 percent.

U.S. exports of golf equipment in 1986 were $108 million, up 9 percent over 1985. These products are primarily exported to Japan, 41 percent; Canada, 16 percent; the United Kingdom, 16 percent; Australia, 6 percent; and Mexico, 3 percent. U.S. exports to Japan dropped from $73.6 million in 1982 to only

$36.2 million in 1985, accounting for 83 percent of the decline in total exports of golf equipment during 1982-85.

U.S. exports of exercise equipment declined an estimated 12 percent in 1986 to a new low of $23.3 million. The primary markets for exercise equipment are Saudi Arabia, 18 percent; Japan, 15 percent; Canada, 14 percent; the United Kingdom, 13 percent; and Germany, 5 percent. From 1981 to 1984, Saudi Arabia more than doubled its purchases of U.S. sporting goods, from $2.8 million to $6.4 million, but its 1986 purchases were estimated to be less than half the 1985 value.

In 1986, exports of miscellaneous sporting goods were $164 million, a 1 percent decline from 1985. Miscellaneous sporting goods account for 54 percent of total U.S. exports of sporting goods. The primary markets for these miscellaneous goods are Japan, 27 percent; Canada, 21 percent; Haiti, 19 percent; Germany, 11 percent; and Australia, 10 percent.

Changes in trade patterns. Currency exchange rates affect relative prices of products moving in world trade, and changes in relative prices affect a country's competitiveness in that trade. The recent depreciation of the U.S. dollar relative to Japan and Europe is expected to slow the rate of import penetration and to accelerate the growth of U.S. exports of sporting goods. Conversely, the rise in the value of the dollar vis-a-vis other currencies after flexible exchange rates were instituted in the early 1970's contributed to a loss of U.S. market shares, both domestically and in the world market, as shown in the accompanying tables. Table 1 gives changes in U.S. share of the world sporting goods market vis-a-vis four other major exporters—South Korea, Taiwan, Germany, and Japan. Table 2 compares inflation-adjusted exchange rates of these countries plus Canada.

Table 1: Comparative Shares of World Trade in Sporting Goods
(in percent)

Year	U.S.	Taiwan	South Korea	Japan	West Germany
1975	17.4	6.5	2.7	10.9	5.1
1976	14.1	8.6	3.9	12.6	5.0
1977	12.1	8.9	5.7	13.5	5.4
1978	13.2	11.1	5.6	10.3	5.1
1979	13.4	11.2	5.7	8.5	5.2
1980	12.6	17.3	6.0	8.0	5.2
1981	14.4	14.9	7.0	8.9	5.4
1982	14.5	16.1	7.2	8.6	5.4
1983	13.0	19.7	8.1	8.5	5.2
1984	10.0	24.4	9.4	8.6	4.9
1985	8.6	25.8	9.0	10.6	4.9

Table 2: Inflation-Adjusted Exchange Rate Index (Foreign currency per U.S. dollar; 1985=100)

Year	Canada	Taiwan	South Korea	Japan	West Germany
1975	86.5	NA	97.5	84.2	59.1
1976	85.3	NA	88.5	88.4	66.4
1977	87.7	88.7	86.1	84.5	63.0
1978	93.1	87.5	82.4	76.0	57.4
1979	96.8	86.6	82.4	72.0	55.3
1980	95.2	81.2	81.6	82.5	56.7
1981	98.4	86.6	83.1	75.1	69.5
1982	96.5	93.3	83.3	86.4	75.0
1983	95.1	96.5	87.8	88.5	76.0
1984	95.7	96.3	96.1	90.4	85.5
1985	100.0	100.0	100.0	100.0	100.0
1986*	99.7	96.8	104.3	76.7	71.5

*Estimate based on the first two quarters.
SOURCE: U.S. Department of Commerce, International Trade Administration.
Wholesale price indices for foreign countries and market exchange rates are from the International Monetary Fund's International Financial Statistics. Taiwan's wholesale price index and market exchange rate were provided by the Coordination Council for North American Affairs.

As shown in table 1, U.S. share of total world trade in sporting goods fell by more than half between 1975 and 1985, from 17.4 percent to a new low of 8.6 percent. During that same period, Taiwan's, and South Korea's shares increased over threefold. Taiwan's shot from 6.5 percent in 1975 to 25.8 percent for 1985, and South Korea's rose from 2.7 to 9.0 percent. Shares held by Japan and Germany both remained relatively constant at 11 and 5 percent, respectively.

During the most recent period of U.S. dollar appreciation, from the fourth quarter of 1980 to the first quarter of 1985, the United States suffered a 12 percent annual decline in its share of world trade as prices for its products increased relative to those of other countries. Taiwan's share, in contrast, rose 14.6 percent per year, and South Korea's 6.5 percent.

As the world's largest importer of sporting goods, exceeding the EC and Japan combined, the United States has been the target for many of these increased imports, especially from Taiwan. Imports' share of U.S. new supply rose from 18.5 percent in 1980 to 26.4 percent in 1985, with Taiwan's share of the import market soaring from 13.4 percent to 37.1 percent. South Korea's share, on the other hand, remained about steady at 18.5 percent.

The currencies of Taiwan and South Korea are closely pegged to the U.S. dollar, but inflation-adjusted exchange rates in Table 2 show considerable changes nonetheless. The real value of the new Taiwanese dollar declined only 15 percent from 1981 to 1985. Over the same period, the real value of the South Korean won declined even more at 20 percent. In contrast to these decreases, the Japanese yen and the German mark experienced a 33 percent and 44 percent decrease in real value during this period.

Exports of golf clubs to Japan and U.S. imports of ski gloves from South Korea and Taiwan are two examples of how exchange rates affect relative prices and how these relative prices, in turn, affect trade flows.

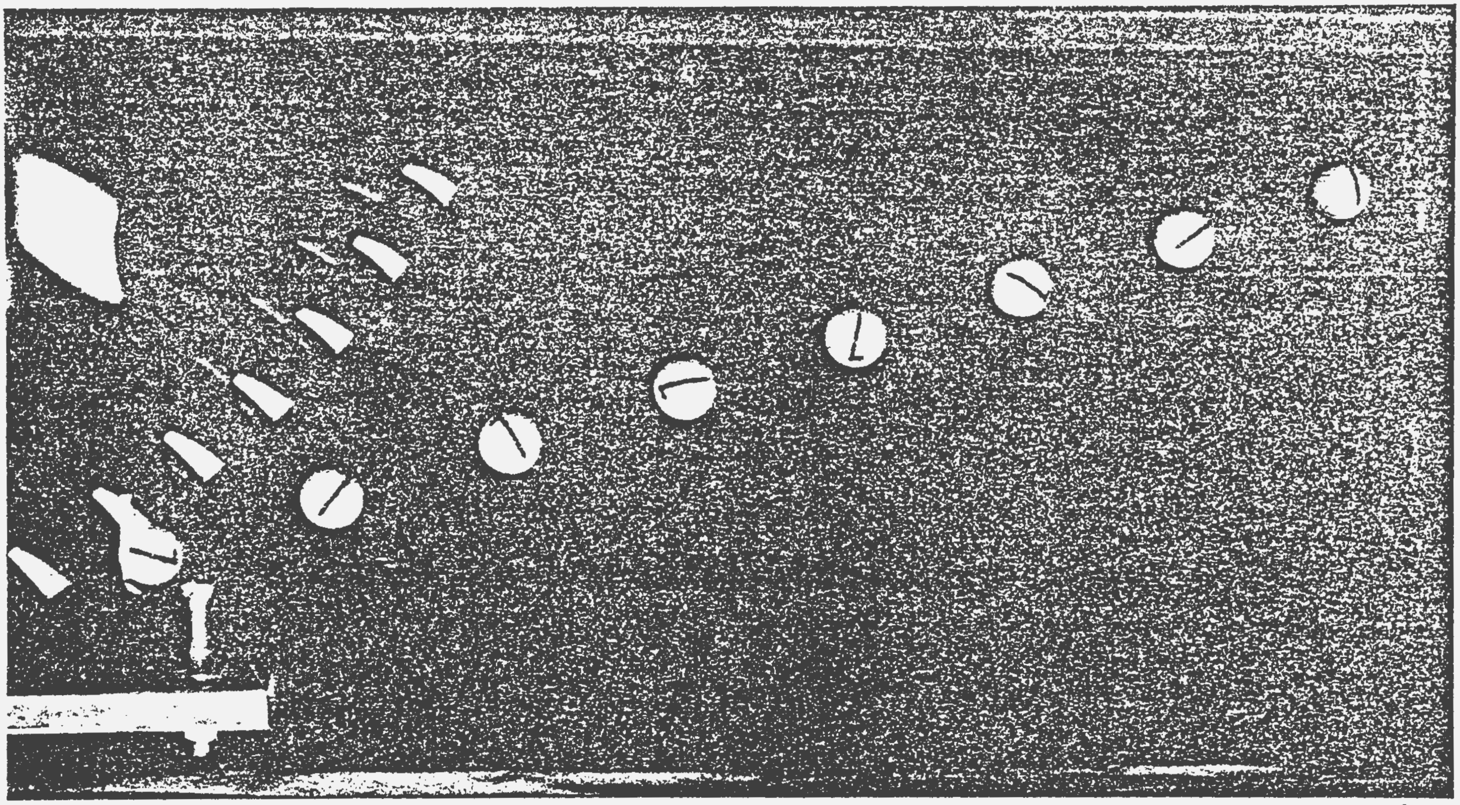
In 1985, U.S. imports of ski gloves were valued at $76 million. The quantity of these imports had increased about 30 percent in 1983 and 1984, but the 1985 increase was only 6 percent, and a 4 percent decrease is estimated for 1986.

Golf clubs were the largest single U.S. sport product exported in 1985. Their value amounted to $37 million, 12 percent of total sporting goods exports and down from a 1982 peak of $64 million. During the recent period of dollar appreciation the quantity of golf club exports fell by half. Conversely, the dollar depreciation, which started early in 1985, resulted in an estimated 6 percent increase in the quantity of golf clubs exported in 1986.

Outlook for 1987

In 1987 the value of sporting goods shipments is expected to increase 3 percent (in 1982 dollars). Since personal disposable income (PDI) is the most significant determinant of demand for sporting goods, the 2.4 percent constant-dollar increase in PDI in 1987 should result in significant growth in sporting goods consumption. Other factors that play a role in consumer demand are interest rates and the general level of inflation. These factors affect consumer confidence and are expected to have a positive effect in 1987.

The domestic industry will be more competitive with foreign suppliers as the full effects of the dollar devaluation are felt in 1987. The price sensitivity of sporting goods demand will result



Spalding

A stop-action photo shows the path of a golf ball being tested. Demograhic changes and growing interest in outdoor sports bode well for sporting goods such as golf balls and equipment.

in fewer imports and more exports, although the value of imports still will increase more rapidly than the value of exports.

Long-Term Prospects

The long-term outlook for the sporting goods industry should improve. A 3 percent annual increase in constant-dollar domestic shipments is expected over the next 5 years. The value of the dollar on international currency exchanges is expected to stabilize near the current value, resulting in a more competitive position for the U.S. industry. Over the long run the trade deficit in sporting goods is expected to decrease from the current level of $1 billion.

Capital expenditures per production worker, estimated to be one-third the level of capital expenditures per production worker in all manufacturing, are expected to increase in the next 5 years. However, the rate of growth of expenditures may not be sufficient to regain the level of competitiveness that the U.S. sporting goods industry once enjoyed. Since new capital expenditures have been growing at two-thirds the rate of growth in industry shipments, some industry observers feel that efficiency gains will suffer in the future.

Historical Trends: Sporting and Athletic Goods, n.e.c. (SIC 3949)

(in millions of dollars except as noted)

	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984
Industry Data													
Value of shipments[1]	1,729	1,613	1,892	1,993	2,303	2,425	2,576	2,812	3,055	3,249	3,377	3,334	3,765
Value of shipments (1982$)	3,405	2,971	3,336	3,258	3,216	3,295	3,427	3,464	3,370	3,399	3,377	3,295	3,746
Total employment (000)	61.0	57.6	61.9	54.5	60.0	57.2	59.7	56.0	53.9	52.4	47.8	44.8	46.7
Production workers (000)	49.1	46.7	50.5	43.8	48.8	46.1	48.1	44.3	42.2	40.4	36.0	33.7	35.2
Average hourly earnings ($)	3.12	3.12	3.48	3.82	4.10	4.17	4.51	4.76	5.13	5.49	6.29	6.51	6.73
Capital expenditures	46.7	45.1	59.4	44.4	89.0	62.7	69.3	88.8	73.5	68.1	76.5	—	—
Product Data													
Value of shipments[2]	1,539	1,489	1,726	1,798	2,133	2,217	2,450	2,640	2,847	3,042	3,161	3,127	3,284
Value of shipments (1982$)	3,030	2,741	3,042	2,939	2,978	3,012	3,260	3,252	3,140	3,182	3,161	3,090	3,267
Shipments price index[3] (1982 = 100)	56.3	57.9	62.6	67.2	73.9	74.6	76.0	82.0	91.2	96.0	100.0	101.2	100.6
Trade Data													
Value of imports	231	282	314	264	401	523	566	607	646	624	695	828	1,090
Import/new supply ratio[4]	0.130	0.159	0.154	0.128	0.158	0.191	0.188	0.187	0.185	0.170	0.180	0.209	0.249
Value of exports	184	143	168	169	172	194	245	303	355	385	388	366	332
Export/shipments ratio	0.119	0.096	0.097	0.094	0.081	0.088	0.100	0.115	0.125	0.127	0.123	0.117	0.101

[1] Value of all products and services sold by the Sporting and Athletic Goods, n.e.c. industry.

[2] Value of products classified in the Sporting and Athletic Goods, n.e.c. industry produced by all industries.

[3] Developed by the Office of Industry Assessment, ITA.

[4] New supply is the sum of product shipments plus imports.

SOURCE: U.S. Department of Commerce: Bureau of the Census, Bureau of Economic Analysis, International Trade Administration (ITA).

Between 1987 and 1991, the U.S. market for sporting goods is expected to expand rapidly as the population increases and changes. The 25-44 year age group will increase by more than 10 percent over the next 5 years, twice the growth rate for the general population, and thus boost demand for sporting goods, most of which are purchased by individuals in this age group. These demographic changes, as well as the international, economic, and income changes should result in growth of the U.S. sporting goods industry—*Ken Stiltner, Office of Consumer Goods, (202) 377-2132, October 1986.*

Additional References

Sporting Goods Industry, Financial Performance in 1985, Sporting Goods Manufacturers Association, North Palm Beach, FL 33408.

Quarterly Sales Trends in the Sporting Goods Market, Sporting Goods Manufacturers Association, North Palm Beach, FL 33408.

The Sporting Goods Market in 1986, National Sporting Goods Association, Mt. Prospect, IL 60056.

Musical Instruments and Parts: Toys and Sporting Goods, SIC 3949, Series MC82-I-39B, 1982, Census of Manufactures, Bureau of the Census, U.S. Department of Commerce, Washington, DC 20233.

Statistics for Industry Groups and Industries, Series M84(AS)-1, 1984 Annual Survey of Manufactures, Bureau of the Census, U.S. Department of Commerce, Washington, DC 20233.

Value of Product Shipments, Series M84(AS)-2, 1984 Census of Manufactures, Bureau of the Census, U.S. Department of Commerce, Washington, DC 20233.

Sports Participation in 1985, National Sporting Goods Association, Mt. Prospect, IL 60056.

The Sporting Goods Directory 1986, The Sporting News Publishing Company, St. Louis, MO 63132.

The Sporting Goods Dealer, The Sporting News Publishing Company, St. Louis, MO 63132.

Sports Merchandiser, W.R.C. Smith Publishing Company, Atlanta, GA 30357.

Sporting Goods Business, Gralla Publications, New York, NY 10036.

RECREATIONAL BOATS AND BOATING EQUIPMENT

Continuing their growth rate of the recent past, retail sales of recreational boats and boating equipment rose an estimated 5-6 percent in 1986. Declines in interest rates and fuel prices, along with steady if slow economic growth, have contributed to the further expansion. However, much of the pent-up demand for boats that sparked growth after the 1982 recession appears to have been satisfied, and the near term may see stronger demand for boating engines, equipment, and accessories than for boats per se.

Domestic manufacturers of boats and equipment so far do not appear to have benefited from recent gains in demand, which is being satisfied increasingly by imports while exports decline. This imbalance resulted in a nearly 40 percent rise in the boat trade deficit in 1985. The pressure from imports could ease in the future, however, if the dollar remaines weak vis-a-vis other currencies.

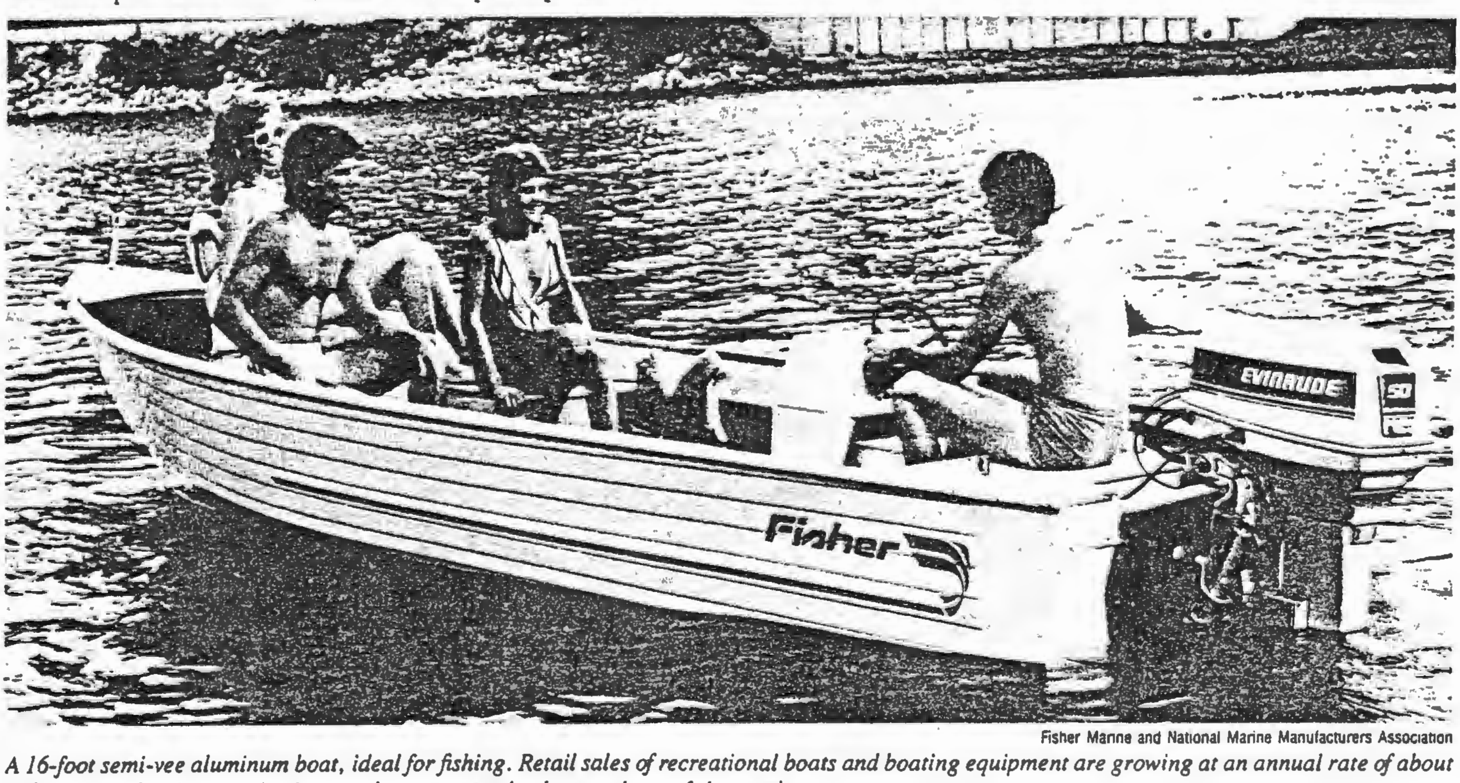
Current Situation

Industry reports indicate that retail expenditures on boating and related activities may have surpassed $14 billion in 1986, compared with $13.3 billion estimated for 1985. These figures include expenditures for new and used outboard and inboard boats, noncommercial fishing boats, motors, engines, accessories (boat trailers, pumps, cordage, coatings, etc.), safety equipment, water skis and ski accessories, sailboats and smaller craft, as well as fuel, insurance, docking, maintenance, launching, storage and repair, and club memberships.

The number of recreational boats in 1986 is estimated to be up about 3 percent from the 13.9 million estimated for 1985. Some 9.7 million of these are registered recreational boats, compared with 9.4 million registered as of the end of 1985. Boat registrations by region during 1985 were as follows:

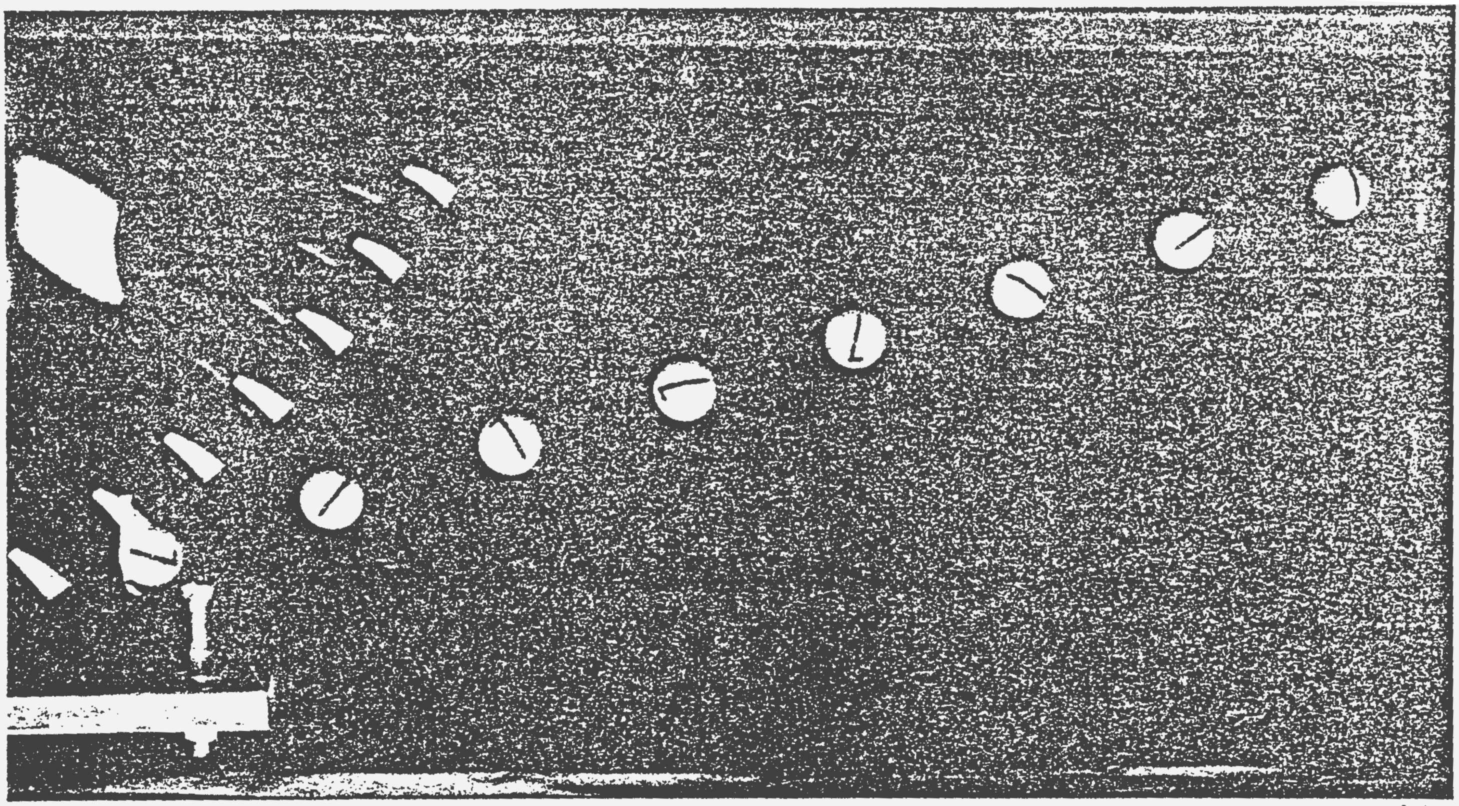
Region	Percent
Great Lakes	27
Gulf Coast	19
Middle-Atlantic	17
West Coast	11
Midwest, Mountain	11
East-Central	10
New England	5
Noncontiguous	1

[1]Percentages do not add due to rounding.
SOURCE: The Boating Business, 1985.
These percentages are believed to have held through 1986.



Fisher Marine and National Marine Manufacturers Association

A 16-foot semi-vee aluminum boat, ideal for fishing. Retail sales of recreational boats and boating equipment are growing at an annual rate of about 5-6 percent, but imports in the past have captured a larger share of the market.



Spalding

A stop-action photo shows the path of a golf ball being tested. Demograhic changes and growing interest in outdoor sports bode well for sporting goods such as golf balls and equipment.

in fewer imports and more exports, although the value of imports still will increase more rapidly than the value of exports.

Long-Term Prospects

The long-term outlook for the sporting goods industry should improve. A 3 percent annual increase in constant-dollar domestic shipments is expected over the next 5 years. The value of the dollar on international currency exchanges is expected to stabilize near the current value, resulting in a more competitive position for the U.S. industry. Over the long run the trade deficit in sporting goods is expected to decrease from the current level of $1 billion.

Capital expenditures per production worker, estimated to be one-third the level of capital expenditures per production worker in all manufacturing, are expected to increase in the next 5 years. However, the rate of growth of expenditures may not be sufficient to regain the level of competitiveness that the U.S. sporting goods industry once enjoyed. Since new capital expenditures have been growing at two-thirds the rate of growth in industry shipments, some industry observers feel that efficiency gains will suffer in the future.

Historical Trends: Sporting and Athletic Goods, n.e.c. (SIC 3949)

(in millions of dollars except as noted)

	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984
Industry Data													
Value of shipments[1]	1,729	1,613	1,892	1,993	2,303	2,425	2,576	2,812	3.055	3.249	3,377	3,334	3,765
Value of shipments (1982$)	3,405	2,971	3,336	3,258	3,216	3,295	3,427	3,464	3,370	3,399	3.377	3,295	3,746
Total employment (000)	61.0	57.6	61.9	54.5	60.0	57.2	59.7	56.0	53.9	52.4	47.8	44.8	46.7
Production workers (000)	49.1	46.7	50.5	43.8	48.8	46.1	48.1	44.3	42.2	40.4	36.0	33.7	35.2
Average hourly earnings ($)	3.12	3.12	3.48	3.82	4.10	4.17	4.51	4.76	5.13	5.49	6.29	6.51	6.7
Capital expenditures	46.7	45.1	59.4	44.4	89.0	62.7	69.3	88.8	73.5	68.1	76.5	—	—
Product Data													
Value of shipments[2]	1,539	1,489	1,726	1,798	2,133	2,217	2,450	2,640	2,847	3,042	3,161	3,127	3,28
Value of shipments (1982$)	3,030	2,741	3,042	2,939	2,978	3,012	3,260	3,252	3,140	3,182	3,161	3,090	3,26
Shipments price index[3] (1982=100)	56.3	57.9	62.6	67.2	73.9	74.6	76.0	82.0	91.2	96.0	100.0	101.2	100.
Trade Data													
Value of imports	231	282	314	264	401	523	566	607	646	624	695	828	1,09
Import/new supply ratio[4]	0.130	0.159	0.154	0.128	0.158	0.191	0.188	0.187	0.185	0.170	0.180	0.209	0.24
Value of exports	184	143	168	169	172	194	245	303	355	385	388	366	33
Export/shipments ratio	0.119	0.096	0.097	0.094	0.081	0.088	0.100	0.115	0.125	0.127	0.123	0.117	0.10

[1]Value of all products and services sold by the Sporting and Athletic Goods, n.e.c. industry.

[2]Value of products classified in the Sporting and Athletic Goods, n.e.c. industry produced by all industries.

[3]Developed by the Office of Industry Assessment, ITA.

[4]New supply is the sum of product shipments plus imports.

SOURCE: U.S. Department of Commerce: Bureau of the Census, Bureau of Econom Analysis, International Trade Administration (ITA).

The number of Americans participating in recreational boating in 1986 totaled roughly 69 million, compared with 67.9 million in 1985. About half the U.S. population lives within 50 miles of water and that proportion is growing as a result of population shifts toward shorelines, especially in the sunbelt. The U.S. coastline (including the Great Lakes) has almost 83,000 miles suitable for boating.

Water sports activities—particularly water skiing and sport fishing—have continued to grow in popularity, boosting demand for sport boats, ski boats, and run-abouts. This trend has been supported by more aggressive marketing at the dealer level and greater availability of credit at lower interest rates.

Among the recent gainers have been medium-priced sterndrive boats and inboard cruiser-drive boats. Together they were expected to capture 10-15 percent more of the market in 1986.

Sales of outboards, on the other hand, have been going up in value, but the number of units sold has been falling. In 1985, their value rose about 7 percent to $760 million, but unit sales declined 4 percent to 305,000; average price of an outboard boat reached nearly $2,500 that year, or about 11 percent more than in 1984. If the same percentage growth was maintained the cost of an outboard boat in 1986 would have risen to about $2,780. As in the past the 16-foot motorboats and other small craft accounted for the bulk of the unit sales volume.

Sales of outboards have been supported by innovations in hull design, more efficient advanced technology, improved power plants, and strong promotional campaigns by manufacturers. The availability of affordable financing also has been a positive factor.

In addition to selected growth in the power boat industry, sales of engines, trailers, and accessories were expected to show gains through 1986. Industry reports have called 1986 a year for improvement and upgrading, with good sales performances seen for items such as marine electronics, galleyware, foul weather gear, and maintenance products.

The average boat dealer reportedly grossed more than $800,000 in 1985, compared with less than $700,000 in 1984. Based on this growth rate, earnings in 1986 should have surpassed $900,000. Average sales per waterfront dealer may have reached $1.2 million, compared with around $1 million recorded in 1985.

The industry continues to be affected by a number of issues and trends, including:

- Further growth in private "dockminiums" in line with growth in condominiums and the loss of conventional slip spaces and shorefront. Dockminiums are especially prevalent in the Northeast, Mid-Atlantic States, and Florida. California is seen as the next probable area for growth.
- A number of recent mergers and acquisitions within the industry, which are seen leading to concentration of financial and other resources and strengthened vertical integration.
- The rising cost of liability insurance, which is beginning to adversely affect the industry, despite a favorable trend in boating safety and fatality statistics.
- Tax reform that would eliminate the deduction for interest paid on financing of consumer goods. This change could especially affect the sale of large cruisers and sailboats (30 feet and up).

Rapid import growth continued to hurt U.S. boating manufacturers through 1985 and into 1986, negating the positive effects of rising consumer demand. Imports of boats and equipment rose nearly 24 percent in 1985 to a high of more than $350 million, while U.S. exports dropped 7 percent, to $61 million, in their sixth straight year of decline. This left a trade deficit of about $290 million, or 39 percent above that in 1984.

Inboard motorboats made up the largest share of both imports and exports. Imports of inboard motorboats amounted to nearly $180 million in 1985, or 47 percent more than in 1984, and accounted for 85 percent of the total increase in pleasure boat imports during 1985. The five leading suppliers were Taiwan, Japan, The Netherlands, Italy, and Singapore. Exports of inboard motor boats rose slightly to $36.9 million in 1985 from $34.2 million the previous year and probably showed modest growth again in 1986. Inboard motor boats made up 60 percent of U.S. boat exports in 1985 and went primarily to Canada, Spain, Italy, the Bahamas, and the United Arab Emirates.

Outlook for 1987

The U.S. boating industry is reasonably optimistic about its performance in 1987. With the recent growth rate of 5-6 percent

O'Brien International and National Marine Manufacturers Association

Making a water ski. Retail expenditures on boating and related activities may reach $14.8 billion in 1987 if they continue their recent annual growth rate of 5-6 percent.

expected to be maintained, retail sales by the industry could reach $14.8 billion. There could, however, be a further shift toward improvement and maintenance of existing equipment and away from the purchase of new boats.

The industry will probably continue to focus much of its marketing effort on medium and higher priced boating lines. As in 1986, the medium-priced sterndrives and upper- and lower-inboard sterndrives offer potential for growth in 1987, both in the domestic and foreign markets.

The industry will probably continue to show some sensitivity to changes in interest rates. Lower interest rates could reduce the manufacturing and operational costs of the U.S. recreational boating industry and possibly lead to some reduction in prices of products and services. Favorable credit terms to consumers also could boost sales, although some sources believe that interest rates will not have as great an impact on demand in 1987 as in earlier years. Another possible stimulus to demand could arise from continued low oil prices and the accompanying savings on fuel costs.

Further depreciation of the dollar against other currencies should help stem the inflow of imports and bolster exports. However, foreign competitors may continue to develop their market infrastructures in this country; once infrastructures are in place, it takes several years to alter them and for the effects of currency changes to work their way through the system. Thus, recreational boat dealers may again experience a better year than the manufacturers.

Long-Term Prospects

The U.S. boating industry is expected to average a 5-6 percent annual growth rate during the next 5 years. The National Marine Manufacturers Association (NMMA) projects the number of new boats owned to reach 15.9 million by 1990 and 19-21 million by the year 2000, compared with 13.9 million in 1985.

Current trends also indicate that there could be 10.8 million new boating customers by the late 1980s. Contributing to these expectations is a prospective doubling of households with incomes of $35,000 and above by 1995, including a 31 percent increase in the number headed by 35-44 year olds. These individuals are now in the 25-34 age group, which, according to a NMMA survey of 35,000 households, includes the greatest number of boating participants, especially among those with incomes between $35,000 and $49,000.

The sales positions of U.S. boat manufacturers could improve if interest rates continue to decline or if decline of the dollar makes their products more competitive on world markets. Manufacturers must regain lost shares, both in this country and abroad.

Achievement of projected growth, however, also depends on the availability of physical facilities, already in short supply in some areas. New marine construction—marinas, harbor access facilities, and waterfront redevelopment—could offer opportunities for growth in the next 5 years.—*Dr. Jack Shuman, National Oceanic and Atmospheric Administration (NOAA), (301) 443-6076, October 1986.*

Additional References

Boating Statistics, 1985, COMDITINST. M 16754.1 G, United States Coast Guard, U.S. Department of Transportation, Washington, DC.

Statistical Abstract of the United States, 1986, Bureau of the Census, U.S. Department of Commerce, Washington, DC.

The Boating Market, A Sports Participation Study, The National Marine Manufacturers Association, 401 North Michigan Avenue, Chicago, IL 60611.

"Powerboats," *Changing Times*, Vol. 40 No. 7, pp 74-82, July 1986.

"Monied Midlife," July 1986, *American Demographics*.

Participation in Outdoor Recreation Among American Adults and the Motivations Which Drive Participation, for Presentation to the President's Commission on Americans Outdoors, March 1986, Market Opinions Research, Detroit, MI.

INTER/PORT. News and Views for the American Recreational Boating Industry, June 26, 1986, The National Marine Manufacturers Association, 401 North Michigan Avenue, Chicago, IL 60611.

Boating 1985, A Statistical Report on America's Top Family Sport, The National Marine Manufacturers Association, 401 North Michigan Avenue, Chicago, IL 60611.

"The Boating Business," 1985, *Boating Industry Magazine*, Whitney Publishers, New York, NY 10024.

Power Boaters and Sailboaters in Beaufort County, South Carolina, A Psychographic and Demographic Segmentation Analysis, 1985, PhD dissertation, Thomas D. Potts, Texas A&M University.

Moyat, Robert, *The Demographics of Boating*, The National Association of Products and Services, September 1986, Chicago, IL 60611.