

Recommendation: HOLD

Target Price until (12/31/2016): \$101.66

1. Reasons for the Recommendation

My recommendation for Stryker Corporation is hold. The company has promising growth but the next year will be constant for a number of reasons. Stryker has taken a leap into the assisted robotic orthopedic surgery market as it gained FDA approval of its total knee replacement in August 2015 but a full commercial release will not take place until 2017. Additionally, the company continues to see strong sales in the US where it exhibits approximately 69% of its revenue. However, international sale growths have been less than optimistic as products sales have been stunted by the strengthening US dollar and weakening conditions in China and South America. These combined factors have a positive outlook for Stryker Corporation but the impacts may not be immediately realized in the coming year.

Stryker Corporation acquired MAKO Industries in December of 2013 at an 87% premium. Revenue growth from the acquisition has since resulted in decent organic growth within the companies Orthopaedics segment. Othopaedic organic growth has gone from 1.8% at the end of 2014 to 5.3% for the 3rd quarter of 2015. However, I believe potential MAKO revenue growth has not fully been realized when valuing Stryker because no one knows how well the MAKO products will do. Its products are focused on knee and hip replacement using an assisted robotic arm, one that produces a more accurate replacement that is less invasive to the patient when compared to traditional surgery. The MAKO product line is innovative and new to the market in the sense that it has not yet reached the macro scale in terms of sales. With recent FDA approval of the MAKO total knee replacement, the robotic arm is well on its way to a full scale launch. As of this year Stryker has sold 41 total knee replacement robots and has a training force of over 1,000 individuals dedicated to further sales in 2016. However, sales will be limited in 2016 in order to focus on a safe rollout of its new robotic product. The company wants to phase the launch with 2016 being a test pilot in order to prepare for a full scale launch in 2017. This will allow time to gather key data about the economic impact of the new product as well evaluate the opinions of the surgeon community.

It is important to take account the growth of products like robots in surgery when evaluating Stryker Corporation. In 2014, the orthopedic implants and devices segment made up 18% of the surgical instrument manufacturing industry and 43% of Stryker's sales. Once the total knee robots are ready for a full commercial release in 2017, Stryker should be at a position to capture market share better than any other competitor. The company does face competition from companies like Blue Belt Technologies, who has partnered with Johnson and Johnson subsidiary DePuy Inc. in order to further the development of robotic arms used in orthopedic surgery. However, Stryker has recently gained FDA approval on the total knee MAKO robot which will help drive market share in the orthopedic reconstructive market. Passing certain regulatory requirements holds a considerable value within the industry which in turn can drive market share gains, especially early on in an advancing market. Additionally, servicing these instruments grants a new source of revenue growth. As technology advances in robotics in orthopedic surgery, so will the necessity to keep the instruments functional. Right now the servicing of instruments makes up 3% of revenue in the surgical manufacturing industry. Stryker has the capability with its sales and training staff to increase revenue by servicing mechanical products and keeping them functional. While some of this

information related to the development of robotics in orthopedic surgery has had a positive impact on revenue growth and stock price already, the overall impact has not truly been seen in my opinion. Stryker will not see a huge impact in financial gain in 2016 but once the total knee replacement sees a full scale launch in 2017 its position in terms of market share and value will be more realized. This will in turn see an increase in revenue growth and stock price in the future preceding the full commercial release to the MAKO total knee.

Stryker Corporation business is focused on sales growth within the United States where 67% of its revenues are represented. Future sales growth within the United States are led by many factors. One of the largest factors surrounds the Patient Protection and Affordable Care Act (PPACA) which has given millions of Americans access to health care services, including surgeries. Additionally, funding for Medicare and Medicaid saw growth for 2015 as did many of the individuals with private insurance, all supporting industry growth. As the access to health care eases it promotes the amount of surgeries. However, this comes at a cost. As more and more individuals become covered by health insurance the cost to pay out insurance claims rises. Insurance companies are lowering the reimbursement rates which places a higher cost for hospitals and healthcare professionals to service individuals. As these hospitals and healthcare professionals face lower insurance reimbursement claims they are forced to cut costs in other aspects. This potentially includes the purchase of new products and also purchasing products that can be serviced and reused instead of disposable one-time use products. This may have an impact on Stryker Corporation as its customers look to purchase cheaper imported products and reusable products instead of new ones. However, my opinion is that the impact from the rise in individuals covered by health insurance will outweigh any additional expenses that will rise from the result of it.

Lastly, the most unknown factor effecting Stryker Corporation has to do with international sales. Right now we are seeing the US dollar strengthen as other economies weaken, especially in China, South America, and emerging market regions. As the US dollar strengthens it becomes more expensive for foreign countries to purchase Stryker Corporations products. This is especially true for international regions outside of Europe where Stryker has minimal manufacturing plants. Additionally, foreign regulatory requirements are constantly changing and could result in a negative impact for Stryker as it becomes more difficult to sell new and innovative products abroad. Luckily, most of these deterrents in revenue are made up for with improvements in strong sales in Europe and Australia. In 2014 Stryker Corporation established a European headquarters in the Netherlands in order to expand its European sales and also to take advantage of tax breaks related to foreign sales. More recently, Stryker has restructured its leadership model in regions around the world in order to drive stronger engagement with international product divisions. This restructuring will take place in 2016 and will promote international growth in the long term but immediate international growth will remain challenging for the company.

As you can see, the future looks promising for Stryker Corporation. However, it's hard to recommend a buy at this time because many of the factors effecting growth have yet to be realized and most likely will not be realized within the next year. There are too many domestic economic factors surrounding the funding of health care and the development of new technologies that make it difficult to value Stryker in the next year. Likewise, there are many negative international factors from foreign exchange markets that will continue to be problematic for Stryker's international growth in the next year.

2. Company Analysis

Stryker Corporation was founded in 1941 by Dr. Homer H. Stryker, a successful orthopaedic surgeon from Michigan. Today Stryker is one of the world's leading medical technology companies. Its products are marketed to hospitals, doctors, healthcare facilities. Outside of the United States products are sold in over 100 countries to third party retailers through the internationally located sales branches who sells to end users equivalent to those in the United States. Stryker has three main reportable business segments under which it operates under and has dedicated sales teams for each segment. These business segments are Orthopaedics, MedSurg, and Neurotechnology and Spine.

The largest segment is Orthopaedics. It accompanies 43% of Stryker's revenues and 53% of net earnings for 2014. Orthopaedics deals with disease and injuries related to the musculoskeletal system (nerves, joints, muscles, tendons, etc.). In the past nine months the segment has seen minimal growth due to negative impacts on foreign exchange rates. The 1.1% increase was due to the higher shipments in trauma and extremities and foot and ankle products.

Stryker's second largest segment is MedSurg. This segment makes up 39% of net revenues 37% of net earnings for Stryker. The MedSurg segment produces all sorts of medical and surgical equipment from hospital beds to endoscopic cameras to remanufacturing and servicing medical equipment. In the past nine months of 2015 the segment has revenue grown by 3.0%. Growth has been promoted by more endoscopy products being shipped and will grow further in the fourth quarter of 2015 as customers await the launch of a new endoscopy camera. Again, sales growth was negatively impacted by foreign currency exchange rates.

The smallest segments is Neurotechnology and Spine and it is responsible for 18% of the company's revenues and roughly 20% of net earnings. The products in this segment include neurovascular and neurosurgical devices. In the first nine months of 2015 the segment saw 4.5% in revenue growth. This was largely due to a double digit growth in neurovascular products.

About 68% of Stryker's sales are conducted within the United States. The remaining 32% of revenues come from Europe, Africa, Middle East (17%) and Asia Pacific (15%) according the company's 2014 financial statements. While Stryker Corporation is headquarter in Kalamazoo, Michigan it has offices all around the United States and world. The company has production and sales offices in China, Mexico, Puerto Rico, France, Germany, Ireland, Switzerland, and Japan. Many of these offices are solely used for sales but others do manufacture the company's products. Many of the internationally located manufacturing sites were acquired through acquisitions. Most manufacturing is done and inventory is stored near the Michigan headquarters. One of Stryker's main long term goals is to increase international operations. International sales have been negatively impacted by the strengthening US dollar recently. This is important to mention because many of Stryker's products are still produced domestically in the United States and are becoming increasingly expensive for foreign buyers. This has slowed international growth and will continue to until global economic conditions improve. This especially true in countries like China and Brazil that could hold a decent portion of international market share in the industry.

However, Stryker Corporation is committed to promote international and domestic growth by continuing to innovate new products and improve on existing ones. Stryker largely does this through acquisitions and also by staying focused on funding research and development expenses. While acquisition have placed a significant financial impact on Stryker the past few years it has resulted in a stronger product mix and increase in global position. Additionally, the company has acquired and owns approximately 1,900 patents in the United States and 3,400 international patents. This gives Stryker a competitive advantage because it restricts competitors from duplicating product designs. In the third quarter of 2015 Stryker Corporation's research and development costs made up 6.4% of net sales. Research and development costs were respectively \$614, \$536, and \$417 in 2014, 2013, and 2012. Overall, Stryker is willing to invest in acquisitions and research and development costs in order to expand in the markets they operate. It holds close relationships with physicians and medical personnel all across the world in order to increase its efforts in product development and improvement.

The largest impact that Stryker has faced in the past three years stems from voluntary recall of their Rejuvenate and ABG II Modular Neck hip stem. This has led to global termination of these hip replacement products. The recall has also had a significant impact on profitability. Net income margin decreased from 15% in 2012, to 11.5% in 2013, and finally to 5.15% in 2014. Additionally, earnings per share went from \$3.41 per share in 2012, to \$2.66 in 2013, and to \$1.36 in 2014. Stryker has had a significant impact on its profitability stemming from the Rejuvenate and ABG II Modular-Neck hip stems voluntary recall. However, this does not mean that Stryker is still a profitable and growing company even though many of its profitability ratios may say otherwise. If examined closer you can see that Stryker Corporation has made many good choices as a company when it comes to its main priorities, especially acquisitions, paying dividends, stock repurchases and cash on hand from cash flows in light of one-time costs such as a recall. However, these one-time costs are still important to mention as they can dry up available cash in the short term, cash that could be used for investment activities.

3. Industry Analysis

The Surgical Instrument Manufacturing industry accounts \$44.2 billion in revenue and \$5.5 billion in profit each year. The industry separates its products into general surgical equipment, specialty surgical instruments, orthopedic instruments and implants, electro surgery instruments, and instrument servicing. Today many hospitals are electing for reusable equipment that can be serviced and maintained. While it is ideal for revenue growth to sell disposable equipment, reusable equipment allows the industry and companies like Stryker differentiate their business by becoming repairers and maintainers of the equipment they manufacture.

The major players in the Surgical Instrument Manufacturing industry are Johnson & Johnson, Stryker Corporation, and Covidien PLC and they account for 36% of industry revenue. Johnson & Johnson holds 18.9%, Stryker holds 11.1%, and Covidien PLC holds 5.9% of the industry market. There are many smaller companies that operate within the industry but they tend to produce specialized equipment. These smaller companies are able to hold their ground against the larger players because regulation is so tight that a single company cannot support each niche product that the industry demands. Additionally, larger companies like Johnson & Johnson hold significant market share in other industries so it is hard for them to capitalize on specialized industries like Surgical Instrument Manufacturing. However, as technology changes and the industry develops, larger corporations like Stryker and Johnson & Johnson are acquiring many of the smaller companies to gain market share.

Additionally, smaller companies have ease of access to suppliers just like bigger companies. The major suppliers of the Surgical Instrument Manufacturing industry are the iron and steel, glass, rubber, plastic, and electrical equipment industries. The abundance of suppliers give manufactures ease of access to the goods they produce. Also, smaller companies are able to be competitive because of regulatory constraints from the FDA. Many specialized researchers are able to focus on one product in the industry and patent their products. The only way larger companies would have access to these products would be to acquire the company and thus the patent. However, what small companies cannot overcome are the barriers of entry into the global market. This is very important because exports account for half of the industry's revenue.

Americans more than ever have access to healthcare since the Patient Protection and Affordable Act (PPACA) was put in place. This has translated into more surgeries, especially elective surgeries which is a direct result from strong employment and a growing economy. This means that there is more of a demand of surgical instruments and equipment as hospitals look to stock up on equipment and prepare for more surgeries. At the same time, the PPACA has also put an increase cost on hospitals due to fluctuating reimbursement rates from Medicaid and Medicare. Lately, the reimbursement rates have been decreasing and healthcare costs rise and expenses are placed on consumers and hospitals. This has made doctors and hospitals be more conservative with what they are spending on, including surgical instruments and other medical supplies. It's hard to say from my research if this has had a major impact on industry revenues but as the government and healthcare providers crack down on reimbursements it could significantly decrease revenue in the US Surgical Instrument Manufacturing industry. Additionally, these concerns do not include the implementation of a 2.3% exercise tax the government has imposed on industry manufacturers in order to defray the cost of the PPACA.

Another factor that may increase revenues and promote industry growth is that the American population is aging and the 65 older population is expected to grow. More surgeries will result from this. This is good news for Stryker who specializes in products that help the ailments of older individual, like knee and hip replacement. Those products alone are responsible for 30% of Stryker's revenue. Again, increased revenues may be offset if Medicare funding takes a hit and hospitals look for cheaper surgical instruments.

One negative impact that the industry faces is the price volatility of steel and other suppliers. This can especially be said for many foreign suppliers such as China whose manufacturing industries have record high volatility. While surgical instrument manufactures can pass any price increase on to end users, it can be extremely difficult to anticipate manufacturing costs if the supply cost is becomes too volatile to predict. This can result in huge profit losses if manufactures estimate a lower than normal supply cost. I think this will become a big factor as China regains economic steadiness in the coming years after taking such a huge hit last month. I believe suppliers in China, especially steel suppliers, will increase prices and if manufacturing companies are not prepared it can result in a loss of profits for the industry.

Lastly, the biggest factor that will impact US industries as a whole has to everything to do with the strengthening US dollar. The US dollar continues to strengthen as the economy grows and will continue to if the US Federal Reserve raises interest rates this month. Right now exports account for 50.7% of the Surgical Instrument Manufacturing industry revenues. As the US dollar strengthens it will translate to a higher product purchase costs for foreign buyers. This will have an immediate impact on the industry if the Federal Reserve raises interest rates this month. Foreign buyers will look elsewhere for surgical instruments and US companies like Stryker will see a significant loss in revenue and global market share.

Overall, the Surgical Instrument Manufacturing industry is strong and continues to grow at a steady pace, roughly 2.5% a year. Like many medical industries, there is always a strong demand for medical products and services and luckily it is not as impacted greatly by strong economic shifts.

Appendix: Inputs into valuation using multiples

	2009A	2010A	2011A	2012A	2013A	2014A	2015F	2016F	2017F
Stock Price	50.37	53.7	49.71	54.82	75.14	94.33	97.41	101.66	111.95
EPS (basic)	\$2.79	\$3.21	\$3.48	\$3.41	\$2.66	\$1.36	\$1.25	\$1.64	\$2.11
Sales	6723	7320	8307	8657	9021	9675	9964.54	10260.74	10727.07
Sales per share (basic)	16.95	18.47	21.49	22.75	23.83	25.56	26.33	27.11	28.34
P/E (Calculated)	18.05	16.72	14.28	16.07	28.28	69.33	77.67	62.08	53.08
P/S (Calculated)	2.97	2.91	2.31	2.41	3.15	3.69	3.7	3.75	3.95
P/E (Actual - MorningStar)	18.20	16.80	15.80	16.20	32.30	56.20			
P/S (Actual - MorningStar)	3.00	2.90	2.40	2.40	3.20	3.80			

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

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