
Recommendation: HOLD**Target Price until (12/31/2017): \$115**

1. Reasons for Recommendation

We have determined a HOLD recommendation for the Portfolio's Stryker Corporation holdings. Though the level of growth for the company is low annually, it is steady and consistently positive for a number of reasons. Stryker's previous acquisitions show a willingness to expand operations in order to capture new markets previously unexplored by the company and its recent acquisitions in 2016 will increase product offerings and global footprint, though at the cost of increased financial leverage. Additionally, Stryker's low market volatility and strong stock performance have provided the Portfolio with large returns despite the fluctuating economy. However, the company has struggled to achieve optimal global sales growth due to unfavorable exchange rates. Considering all of these factors, the outlook for Stryker Corporation is positive and we believe the company will continue to increase its revenues through strategic acquisitions, global expansion and increased product offerings.

Stryker has recently acquired two companies and a sizeable asset portfolio in 2016 for a total of \$4.09B. The largest of the three deals, Sage Products LLC, was bought for \$2.78B using debt in the form of selling \$3.5B of unsecured senior notes. This debt was used for both the acquisition of the company and to pay off previous debt maturing in September 2016.² Although this large increase in leverage caused a downgrade of Stryker's unsecured senior note rating by Moody's from A3 to Baa1⁵, the acquisition is well-aligned with Stryker's operations and looks to add value to the company starting this year. Sage's products, which prevent hospital acquired infections and other "never events", fits very well into Stryker's MedSurg segment, synergizing with Stryker's numerous medical devices. With a 13% revenue growth for Sage from the previous year², the acquisition will add value to Stryker and promote additional revenue growth for the company. Physio-Control was bought outright for \$1.28B in an all-cash transaction³ and is well-aligned with Stryker's MedSurg segment, specifically the Medical EMS subsegment, due to the company's numerous monitors, defibrillators, and CPR assistance devices which increase survival rates in emergency situations. In addition to new product holdings that Stryker can provide, a large reason for this acquisition is the global infrastructure and presence that Physio-Control holds, allowing Stryker to further expand into foreign markets. The smallest of the three 2016 deals was a \$31M all-cash purchase of Synergetics USA, Inc.'s neuro portfolio and all assets associated with that segment¹. This acquisition aligns completely with Stryker's NeuroTech & Spine segment and will allow increased product offerings in spinal surgery operations.

Through the acquisition of Small Bone Innovations (SBI), Stryker has shown their desire to expand beyond their current operations. Implants had been focused on knee and hip replacements but Small Bone Innovation, as the name suggests, focuses on small joint replacements. Included in the assets to be acquired is the STAR ankle replacement, the only mobile bearing ankle replacement in the U.S. But it isn't only ankles that SBI focuses on, they also offer products that aid surgeons in the treatment and replacement of wrists, elbows, and fingers. This 2014 acquisition is an example of Stryker expanding their current operations rather than just improving them. This can lead to greater sales and increased market share which can provide more growth opportunities in the future.

Stryker has a long history of strong and consistent stock performance. At its last peak in 2008, the stock was selling at \$74.72, and after a large dip due to both internal and economic factors started 2009 at \$33.67⁷. Since that last trough however, the stock has risen steadily at an average annual rate of 2.25%. This consistent growth, despite market volatility, is partly due to the fact that the demand for Stryker's products is not dependent on the economy. Regardless of the global economic situation, people still require surgery and emergency medical attention, ensuring a consistent and reliable demand. This, and the fact that surgeries are rising annually due to the Affordable Care Act, the growing elderly population, and the obesity epidemic keep future income forecasts steady for investors, which translates to a low beta value and subsequently increased market robustness. Since purchasing Stryker stock on May 4, 2006, the return for the holding period up to March 31, 2016 was 166.29% with an active return versus the Healthcare sector of 43.92% and an active return versus the S&P of 109.84%, showing the profitability and reliability of the holding.

A large factor that is still unresolved is Stryker's international sales growth and development. While trying to expand into developing countries in Europe, Asia, and South America, Stryker has encountered resistance in the form of a strong U.S. dollar and weakened emerging economies. This situation has made Stryker's products more expensive abroad and the conversion rates between foreign currencies are not in the company's favor. In 2015, Stryker's sales growth totaled 7.0%, but the constant currency conversion reduced that amount to only 2.8%. And the fact that 40% of Stryker's sales are in foreign denominations further exacerbates the issue. This is partly offset by the strong sales growth in Europe and Asia due to recent expansions and the creation of Stryker's European headquarters in 2014. Additionally, the acquisition of the already globalized Physio-Control Inc. will provide further infrastructure to expand globally and increase sales abroad. Even so, this growth has yet to be fully realized and will most likely not be this year.

Considering these factors, the future of Stryker is promising overall. With a strong well-founded acquisition appetite, Stryker will be able to increase sales growth and overall product offerings while maintaining their already solid organic growth. Of course, this is if Stryker is wise about using acceptable ratios of leverage and cash to finance such deals. These acquisitions will lead to new technologies, increased market share, and continued global expansion in the coming year.

2. Company Analysis

Stryker is a medical technology corporation that is part of the Medical Appliances and Equipment industry which is part of the Healthcare sector. The company divides its operations into three segments: Orthopaedics, MedSurg and Neurotechnology and Spine. Orthopaedics is the highest contributor to revenue, at 43%. This segment concentrates on extremities surgeries, trauma and implants. The Orthopaedics segment offers products and services through its four subsegments which are Knee, Hip, Trauma and Extremities, and Other Products. Medsurg is the fastest growing segment out of the company's three segments. In 2014 it accounted to 39% of revenue. The Medsurg segment has four business units as well: Instruments, Endoscopy, Medical and Sustainability. This segment offers a wide range of products: cement mixers, visualization and documentation systems, surgical sponges, patient

handling equipment, surgical navigation software and surgical instruments. Neurotechnology and Spine accounts for 18% of company revenue. Neurotechnology and Spine is evidently divided into two subdivisions: Neurotech and Spine. Neurotechnology comprises products like synthetic bone graft, open skull surgery and endovascular. The entire neurovascular product line was acquired in 2011 from Boston Scientific. The Spine subsegment produces and distributes spine-related implant products as a result of injury, degeneration and deformities.

The company offers products and services in the U.S. as well and internationally. In 2014, 68% of revenues came in from the local segments of the business and 32% accounted for international sales. The company opened its European headquarters in the Netherlands in hopes to strengthen its international presence and broaden their operations. Internationally, Stryker operates mainly through company owned branches and subsidiaries. The company has an extensive international presence and offers services and products in more than 100 countries which are located in North and South America, Europe, Middle East, Africa and Asia. Stryker sells its products and services directly or through third party dealers and distributors. Their primary customers are hospitals, doctors, clinics, outpatient care centers and government funded hospitals and clinics.

The company's main industry is in the Surgical Instrument Manufacturing Industry and it has a market share of 12.7%, the largest in that industry. Stryker is also in the top five companies, market share wise, in the second industry they operate in - the Medical Instrument and Supply Manufacturing industry. In the hospital Bed Manufacturing Industry the company has an even bigger impact and maintains 41% market share and we believe this gives the company a significant competitive advantage.

One of Stryker's strengths is its ability to generate sales growth above industry average. In the last six years the company has outperformed both of the main industries they are part of. While the Surgical Instrument industry has performed between -2.8 % and 3.7%, Stryker has grown their sales between 2.8% and 13.5%. For the same period, major competitor Johnson & Johnson has underperformed Stryker and had sales growth between -4.2% and 7%.

The company invests in product innovation through research and development projects (R&D). Based on the company's statements in their 10-K report, Stryker works with physicians, hospitals, medical personnel and universities, who assists the company in new product innovation ideas and development. Most of Stryker's product innovation and improvements is done internally, either in the U.S. or at international facilities that the company owns. Although medical product innovation is costly and strictly regulated, competition in this industry is still fierce. Stryker has to compete with new and established companies and it needs to stay relevant to be able to compete, it needs to always improve and innovate. Between 2011 and 2015 the company's R&D spending as a percentage of sales was 5.6%, 5.4%, 5.9% and 6.3% in the last two years, respectively. When comparing its R&D spending to the giant Johnson & Johnson, which averaged 11% of sales, Stryker R&D is significantly lower. When looking at competitors that specialize in medical products only, Stryker's R&D spending is average to its peers. For example, in the last three years Smith & Nephew contributed 4-5%, Zimmer Biomet 4-4.5% and Medtronic 8.1-9.4%.

In addition to internal innovation, the company does acquire new products through acquisitions. As previously mentioned, competition is high in this industry and acquisition of small or large competitors are a norm in the industry. By connecting itself to a big company, the acquirer can get access to new capital through R&D budgets, increase market share and expand its geographical reach. Although Stryker does invest and grow through acquisitions, we believe the company has been successful to grow organically as well. In constant currency, the company increased sales by 6.1% in 2015, 5.8% in 2014, 5.1% in 2013 and 4.2% in 2012. The company has increased organic growth year after year for the last four years.

Since 2012 the company has experienced a significant increase in product recall charges due to two products it has recalled. Stryker has paid 1.2B up to 2015 and is expected to pay an additional 1.2B in total recall charges. This has reduced their net income significantly in 2015 and we are expecting the company's income statement to be negatively impacted in the future as well. Another weakness for this company is doing business in an industry with extensive government regulation which is costly and time consuming.

A huge opportunity for Stryker is the demographical shift. The aging of the baby boomer generation, the obesity epidemic and the increasing life expectancy means more people will need surgical procedures and hospitals will need more surgery instruments and other products the company offers. Additionally, emerging economies and business globalization will open the doors to other markets and an opportunity for sales growth. Emerging markets like the BRIC countries, could positively affect Stryker's revenue growth, as patients in these countries will be able to afford costlier products and surgical procedures. A threat that could harm Stryker and the whole industry is the government and legislation efforts to reduce healthcare cost. The company could be negatively affected by price regulation, reduced competitive pricing and consolidation between healthcare providers. Another threat that the company has been experiencing in the last couple of years has been exchange rate fluctuations and the strengthening of the U.S. dollar. Despite the company's efforts to reduce this risk through interest rate exchange hedge contracts, Stryker's sales were still reduced 4.2% in 2015 due to foreign currency exchange rates.

3. Industry Analysis

In Surgical Instruments Manufacturing, revenue comes from general tools used in surgery, both powered and manual, from implants such as joint replacements, and from specialty surgery instruments. A small percentage of devices are labeled as "other", which are meant to clean or maintain the aforementioned devices. Stryker is not only a major player in this industry but also the company with the most market share, ahead of companies like Johnson & Johnson and Medtronic plc. Despite that, the market has a low concentration and these companies only make up 30.7% of the market share for this industry. There is still a small number of new companies entering the market and acquisitions of small companies have been constantly increasing. The industry is highly competitive and reputation, reliability and performance of products are the greatest factors in this industry, which makes it difficult for unestablished companies to flourish. Surgical instruments are regulated by the FDA, who can also constrain labeling and promotion. In 2015, 49.7% of sales demand came from hospitals, government, and other treatment centers. 29.3% of sales were exports, purchased by either governments or wholesalers.

National wholesalers made up the remaining 21% of industry sales. The main suppliers for this industry are manufacturers of iron & steel, plastic pipe & parts, electrical equipment, rubber products, and glass products. Main drivers, other than disposable income and the overall economy, include people aged 65 years or older and the Affordable Care Act. According to IBIS World, this industry is projected to grow annually at 1.9% for the next five years.

In the Medical Instrument and Supply Manufacturing industry, 57% of the products are surgical, orthopedic, and diagnostic apparatus. Stents, catheters and the “other” category account for 24% of revenues. The remaining 19% of revenues is made up of blood transfusion and IV equipment, as well as syringes and hypodermic needles, and dental instruments. 62% of the demand comes from hospitals, clinics, independent physicians and government institutions. 23% are exports and the remaining 15% comes from wholesalers. Cotton farmers and manufacturers of glass, hoses and belts, plastic pipe and parts, and rubber are the industries that supply the Medical Instruments and Supply Manufacturing industry. Exports are expected to decrease, while imports are expected to increase which will put pressure on U.S. companies to stay competitive. Johnson & Johnson continues to be the largest player in this industry with 13.2% market share, followed by Stryker with 8.6% market share. Like the previous industry, Medical Instruments and Supply Manufacturing has a low consolidation and is heavily reliant on innovation. Acquisitions of smaller companies are common among the big players. Demand drivers are also the same as the previously described industry. Expected revenue growth for this industry is 5.3% from 2015 to 2020.

The last industry in which Stryker operates is the Hospital Bed Manufacturing Industry. This industry manufactures beds, ranging from strictly manual to fully electric beds. This industry is dominated by Hill-Rom with 47.6% of the market share and Stryker whose market share is 41.3%. This highly concentrated market is expected to increase market share for the big players and decrease it for the smaller companies due to poor demand. Stryker acquired CHG Hospitals Beds, Inc. in the beginning of 2015, suggesting that the expectations of increased market share for the big players will continue to rise. The main suppliers for this industry are aluminum and steel manufacturers, and also mattress manufacturers. The Hospital Bed Manufacturing industry generates only a small revenue relative to the previously mentioned industries in which Stryker operates. Demand in this industry is also expected to increase as more humans live past the age of 65, especially in developing countries where more healthcare products can be offered to more people. Also, fully electric beds are replacing the less convenient semi electric beds. Hospital Bed Manufacturing is a slow but surely growing industry, which will average 2.3% yearly through 2021.

Appendix: Inputs into valuation using multiples

| Table 4 | 2010A | 2011A | 2012A | 2013A | 2014A | 2015A | 2016F | 2017F | 2018F |
|-------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|------------------|--------------|
| Stock Price (Using P/S) | \$ 52.10 | \$ 54.80 | \$ 53.65 | \$ 67.89 | \$ 83.09 | \$ 95.69 | \$ 108.38 | \$ 123.70 | \$ 141.86 |
| Stock Price (Using P/E) | \$ 52.10 | \$ 54.80 | \$ 53.65 | \$ 67.89 | \$ 83.09 | \$ 95.69 | \$ 98.07 | \$ 111.06 | \$ 103.41 |
| Stock Price (Using EV/EBIT) | \$ 52.10 | \$ 54.80 | \$ 53.65 | \$ 67.89 | \$ 83.09 | \$ 95.69 | \$ 115.21 | \$ 108.29 | \$ 93.75 |
| Stock Price (Using EV/EBITDA) | \$ 52.10 | \$ 54.80 | \$ 53.65 | \$ 67.89 | \$ 83.09 | \$ 95.69 | \$ 106.22 | \$ 114.39 | \$ 112.58 |
| Stock Price (Using EV/Sales) | \$ 52.10 | \$ 54.80 | \$ 53.65 | \$ 67.89 | \$ 83.09 | \$ 95.69 | \$ 89.77 | \$ 102.96 | \$ 118.52 |
| Sales | \$ 7,320.00 | \$ 8,307.00 | \$ 8,657.00 | \$ 9,021.00 | \$ 9,675.00 | \$ 9,946.00 | \$10,430.37 | \$10,924.77 | \$11,498.32 |
| Sales per share (basic) | \$ 18.47 | \$ 21.49 | \$ 22.75 | \$ 23.83 | \$ 25.56 | \$ 26.41 | \$ 27.70 | \$ 29.27 | \$ 31.08 |
| EBIT | \$ 1,750.80 | \$ 1,686.00 | \$ 1,741.00 | \$ 1,256.00 | \$ 1,246.00 | \$ 1,861.00 | \$ 1,961.05 | \$ 1,897.56 | \$ 1,606.88 |
| EBITDA | \$ 2,161.00 | \$ 2,167.00 | \$ 2,227.00 | \$ 1,767.00 | \$ 1,832.00 | \$ 2,451.00 | \$ 2,710.20 | \$ 2,786.25 | \$ 2,642.42 |
| EPS (basic) | \$ 3.21 | \$ 3.48 | \$ 3.41 | \$ 2.66 | \$ 1.36 | \$ 3.82 | \$ 3.88 | \$ 3.66 | \$ 2.73 |
| MVE | \$20,652.44 | \$21,180.20 | \$20,419.19 | \$25,703.15 | \$31,449.57 | \$36,036.85 | \$43,388.65 | \$40,419.36 | \$34,681.56 |
| Debt | \$ 1,021.00 | \$ 1,768.00 | \$ 1,762.00 | \$ 2,764.00 | \$ 3,973.00 | \$ 4,022.00 | \$ 7,349.64 | \$ 7,698.01 | \$ 8,102.15 |
| Enterprise Value | \$19,915.44 | \$22,043.20 | \$20,786.19 | \$27,128.15 | \$33,627.57 | \$36,679.85 | \$47,359.28 | \$48,117.37 | \$42,783.71 |
| P/E | 16.23 | 15.75 | 15.73 | 25.52 | 61.10 | 25.05 | 25.29 | 30.34 | 37.93 |
| P/S | 2.82 | 2.55 | 2.36 | 2.85 | 3.25 | 3.62 | 3.91 | 4.23 | 4.56 |
| EV/EBIT | 11.37 | 13.07 | 11.94 | 21.60 | 26.99 | 19.71 | 24.15 | 25.36 | 26.63 |
| EV/EBITDA | 9.22 | 10.17 | 9.33 | 15.35 | 18.36 | 14.97 | 16.22 | 16.87 | 17.55 |
| EV/Sales | 2.72 | 2.65 | 2.40 | 3.01 | 3.48 | 3.69 | 3.95 | 4.22 | 4.52 |

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

References

[1][http://www.streetinsider.com/Corporate+News/Stryker+\(SYK\)+to+Acquire+Synergetics+USAs+Neuro+Portfolio+in+All-Cash+Deal/11298293.html](http://www.streetinsider.com/Corporate+News/Stryker+(SYK)+to+Acquire+Synergetics+USAs+Neuro+Portfolio+in+All-Cash+Deal/11298293.html)

[2][http://www.streetinsider.com/Corporate+News/Stryker+\(SYK\)+to+Acquire+Sage+Products+in+\\$2.78B+Deal/11264033.html](http://www.streetinsider.com/Corporate+News/Stryker+(SYK)+to+Acquire+Sage+Products+in+$2.78B+Deal/11264033.html)

[3][http://www.streetinsider.com/Corporate+News/Stryker+\(SYK\)+to+Acquire+Physio-Control+Intl+in+\\$1.28B+Deal/11320813.html](http://www.streetinsider.com/Corporate+News/Stryker+(SYK)+to+Acquire+Physio-Control+Intl+in+$1.28B+Deal/11320813.html)

[4]<http://www.mddionline.com/article/expect-stryker-acquire-more-companies-2016-10-23-15>

[5]https://www.moodys.com/research/Moodys-downgrades-Strykers-unsecured-rating-to-Baa1-from-A3-outlook--PR_344612

[6]<http://clients1.ibisworld.com/>

[7]<http://finance.yahoo.com>