

# **Stryker Corp.**

**Nomination for 2004 NAIC Growth Company of the Year**

**Nomination Submitted by:**  
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## Introduction

Founded in 1941 by Dr. Homer Stryker, a leading orthopedic surgeon and inventor of several orthopedic devices, Stryker Corporation – which started as a supplier to the US military -- has become a worldwide leader of orthopedic implants. Analysts describe this business as one of the hottest growth areas in healthcare. Last year the Kalamazoo, Michigan based company's sales grew 20% to exceed \$3.6 billion.

Based on information derived from Value Line, Standard and Poor's and Argus reports; magazine articles; annual, 10K and 10Q financial reports; and a telephone discussion with Mr. Dean Bergy (Stryker CFO), I have concluded Stryker is an excellent quality, classic growth company. Therefore, for the following reasons, I am pleased to nominate Stryker Corporation for the **NAIC 2004 Growth Company of the Year**.

- Outstanding growth: 23.0% per annum revenue growth and 21.0% per annum earnings per share growth for the past 5 years; 21.0% per annum sales growth and 22.5% per annum earnings growth for the past 10 years (Value Line). Indeed, according to Value Line, Stryker's net earnings growth has exceeded 20% in all but one year for the past 27 years.
- Low debt: As of the end of 2003, Stryker's long-term debt was \$18.8 million – down from \$1.4 billion in 1998 when they acquired Howmedica from Pfizer. Their debt/equity ratio is less than 1%. The company believes they have sufficient operations cash flow and revolving credit (\$802.1 million) to fund anticipated future growth without additional debt and the company plans to be debt free by the end of this year. All of this assumes there are no large acquisitions.
- Pricing power: Stryker's products have long histories and are protected by patents. Surgeons are reluctant to switch to competitor's products because of the high cost of retraining. Hence, there is considerable loyalty to Stryker's products, which creates substantial barriers to entry from competition. Stryker finds they can reasonably raise prices when necessary because of this loyalty. In September 2003, the company implemented a 6% price increase for US products after prices had been relatively flat for several years. Like the problem major drugs are finding, there is resistance to the pricing increases from insurance companies but unlike major drugs, Stryker's products tend to be nonrecurring. That is, you have an implant once. Also, the implants are profitable for hospitals. Stryker is sensitive to the pricing issue and is careful in their planning of price increases.
- Productive R&D program: Their R&D ranges from 5% to 6% of sales – comparable to their peers. Stryker continues to have a regular flow of new products coming from their investment. They recently announced a high tech tool for knee replacement surgery consisting of a smart camera and special software that alerts the doctor to any unwanted position changes in the patient's leg. The equipment is getting very positive reviews from the medical and financial communities.
- Corporate commitment to 20% profit growth: (2003 annual report).
- Conservative balance sheet and accounting policy: They have little debt and strong cash flow sufficient to fund future internal growth. Options are reasonable (4%) and pension growth assumptions are low (5.3%).
- Positioned in a major growth market: Hip/knee joint replacement is a major growth area as aging baby boomers struggle to keep active and the population throughout the world struggles with an obesity problem. Approximately 40% of the 600,000 joint replacements each year are performed on the under-65 population – up from 20% only 15 years ago. Recently, Stryker signed Jack Nicklaus as a spokesperson after he had a hip repaired. Stryker estimates their worldwide market share to be as follows: hips/knees – 20% to 25%; spine (relative newcomer but fastest growing) – 7% to 8%; and hospital instruments – 30%.

Stryker shares trade on the New York Stock Exchange under the symbol SYK. It is ranked #44 on Better Investing magazine's top 100 stocks owned by investment clubs. Stryker has never been a Better Investing stock to study nor has it been an NAIC growth stock of the year winner. A peer, Biomet, was a Better Investing magazine stock to study in September 2003. In the following section, I will use Biomet as an industry proxy to compare with Stryker.

Stryker's strong growth is likely to persist. The global orthopedic industry is expected to expand 12% per year. Mr. Bergy said that Stryker believes the growth relative to their business will be 15% to 16% worldwide including effects of foreign currency. Further, Stryker believes their future growth will exceed 20%.

## Analysis

### **Business and Product Summary**

According to their 10K, Stryker Corporation is a leader in the worldwide orthopedic market and is one of the world's largest medical device companies. Stryker delivers results through a wide range of capabilities including joint replacements, trauma, spine and micro implant systems, orthobiologics, powered surgical instruments, surgical navigation systems and endoscopic products as well as patient handling and emergency medical equipment. Stryker also provides outpatient physical therapy services in the United States. Stryker was incorporated in Michigan in 1946 as the successor company to a business founded in 1941 by Dr. Homer H. Stryker, a leading orthopedic surgeon and the inventor of several orthopedic products. International sales are 36% of the total sales.

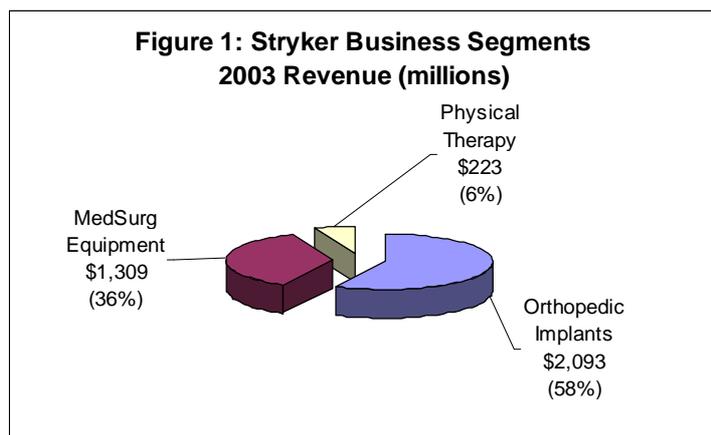
The following three paragraphs are excerpts from the S&P stock report describing Stryker's business:

*The company has three business segments. Orthopedic Implants consists of products such as hip, knee, shoulder and spinal implants, associated implant instrumentation, trauma-related products and bone cement. Artificial joints are made of cobalt chromium, titanium alloys, ceramics, or ultra-high molecular weight polyethylene, and are implanted in patients whose natural joints have been damaged by arthritis, osteoporosis, other diseases, or injury.*

*MedSurg operates four units. Stryker Instruments sells powered surgical drills, saws, fixation and reaming equipment, as well as other instruments used for drilling, burring, rasping or cutting bone, wiring or pinning bone fractures, and preparing hip or knee surfaces for the placement of artificial hip or knee joints. Stryker Endoscopy offers medical video cameras, light sources, arthroscopes, laparoscopes, powered surgical instruments, and disposable suction/irrigation devices. Stryker*

*Medical offers 30 types of specialty stretchers customized for acute care and specialty surgical facilities. Stryker Leibinger makes plate and screw systems for craniomaxillofacial surgery to repair small bones in the hands, face and head, and sells a proprietary bone substitute material, BoneSource.*

*Through a network of 374 outpatient centers in 25 states and the District of Columbia, the Physical Therapy division provides physical, occupational and speech therapy services to patients recovering from orthopedic or neurological illness and injury.*



**Comparison of Stryker with Biomet**

Stryker has three strong peers in the orthopedic implant business: Johnson and Johnson, Biomet and Zimmer. Johnson and Johnson's division that produces and markets joint reconstruction devices reported \$3.0 billion dollars of sales with 18.6% growth last year – better than Biomet but less than Stryker and Zimmer. Zimmer had sales of \$1.9 billion with a growth rate of 38.5%. Zimmer, a spin-off of Bristol-Myers, has been a separate corporation for only 4 years and so is not a candidate for growth stock of the year. Biomet's sales were \$1.4 billion with a year-to-year sales growth rate of 16.6% and Stryker's sales were \$3.6 billion with a year-to-year sales growth rate of 20.3%.

Biomet is closest in comparison to Stryker and has been in business a long time. Figure 2 shows a comparison of the two corporations. Biomet has a higher Financial Strength and pre-tax profit margin (PTPM). Stryker has a higher historical sales growth and earnings per share growth for the past 5 years. Stryker also invests more in research and development. Historically, Stryker's R&D has varied between 5% and 6% of sales. Debt for both companies is insignificant.

**Figure 2: Comparison of Stryker with Biomet**

	<b>Biomet</b>	<b>Stryker</b>	<b>Source</b>
Financial Strength	A+	A	Value Line
Earnings & Dividend Quality	B+	B+	S&P
EPS Predictability	100	100	Value Line
ROE (previous year)	22.50%	29.60%	OPS (TK4)
PTPM (2003)	32.10%	18.2%	OPS (TK4)
Sales Growth (prev 5 years)	14.50%	24.5%	Value Line
EPS Growth (prev 5 years)	17%	22.5%	Value Line
Debt/Capital Ratio	9%	1%	Value Line
R&D % of sales (2003)	4%	5%	Annual Report
PE Range (5 years)	34-20	44-27	OPS (TK4)

The item for which Stryker significantly lags is PTPM. Mr. Bergy said Biomet's profit margins are higher because they are more of a pure play in the implant business, which has higher profit margins. Stryker's PTPM also fell after the December 1998 acquisition of Howmedica and has been on the mend since that merger. It is now close to the margins they had prior to the acquisition. PTPM should continue to rise somewhat since Howmedica's implant business is high margin.

Note that the historical PE ratio for Stryker is considerably higher than that for Biomet. That higher measure most likely is due to the higher historical earnings growth rate.

**Growth**

Figure 3 shows Stryker's annual sales and earnings growth rates for the past 9 years. This figure shows the effect the acquisition of Howmedica in late 1998 had on the overall sales growth rate. It also shows that Stryker is well on its way back to the more normal 20% sales growth rates prior to the acquisition.

I asked Mr. Bergy about Stryker's growth strategy. He said the Howmedica was a very large acquisition for them and although he wouldn't rule out another large acquisition in the future, he thought growth would tend to be more internal growth with some small growth by acquisitions.

Figure 3: Stryker Sales and Earnings Growth  
(From TK4 using OPS data)

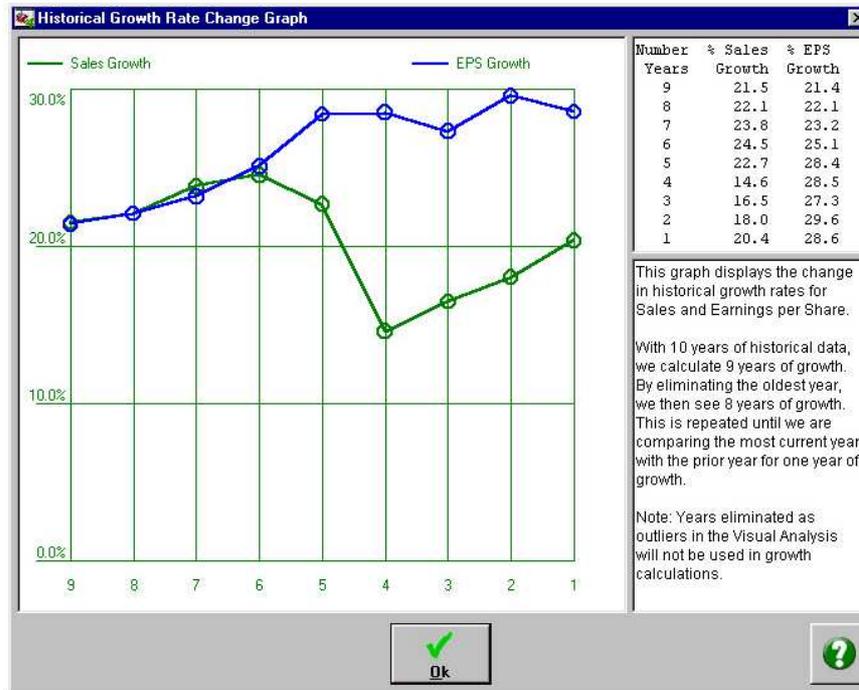


Figure 4 shows Value Line, First Call and Argus growth projections for Biomet and Stryker. Stryker also makes a commitment in their annual report to average 20% earnings growth.

Figure 4: Analyst' s Forward Sales and Earnings Projections

	BMET		SYK	
	<u>Sales</u>	<u>Earnings</u>	<u>Sales</u>	<u>Earnings</u>
Value Line	16.5%	18.0%	15.5%	22.0%
First Call		15.6%		19.2%
Argus		Not given		15.0%
Corporate Commitment		Not given		20.0%

Figure 5 gives two interesting views of sales geographic growth. First, excluding the exchange effects of foreign currency, international growth is less than domestic growth. I asked Mr. Bergy why international growth was lower than domestic growth. His answer was that international markets were more socialized medicine than are domestic markets, which holds down margins. The second observation is that orthopedic growth is stronger worldwide than is the MedSurg segment. The data in the table comes from Stryker's annual report. In both cases, the data show that the effects of foreign exchange are significant.

Figure 5: Geographic Views of Sales Growth

	<u>Sales</u>	<u>Growth</u>	<u>Growth excluding foreign exchange effects.</u>
Domestic	2334.4	18%	
International	1291.9	24%	10%
Worldwide Orthopedic	2093.0	23%	16%
Worldwide MedSurg	1309.3	18%	15%

**SSG Sales & Growth Projections**

First, all data for the SSG comes from NAIC's OPS.

I start my analysis with the data in Figure 6 from Stryker's annual reports. The net sales growth appears to be 11 to 12%. For my analysis, I believe that rate will continue and I am projecting Stryker's sales will grow 12% for the next 5 years. This number matches fairly well with analyst projections on how fast the overall worldwide orthopedic market is growing. MedSurg's market is to hospitals and may grow somewhat slower because of healthcare reimbursement pressures on hospitals but so far Stryker says they are not seeing any slowing of MedSurg's sales growth. Stryker periodically tests the ability to raise prices and so far they have been successful. In September 2003 they issued a 6% price increase for domestic markets. I project an average price increase of 2%. Foreign exchange boosted sales last year by 5% as the dollar fell in value. In 2001 and 2000 foreign exchange reduced sales. For this analysis, I am excluding any growth benefit from foreign exchange. Freight revenue was a one-time accounting change benefit in 2001. Acquired businesses have been providing 1% sales growth for the past few years. For this analysis, I project most future growth to be organic with 1% coming from acquisitions. Thus, I project sales to grow at an annual rate of 15%.

**Figure 6: Makeup of Stryker Sales Growth  
(data from annual report)**

	2003	2002	2001	2000	My Future Projection
Net Sales	12%	11%	12%	9%	12%
Price Increase	2%	3%	3%	1%	2%
Foreign Exchange	5%	nil	-3%	-2%	0%
Freight Revenue	n/a	n/a	1%	n/a	n/a
Acquired Business	1%	2%	1%	1%	1%
Total Sales Growth	20%	16%	14%	9%	15%

I determined EPS by using the Preferred Procedure (see Figure 7). I started with the sales growth of 15%. PTPM history is shown on the right side of Figure 7. I picked 20% PTPM because of Mr. Bergy's comment that Howmedica had increased their high margin implant business. It seemed reasonable that the PTPM should be able to achieve a level at least equivalent to what Stryker achieved prior to the acquisition in 1997 – which was 19.8%.

Stryker has been lowering their taxes by moving more of their manufacturing to Puerto Rico and Ireland. Mr. Bergy said that trend would continue and he thought tax rates in 5 years would settle to the mid upper 20s. Therefore, I selected a tax rate of 29%. The tax rate has been trending down steadily for the past 10 years. I assumed no growth in the number of shares of common

stock. This gives an EPS percentage growth of 18%. Referring to Figure 4, my 18% EPS projection is at the lower edge of the range from all the analysts except Argus.

Figure 7: EPS Growth Using Preferred Procedure

Preferred Procedure Calculation			
Projected 5 Year Sales @:	15.0%	<input type="checkbox"/>	0.0 \$ 7,406.9
Less Expenses(5 Yr Avg % Pre Tax Profit Margin):	15.5%	<input checked="" type="checkbox"/>	20.0 -5,925.5
Less Taxes(Last yr. Tax Rate):	30.6%	<input checked="" type="checkbox"/>	29.0 -429.6
Less Preferred Dividends (Current Pref'd Div):	\$0.0	<input type="checkbox"/>	0.0 0.0
Projected 5 Yr Total Earnings			\$ 1,051.8
Divided by Shares Outs. (Current Sh's. Outs.(M)):	400.2	<input checked="" type="checkbox"/>	400.0 2.63

% Pretax Profit Margin (2A)	
1994	17.6
1995	16.9
1996	18.6
1997	19.8
1998	17.5
1999	11.7
2000	14.6
2001	15.6
2002	17.4
2003	18.2

Make Earnings Per Share Selection Here:		
	EPS \$	EPS % Growth
<input type="radio"/> EPS by "Preferred Procedure":	2.63	18.0
<input checked="" type="radio"/> Projected EPS:	2.63	18.0
<input type="radio"/> Other:	0.00	0.0
Analysts' Estimate:	2.91	

**Selecting High and Low PEs and Lower Price for the SSG**

Biomet is a good model to use for the PE projections for Stryker. I am projecting earnings growth of 18% for Stryker. For the past 5 years, Biomet's earnings growth has averaged 17%. For that same earnings growth, Biomet's average high PE for the past 10 years has been 29.6 and average low PE has been 17.3. Because I am projecting Stryker's growth to be slightly higher, I am selecting a high PE of 30 in section 4A and a low PE of 18 in section 4B. This gives an average PE of 24. As a reasonableness test, this gives a 5-year average PEG of 1.33 – which is good.

For the low price expected for the next 5 years, I used 4Ba on the SSG. The most recent earnings per share for the twelve trailing quarters are \$1.20. Using an average low PE of 18, this gives an estimated low price of \$21.60.

The completed SSG is provided at the back of this report.

**Management**

John Brown (age 69) is the CEO of Stryker. He has been Chairman of the Board, since January 1981, and President and Chief Executive Officer, from February 1977 to June 2003. He owns 4.95% of the outstanding stock. Officers and directors including Mr. Brown own 29.3% of the company (3/04 proxy).

In June 2003, Mr. Stephen MacMillan was hired as Stryker's new President and Chief Operating Officer. His prior experience was with Pharmacia and Johnson and Johnson where he worked in their pharmaceutical and animal health divisions. The succession plan is for Mr. MacMillan to succeed Mr. Brown as CEO in 2005. Being new to Stryker, he has spent very little time with Wall Street analysts.

The company has 14,762 associates.

### **Capitalization**

As of year-end 2003 the company's long-term debt including maturities was down to \$18.8 million. They expect to have no long-term debt by the end of 2004.

As of the end of 2003, the company had \$65.9 million in cash and cash equivalents. The company's \$750 million five-year revolving credit agreement expires in December 2006. As a result of their excellent cash and outstanding debt balances, the company decided not to renew their previous \$250 million 364-day revolving credit agreement which expired in December 2003. The company believes its cash on hand and anticipated cash flows from operations will be sufficient to fund future operating-capital requirements, future facility construction and other capital expenditures. If additional funds are required, the company has \$802.1 million of additional borrowing capacity available. If they do a large acquisition, they will again obtain long-term debt.

### **Financial Management**

The annual report footnotes show a conservative basis of accounting. For Orthopedic Implants, revenue is recognized when the company is notified the item has been used. For MedSurg, revenue is recognized when the item has been shipped. For Physical Therapy, revenue is recognized when the service has been rendered.

Days sales in inventory decreased 6 days to 120 days in December 2003 from 126 days in December 2002. Accounts Receivable days sales outstanding remained unchanged at 58 days from year end 2002 to year end 2003. Reserves exist for inventory obsolescence and account receivables doubtful accounts.

Stryker's pension fund is under funded -- \$108.7 million obligations vs. plan assets of \$60.7 million. They plan to contribute \$4.8 million to the plan in 2004. Their assumption for expected return on plan assets is 5.3%, which is very conservative to what is normally assumed. The explanation I was given for this number is that the pension plan includes Japan, which has not had good returns in the past.

Dilution from options is estimated at 4% per their annual report. Likewise, Standard & Poor's core earnings for Stryker are 4% less than reported net income. Thus, Stryker will not endure a significant earnings hit in 2005 when options must be expensed.

The Consolidated Statements of Cash Flows in the 2003 Annual Report shows net cash provided by operating activities of \$648.5 million, which is above the net earnings of \$435.2 million. A close match between these two numbers is generally considered an indication of high quality earnings. A positive number indicates the company is generating more cash than the earnings would suggest. Free cash flow, a measurement tracked by some analysts, is defined as cash from operations minus cash paid for property, plant and equipment and minus cash paid for dividends. This is the cash the business generates and is available for discretionary use. Last year \$144.5 million was paid for property, plant and equipment and \$23.7 million was paid for dividends. This provided free cash flow of \$480.3 million – a very positive number.

## **Valuation**

As is common with high growth companies, Stryker is an expensive stock with a current PE above 40 although with the twelve trailing months growth rate of 29% the PEG is a more reasonable 1.5. Over the past five years the average PE has been 35.5 (see Section 3 of the SSG) but there has been substantial expansion of the PE (from an average of 20.3 1994 to 27.4 now). While the company is expected to continue a high level of growth, it will become increasingly more difficult to continue to achieve the high levels of growth in the past.

Considering the above, a reasonable growth rate assumption for the future is closer to 15% per annum for sales and 18% for earnings and a high PE of 30, which is closer to that Biomet. This puts a reasonable price valuation for purchase of SYK at \$37 per share. As of this writing, SYK is selling for \$52 per share. One caution is that institutions own 67% and executives and directors own 30%.

## Summary

With annual past growth per year for sales and earnings exceeding 20% and a business model in place that will maintain a high growth rate in the foreseeable future, Stryker is a worldwide leader in the hot medical supplies segment. Being in business since 1941, it has established a solid, growing business in a major growth market. Stryker is highly qualified to be the NAIC 2004 Growth Stock of the Year.

## Company Information

Corporate Office:	Stryker Corporation 2725 Fairfield Road Kalamazoo, MI 49002 269.385.2600
CEO	John W. Brown
Stock Listing	SYK on NYSE
Employees:	14,762
Web Page:	<a href="http://www.stryker.com">www.stryker.com</a>
Investor Relations:	Dean H. Bergy (Chief Financial Officer and Treasurer)

## References:

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3. Argus Report for Stryker, April 20, 2004, John Eade
4. Stryker 2003 Annual Report
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7. "Opportunities in Orthopedic Implants, *Better Investing*, June 2004
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9. Telephone conversation with Mr. Dean Bergy (Stryker CFO), June 2, 2004