

Last Price	Fair Value	Consider Buy	Consider Sell	Uncertainty	Economic Moat™	Moat Trend™	Stewardship	Industry Group
60.67 USD	71.00 USD	49.70 USD	95.85 USD	Medium	Wide	Stable	Standard	Medical Devices

# St. Jude Delivers Solid First Quarter Despite Ongoing Weakness in CRM

See Page 2 for the full Analyst Note from 20 Apr 2016

Debbie S. Wang Senior Equity Analyst debbie.wang@morningstar.com +1 (312) 384-3937

The primary analyst covering this company does not own its stock.

Research as of 20 Apr 2016 Estimates as of 20 Apr 2016 Pricing data through 22 Apr 2016 Rating updated as of 22 Apr 2016

Currency amounts expressed with "\$" are in U.S. dollars (USD) unless otherwise denoted.

#### Contents

Investment Thesis	1
Morningstar Analysis	
Analyst Note	2
Valuation, Growth and Profitability	2
Scenario Analysis	2
Economic Moat	3
Moat Trend	3
Bulls Say/Bears Say	5
Financial Health	6
Enterprise Risk	6
Management & Ownership	8
Analyst Note Archive	9
Additional Information	-
Morningstar Analyst Forecasts	10
Comparable Company Analysis	14
Methodology for Valuing Companies	16

#### **Investment Thesis** 28 Jan 2015

St. Jude Medical benefits from the device industry's high barriers to entry and has done a nice job of closing the historical gap with key rivals. St. Jude has even taken the lead in certain therapeutic areas, which underscores its wide economic moat. Originally known as a pioneer in mechanical heart valves, St. Jude branched out considerably with various acquisitions. Diversification has been the key to the firm's growth during the past 10 years, allowing it to tap into previously robust markets for implantable cardioverter defibrillators while mechanical heart valve sales continue to decline. In 2013, cardiac rhythm management devices accounted for about 50% of total sales, with heart valves contributing an estimated 9%. We think St. Jude has built an extensive portfolio of devices across the spectrum of cardiac care.

We're excited about St. Jude's foray into key therapeutic areas that hold potential for growth. First, the firm has launched its new Portico transcatheter aortic heart valve in Europe. This will allow St. Jude to enter a new market among frail patients with aortic stenosis--a market we project will reach \$3 billion by 2020. Second, the firm recently launched its diagnostic CardioMems product in the U.S. This technology helps with early identification of worsening condition in heart failure patients, and allows for timely intervention to help stabilize the patient before hospital admission is necessary. St. Jude is also squarely in the fast-growing neuromodulation market. Although this market has primarily focused on addressing patients with chronic pain, we think the technology also has application in treatment-resistant depression, epilepsy, incontinence, and Parkinson's disease.

Management has taken solid steps to strengthen St. Jude, and the company is giving its peers a run for their money. We expect St. Jude to offer tough competition, especially as it races to solidify its presence in neuromodulation, aortic stenosis, and atrial fibrillation--the three therapeutic areas that are associated with substantial untreated populations and could develop into multibillion-dollar markets.

Vital Statistics				
Market Cap (USD Mil)				17,207
52-Week High (USD)				80.84
52-Week Low (USD)				48.83
52-Week Total Return %				-15.9
YTD Total Return %				-1.3
Last Fiscal Year End			31 E	Dec 2015
5-Yr Forward Revenue CAGR %				3.1
5-Yr Forward EPS CAGR %				1.5
Price/Fair Value				0.85
Valuation Summary and Fore	casts			
Fiscal Year:	2014	2015	2016(E)	2017(E)
D: /F :		400		

Valuation Summary and Forecasts										
Fiscal Year:	2014	2015	2016(E)	2017(E)						
Price/Earnings	11.8	12.9	14.9	13.8						
EV/EBITDA	10.0	10.6	13.6	13.3						
EV/EBIT	11.7	12.9	16.9	16.5						
Free Cash Flow Yield %	6.0	4.9	7.1	7.0						
Dividend Yield %	1.6	1.8	1.6	1.5						

Financial Summary	and Fore	casts (	USD Mil)		
	Fiscal Year:	2014	2015	2016(E)	2017(E)
Revenue		6,100	5,922	5,982	6,204
Revenue YoY %		10.9	-2.9	1.0	3.7
EBIT		1,810	1,546	1,353	1,391
EBIT YoY %		42.2	-14.6	-12.5	2.8
Net Income, Adjusted		1,597	1,374	1,178	1,257
Net Income YoY %		51.5	-14.0	-14.2	6.7
Diluted EPS		5.51	4.80	4.08	4.41
Diluted EPS YoY %		51.9	-13.0	-15.0	8.2
Free Cash Flow		1,522	-1,882	1,136	1,122
Free Cash Flow YoY %		143.5	-223.7	-160.3	-1.2

Historical/forecast data sources are Morningstar Estimates and may reflect adjustments.

#### **Profile**

St. Jude Medical manufactures cardiovascular medical devices, including the world's most widely used mechanical heart valve. Its products include surgical heart valves, pacemakers, implantable cardioverter defibrillators, catheter ablation systems, transcatheter heart values, and vascular closure devices for catheterization procedures. St. Jude sells its products to hospitals and heart surgery centers in the United States and abroad. Foreign sales make up approximately 55% of the company's total sales.



Last Price	Fair Value	Consider Buy	Consider Sell	Uncertainty	Economic Moat™	Moat Trend™	Stewardship	Industry Group
60.67 USD	71.00 USD	49.70 USD	95.85 USD	Medium	Wide	Stable	Standard	Medical Devices

### Morningstar Analysis

#### St. Jude Delivers Solid First Quarter Despite Ongoing Weakness in CRM 20 Apr 2016

St. Jude Medical posted solid first-quarter results that were consistent with our expectations on the top and bottom lines; we're standing behind our \$71 fair value estimate. Despite a year-over-year revenue decline in cardiac rhythm management (down 7% in constant currency), St. Jude's new products in neuromodulation, broad portfolio in atrial fibrillation, and integration of Thoratec all contributed to 2% comparable revenue growth over the prior-year period. St. Jude's innovation in the form of CardioMems, TactiCath, and chronic pain technology all underscore our confidence in this firm's wide moat.

St. Jude has continued to suffer softness in its CRM product, as rival Medtronic has come on strong with its MRI-safe CRM products. However, we expect St. Jude's product line to turn the corner over the next 24 months, as launches of comparable pacemakers and implantable cardioverter defibrillators are expected to launch in the U.S. in the second half of 2016 and first part of 2017, respectively. This should help St. Jude recover some share. However, the entire CRM market remains in slow growth mode, and St. Jude will need to rely on its participation in faster-growing markets to goose growth. In particular, we like the robust underlying demand in atrial fibrillation and opportunities for innovation in neuromodulation—which both contributed double-digit growth to St. Jude's first-quarter performance. The new addition of left ventricular assist devices (from Thoratec) delivered high-teens growth in the first quarter.

Despite the low penetration rates of LVAD therapy and the sizable heart failure patient population that's unlikely to receive a transplant, we remain cautious about this technology primarily because of the high (and expensive) complication rates. As we march toward value-based reimbursement, the cost of treating LVAD complications could pose challenges to more widespread adoption of the technology. On the other hand, these drawbacks also present opportunities for meaningful innovation something we hope to see as St. Jude invests in nextgeneration LVAD technology.

#### Valuation, Growth and Profitability 24 Jun 2015

We stand behind our fair value estimate of \$71 per share. While we think St. Jude's lineup of ICDs and cardiac resynchronization devices is competitive, we recognize that unanswered questions about how to more accurately identify patients who will benefit from defibrillation leave the U.S. market in a state of anemic growth. As a result, we project low-single-digit growth for ICDs through our explicit forecast period. Even though rival Medtronic eked out some pacemaker share gains over the past couple of years thanks to its MRI-compatible product, we expect St. Jude to regain some of that share loss thanks to the launch of its new Nanostim leadless pacemaker. Overall, we expect strength in atrial fibrillation, structural heart, vascular, and neuromodulation devices to drive revenue growth over the next five years. This adds up to 4% projected average annual top-line growth through 2019.

Going forward, we expect sales and marketing expenses to remain around 32%-33% of sales in order to support and successfully commercialize several new technology platforms currently in development. Over the longer term, we anticipate an incremental rise in R&D spending, as the FDA is likely to require more postmarketing studies in the future. Thanks to the cost benefits of shifting manufacturing over to new facilities in Costa Rica and Malaysia, we project an incremental 250-basis-point gain in operating margins by 2017 after accounting for the 2% cut in Medicare reimbursement, leading to 6% net income growth.

#### **Scenario Analysis**

Based on the average volatility of cash flows from a diverse product portfolio in relatively less discretionary cardiac markets, we rate St. Jude's uncertainty as medium. In our expected scenario, we anticipate St. Jude will absorb all of the 2% Medicare reimbursement cut as providers push back



Last Price	Fair Value	Consider Buy	Consider Sell	Uncertainty	Economic Moat™	Moat Trend™	Stewardship	Industry Group
60.67 USD	71.00 USD	49.70 USD	95.85 USD	Medium	Wide	Stable	Standard	Medical Devices



on pricing, but cost-shifting still takes place with the managed care organizations.

On the optimistic side, if ICD sales regain mid-single-digit growth through 2019, St. Jude gains more pacemaker share than anticipated, atrial fibrillation sales average 12% growth through 2019, neuromodulation growth hits the high single digits, and St. Jude is able to fully offset the 2% Medicare cut through cost shifting and manufacturing efficiencies, then we'd boost our fair value estimate to \$97 per share.

On the other hand, in our bear-case scenario, our fair value estimate is \$54 per share. In this case, we assume St. Jude's CRM market-share loss to Medtronic exceeds what we've built into our base case because of disappointing commercial response to St. Jude's pacemaker product. St. Jude is then unable to significantly penetrate the existing chronic pain market and cannot obtain new indications in neuromodulation, the firm's transcatheter heart valve products lag as me-too products, rivals end up dominating the atrial fibrillation market, and Medicare reimbursement cuts see extremely limited cost shifting with commercial

payers.

#### **Economic Moat**

We've given St. Jude a wide economic moat for its progress in strengthening its competitive advantage by improving innovation and catching up on product cycles. Like its rivals, St. Jude's competitive advantage primarily stems from intangibles such as its intellectual property and the relationships it cultivates with physicians. The number and scientific strength of St. Jude's patents put the company in the Top 10 medical device firms as ranked by the Patent Board, an independent patent analytics and research group. Although St. Jude had historically lagged its key competitors in introducing cutting-edge technology, the company has significantly ramped up its level of innovation and beefed up its salesforce over the past seven years. This has allowed St. Jude to launch its own next-generation products alongside those of Medtronic and even pull ahead of rivals in certain areas such as atrial fibrillation and cardiac resynchronization devices.

St. Jude's wide moat also stems from efficient scale, where it participates in a rational oligopoly with two rivals, primarily. This structure of the cardiac device industry translates into three large competitors that dominate more than 80% of the market. These large competitors can easily acquire any upstarts or emerging competitors with new technology. Furthermore, in many of St. Jude's business segments, there is room for manufacturers to differentiate their products. For example, St. Jude's implantable cardioverter defibrillators are not entirely interchangeable with those from Medtronic or Boston Scientific. Each rival configures a slightly different set of features and capabilities, in addition to the primary rhythm regulation function, to make their products distinctive.

#### **Moat Trend**

St. Jude's moat trend remains stable. Despite grassroots agitation for regulatory reform and a tougher pricing



Last Price	Fair Value	Consider Buy	Consider Sell	Uncertainty	Economic Moat™	Moat Trend™	Stewardship	Industry Group
60.67 USD	71.00 USD	49.70 USD	95.85 USD	Medium	Wide	Stable	Standard	Medical Devices

environment as governments wrestle with budgetary limits and hospital customers adapt to cost controls driven by health-care reform, we think the cardiac device makers should continue to enjoy the stable oligopoly that is currently in place. The competitive field is already consolidated and chances are extremely slim that any new entrants will be able to grow big enough to threaten the existing three rivals. Thanks to the timing of individual product cycles at each cardiac device company, the competitors often trade a few market share points back and forth every three or four years as new innovations are introduced. As long as St. Jude does not fall too far behind on the innovation front, it should be able to maintain its competitive advantage. The more serious risk--though we believe it is highly unlikely--would be the entrance of another large competitor into the cardiac device market. However, considering the difficulty of amassing the intellectual property, expertise in manufacturing in accordance with extensive regulations, resources necessary to fund large-scale clinical studies, and building relationships with practitioners, it is extremely unlikely that another competitor of St. Jude's caliber will break into this market anytime soon. While the likelihood of new entrants remains low, we think the bar for getting new devices and procedures approved and reimbursed has risen for all medical technology companies thanks to the ACA's focus on shifting from a volume-based reimbursement framework to a value-based one.

If we see St. Jude strengthen its grip on key emerging therapeutic markets, we would consider changing its moat trend to positive. For example, the company has forged ahead with development of catheter-based ablation devices to treat atrial fibrillation, a condition that affects more than 2 million Americans, and for which there are few effective drug therapies. This market remains in its infancy and the long-term therapeutic efficacy of ablation has not yet been determined. But, it could become a multibillion-dollar market and St. Jude maintains a strong presence there. We

also think St. Jude's acquisition of CardioMems holds considerable potential in this new age of health care, where providers have financial incentives to keep patients from returning to the hospital after an episode of care. The CardioMems implantable wireless diagnostic helps monitor heart failure patients--a population prone to rehospitalization--and gives practitioners enough early warning to intervene in the event that a patient's heart failure symptoms worsen, which lowers the chances of that patient landing in the hospital again. After the U.S. Food and Drug Administration approved the firm's heart failure management system last spring, St. Jude has put its muscle behind a robust launch.



Last Price	Fair Value	Consider Buy	Consider Sell	Uncertainty	Economic Moat™	Moat Trend™	Stewardship	Industry Group
60.67 USD	71.00 USD	49.70 USD	95.85 USD	Medium	Wide	Stable	Standard	Medical Devices

## Bulls Say/Bears Say

#### **Bulls Say**

- ► St. Jude is hotly pursuing development and commercialization of transcatheter aortic heart valves and renal denervation--two emerging technologies and new markets that should fuel growth.
- ► The atrial fibrillation market holds much potential, as currently available medical treatments are often ineffective for more than 50% of patients, and stroke related to atrial fibrillation is likely underestimated.
- St. Jude's launch of the CardioMems wireless monitoring technology for heart failure patients could translate into a feeder stream of eventual CRM patients.

#### **Bears Say**

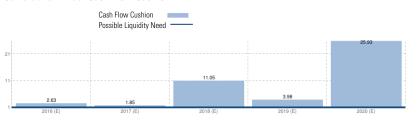
- St. Jude remains a distant second to Medtronic in the implantable cardioverter defibrillator market, and we do not see any catalysts on the horizon to spur growth in this category.
- ► In the wake of disappointing results from Medtronic's controlled trial for renal denervation, serious doubts about the therapy have been raised.
- Advances in minimally invasive heart valve repair could reduce demand for the traditional heart valve replacements St. Jude offers.



Last Price	Fair Value	Consider Buy	Consider Sell	Uncertainty	Economic Moat™	Moat Trend™	Stewardship	Industry Group
60.67 USD	71.00 USD	49.70 USD	95.85 USD	Medium	Wide	Stable	Standard	Medical Devices

Five Year Adjusted Cash Flow Forecast (USD Mil)					
	2016(E)	2017(E)	2018(E)	2019(E)	2020(E)
Cash and Equivalents (beginning of period)	667	119	367	1,347	2,088
Adjusted Available Cash Flow	1,070	1,060	1,142	1,145	1,193
Total Cash Available before Debt Service	1,737	1,179	1,509	2,492	3,281
Principal Payments	-500	-500	_	-500	_
Interest Payments	-148	-136	-136	-126	-126
Other Cash Obligations and Commitments	-13	-1	-1	-1	-1
Total Cash Obligations and Commitments	-661	-637	-137	-627	-127

#### **Cumulative Annual Cash Flow Cushion**



#### **Adjusted Cash Flow Summary**

		/0 UI
	USD Millions	Commitments
Beginning Cash Balance	667	30.5
Sum of 5-Year Adjusted Free Cash Flow	5,610	256.5
Sum of Cash and 5-Year Cash Generation	6,277	286.9
Revolver Availability	_	
Asset Adjusted Borrowings (Repayment)	_	
Sum of Cash, 5-Year Cash Generation, Revolver and Adjustments	6,277	286.9
Sum of 5-Year Cash Commitments	-2,187	_

#### **Financial Health**

St. Jude's financial position looks set to weaken moderately immediately following the \$3.4 billion Thoratec acquisition, which is scheduled to close in late 2015. For example, at the beginning of July, debt totaled \$3.7 billion, or gross debt/EBITDA in the low 2s by our estimates. With cash on its balance sheet (\$910 million), net debt/EBITDA stood in the mid-1s times, or on the high end of its typical ratio between 1.0 and 1.5 times. By our estimates, gross debt leverage could rise to the mid-3s to fund the Thoratec acquisition. While management aims to reduce gross debt leverage to about 2 times by the end of 2017, this leverage-increasing transaction is enough to downgrade a firm that was already operating on the weak end of its previous rating category. St. Jude intends to fund the Thoratec acquisition with proceeds from new term loan and senior note borrowings. So that will add significantly to its existing debt. For example, major debt maturities include current debt due within the next year of \$2.0 billion and senior notes of \$900 million due 2023 and \$700 million due 2043

#### **Enterprise Risk**

St. Jude faces tougher pricing conditions all around. Hospitals, under pressure themselves to remain profitable, are more likely to push back on vendors when negotiating contracts. Further cuts in Medicare reimbursement will exacerbate the situation. This effect could be more severe in competitive markets where cost-shifting is limited. Payers are also under the gun to lower spending, which makes them reluctant to establish reimbursement for new technology without compelling clinical evidence. This new and widespread emphasis on comparative effectiveness research will make it more difficult for St. Jude to garner premium prices for new products without clinical and economic data to substantiate better patient outcomes and cost effectiveness. As with all medical devices, product recalls crop up on occasion and could hamper St. Jude's



Last Price Fair Va	lue Consider Buv	Consider Sell	Uncertainty	Economic Moat™	Moat Trend™	Stewardship	Industry Group
60.67 USD 71.00 U	ISD 49.70 USD	95.85 USD	Medium	Wide	Stable	Standard	Medical Devices

performance. Furthermore, we think there will be changes to the regulatory approval process for medical devices that could result in more time-consuming and expensive trials when the Food and Drug Administration ratchets up its standards for clinical data and registry studies. It is not yet clear just how much more device companies will need to spend to satisfy the regulatory agency, but we are confident that existing standards are rising. Finally, not every pipeline technology will reach commercialization--there will be inevitable gutter balls along the way.



Last Price	Fair Value	Consider Buy	Consider Sell	Uncertainty	Economic Moat™	Moat Trend™	Stewardship	Industry Group
60.67 USD	71.00 USD	49.70 USD	95.85 USD	Medium	Wide	Stable	Standard	Medical Devices

## Management & Ownership

Management Activity	'			
Name	Position	Shares Held	Report Date*	InsiderActivity
DANIEL J. STARKS	Director	6,128,215	17 Dec 2015	_
JOHN C. HEINMILLER		237,211	18 Dec 2015	_
JOHN W. BROWN	Director	121,349	01 Jun 2015	_
ERIC S. FAIN,M.D.		79,954	02 Jan 2016	_
MR. STUART M. ESSIG, PHD	Director	36,299	07 May 2015	_
MICHAEL T. ROUSSEAU		31,484	17 Dec 2015	_
STEFAN K. WIDENSOHLE	RDirector	31,288	01 Feb 2016	_
RICHARD R. DEVENUTI	Director	30,830	07 May 2015	_
BARBARA B. HILL	Director	29,185	03 Feb 2016	_

<sup>\*</sup>Represents the date on which the owner's name, position, and common shares held were reported by the holder or issuer.

	_	
Fund	Owners	ehin

•				
Top Owners	% of Shares Held	% of Fund Assets	Change (k)	Portfolio Date
VA CollegeAmerica Growth Fund of America	2.46	0.29	-1,048	31 Mar 2016
VA CollegeAmerica AMCAP	2.46	0.87	-768	31 Mar 2016
Vanguard Health Care Fund	2.17	0.72	_	31 Dec 2015
Vanguard Total Stock Mkt Idx	1.86	0.07	-100	31 Mar 2016
VA CollegeAmerica Invmt Co of America	1.65	0.37	-365	31 Mar 2016
Concentrated Holders				
NB Value Equity Fund	_	7.30	_	30 Jun 2015
Market Vectors MS US Wide Moat ETF	_	5.14	_	15 Apr 2016
Market Vectors® Mstar Wide Moat ETF	0.23	5.13	_	14 Apr 2016
Yorkville American QVR Enhanced	_	4.36	_	31 Mar 2016
North Growth US Equity	0.08	4.09	_	31 Dec 2015

#### Institutional Transactions

Top 5 Buyers	% of Shares Held	% of Fulla Assets	Sold (k)	Portfolio Date
Barrow Hanley Mewhinney & Strauss LLC	1.05	0.27	2,713	31 Dec 2015
Geode Capital Management, LLC	0.91	0.09	2,588	31 Dec 2015
MFS Investment Management KK	7.62	0.71	1,819	31 Dec 2015
Schroder Investment Management Ltd	1.02	0.62	1,656	31 Dec 2015
New Jersey Division of Pensions and Benefits	0.48	0.09	1,580	30 Jun 2010
Top 5 Sellers				
Capital Research Global Investors	9.37	0.56	-4,962	31 Dec 2015
Fidelity Management & Research Company	1.80	0.22	-1,304	29 Feb 2016
Pnc Bank, National Association	0.15	0.03	-1,238	31 Dec 2015
Ivory Investment Management LLC	0.06	0.28	-1,088	31 Dec 2015
BlackRock Fund Advisors	2.58	0.07	-792	31 Dec 2015

#### Management 24 Jun 2015

Chairman, President, and CEO Daniel Starks smoothly stepped into his leadership roles in May 2004 after a long history with St. Jude in different positions. Before coming on board at St. Jude, Starks was president and CEO of Daig Corporation--a cardiovascular device firm that was acquired by St. Jude in 1996. We think Starks' compensation has been reasonable, and we like that St. Jude uses the 50th percentile as a reference point on management compensation compared with its peer group, which we find more palatable than the 75th percentile benchmark that is commonly seen. However, bonuses for management are mainly tied to earnings per share targets, which can be manipulated through accounting mechanisms. We like that Starks has a respectable 3% stake in the company.

Management has done a decent job with capital allocation, in our opinion. Like the other major medical device companies, St. Jude makes regular acquisitions of smaller (often privately held) firms that offer emerging technology. These purchases are often dilutive in the short term because the technology still requires much development to reach commercialization. Though it is difficult to assess the value of what was purchased, we tend to view these investments akin to the internal investments that St. Jude must make in R&D. We like that the firm has its eye on the longer-term potential of these early-stage technologies, even if there is near-term dilution. Further, St. Jude has not been plagued by goodwill write-downs, which gives us some confidence that the firm pays a reasonable price for its acquisitions.

Shares

% of Sharps % of Fund



Last Price	Fair Value	Consider Buy	Consider Sell	Uncertainty	Economic Moat™	Moat Trend™	Stewardship	Industry Group
60.67 USD	71.00 USD	49.70 USD	95.85 USD	Medium	Wide	Stable	Standard	Medical Devices

### **Analyst Notes**

# Few Surprises in St. Jude Medical's Fourth-Quarter Results and Our Fair Value Estimate Is Unchanged 27 Jan 2016

St. Jude Medical posted fourth-quarter results that fell slightly short of our tempered expectations, but not enough to change our \$71 fair value estimate materially. Although St. Jude has been late to launch MRI-safe cardiac rhythm management devices in the U.S., we note the firm's CRM franchise is highly unlikely to be substantially damaged by the delay, even though we expect further softness in this product line in the near term (especially in implantable cardioverter defibrillators). This sort of waxing and waning of product cycles, accompanied by low levels of trading market share back and forth, is part of the normal pattern seen with CRM devicemakers over the longer term. Thanks to newly commercialized technologies at St. Jude, we remain confident the firm enjoys a wide economic moat.

Although it is unusual for St. Jude to be so far behind in launching its MRI-safe devices domestically, we expect St. Jude to regain its footing upon launching its comparable pacemaker in the first half of 2016, followed by an MRI-compatible ICD in early 2017. Despite minor shifts in market share from quarter to quarter, or even year to year, St. Jude's share has remained relatively steady since 2010, ranging from the high 20s to low 30s, by our estimates. The last time any significant and sustained share shifts took place among the three major competitors was in the 2005-07 time frame when Guidant weathered the fallout from its Class I recall of its ICDs. At the time, St. Jude pressed its advantage and captured share from Boston. St. Jude's current delay has led to near-term sales decline, but we think CRM sales should return to growth with the new product launches.

We remain enthusiastic about St. Jude's new neuromodulation technology for chronic pain, and the ongoing adoption of CardioMems, both of which offer distinctive advantages in terms of clinical outcomes and cost savings. Nonetheless, securing and sorting out reimbursement has become tougher thanks to healthcare reform. The clinical data on CardioMems is impressive, in our opinion, reducing hospitalizations among heart failure patients by 48% over an average of 31 months measured. But, it will take time for the body of evidence to build. Moreover, relatively steep upfront costs to set up the system with St. Jude's Merlin monitoring system will likely translate into gradual adoption.



Last Price	Fair Value	Consider Buy	Consider Sell	Uncertainty	Economic Moat™	Moat Trend™	Stewardship	Industry Group
60.67 USD	71.00 USD	49.70 USD	95.85 USD	Medium	Wide	Stable	Standard	Medical Devices

## Morningstar Analyst Forecasts

Fiscal Year Ends in December						Forecast	
	3-Year						5-Year
Growth (% YoY)	Hist. CAGR	2013	2014	2015	2016	2017	Proj. CAGR
Revenue	2.5	0.0	10.9	-2.9	1.0	3.7	3.1
EBIT	3.4	-8.9	42.2	-14.6	-12.5	2.8	1.3
EBITDA	3.8	-6.7	35.0	-11.3	-10.2	2.2	1.0
Net Income	12.1	8.2	51.5	-14.0	-14.2	6.7	1.4
Diluted EPS	15.7	17.2	51.9	-13.0	-15.0	8.2	1.5
Earnings Before Interest, after Tax	18.1	22.5	49.3	-10.1	-16.0	2.5	0.1
Free Cash Flow	-218.7	-44.5	143.5	-223.7	-160.3	-1.2	_
	3-Year						5-Year
Profitability	Hist. Avg	2013	2014	2015	2016	2017	Proj. Avg
Operating Margin %	26.3	23.1	29.7	26.1	22.6	22.4	23.0
EBITDA Margin %	31.7	28.5	34.8	31.8	28.2	27.8	28.3
Net Margin %	22.8	19.2	26.2	23.2	19.7	20.3	20.7
Free Cash Flow Margin %	1.5	11.4	24.9	-31.8	19.0	18.1	17.5
ROIC %	16.6	14.5	20.4	14.9	11.4	11.7	12.2
Adjusted ROIC %	32.8	27.7	39.9	30.6	24.4	24.9	25.7
Return on Assets %	10.9	8.0	13.8	10.9	7.5	7.9	7.9
Return on Equity %	28.0	18.9	33.9	31.1	22.2	19.8	18.7
	3-Year						5-Year
Leverage	Hist. Avg	2013	2014	2015	2016	2017	Proj. Avg
Debt/Capital	0.52	0.46	0.48	0.61	0.52	0.46	0.44
Total Debt/EBITDA	2.50	2.28	1.82	3.40	3.10	2.74	2.70
EBITDA/Interest Expense	19.90	16.50	24.94	18.25	11.37	12.70	13.62

	2014	2015	2016(E)	2017(E)
Price/Fair Value	1.00	0.87	_	_
Price/Earnings	11.8	12.9	14.9	13.8
EV/EBITDA	10.0	10.6	13.6	13.3
EV/EBIT	11.7	12.9	16.9	16.5
Free Cash Flow Yield %	6.0	4.9	7.1	7.0
Dividend Yield %	1.6	1.8	1.6	1.5
<b>Key Valuation Drivers</b>				
Cost of Equity %				9.0
Pre-Tax Cost of Debt %				5.5
Weighted Average Cost of Ca	pital %			8.0
Long-Run Tax Rate %				18.0
Stage II EBI Growth Rate %				6.5
Stage II Investment Rate %				26.0
Perpetuity Year				20

**Valuation Summary and Forecasts** 

Additional estimates and scenarios available for download at http://select.morningstar.com.

Discounted Cash Flow Valuation			
	USD Mil	Firm Value (%)	Per Share Value
Present Value Stage I	4,495	17.6	15.55
Present Value Stage II	10,044	39.4	34.75
Present Value Stage III	10,978	43.0	37.99
Total Firm Value	25,517	100.0	88.29
Cash and Equivalents	667	_	2.31
Debt	-6,392	_	-22.12
Preferred Stock	_	_	_
Other Adjustments	_	_	_
Equity Value	19,792	_	68.48
Projected Diluted Shares	289		
Fair Value per Share (USD)	_		

The data in the table above represent base-case forecasts in the company's reporting currency as of the beginning of the current year. Our fair value estimate may differ from the equity value per share shown above due to our time value of money adjustment and in cases where probability-weighted scenario analysis is performed.



**Last Price** Moat Trend™ **Fair Value Consider Buy Consider Sell** Uncertainty Economic Moat™ Stewardship **Industry Group** 60.67 USD 71.00 USD 49.70 USD 95.85 USD Medium Wide Stable Standard Medical Devices

## Morningstar Analyst Forecasts

Income Statement (USD Mil) Fiscal Year Ends in December				Fore	eact
riscal teal clius III Decellibel	2013	2014	2015		<u>vası</u> 2017
Revenue	<b>5,501</b>	6,100	5,922	<i>5,982</i>	<i>6,204</i>
Cost of Goods Sold	1,574	1,653	1,706	1,795	1,861
Gross Profit	3,927	4,447	4,216	4,188	4,343
Selling, General & Administrative Expenses	1,884	1,856	1,878	1,884	1,954
Research & Development	691	692	676	766	775
Other Operating Expense (Income)	_	_	_	_	_
Depreciation & Amortization (if reported separately)	79	89	116	184	222
Operating Income (ex charges)	1,273	1,810	1,546	1,353	1,391
Restructuring & Other Cash Charges	301	181	96	_	_
Impairment Charges (if reported separately)	_	_	_	_	_
Other Non-Cash (Income)/Charges				25	25
Operating Income (incl charges)	972	1,629	1,450	1,328	1,366
Interest Expense	95	85	103	148	136
Interest Income		-2	-3		
Pre-Tax Income	877	1,542	1,344	1,180	1,230
Income Tax Expense	92	113	62	207	215
Other After-Tax Cash Gains (Losses)	_	_	_	_	_
Other After-Tax Non-Cash Gains (Losses)	_	_	_	_	_
(Minority Interest)	_	_	_	_	_
(Preferred Dividends)	_	_	_	_	
Net Income	785	1,429	1,282	974	1,015
Weighted Average Diluted Shares Outstanding	291	290	286	289	285
Diluted Earnings Per Share	2.70	4.93	4.48	3.37	3.56
Adjusted Net Income	1,054	1,597	1,374	1,178	1,257
Diluted Earnings Per Share (Adjusted)	3.63	5.51	4.80	4.08	4.41
Dividends Per Common Share	0.92	0.92	0.92	0.92	0.92
EBITDA	1,269	1,939	1,784	1,662	1,700
Adjusted EBITDA	1,570	2,120	1,880	1,687	1,725



Last Price	Fair Value	Consider Buy	Consider Sell	Uncertainty	Economic Moat™	Moat Trend™	Stewardship	Industry Group
60.67 USD	71.00 USD	49.70 USD	95.85 USD	Medium	Wide	Stable	Standard	Medical Devices

# Morningstar Analyst Forecasts

Balance Sheet (USD Mil)				_	
Fiscal Year Ends in December	2013	2014	2015	Fore	ecast 2017
Cash and Equivalents	1.373	1.442	667	119	367
Investments	_	_	_	_	_
Accounts Receivable	1,422	1,215	1,237	1,250	1,296
Inventory	708	784	909	956	992
Deferred Tax Assets (Current)	116	113	132	132	132
Other Short Term Assets	407	473	452	452	452
Current Assets	4,026	4,027	3,397	2,909	3,239
Net Property Plant, and Equipment	1,410	1,343	1,320	1,322	1,344
Goodwill	3,524	3,532	5,651	5,651	5,651
Other Intangibles	911	851	2,226	2,160	2,094
Deferred Tax Assets (Long-Term)	116	113	132	132	132
Other Long-Term Operating Assets	_	_	_	_	_
Long-Term Non-Operating Assets	377	454	470	470	470
Total Assets	10,364	10,320	13,196	12,644	12,930
Accounts Payable	247	151	201	211	219
Short-Term Debt	62	1,593	1,163	500	500
Deferred Tax Liabilities (Current)	_	_	_	_	_
Other Short-Term Liabilities	1,071	922	1,109	1,109	1,109
Current Liabilities	1,380	2,666	2,473	1,820	1,828
Long-Term Debt	3,518	2,273	5,229	4,729	4,229
Deferred Tax Liabilities (Long-Term)	240	240	738	738	738
Other Long-Term Operating Liabilities	_	_	_	_	_
Long-Term Non-Operating Liabilities	706	784	582	607	632
Total Liabilities	5,844	5,963	9,022	7,894	7,427
Preferred Stock	_	_	_	_	_
Common Stock	29	29	28	28	28
Additional Paid-in Capital	220	118	148	148	148
Retained Earnings (Deficit)	3,936	4,225	4,211	4,919	5,671
(Treasury Stock)	_	_	_	_	_
Other Equity	46	-173	-345	-345	-345
Shareholder's Equity	4,231	4,199	4,042	4,750	5,502
Minority Interest	_				
Total Equity	4,231	4,199	4,042	4,750	5,502



**Last Price** Moat Trend™ **Fair Value Consider Buy Consider Sell** Uncertainty Economic Moat™ Stewardship **Industry Group** 60.67 USD 71.00 USD 49.70 USD 95.85 USD Medium Wide Stable Standard Medical Devices

## Morningstar Analyst Forecasts

Cash Flow (USD Mil)					
Fiscal Year Ends in December				Fore	cast
	2013	2014	2015	2016	2017
Net Income	692	955	866	974	1,015
Depreciation	218	221	218	218	218
Amortization	79	89	116	116	116
Stock-Based Compensation	_	_	_	_	_
Impairment of Goodwill	_	_	_	_	_
Impairment of Other Intangibles	_	_	_	_	_
Deferred Taxes	-124	-87	-37	_	_
Other Non-Cash Adjustments	272	126	11	25	25
(Increase) Decrease in Accounts Receivable	-100	112	-39	-13	-46
(Increase) Decrease in Inventory	-99	-102	-39	-47	-35
Change in Other Short-Term Assets	13	-70	-4	130	130
Increase (Decrease) in Accounts Payable	31	-60	-25	10	8
Change in Other Short-Term Liabilities	-21	120	-28	_	_
Cash From Operations	961	1,304	1,039	1,413	1,430
(Capital Expenditures)	-222	-190	-186	-200	-220
Net (Acquisitions), Asset Sales, and Disposals	-292	-147	-3,252	-200	-200
Net Sales (Purchases) of Investments	_	_	_		_
Other Investing Cash Flows	_	_	_	_	_
Cash From Investing	-514	-337	-3,438	-400	-420
Common Stock Issuance (or Repurchase)	-390	-341	-361	_	_
Common Stock (Dividends)	-282	-303	-322	-266	-262
Short-Term Debt Issuance (or Retirement)	_	_	_	-663	_
Long-Term Debt Issuance (or Retirement)	_	_	_	-500	-500
Other Financing Cash Flows	_	_	_	_	_
Cash From Financing	-672	-644	-683	-1,429	-762
Exchange Rates, Discontinued Ops, etc. (net)	_	_	_	_	_
Net Change in Cash	-225	323	-3,082	-416	248



Last Price	Fair Value	Consider Buy	Consider Sell	Uncertainty	Economic Moat™	Moat Trend™	Stewardship	Industry Group
60.67 USD	71.00 USD	49.70 USD	95.85 USD	Medium	Wide	Stable	Standard	Medical Devices

# Comparable Company Analysis

These companies are chosen by the analyst and the data are shown by nearest calendar year in descending market capitalization order.

Valuation Analysis																
		Price/Ea	rnings		EV/EBITD	Α		Price/Fro	ee Cash Flo	w	Price/Bo	ok		Price/Sa	iles	
Company/Ticker	Price/Fair Value	2015	2016(E)	2017(E)	2015	2016(E)	2017(E)	2015	2016(E)	2017(E)	2015	2016(E)	2017(E)	2015	2016(E)	2017(E)
Medtronic PLC MDT USA	1.04	21.5	18.0	17.0	14.7	18.2	16.5	22.3	42.2	23.0	2.0	2.6	2.7	5.2	5.1	4.8
Boston Scientific Corp BSX USA	1.52	22.7	21.5	22.2	14.4	13.9	13.7	27.4	17.7	17.0	4.1	3.7	3.4	3.6	3.5	3.4
Average		22.1	19.8	19.6	14.6	16.1	15.1	24.9	30.0	20.0	3.1	3.2	3.1	4.4	4.3	4.1
St Jude Medical Inc STJ US	0.85	12.9	14.9	13.8	10.6	13.6	13.3	20.5	14.2	14.2	4.3	3.6	3.1	2.9	2.9	2.8

Returns Analysis		ROIC %			Adjusted	ROIC %		Return o	n Equity %		Return o	n Assets %		Dividenc	l Yield %	
Company/Ticker Medtronic PLC MDT USA	Last Historical Year Total Assets (Mil) — USD	2015 8.4	2016(E) 8.4	2017(E) 9.1	2015 19.0	2016(E) 17.7	2017(E) 18.9	2015 7.4	2016(E) 8.2	2017(E) 9.6	2015 3.7	2016(E) 4.2	2017(E) 4.9	2015 1.3	2016(E) 1.3	2017(E) 1.4
Boston Scientific Corp BSX USA	— USD	10.6	10.8	11.0	19.4	21.4	22.6	0.2	10.3	10.3	0.1	3.7	4.1	_	_	_
Average		9.5	9.6	10.1	19.2	19.6	20.8	3.8	9.3	10.0	1.9	4.0	4.5	1.3	1.3	1.4
St Jude Medical Inc STJ US	<b>13,196</b> USD	14.9	11.4	11.7	30.6	24.4	24.9	31.1	22.2	19.8	10.9	7.5	7.9	1.8	1.6	1.5

Growth Analysis																
		Revenue	Growth %		EBIT Gro	wth %		EPS Gro	wth %		Free Cas	sh Flow Gro	wth %	Dividend	l/Share Gro	owth %
	Last Historical Year Revenue															
Company/Ticker	(Mil)	2015	2016(E)	2017(E)	2015	2016(E)	2017(E)	2015	2016(E)	2017(E)	2015	2016(E)	2017(E)	2015	2016(E)	2017(E)
Medtronic PLC MDT USA	20,261 USD	19.2	39.0	4.2	1.1	31.5	12.2	-16.0	26.3	6.1	-695.2	-130.9	84.8	9.5	8.9	14.5
Boston Scientific Corp BSX USA	7,322 USD	-0.8	3.2	2.8	2.8	6.0	2.0	-62.9	6.0	-4.0	-121.6	-337.2	-4.8	_	_	
Average		9.2	21.1	3.5	2.0	18.8	7.1	-39.5	16.2	1.1	-408.4	-234.1	40.0	9.5	8.9	14.5
St Jude Medical Inc STJ US	<b>5,922</b> USD	-2.9	1.0	<i>3.7</i>	-14.6	-12.5	2.8	-13.0	-15.0	8.2	-223.7	-160.3	-1.2	_	_	_



Last Price	Fair Value	Consider Buy	Consider Sell	Uncertainty	Economic Moat™	Moat Trend™	Stewardship	Industry Group
60.67 USD	71.00 USD	49.70 USD	95.85 USD	Medium	Wide	Stable	Standard	Medical Devices

# Comparable Company Analysis

These companies are chosen by the analyst and the data are shown by nearest calendar year in descending market capitalization order.

Profitability Analysis																
	Last Historical Year Net Income	Gross M	argin %		EBITDA I	Margin %		Operatin	g Margin %	Ó	Net Mar	gin %		Free Cas	sh Flow Ma	rgin %
Company/Ticker	(Mil)	2015	2016(E)	2017(E)	2015	2016(E)	2017(E)	2015	2016(E)	2017(E)	2015	2016(E)	2017(E)	2015	2016(E)	2017(E)
Medtronic PLC MDT USA	3,844 USD	68.9	68.0	68.5	34.9	31.3	33.1	26.7	25.2	27.2	19.0	22.0	21.6	23.4	12.0	21.1
Boston Scientific Corp BSX USA	1,191 USD	70.5	70.8	70.6	30.3	30.6	30.1	20.4	20.9	20.8	16.3	16.6	15.5	13.3	19.9	20.2
Average		69.7	69.4	69.6	32.6	31.0	31.6	23.6	23.1	24.0	17.7	19.3	18.6	18.4	16.0	20.7
St Jude Medical Inc STJ US	<b>1,374</b> USD	71.2	70.0	70.0	31.8	28.2	27.8	26.1	22.6	22.4	23.2	19.7	20.3	14.4	20.3	19.5

Leverage Analysis		Debt/Equ	iity %		Debt/Tota	ıl Cap %		EBITDA/	Interest Ex	p.	Total Del	bt/EBITDA		Assets/E	quity	
Company/Ticker Medtronic PLC MDT USA	Last Historical Year Total Debt (Mil) 36,186 USD	2015 68.0	2016(E) 59.0	2017(E) 60.7	2015 40.5	2016(E) 37.1	2017(E) 37.8	2015 10.6	2016(E) 8.9	2017(E) 9.8	2015 5.1	2016(E) 3.6	2017(E) 3.3	2015 2.0	2016(E) 1.9	2017(E) 2.0
Boston Scientific Corp BSX USA	5,459 USD	84.4	67.8	37.9	45.8	40.4	27.5	11.0	12.8	16.4	2.5	2.1	1.3	2.9	2.7	2.4
Average		76.2	63.4	49.3	43.2	38.8	32.7	10.8	10.9	13.1	3.8	2.9	2.3	2.5	2.3	2.2
St Jude Medical Inc STJ US	<b>6,392</b> USD	158.1	110.1	86.0	61.3	52.4	46.2	18.3	11.4	12.7	3.4	3.1	2.7	3.3	2.7	2.3

Liquidity Analysis																
	Market Cap	Cash per	Share		Current F	latio		Quick Ra	ntio		Cash/Sh	ort-Term D	ebt	Payout F	Ratio %	
Company/Ticker	(Mil)	2015	2016(E)	2017(E)	2015	2016(E)	2017(E)	2015	2016(E)	2017(E)	2015	2016(E)	2017(E)	2015	2016(E)	2017(E)
Medtronic PLC MDT USA	142,264 USD	17.57	10.27	10.08	3.36	2.99	3.63	2.99	2.49	2.99	8.00	6.06	27.16	50.0	42.6	40.0
Boston Scientific Corp BSX USA	26,643 USD	0.85	1.37	0.94	1.37	1.82	1.44	1.06	1.47	1.12	1.93	7.46	2.13	-	_	_
Average		9.21	5.82	5.51	2.37	2.41	2.54	2.03	1.98	2.06	4.97	6.76	14.65	50.0	42.6	40.0
St Jude Medical Inc STJ US	<b>17,207</b> USD	2.33	0.41	1.29	1.37	1.60	1.77	1.01	1.07	1.23	0.57	0.24	0.73	20.6	27.3	25.8



## **Research Methodology for Valuing Companies**

#### **Components of Our Methodology**

- ▶ Economic Moat™ Rating
- ▶ Moat Trend™ Rating
- ► Moat Valuation
- Three-Stage Discounted Cash Flow
- ► Weighted Average Cost of Capital
- ► Fair Value Estimate
- Scenario Analysis
- Uncertainty Ratings
- Margin of Safety
- ► Consider Buying/Selling
- Stewardship Rating

We believe that a company's intrinsic worth results from the future cash flows it can generate. The Morningstar Rating for stocks identifies stocks trading at a discount or premium to their intrinsic worth—or fair value estimate, in Morningstar terminology. Five-star stocks sell for the biggest risk-adjusted discount to their fair values, whereas 1-star stocks trade at premiums to their intrinsic worth. Four key components drive the Morningstar rating: our assessment of the firm's economic moat, our estimate of the stock's fair value, our uncertainty around that fair value estimate and the current market price. This process ultimately culminates in our single-point star rating. Underlying this rating is a fundamentally focused methodology and a robust, standardized set of procedures and core valuation tools used by Morningstar's equity analysts.

The concept of the Morningstar Economic Moat™
Rating plays a vital role not only in our qualitative
assessment of a firm's investment potential, but
also in our actual calculation of our fair value
estimates. We assign three moat ratings—none,
narrow, or wide—as well as the Morningstar Moat
Trend™ Rating—positive, stable, or negative—to
each company we cover. Companies with a narrow
moat are those we believe are more likely than not
to achieve normalized excess returns on invested
capital over at least the next 10 years. Wide-moat
companies are those in which we have very
high confidence that excess returns will remain for

10 years, with excess returns more likely than not to remain for at least 20 years. The longer a firm generates economic profits, the higher its intrinsic value. The assumptions that we make about a firm's economic moat play a vital role in determining the length of "economic outperformance" that we assume in the terminal sections of our valuation model. To assess the sustainability of excess profits, analysts perform ongoing assessments of what we call the moat trend. A firm's moat trend is positive in cases where we think its sources of competitive advantage are growing stronger; stable where we don't anticipate changes to competitive advantages over the next several years; or negative when we see signs of deterioration.

At the heart of our valuation system is a detailed projection of a company's future cash flows. The first stage of our three-stage discounted cash flow model can last from 5 to 10 years and contains numerous detailed assumptions about various financial and operating items. The second stage of our model where a firm's return on new invested capital (RONIC) and earnings growth rate implicitly fade until the perpetuity year—can last anywhere from one year (for companies with no economic moat) to 10-15 years (for wide-moat companies). In our third stage, we assume the firm's RONIC equals its weighted average cost of capital, and we calculate a continuing value using a standard perpetuity formula. In deciding on the rate at which to discount future cash flows, we use a building block approach,

#### Morningstar Research Methodology for Valuing Companies



Source: Morningstar, Inc.

## Detailed Methodology Documents and Materials\*

- ► Comprehensive Equity Research Methodology
- Uncertainty Methodology
- Cost of Fauity Methodology
- ► Morningstar DCF Valuation Model
- ► Stewardship Rating Methodology

disclosures at the end of this report.

which takes into account expectations for market real return, inflation, country risk premia, corporate credit spread, and any additional systematic risk.

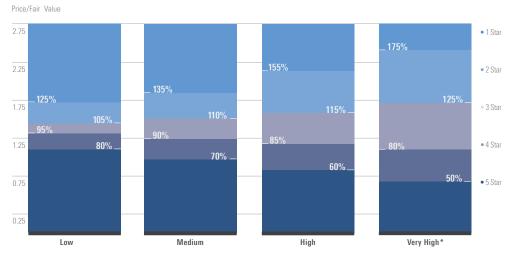
We also employ a number of other tools to augment our valuation process, including scenario analysis, where we assess the likelihood and performance of a business under different economic and firm-specific conditions. Our analysts model three scenarios for each company we cover, stresstesting the model and examining the distribution of resulting fair values.

The Morningstar Uncertainty Rating captures the range of likely potential fair values and uses it to assign the margin of safety required before investing, which in turn explicitly drives our stock star rating system. The Uncertainty Rating represents the analysts' ability to bound the estimated value of the shares in a company around the Fair Value Estimate, based on the characteristics of the business underlying the stock, including

operating and financial leverage, sales sensitivity to the overall economy, product concentration, pricing power, and other company-specific factors.

Our corporate Stewardship Rating represents our assessment of management's stewardship of shareholder capital, with particular emphasis on capital allocation decisions. Analysts consider companies' investment strategy and valuation, financial leverage, dividend and share buyback policies, execution, compensation, related party transactions, and accounting practices. Corporate governance practices are only considered if they've had a demonstrated impact on shareholder value. Analysts assign one of three ratings: "Exemplary," "Standard," and "Poor." Analysts judge stewardship from an equity holder's perspective. Ratings are determined on an absolute basis. Most companies will receive a Standard rating, and this is the default rating in the absence of evidence that managers have made exceptionally strong or poor capital allocation decisions.

#### **Morningstar Margin of Safety and Star Rating Bands**



\* Occasionally a stock's uncertainty will be too high for us to estimate, in which case we label it Extreme.

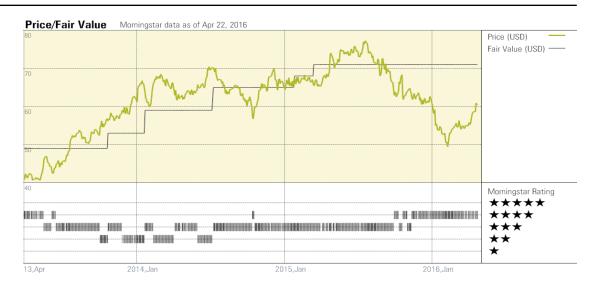
Source: Morningstar, Inc.

proprietary property of Morningstar and may not be reproduced, in whole or in part, or used in any manner, without the prior written consent of Morningstar. To order reprints, call +1 312-696-6100. To license the research, call +1 312-696-6869. Please see important

<sup>\*</sup>Please contact a sales representative for more information.



Last Price	Fair Value	Consider Buy	Consider Sell	Uncertainty	Economic Moat™	Moat Trend™	Stewardship	Industry Group
60.67 USD	71.00 USD	49.70 USD	95.85 USD	Medium	Wide	Stable	Standard	Medical Devices



Unless stated otherwise, this Research Report was prepared by the person(s) noted in their capacity as Equity Analysts employed by Morningstar, Inc., or one of its affiliates. This Report has not been made available to the issuer of the relevant financial products prior to publication.

The Morningstar Rating for stocks identifies stocks trading at a discount or premium to their intrinsic value. Five-star stocks sell for the biggest risk-adjusted discount whereas one-star stocks trade at premiums to their intrinsic value. Based on a fundamentally focused methodology and a robust, standardized set of procedures and core valuation tools used by Morningstar's Equity Analysts, four key components drive the Morningstar Rating: 1. Assessment of the firm's economic moat, 2. Estimate of the stock's fair value, 3. Uncertainty around that fair value estimate, and 4. Current market price. Further information on Morningstar's methodology is available from http://global.morningstar.com/equitydisclosures.

This Report is current as of the date on the Report until it is replaced, updated or withdrawn. This Report may be withdrawn or changed at any time as other information becomes available to us. This Report will be updated if events affecting the Report materially change.

#### Conflicts of Interest:

- -No material interests are held by Morningstar or the Equity Analyst in the financial products that are the subject of the Reports.
- -Equity Analysts are required to comply with the CFA Institute's Code of Ethics and Standards of Professional Conduct.
- -Equity Analysts' compensation is derived from Morningstar's overall earnings and consists of salary, bonus and in some cases restricted stock.
- -Equity Analysts do not have authority over Morningstar's investment management group's business arrangements nor allow employees from the investment management group to participate or influence the analysis or opinion prepared by them. Morningstar will not receive any direct benefit from the publication of this Report.
- Morningstar does not receive commissions for providing research and does not charge companies to be rated.
- -Equity Analysts use publicly available information.



Last Price	Fair Value	Consider Buy	Consider Sell	Uncertainty	Economic Moat™	Moat Trend™	Stewardship	Industry Group
60.67 USD	71.00 USD	49.70 USD	95.85 USD	Medium	Wide	Stable	Standard	Medical Devices

-Morningstar may provide the product issuer or its related entities with services or products for a fee and on an arms' length basis including software products and licenses, research and consulting services, data services, licenses to republish our ratings and research in their promotional material, event sponsorship and website advertising.

-Further information on Morningstar's conflict of interest policies is available from http://global.morningstar.com/equitydisclosures.

If you wish to obtain further information regarding previous Reports and recommendations and our services, please contact your local Morningstar office.

Unless otherwise provided in a separate agreement, you may use this Report only in the country in which the Morningstar distributor is based. Unless stated otherwise, the original distributor of this document is Morningstar Inc. Redistribution, in any capacity, is prohibited without permission. The information, data, analyses and opinions presented herein do not constitute investment advice; are provided solely for informational purposes and therefore are not an offer to buy or sell a security; and are not warranted to be correct, complete or accurate, nor may they be construed as a representation regarding the legality of investing in the security/ies concerned, under the applicable investment or similar laws or regulations of any person or entity accessing this report. The opinions expressed are as of the date written and are subject to change without notice. Except as otherwise required by law, Morningstar, its affiliates, and their officers, directors and employees shall not be responsible or liable for any trading decisions, damages or other losses resulting from, or related to, the information, data, analyses or opinions or their use. You should seek the advice of your financial, legal, tax, business and/or other consultant, and read all relevant issue documents pertaining to the security/ies concerned, including without limitation, the detailed risks involved in the investment, before making an investment decision.

Please note that investments in securities are subject to market and other risks and there is no assurance or guarantee that the intended investment objectives will be achieved. Past performance of a security may or may not be sustained in future and is no indication of future performance. As the price / value / interest rate of a security fluctuates, the value of your investments in the said security, and in the income, if any, derived therefrom may go up or down.

For Recipients in Australia: This report has been authorized by the Head of Equity and Credit Research, Asia Pacific, Morningstar Australasia Pty Limited and is circulated pursuant to RG 79.26(f) as a full restatement of an original report (by the named Morningstar analyst) which has already been broadly distributed. To the extent the report contains general advice it has been prepared without reference to your objectives, financial situation or needs. You should consider the advice in light of these matters and, if applicable, the relevant Product Disclosure Statement before making any decision to invest. Refer to our Financial Services Guide (FSG) for more information at www. morningstar.com.au/fsq.pdf.

For Recipients in Hong Kong: The research is distributed by Morningstar Investment Management Asia Limited, which is regulated by the Hong Kong Securities and Futures Commission to provide services to professional investors only. Neither Morningstar Investment Management Asia Limited, nor its representatives, are acting or will be deemed to be acting as an investment advisor to any recipients of this information unless expressly agreed to by Morningstar Investment Management Asia Limited. For enquiries regarding this research, please contact a Morningstar Investment Management Asia Limited Licensed Representative at http://global.morningstar.com/equitydisclosures.



Last Price I	Fair Value	Consider Buy	Consider Sell	Uncertainty	Economic Moat™	Moat Trend™	Stewardship	Industry Group
60.67 USD 7	71.00 USD	49.70 USD	95.85 USD	Medium	Wide	Stable	Standard	Medical Devices

For Recipients in India: This research on securities [as defined in clause (h) of Section 2 of the Securities Contracts (Regulation) Act, 1956], such research being referred to for the purpose of this document as "Investment Research", is issued by Morningstar Investment Adviser India Private Limited.

Morningstar Investment Adviser India Private Limited is registered with the Securities and Exchange Board of India under the SEBI (Investment Advisers) Regulations, 2013, vide Registration number INA000001357, dated March 27, 2014, and in compliance of the aforesaid regulations and the SEBI (Research Analysts) Regulations, 2014, it carries on the business activities of investment advice and research. Morningstar Investment Adviser India Private Limited has not been the subject of any disciplinary action by SEBI or any other legal/regulatory body. Morningstar Investment Adviser India Private Limited is a wholly owned subsidiary of Morningstar Associates LLC, which is a part of the Morningstar Investment Management group of Morningstar, Inc., and Morningstar, Inc. is a leading provider of independent investment research that offers an extensive line of products and services for individual investors, financial advisors, asset managers, and retirement plan providers and sponsors. In India, Morningstar Investment Adviser India Private Limited has only one associate, viz., Morningstar India Private Limited, and this company predominantly carries on the business activities of providing data input, data transmission and other data related services, financial data analysis, software development etc.

The author/creator of this Investment Research ("Research Analyst") or his/her associates or his/her relatives does/do not have (i) any financial interest in the subject company; (ii) any actual/beneficial ownership of one per cent or more securities of the subject company, at the end of the month immediately preceding the date of publication of this Investment Research; and (iii) any other material conflict of interest at the time of publication of this Investment

Research

The Research Analyst or his/her associates or his/her relatives has/have not received any (i) compensation from the subject company in the past twelve months; (ii) compensation for products or services from the subject company in the past twelve months; and (iii) compensation or other material benefits from the subject company or third party in connection with this Investment Research. Also, the Research Analyst has not served as an officer, director or employee of the subject company.

The terms and conditions on which Morningstar Investment Adviser India Private Limited offers Investment Research to clients, varies from client to client, and are spelt out in detail in the respective client agreement.