

Recommendation: HOLD

Target Price until (12/31/2015): \$85.92

1. Reasons for the Recommendation

The recommendation for Stryker Corporation (SYK) stock is to hold. This decision is based on the company's management quality, demand outlook, and industry reform and regulations.

In October of 2012, Kevin A. Lobo was appointed as the President and Chief Executive Officer (CEO) of Stryker Corporation. Since Mr. Lobo has taken over, Stryker's stock price has increased 33% compared to 25% for the S&P 500 (as of November 22, 2013) (Google Finance, 2013). In order to continue to drive growth, Kevin Lobo and Stryker's executive committee have outlined a five year plan that includes increasing the quality and size of their sales force, continued investment in research and development, increased supply chain efficiency, expansion into international markets, and aggressive acquisition activities (Seekingalpha.com, 2013). The company has recently taken steps to pursue these goals by changing compensation structures for their sales force and increasing their investment in research and development to 6% of net revenues. Additionally, the 2013 acquisition of Trauson Holdings, a Chinese reconstructive device manufacturer, was a strategic decision to increase international sales and obtain access to international distribution networks. In 2013 Stryker also acquired MAKO, a robotic assistive surgery manufacturer, to advance their technological capabilities in the reconstructive surgery segment. Stryker has proven they can successfully integrate acquired companies, with the most recent example being their 2011 acquisitions into the Neurotechnology segment, which they have been able to grow organically by 8%-9% annually over the last two years, compared to an industry growth rate of 5.8%. Although Kevin Lobo's short tenure has produced positive results, the recent acquisition of MAKO, who has had negative net income the last five years, at an 87% premium, has brought the management's decision making under question. Although the MAKO acquisition brings strong growth prospects and synergies to Stryker, the prompt decision and high purchase price may be indicative of the company's future strategy for "aggressive acquisitions" (Seekingalpha.com, 2013). Stryker has also been experiencing declining gross and operating margins, which has negatively impacted net income in 2012 and the first three quarters of 2013. These declining margins have been primarily driven by the 2.3% excise tax, acquisition related costs, product recalls, and legal settlements. Many of these costs are "non-recurring," which will enable Stryker's operating margin and net income to rebound in the coming years; however, Stryker's management must continue to focus on driving down costs and mitigate the risks and magnitude of "non-recurring" expenses (Seekingalpha.com, 2013).

Demand for medical devices is expected to grow over the next five years due to an aging population, increased accessibility to healthcare, increased disposable income, and growing demand in international markets. According to the U.S. Census Bureau, the number of individuals in the United States over the age 65 will grow from 44.0 million in 2013 to 51.3 million by 2018, resulting in a compound growth rate of 3.1% over that time period (Son, 2013). The aging population is expected to increase demand for reconstructive surgeries such as hips and knees, spinal surgeries, and neurotechnology products (stroke). Additionally, health care reform is projected to "expand health insurance coverage to 32.0 million Americans," which is expected to further drive demand for procedures that require medical devices (Son, 2013). International sales will also play a significant growth opportunity for Stryker, with 35% of their total sales currently coming from international markets. As the

economies and the quality of medicine around the world continue to advance, demand for medical devices internationally will continue to grow, especially in developing countries such as China and India, making the 2013 Trauson acquisition a key component for Stryker's international success. Disposable income is another factor that may positively impact the demand for medical devices, with disposable income expected to increase by 2.4% over the next five years (Son, 2013). Higher disposable income will likely increase demand for discretionary surgeries, such as knees. Due to these various factors, demand for medical devices is expected to continue to grow over the next five years.

Although demand for medical devices looks strong in the coming years, and Stryker seems to be well positioned to capitalize on the expected growth, uncertainties such as healthcare reform and medical device regulations could slow the overall performance of the industry and ultimately impact Stryker's growth prospects. Healthcare reform within the United States has already negatively impacted the medical device industry by applying a 2.3% excise tax on medical devices. This tax is not likely to be repealed and uncertainty remains whether the tax will increase or decrease in the coming years. The United States healthcare reform has also resulted in pricing pressures, which will continue to increase as healthcare providers continue to consolidate, the payment of healthcare expenses shifts to the government, and new laws and regulations develop regarding product pricing and insurance reimbursements. Additionally, demand for stricter regulation of medical devices may pose a threat to the overall growth prospects of the industry. In the United States the FDA regulates all medical devices. Stricter regulations, both within the United States and internationally, pose a significant threat to this industry in terms of the cost to develop products, delayed time to market, and an increase in the number of product recalls (Seekingalpha.com, 2013).

Overall, Stryker has both positive and negative aspects affecting the long term outlook of the company's stock. Stryker's current management has proven to deliver positive results in the short term, yet recent decisions and declining margins will continue to challenge Stryker's strength of management and their ability to deliver results. Demand for medical devices looks positive in the coming years, but may be offset by uncertainty's regarding healthcare reform and medical device regulations. These factors are the primary reasons for the hold recommendation of Stryker's stock.

The market consensus has currently priced in the all of the above factors, with the primary difference being the magnitude in which each factor is expected to impact the performance of Stryker's stock. Expectations for strong sales growth and acquisition related activity in the reconstructive and neurotechnology product segments likely exceed those of the market consensus. Expectations are likely to be in line with the market in terms of MedSurg growth and Stryker's operating margins.

2. Company Analysis

Founded in 1941 in Kalamazoo, Michigan, Stryker Corporation is a publically traded company on the New York Stock Exchange (NYSE) under the ticker symbol “SYK”. Stryker is in the medical devices industry where they manufacture, market, and sell products in the Reconstructive, MedSurg, and Neurotechnology and Spine product segments. Stryker is “one of the world’s leading medical technology companies” with 2012 revenues of \$8.7 billion and net earnings of \$1.3 billion (Stryker Corporation, 2012).

Stryker’s largest product segment, Reconstructive, accounts for roughly 44% of the company’s total revenues. Within this product segment, knees account for 35% of total sales, with hips accounting for 32%. Trauma, extremities, and other account for the remaining 33% of reconstructive sales. Stryker has an estimated 20% market share in the hip and knee product segment and 17% market share in trauma, extremities and other (Stryker Fact Book, 2012). Stryker has made multiple acquisitions in this product segment, most recently with the 2013 acquisitions of Trauson Holdings, a Chinese manufacture of low cost reconstructive products, and MAKO, a reconstructive manufacturer with robotic assisting surgical technologies. Historically, Stryker has been able to grow this product segment an average of 6.7% annually, which was due to a strong sales force and competitive product offerings that drove organic growth. Acquisition activities have contributed a small percentage of growth, although inorganically. Stryker will continue to aggressively pursue acquisitions in this product segment as well as increase the competitiveness and mix of products through continued investment in research and development (Stryker Corporation, 2013). Stryker’s reconstructive segment is anticipated to be one of the company’s primary growth areas through 2018 due to the increased demand for these products, with expectations for this segment to grow 7% annually (organic) through 2018 and 7.4% including acquisitions. This growth will primarily be driven by increased product offerings and strong demand for knee and hip surgeries as well as continued advancements in trauma and extremities products, which will increase Stryker’s market share in this segment.

Stryker’s second largest product segment, MedSurg, accounts for roughly 37% of the company’s total revenues. Within the MedSurg product segment, Instruments account for 39% of MedSurg sales with Endoscopy, Medical Equipment, and Other accounting for 34%, 21%, and 6%, respectively (Stryker Corporation, 2013). Stryker’s MedSurg segment has grown at an average of 12% annually over the last 10 years, driven primarily by acquisition related activities. Most recently in 2012 and through the first three quarters of 2013, Stryker has only seen this segment grow by an average of 2.3%. This slow growth is primarily due to minimal acquisition related activities, the stagnation of instrument related sales, and the recall of their “Neptune Waste Management System”, which is expected to return to the market in early 2014 (Stryker Corporation, 2013). Over the next five years, this product segment is expected to remain fairly stable with annual organic growth of 2.2%. This stable growth will be negatively impacted by lower capital expenditures at hospitals and other healthcare providers and positively impacted by the re-introduction of the “Neptune Waste Management System” in 2014.

Stryker’s smallest, yet fastest growing product segment is Neurotechnology and Spine, which accounts for roughly 19% of total sales. Neurotechnology contributes roughly 54% of this segments sales, with Spine contributing the remaining 46%. Stryker acquired their way into the Neurotechnology

segment in 2011 with the acquisitions of Concentric Medical and the Neurovascular division of Boston Scientific. Since acquiring their way into the Neurotechnology segment, Stryker has been able to grow sales organically by 8.5% in 2012 and an average of 9.8% in the first three quarters of 2013 (Stryker Corporation, 2013). Neurotechnology and Spine sales are expected to continue to grow organically by 7.5% in 2014, gradually declining to 4.5% growth in 2018. This growth will primarily be driven by innovative product offerings that will result in market share gains, but is expected to gradually slow to a rate closer to this segments total market growth by 2018.

3. Industry Analysis

According to the NAICS Code Grouping of the U.S. Department of Commerce, the medical device industry encompasses a broad range of product categories such as diagnostic reagents, electro medical and electrotherapeutic devices and equipment, irradiation apparatus, surgical and medical instruments, surgical appliances and supplies, dental equipment and supplies, ophthalmic goods, and dental laboratories (Richard K. Miller & Associates, 2013). This industry had sales of \$135.9 billion in 2012 (Richard K. Miller & Associates, 2013). The largest product segments in the medical device industry include surgical appliances and supplies and surgical and medical instruments, which together combined for 2012 sales of \$91.7 billion (Son, 2013). Within these product categories lie the three main product segments in which Stryker Corporation currently competes: Reconstructive, MedSurg, and Neurotechnology and Spine. Customers of these products include primary care and specialist doctors, hospitals, healthcare purchasing organizations, and other medical or surgical providers (Stryker Corporation, 2012).

The reconstructive product segment had a market size of \$25.2 billion in 2012 (Stryker Fact Book, 2012). This product segment includes reconstructive implants such as knees and hips, as well as products for sports, extremities, and trauma surgeries, and orthobiologics. Hip and knee products are a \$14 billion industry with Zimmer, Johnson & Johnson, and Stryker claiming 65% of this market, with market shares of 24%, 21%, and 20%, respectively. Sports, extremities and trauma surgeries are a \$5.9 billion industry with Johnson & Johnson claiming a 40% market share. Other market leaders in this product category include Stryker (17%), Biomet (8%), Smith and Nephew (8%), and Zimmer (4%). Orthobiologics account for the remaining \$5.3 billion in the reconstructive product category with Medtronic and Johnson & Johnson claiming 15% and 13% of the market, respectively. Stryker has an estimated 3% market share in the orthobiologics category. Overall, the reconstructive segment grew 2% in 2012 (Stryker Fact Book, 2012).

The MedSurg product segment had 2012 sales of \$36.3 billion in 2012, with year over year growth of 3% (Stryker Fact Book, 2012). Products in this segment include endoscopy, which are “minimally invasive surgical solutions”, patient handling equipment, operating room equipment, and the reprocessing and remanufacturing of equipment (Stryker Corporation, 2012). Endoscopy accounts for 74% of the MedSurg segment with 2012 sales of \$26.8 billion (Stryker Corporation, 2012). The endoscopy market leaders include Johnson & Johnson, Olympus, and Covidien, with market shares of 19%, 17%, and 14%, respectively. Stryker claimed a 4% market share in endoscopy in 2012. Patient handling equipment is the second largest MedSurg product category with 2012 sales of \$4.5 billion with Hill- Rom and Stryker being the obvious market leaders with market shares of 28% and 16%,

respectively. Stryker is the clear cut market leader in operating room equipment, claiming 35% of the \$3.3 billion market, with Zimmer and Medtronic claiming 11% and 6%, respectively. Reprocessing and remanufacturing is the smallest MedSurg segment with sales of \$1.8 billion with Stryker and Johnson & Johnson claiming the majority of the market (Stryker Fact Book, 2012).

Neurotechnology and Spine had 2012 sales of \$11.0 billion. Spine accounted for the majority of this segment with 2012 sales of \$7.6 billion. Spine products include “spinal implant products including cervical, thoracolumbar and inter body systems used in spinal injury, deformity, and degenerative therapies” (Stryker Corporation, 2012). The leading companies in this product category include Medtronic, Johnson & Johnson, Stryker, and Zimmer, with the market leader being Medtronic, who claimed an estimated 31% of this market in 2012. Johnson & Johnson, Stryker, and Zimmer had estimated market shares of 23%, 8%, and 3%, respectively. Spine sales were down 1% in 2012. Neurotechnology products had 2012 sales of \$3.4 billion with Stryker claiming 24% market share. Johnson & Johnson and Medtronic had market shares of 18% and 15%, respectively (Stryker Fact Book, 2012). Neurotechnology sales grew 5.8% in 2012 (Stryker Fact Book, 2012).

Overall, the medical devices industry is expected to grow by 3.9% annually in the U.S over the next five years (2013-2018). This growth will primarily be driven by an aging population, increased accessibility to medical care, and higher disposable income (Son, 2013). The medical device industry is also likely to continue to consolidate in order to benefit from economies of scale, which will distribute the high fixed costs across multiple products, ultimately increasing profit margins and driving down product costs. Healthcare reform is likely to be the greatest driver of market consolidation due to actions such as increased taxes and potential pricing pressure, making it difficult for smaller firms to compete (Son, 2013).

Appendix: Inputs into valuation using multiples

SYK	2006A	2007A	2008A	2009A	2010A	2011A	2012A	2013F	2014F	2015F
Stock price	\$47.56	\$66.76	\$60.50	\$41.75	\$52.10	\$54.80	\$53.65	\$72.00	\$76.87	\$85.92
Diluted EPS	\$1.89	\$2.44	\$2.78	\$2.77	\$3.19	\$3.45	\$3.39	\$2.37	\$2.53	\$2.83
Sales (millions)	\$5,147	\$6,001	\$6,718	\$6,723	\$7,320	\$8,307	\$8,657	\$8,979	\$9,403	\$9,910
P/E	25.16	27.36	21.76	15.07	16.33	15.88	15.82	30.39	30.39	30.39
P/S	3.81	4.64	3.72	2.48	2.84	2.57	2.37	3.06	3.06	3.06

* Analyst's own calculations. Source of basic data: Stryker Corporation 10-K; Yahoo! Finance

Sources:

Stryker Corporation. (2012). *Stryker Corporation Form 10-K*. Kalamazoo, MI;.

Stryker Corporation. (2012). *Stryker Corporation Fact Book 2012*. Kalamazoo, MI;.

Richard K. Miller & Associates. (2013). *Healthcare Business Market Research Handbook 2013-2014*. Loganville, GA;.

Anna Son. (2013). *IBIS World Industry Report 33911a Medical Instruments & Supply Manufacturing in the US*. Retrieved from [http://clients1.ibisworld.com.libproxy.unm.edu/reports/us/industry/default.aspx?entid=881](http://clients1.ibisworld.com.libproxy.unm.edu/reports/us/industry/default.aspx?entid=881;);

Stryker Corporation. (March, 2013). *Stryker Corporation Form 10-Q*. Kalamazoo, MI;.

Stryker Corporation. (June, 2013). *Stryker Corporation Form 10-Q*. Kalamazoo, MI;.

SeekingAlpha.com. (July, 2013). *Stryker Corporation (SYK) Discusses Q2 2013 Results- Earnings Call Transcripts*. Retrieved from <http://seekingalpha.com/article/1678922-stryker-corporation-hosts-analyst-meeting-transcript?all=true&find=SYK%2B> ;.

Stryker Corporation. (September, 2013). *Stryker Corporation Form 10-Q*. Kalamazoo, MI;.

SeekingAlpha.com. (October, 2013). *Stryker Corporation (SYK) Discusses Q3 2013 Results- Earnings Call Transcripts*. Retrieved from <http://seekingalpha.com/article/1752872-stryker-management-discusses-q3-2013-results-earnings-call-transcript>;

Google Finance. (October, 2013). Retrieved from <http://www.google.com/finance?q=NYSE%3ASYK&ei=9kRnUpCwCsOsqgHJAg>.