

Intuitive Surgical Inc.

USF SMIF

Recommendation

BUY

Price

656.75

Intrinsic Value

754.42

Target Price

840.70

Analysts: A. Nader, J. Ortiz, L. Arruda

GICS Sector Healthcare

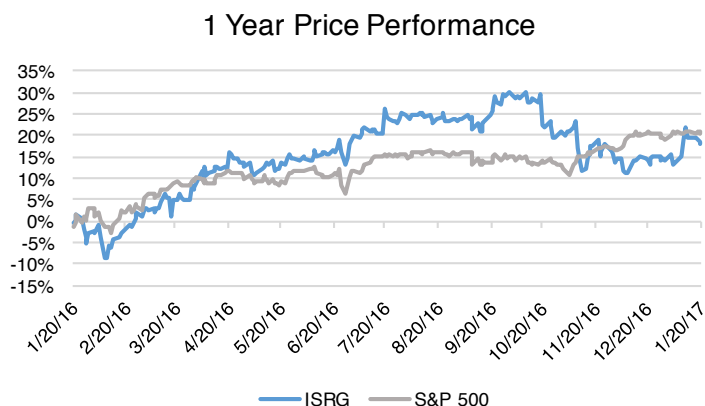
Sub-Industry Health Care Equipment

Summary This company develops the da Vinci surgical system, which uses advanced robotics and computerized visualization technology for minimally invasive surgeries.

Key Statistics

52-Wk Range	502.01-727.25	Beta	0.73	ROA	13.3	P/B	4.6
TTM EPS	18.55	Market Cap	25.4B	ROE	14.95	P/S	9.7
Forward P/E	24.1	Dividend Yield	-	EV/EBITDA	22.75	P/CF	25.5

Price Performance



Revenue Data (M)

	Q1	Q2	Q3	Q4	Total
2016	594	670	683	757	2704
2015	532	586	590	676	2384
2014	465	512	550	605	2132
2013	611	579	499	576	2265

EPS Data

	Q1	Q2	Q3	Q4	Total
2016	3.54	4.71	5.31	E5.90	22.21
2015	2.57	3.56	4.4	4.99	15.54
2014	1.13	2.77	3.35	3.94	11.11
2013	4.56	3.90	3.99	4.28	16.73

Investment Thesis

- Technological advances and growth of procedures adoption will drive the industry and contribute to sales growth.
- The aging Baby Boomer generation will fuel demand for da Vinci procedures and increase both recurring revenues and system sales.
- The expected launch of the da Vinci Sp will ignite a new product update cycle that will drive growth.
- ISRG's cash heavy and debt-free balance sheet provides an ideal scenario for the firm to return value to shareholders through stock repurchases.

Risks

- Litigation risks are unpredictable and could have a material impact on Intuitive Surgical's performance.
- The outlook of the healthcare industry could be negatively impacted by the potential implementation of policies.
- ISRG's ability to create innovative instruments and devices is contingent to FDA approval and intellectual property.

Business Model

Recurring Revenues

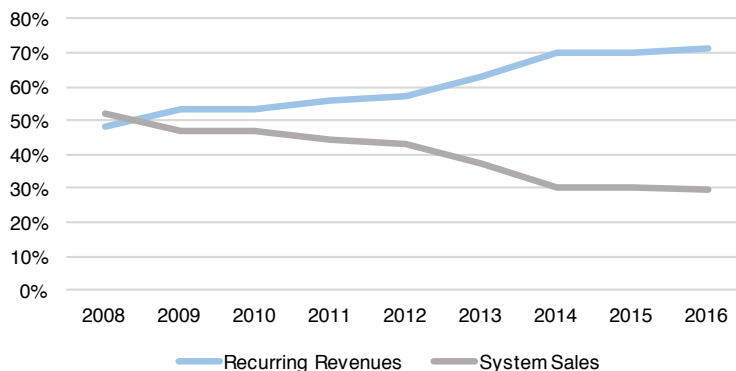
Intuitive Surgical generates recurring revenues from the sales of accessories, instruments and services.

As of December, 2015, 70% of revenue was recurring. Of this revenue, 72% originated from accessories sales and 28% from annual service contracts. The usage life of instruments varies on the type of procedure, but it is generally between 1 and 10 uses, which forces hospitals to regularly place orders.

Service contracts consist of machine support, maintenance, and training. Contracts are signed upon initial purchase of the da Vinci system and are typically renewed at the end of each year.

ISRG has booked recurring revenues at a faster rate than sales of their da Vinci surgery systems. They represent a book-to-bill ratio of approximately 2.3, which shows strong demand for their products.

Source of Revenues (%)

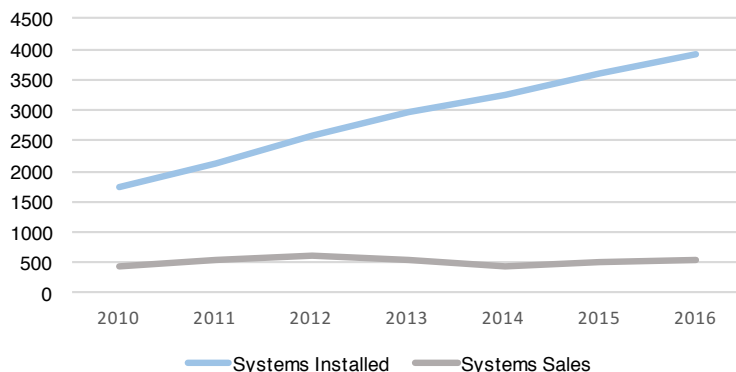


Systems Sales

Intuitive Surgical sells the da Vinci system directly to customers in the U.S., Japan, South Korea, and Western Europe. In the rest of the world, the da Vinci system is sold through third-party distributors.

Geographically, Intuitive Surgical generates 71% of its revenue nationally and 29% internationally. Out of the 3,919 da Vinci systems installed worldwide at the end of 2016, 63% were in the U.S., 15% in Europe, 18% in Asia, and 4% in the rest of the world.

System Growth

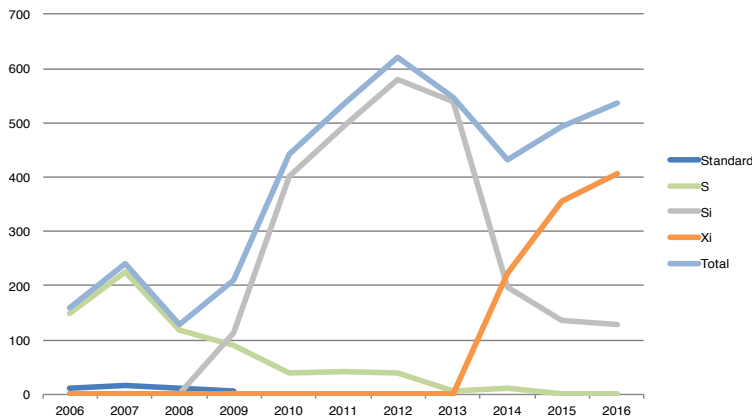


Leasing Initiatives

In order to increase customer’s accessibility to the da Vinci system, ISRG began to offer leasing agreements to qualified customers in 2013. The number of systems sold under a leasing agreement has increased exponentially since the inception of the program. In 2015, 63 systems were shipped under lease contracts, compared to 41 and 6 in 2014 and 2013, respectively.

Investment Rationale

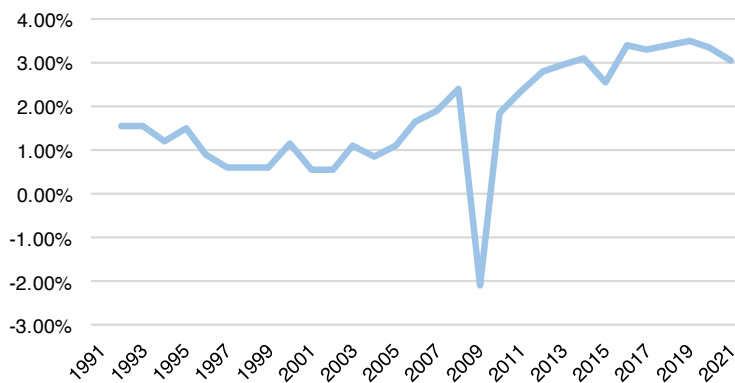
Installed Systems by Model



Technological Advances and Integration of Robotics

Technological advances pertaining to minimally invasive surgery have made surgical procedures more accessible, secure, and efficient. Most notable is the integration of robotics in to the healthcare system, which is fueling ISRG’s revenue growth. This trend will continue as companies like Intuitive Surgical develop new devices and accessories in conjunction with technological advances and robotics integration.

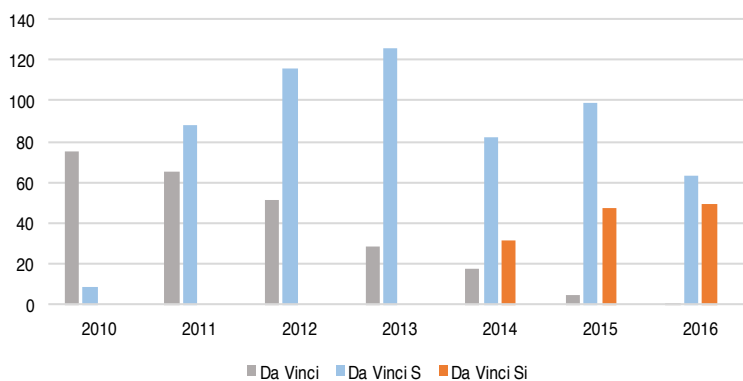
Number of Adults Aged 65 and Older



An Increasingly Aging Population

Growth in the number of procedures will be driven by the aging Baby Boomer generation. According to a 2016 publication by Transparency Market Research, the number of people over 65 years of age is expected to double in the next 10 years. Intuitive Surgical is strategically positioned to benefit from this trend as a large portion of the procedures performed by the da Vinci system is in elderly patients. In fact, ISRG’s fastest growing surgical procedure in the U.S is the prostatectomy, whose average patient age is 75 years.

Trade-In Activity



Trade-In and Update Cycles

ISRG's sales will benefit from a new product update cycle that we expect to take place in 2020. Historically, an updated model is launched approximately every 6 years. This indicates that ISRG will benefit from trade-ins of the highly sold da Vinci Xi model during our investment horizon. Even though Intuitive Surgical has not released details on their upcoming model, the company received FDA clearance for the unreleased da Vinci Sp model.

Investment Rationale

Market Expansion Potential

Intuitive Surgical has maintained its market leader position for over 17 years, yet still has potential to grow nationally and especially internationally. In order to determine what ISRG’s national hospital client base would be at full capacity, we sampled hospitals that have at least one da Vinci system installed. Within the sample, we observed that the smallest hospitals have on average 120 beds, and we used this pattern to estimate the size of ISRG’s potential client base. We found that out of 5,564 hospitals in the U.S., nearly 3,700 are potential da Vinci buyers.

Considering the firm had 2,500 systems installed in the U.S. as of September, 2016, the firm still has the potential to expand its existent hospital client base by 45% to 48%, depending on the proportion of hospitals that have 2 or more systems installed. However, the research performed does not take into consideration the existence of surgery centers, which many are potential clients. Although estimating potential for market penetration within surgery centers is difficult, we can safely assume that ISRG’s expansion potential is superior than 48%, especially considering there are nearly as many surgery centers as hospitals in the U.S.

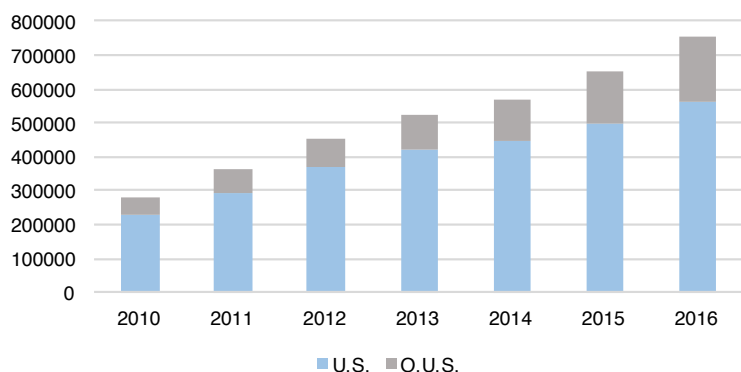
Financial Position

Intuitive Surgical’s sound financial position is indicated by the firm’s proven ability to generate substantial operational cash flows, its debt-free capital structure, and large cash balance. The company has generated over \$600 million of annual operational cash flows every year since 2011. Despite operating in a capital-intensive industry, the company is free of long-term debt. ISRG has a cash balance of approximately \$1 billion. The healthy cash flow stream and large cash balance are especially important because they provide a cushion against unexpected losses, such as litigation costs. Their cash position has enabled them to return value to shareholders through its active share buyback program. On December 13th, 2016, ISRG announced an additional \$3 billion of share buybacks.

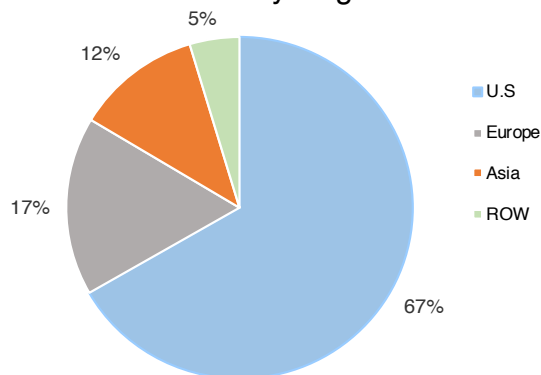
Worldwide Procedures Growth

Intuitive Surgical will see increased sales and recurring revenues during the next 5 years as a result of growth in the number of surgical procedures performed worldwide. Surgical procedures have been increasing exponentially since the early 2000’s as a result of the introduction of innovative medical devices in the market. During the past five years, U.S. procedures grew at a 5-year annualized growth rate of 18.78% while outside the U.S. (OUS) procedures grew at 24.89%.

Growth in da Vinci Procedures



Revenue By Region



Competitive Advantages

Market Leader

Intuitive Surgical is the market leader in the robotic surgery equipment industry. For the last 17 years, Intuitive Surgical has had complete control over the \$2.8 billion market because they are the only manufacturer of surgical robotic systems with a marketable product. The company has established their brand in over 3800 hospitals worldwide and has developed a deep understanding of surgeons' needs.

Barriers to Entry

The surgical robotics industry has high barriers to entry. New entrants are required to expend a substantial percentage of their resources to R&D, clinical studies, manufacturing, recruiting qualified personnel, and raising capital. There are other companies with a robotics surgery system in various stages of production. However, no other company has been able to successfully create a product, pass clinical trials and FDA inspection, then market their product successfully.

High Switching Costs

Intuitive Surgical has created an expansive da Vinci ecosystem that helps the company retain customers. Once a hospital purchases a da Vinci system, Intuitive Surgical benefits from the long-lasting nature of their products and the consistent revenues from limited use products and all associated maintenance. They also benefit from continual da Vinci training provided to surgeons. Essentially, the aforementioned expenses are high switching costs that keep clients tied to the system.

Successful Direct-To-Patient Marketing

Furthermore, there are costs for a hospital associated with not having a da Vinci system. ISRG has been very successful at direct-to-patient marketing, which has created awareness and product demand from patients who now wish to have the robotic surgery. Not owning a system presents the risk of losing surgical patients and possibly surgeons.

Growing Clinical Applications

Intuitive Surgical is expanding the possible surgical applications for its da Vinci systems. They currently focus on 5 types of surgery but are expanding their selection during our investment horizon.

Intellectual Property

Intuitive Surgical's intellectual property and growing instrumentation base is another sizable barrier.

The company holds more than 2,100 U.S. and foreign patents for ownership and exclusive field-of-use licenses. Intuitive Surgical's has applications for an additional 1,500 U.S. and foreign patents which indicates the importance of patents in ISRG's market dominance.

Risk Outlook

Litigation Risk

Intuitive Surgical is vulnerable to product liability and negligence claims relating to the use of their products. 2014 marked ISRG's largest litigation cost of \$64 million. However, they were able to pay off the total amount within the year. This cost represented just 3% of the company's total revenue during this year and 10% of the available cash.

Political Uncertainty

New efforts to restructure the healthcare system by repealing the Affordable Care Act could impact US hospital capital spending. Bank of America's healthcare outlook suggests that the new administration's plans will not impact capital spending in the short term.

While there is a high degree of uncertainty, the consensus states that the ACA will not be repealed without a replacement plan. Even if the ACA is repealed, there will likely be a transitional period of 2-3 years to slowly change the laws within the healthcare system.

The proposed plan to change financing of Medicaid & Medicare coverage could result in a decrease in newly insured Americans and a potential decrease in surgical procedure volumes.

However, there was only a 30 basis point boost to surgical volumes when the ACA was enacted. Therefore, we expect a loss similar to the same increase.

Valuation

Select Operating Data (Per Share)		2016	2017	2018	2019	2020	2021
Net Income		20.9	25.2	27.6	31.0	35.0	36.8
Depreciation		0.2	0.4	0.5	0.6	0.7	0.8
Net Capital Expenditures		(0.6)	1.9	(1.5)	(1.2)	(0.9)	(0.9)
Changes in Net Working Capital		17.8	0.2	3.3	9.7	11.2	2.7
New Debt		0.0	0.0	0.0	0.0	0.0	0.0
Debt Repayment		0.0	0.0	0.0	0.0	0.0	0.0
FCFE		38.4	27.7	29.9	40.1	45.9	39.3
Discount Rate	7.50%	Discounted Values					
Intrinsic Value for FCFE	754.42	35.7	24.0	24.1	30.0	640.6	
Current Price	656.75						
Implied Undervaluation	14.87%						
Beta	0.73						
Market Expected Return	7.45%						
Risk Free Rate	2.45%						
CAPM Expected Return	6.10%						

The FCFE model above was used to estimate the intrinsic value of Intuitive Surgical. The company posted excellent results for the first three quarters of 2016 as a result of growth in adoption of general and urologic surgery, especially with hernia repair and colorectal procedures. The good 2016 performance seen so far is partially responsible for the \$5.07 EPS increase forecasted for the year. The EPS hike forecasted during the following years reflects the aggressive buyback plan the company is expected to implement, as well as continued procedures adoption. The discount rate utilized is based on the CAPM computation adjusted for additional unpredictable risks, such as litigation costs and uncertainty over the outlook of the healthcare industry. Finally, we assumed a perpetuity growth rate of 3% reflecting historical GDP growth rates and inflation levels.

Price/Earnings Constant Model		2017	2018	2019	2020	2021
EPS		25.2	27.6	31.0	35.0	36.8
P/E		28.1	28.1	28.1	28.1	28.1
Price		709.1	776.2	871.7	983.7	1,032.8
Price/Earnings Expansion Model						
		2017	2018	2019	2020	2021
EPS		25.2	27.6	31.0	35.0	36.8
P/E		28.1	28.6	29.1	29.6	30.1
Price		709.1	790.1	902.7	1,036.2	1,106.3
Price/Earnings Contraction Model						
		2017	2018	2019	2020	2021
EPS		25.2	27.6	31.0	35.0	36.8
P/E		28.1	27.6	27.1	26.6	26.1
Price		709.1	762.4	840.7	931.1	959.3

The P/E contraction model was used to set the 3-year target price for ISRG. During the last 5 years, ISRG's multiples have ranged between 23x and 46x.

Financial Statements

Revenues by Segment	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Product Sales Segment											
Instruments and Accessories	701.1	903.3	1,032.9	1,070.2	1,197.7	1,399.0	1,652.3	1,951.4	2,304.7	2,721.9	2803.58
Systems	777.8	932.9	834.9	632.5	721.9	805.0	846.6	890.4	936.4	984.8	1014.297
Total Product Sales	1,478.9	1,836.2	1,867.8	1,702.7	1,919.6	2,204.0	2,498.9	2,841.8	3,241.0	3,706.7	3,817.9
Services Segment											
Services	278.4	342.6	397.3	429.0	464.8	517.0	591.0	675.6	772.3	882.9	909.408
Total Revenues	1,757.3	2,178.8	2,265.1	2,131.7	2,384.4	2,721.0	3,089.9	3,517.4	4,013.4	4,589.6	4,727.3

Number of Systems Sold

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
U.S.	335	400	476	342	238	298						
O.U.S.	106	134	144	204	193	194						
Total System Sales	441	534	620	546	431	491						

Common Size Statement Of Income - As a Percentage of Revenues

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Revenue											
Product	84.16%	84.28%	82.46%	79.88%	80.51%	81.00%	80.87%	80.79%	80.76%	80.76%	80.76%
Service	15.84%	15.72%	17.54%	20.12%	19.49%	19.00%	19.13%	19.21%	19.24%	19.24%	19.24%
Total Revenue	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
Cost of Revenue											
Product	21.75%	22.73%	23.99%	26.73%	27.14%	23.89%	24.43%	24.43%	24.97%	24.97%	24.43%
Service	5.76%	5.20%	5.63%	6.94%	6.68%	5.31%	5.34%	5.34%	5.41%	5.48%	5.48%
Total Cost of Revenue	27.51%	27.93%	29.62%	33.68%	33.82%	29.20%	29.77%	29.77%	30.38%	30.45%	29.91%
Gross Profit	72.49%	72.07%	70.38%	66.32%	66.18%	70.80%	70.23%	70.23%	69.62%	69.55%	70.09%
Operating Expenses											
Selling, general and administrative	24.97%	23.97%	25.34%	32.42%	26.86%	26.86%	26.86%	26.86%	26.86%	26.86%	26.86%
Research and development	7.98%	7.80%	7.40%	8.35%	8.28%	8.28%	6.56%	8.28%	8.28%	8.28%	8.28%
Total Operating Expenses	32.95%	31.77%	32.74%	40.77%	35.14%	35.14%	33.42%	35.14%	35.14%	35.14%	35.14%
Income from Operations	39.54%	40.30%	37.64%	25.56%	31.04%	35.66%	36.80%	35.09%	34.48%	34.41%	34.95%
Interest and other income, net	0.85%	0.73%	0.81%	0.20%	0.78%	0.78%	0.78%	0.78%	0.78%	0.78%	0.78%
Income before Taxes	40.39%	41.03%	38.45%	25.75%	31.81%	36.44%	37.58%	35.86%	35.25%	35.18%	35.73%
Income tax expense	12.21%	10.89%	8.83%	6.11%	7.12%	7.12%	7.12%	7.12%	7.12%	7.12%	7.12%
Net Income	28.17%	30.14%	29.62%	19.65%	24.69%	29.32%	30.46%	28.74%	28.13%	28.07%	28.61%

Financial Statements

Consolidated Statement Of Income	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
<i>In Millions, except Per Share data, unless otherwise specified</i>											
Revenue											
Product	1,478.9	1,836.2	1,867.8	1,702.7	1,919.6	2,204.0	2,498.9	2,841.8	3,241.0	3,706.7	3,817.9
Service	278.4	342.6	397.3	429.0	464.8	517.0	591.0	675.6	772.3	882.9	909.4
Total Revenue	1,757.3	2,178.8	2,265.1	2,131.7	2,384.4	2,721.0	3,089.9	3,517.4	4,013.4	4,589.6	4,727.3
Cost of Revenue											
Product	382.3	495.3	543.4	569.9	647.2	649.9	754.8	859.3	1,002.2	1,146.1	1,154.8
Service	101.2	113.2	127.5	148.0	159.3	144.5	165.1	188.0	217.2	251.4	259.0
Total Cost of Revenue	483.5	608.5	670.9	717.9	806.5	794.5	920.0	1,047.2	1,219.4	1,397.5	1,413.8
Gross Profit	1,273.8	1,570.3	1,594.2	1,413.8	1,577.9	1,926.5	2,169.9	2,470.1	2,794.0	3,192.1	3,313.5
Operating Expenses											
Selling, general and administrative	438.8	522.2	574.0	691.0	640.5	730.9	830.0	944.8	1,078.1	1,232.9	1,269.8
Research and development	140.2	170.0	167.7	178.0	197.4	225.3	202.7	291.2	332.3	380.0	391.4
Total Operating Expenses	579.0	692.2	741.7	869.0	837.9	956.2	1,032.7	1,236.0	1,410.3	1,612.8	1,661.2
Income from Operations	694.8	878.1	852.5	544.8	740.0	970.4	1,137.2	1,234.1	1,383.7	1,579.2	1,652.3
Interest and other income, net	14.9	15.8	18.4	4.2	18.5	21.1	24.0	27.3	31.1	35.6	36.7
Income before Taxes	709.7	893.9	870.9	549.0	758.5	991.5	1,161.1	1,261.4	1,414.8	1,614.8	1,689.0
Income tax expense	214.6	237.3	199.9	130.2	169.7	193.7	219.9	250.3	285.6	326.6	336.4
Net Income	495.1	656.6	671.0	418.8	588.8	797.8	941.2	1,011.0	1,129.2	1,288.2	1,352.5
Net income per share											
Basic (in dollars per share)	12.6	16.5	17.1	11.4	15.9	20.9	25.2	27.6	31.0	35.0	36.8
Diluted (in dollars per share)	12.3	16.0	16.7	11.1	15.5	20.6	24.8	27.1	30.4	34.4	36.1
Shares used in computing net income per share											
Basic (in shares)	39.2	39.8	39.2	36.9	37.1	38.1	37.3	36.6	36.4	36.8	36.8
Diluted (in shares)	40.2	41.1	40.1	37.7	37.9	38.8	38	37.3	37.1	37.5	37.5

Financial Statements

Consolidated Balance Sheet - USD (\$) in Millions	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Current Assets											
Cash and cash equivalents	465.8	553.7	782.1	600.3	714.6	1,021.6	1,012.4	1,082.8	1,235.6	1,412.9	1,455.3
Short-term investments	563.4	770.7	621.4	632.2	845.2	1,193.7	1,118.5	1,196.3	1,365.0	1,561.0	1,607.8
Accounts receivable, net of allowances	297.9	370.3	301.4	315.1	394.3	432.0	550.1	588.3	671.3	767.7	790.7
Inventory	112.1	121.5	179.6	181.7	167.9	183.5	248.5	265.8	303.3	346.8	357.2
Prepays and other current assets	20.9	67.3	38.3	82.6	73.5	80.6	90.1	96.3	109.9	125.7	129.4
Deferred tax assets	6.2	9.3	9.6	0.0	0.0	0.0	8.5	9.1	10.4	11.9	12.3
Total Current Assets	1,466.3	1,892.8	1,932.4	1,811.9	2,195.5	2,911.4	3,028.1	3,238.7	3,695.4	4,226.0	4,352.8
Property plant and equipment	225.9	276.5	355.9	439.4	493.2	515.7	445.0	501.5	546.7	581.3	616.0
Less: accumulated depreciation	28.7	34.7	46.0	52.0	61.1	68.4	82.8	100.2	121.2	146.7	177.5
Net Property Plant and Equipment	197.2	241.8	309.9	387.4	432.1	447.3	527.8	601.7	667.9	728.0	793.5
Long-term investments	1,142.6	1,596.1	1,350.4	1,264.5	1,788.0	2,346.0	2,694.0	3,093.6	3,552.5	4,079.5	4,684.6
Long-term deferred tax assets	69.1	87.0	126.1	171.3	167.8	167.8	167.8	167.8	167.8	167.8	167.8
Intangible and other assets, net	71.0	103.4	94.1	126.3	122.8	135.8	135.8	135.8	135.8	135.8	135.8
Goodwill	116.9	138.1	137.4	198.0	201.1	201.1	201.1	201.1	201.1	201.1	201.1
Total Assets	3,063.1	4,059.2	3,950.3	3,959.4	4,907.3	6,209.4	6,754.6	7,438.8	8,420.6	9,538.2	10,335.6
Current Liabilities											
Accounts payable	45.8	57.6	46.2	61.6	52.6	60.6	81.3	92.5	105.6	120.7	124.3
Accrued compensation and employee benefits	83.1	104.0	70.7	96.2	117.3	104.1	144.6	164.6	187.8	214.8	221.2
Deferred revenue	154.2	185.7	200.1	216.6	225.6	229.6	300.8	342.4	390.7	446.8	460.2
Other accrued liabilities	37.5	54.3	63.9	126.8	96.4	133.8	110.8	126.1	143.9	164.5	169.5
Total Current Liabilities	320.6	401.6	380.9	501.2	491.9	528.1	637.4	725.6	828.0	946.8	975.2
Other long-term liabilities	96.9	77.5	68.0	78.8	95.9	104.8	104.8	104.8	104.8	104.8	104.8
Total Liabilities	417.5	479.1	448.9	580.0	587.8	632.9	742.2	830.4	932.8	1,051.6	1,080.0
Stockholders' Equity											
Preferred stock	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Common stock	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Additional paid-in capital	1,742.8	2,240.1	2,519.9	2,896.8	3,429.8	4,135.0	4,531.8	4,966.6	5,443.2	5,965.5	6,537.9
Retained earnings	901.9	1,333.4	979.4	487.7	899.2	1,437.5	1,476.6	1,637.8	2,040.7	2,517.1	2,713.7
Accum. other comprehensive income	0.9	6.6	2.1	(5.1)	(9.5)	4.0	4.0	4.0	4.0	4.0	4.0
Total Stockholders' Equity	2,645.6	3,580.1	3,501.4	3,379.4	4,319.5	5,576.5	6,012.4	6,608.4	7,487.9	8,486.6	9,255.6
Total Liabilities and Stockholders' Equity	3,063.1	4,059.2	3,950.3	3,959.4	4,907.3	6,209.4	6,754.6	7,438.8	8,420.6	9,538.2	10,335.6