RESEARCH REPORT

November 18, 2019

Stock Rating	HOLD
Price Target	CAD $123.58
Current Price	CAD $140.49

Bear Case	Price Target	Bull Case
$107.75	$123.58	$139.41

Ticker	DHR
Market Cap (MM)	$102,707
Market Cap/LFCF NTM	33.5x
EV/EBITDA NTM	22.5x

52 Week Performance

Danaher Corporation

Finding a Way through M&A

After conducting an analysis of the Medical Devices space at large, the Healthcare Team decided that Danaher Corporation's ability to effectively use inorganic growth as a competitive advantage warrant a further look. This report outlines various elements of Danaher's business that we wanted to gain conviction on before reaching a decision on the name.

Overall, we believe that Danaher's highly disciplined M&A strategy that incorporates the Danaher Business System (DBS) and philosophy of detail-oriented accountability has demonstrated a proven ability to select, integrate and grow acquisition targets. Coupled with its current business, we believe that Danaher has strong fundamentals.

Despite our conviction in Danaher's fundamentals, our price target of $123.58 is much lower than their current price of $140.59. Therefore, the Healthcare Team has decided on a stock rating of **HOLD**.

Healthcare

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Company History and Overarching M&A Growth Strategy

The history of Danaher adds a fair bit of colour to its overall strategy as a company. Danaher Corporation was originally founded in 1969 as a REIT; 9 years later, it reorganized itself as a new corporation, called Diversified Mortgage Investors. It then entered into the vehicle systems market, modeling most of its operations after the Toyota Production system. It eventually expanded into many more markets, most notably that of precision motion equipment, electronic test tools, environmental water quality testing, power quality products and consumables manufacturing. Since then, it has been aggressively expanding into the medical devices space, gaining a sustainable footing amongst incumbents. All of these expansions have been achieved through acquisitions, mergers or takeovers. Since 1984, it has acquired hundreds of businesses – more than 50% of Danaher's total revenue today has been acquired in the past 7 years, demonstrating that Danaher is well-versed in the execution of inorganic growth.

Highly Effective Serial Acquirer

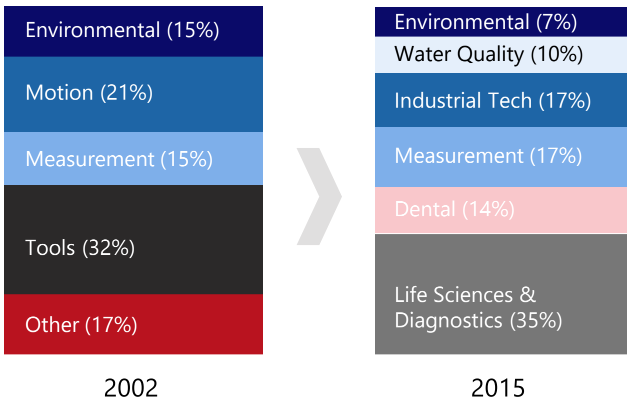
Danaher's overarching operating model, called the Danaher Business System (DBS), is consistently applied across all business units. It measures performance in four key areas: quality, delivery, cost and innovation. More than a tactical implementation of a technology, DBS has evolved into a company philosophy that demands rigorous, detail-oriented and measurable progress at every level. The operating model is built upon the belief that unless well-managed, businesses with high average gross margins become self-destructive and encourage complacent practices. Applying DBS to newly acquired businesses is able to grow these margins. For example, after Danaher's acquisition of Tektronix (a test and measurement equipment company), its margins increased by 15.8% within a year, and its sales grew by 14.9%.

Building on this, Danaher only acquires a business if it sees margin expansion potential, as well as if it serves one of two purposes: (1) *platform-establishing transactions* (new market entry acquisitions) wherein Danaher could gain a competitive advantage through operational excellence, or (2) *bolt-on transactions*, wherein complementarity of goods can be leveraged or network effects through expanding market coverage could be built. This highly principled and disciplined M&A strategy has allowed its operating margins to grow an average of 2.8% faster than revenue, indicating that with each acquisition it is able to tighten its operations and parent them effectively.

After the acquisition is completed, an agile business-unit integration team takes over from the business development team responsible for M&A due diligence. The business-unit integration team is responsible for executing all of the ramp-up work to the acquisition target's normal operations, and ensures that the DBS philosophy (and system, when appropriate) were implemented successfully. The process of identifying a target, conducting rigorous due diligence and integrating successfully ultimately led to the fundamental transformation of the company from an $845MM industrial goods manufacturer to a $12.6B global conglomerate.

EXHIBIT I

Danaher Revenue Breakdown, 2002-2015



Source: DHR Company Filings, RBC Capital Markets

Company History and Overarching M&A Growth Strategy

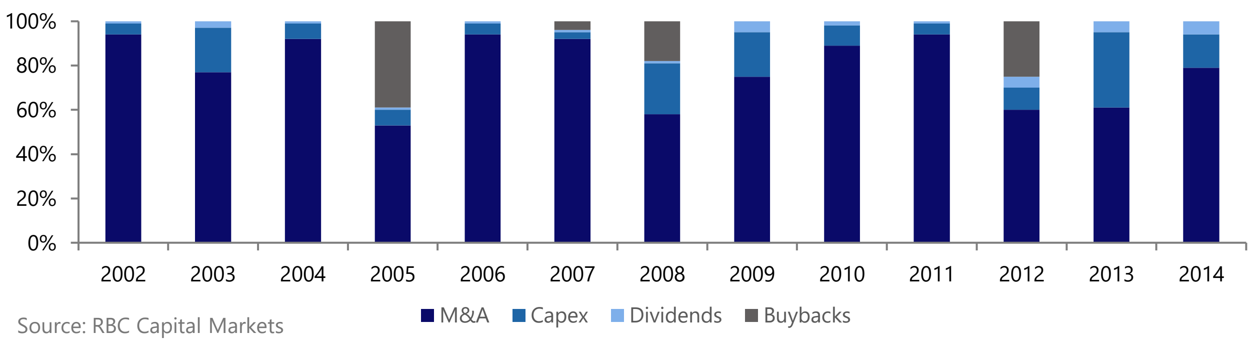
Capital Allocation: Strong M&A Focus

As would an astute value investor, Danaher has consistently bought companies trading at a discount (Exhibit III). In order to acquire these companies, the proceeds from process improvements in previously-acquired business are used to fund new M&A. These proceeds are mostly unlocked through shared expertise in product engineering, supplier management synergies and labour productivity. This has strengthened its position as one of the most acquisitive players in the "multi-industry" sector, allocating almost 80% of balance sheet capacity on M&A vs. the peer average of around 40%.

Management has traditionally financed acquisitions via cash on hand, by has also taken on debt to finance major acquisitions – whereas the GE Biopharma acquisition raised their net debt-to-EBITDA to around 3.9x, they have historically stayed at a steady 3.0x. Management is communicated that this is a comfortable net debt-to-EBITDA margin. Danaher's financial position is quite healthy – its 2018 free cash flow (FCF) value of $3.4B represented an increase of 16.5% vs. 2017, a FCF to net income conversion ratio of 127%. This marked the 27th consecutive year in which the FCF exceeded net income. Their dividends are modest, paying out only 0.6% of their net income when compared to their peers who pay out ~2.0%.

EXHIBIT II

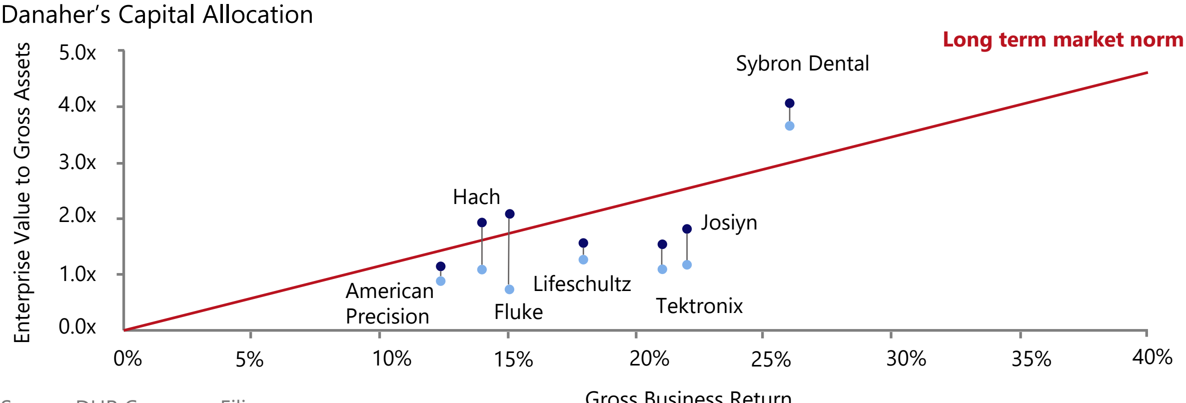
Danaher's M&A-Focused Capital Allocation



Source: RBC Capital Markets

EXHIBIT III

Danaher's Capital Allocation



Source: DHR Company Filings

Danaher Business System (DBS) Deep Dive

Danaher Business System (DBS)

Danaher's operations, culture, managerial decisions and acquisition performance is defined by the company's "Danaher Business System." Operationally, DBS is similar to the "Toyota Way".

DBS is run on the basis of improving cost structure by expanding gross margins and lowering G&A as a percentage of sales while reinvesting in top line growth through strong customer relationships. The DBS program is difficult to place a firm value on, but fundamentally represents management's execution on all subsidiaries with five core values: quality of management, customer engagement, continuous improvement, product innovation, and focus on shareholder value. As such, it is representative of the culture developed at Danaher. The culture appears to be well-received, as it was rated 3.5/5 stars out of ~400 reviews on glassdoor (Exhibit IV).

Danaher has sales and service representatives in 60 countries to maintain customer relationships. DBS is designed to allow the sales team to remain accountable with respective call points, and facilitates new integration of businesses. An example is the coordinated selling efforts between Beckman Coulter and Cepheid (Diagnostics) in China. The company integrated Cepheid into Beckman Coulter's customer base, which has expanded Cepheid's top line by 50% since its acquisition in 2015. Additionally, since implementation of Pall in 2016, it has enhanced the productivity of its workforce to expand operating margins by 8%, expecting to realize $350MM in cost savings by the end of 2019. Moreover, it has taken all of its clients from Claros solutions, another water solutions subsidiary and implemented them within Hach's customer base.

DBS Toolkit

Danaher's Business System additionally includes the DBS toolkit, which is a collection of internal, codified, internal documents on driving growth and sales performance. This program has 25 years of data including thorough application of every acquisition done to date by the parent company. Management prides itself in the ability to swiftly integrate new businesses. Consequently, through DBS, management can make acquisitions of familiar business models with limited downside risk.

Through DBS, Hach has reduced its time to market down on average from 36+ months to 18 months, which is beneficial to customers but also helps increase the cycle time and cadence to producing new products. Since 2016, Hach's product pipeline has increased by 35% and the launch of products increased by 25%.

EXHIBIT IV

Danaher Glassdoor Review

Pros
"Process improvement culture and emphasis on the Danaher Business System" (in 19 reviews)
"Good benefits and for the most part the culture is okay but it can be a bit demanding" (in 12 reviews)

Cons
"Also work/life balance has a long way to go" (in 23 reviews)
"Upper management does not know what's really happening the in base" (in 11 reviews)

Source(s): Danaher Glassdoor

Segments Analysis: Overview of Key Segments

Life Sciences (32% of 2018 Revenue)

Danaher owns 15% share in the $40B life sciences market and offers reagents in varying forms of spectrometry. Within Life Sciences consumables (razorblade) consists of 65% of revenues while the instrument sales pertain to the remaining 35%. The life sciences segment mainly develops high-precision microscopes and add-ons in life science research. Recently, in response to slowing revenue growth Danaher has sought to penetrate inorganically into biomedical research tools.

Diagnostics (31% of 2018 Revenue)

The Diagnostics segment can be broken into critical care and clinical lab instruments, which both develop diagnostic systems for hospitals or clinical networks. The diagnostics revenue growth has been stagnating, as a result of early-stage market maturity in the U.S.. As of 2018, 37% of DHR's diagnostic revenues were in high-growth markets, growing at a rate beyond 10%. Despite stagnation within the U.S., this segment poses the highest margins of 26.6% and has a loyal customer base of 84% recurring revenues.

Environmental & Applied Science (22% of 2018 Revenue)

This segment is divided into water quality and product identification. This line operates with one key subsidiary that initiates bolt-on acquisitions, as opposed to functioning as a separate entity. The water quality business involves precision flow meters that analyze and disinfect various forms of water in residential and industrial settings.

Product identification is an old legacy platform which involves providing solutions for color and packaging design, printing, traceability for pharmaceutical and industrial products.

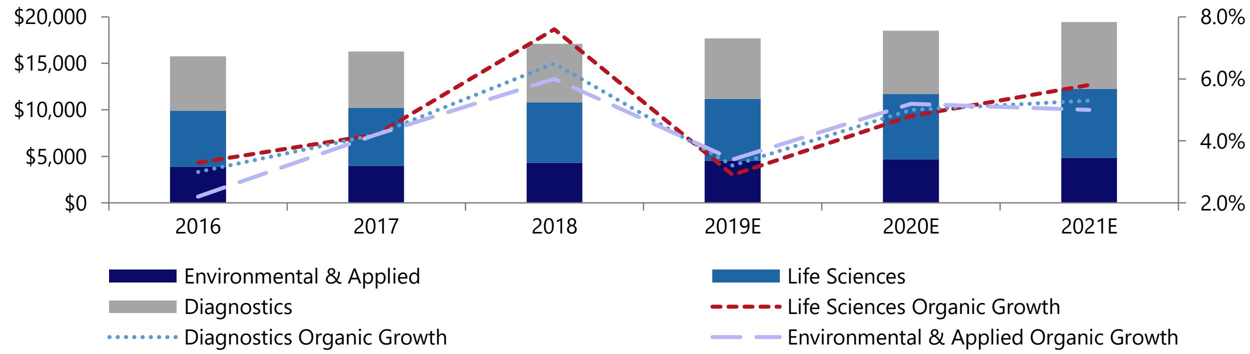
Dentistry (15% of 2018 Revenue)

Danaher used to offer Dentistry products and devices, but has chosen to spin out its dentistry segment as a separate entity in 1H19, raising $750M through a 19.4% IPO of the dentistry business.

All of the aforementioned segments have significant manufacturing operations tied to China, which has created bearish sentiment regarding customer retention as well as new sales in lieu of global trade tensions.

EXHIBIT V

Danaher Revenues by Segment (LHS in $M) vs. Organic Growth Rates (RHS in %)



Source(s): Company Filings, J.P. Morgan

Environmental & Applied Segment: Hach Company

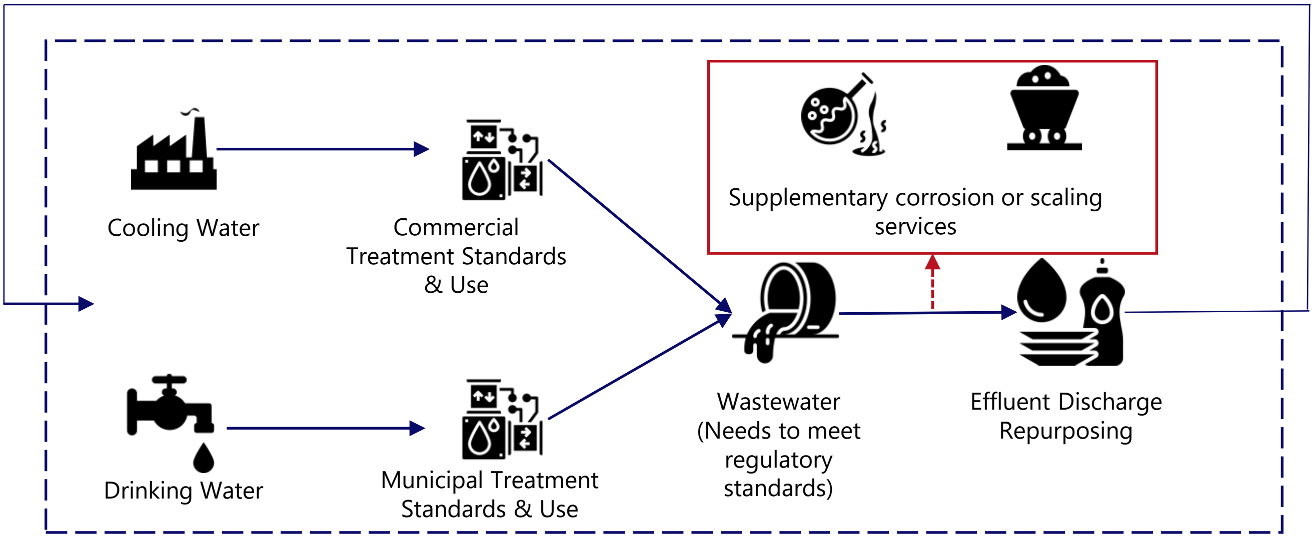
The most prominent of subsidiaries within the Environmental & Applied segment is Hach Company. It is the largest revenue generator within the segment and management alludes to Hach as its largest growth prospect. Hach Industries was acquired by Danaher in 1999, and creates water treatment solutions, ranging from industrial and municipal disinfection systems, or chemical treatment to address corrosion. Water quality businesses are sticky because they treat two main consumers: industrial and municipal. For commercial businesses, regulation is steadily becoming more stringent on purification processes and water waste, in the case of municipal areas the purity of water is vital to consumers. As such, the business model represents a 'mission-critical' portion of its businesses' clients. Additionally, water scarcity, in particular with the United States, is a prevalent topic. Its clients, specifically from California, will pay a premium to extract more utility out of current water supplies.

Hach Company captures the entire value chain of the water quality cycle. (Exhibit VI). It begins with treatment of water to be ready for commercial and industrial use. Water is used by many manufacturing industries to col materials, as well as to be consumed. Then, the water will go back into a treatment facility before returning into the environment or re-integrating back into the water distribution system. Alongside this process, there are additional supplemental water treatment activities such as corrosion or scaling to aid the main value chain.

Hach operates in a low-cyclical business environment, due to the nature of its steady captive consumables stream. Hach sells its customers an instrument in year 1, Additionally, Hach sells its customers an instrument initially, which is then followed by reagents and consumables that generate between 2x and 4x the revenue potential of the device upfront. Since the devices are fairly similarly priced and Hach's consumables are the only player to offer a complete array of devices, it has an edge over competitors.

EXHIBIT VI

Hach Company Value Chain



Source(s): Bloomberg, Company Filings

Environmental & Applied Segment: Hach Company

As a result of the mission critical nature and low cyclicality, there is a recurring revenue stream that develops from sticky consumers. Hach has implemented on $800M worth of acquired revenue, and driven an additional $1B of organic revenue growth by applying the approaches in DBS. As a result, the gross margins of Hach and the general segment have risen from 40% to 55%.

Hach's competitive advantage rises from customer intimacy coupled with understanding the entire value chain of water and tailoring its applications to customer needs. As a result, recurring revenue is about 45% of segment revenue , which is the consumables/reagent section of the business. This figure has increased from 10% in 2010, and is positive since the reagents are more profitable. Hach offers their products at a low price point, and as a result is not susceptible to many macro changes or investment decisions made by larger industrial consumers or municipalities that hold back spending. In 2009, for example, Hach was able to continue maintaining growth, and has proven to be economically resilient. Another reason this is the case is a function of increasing regulatory drivers. When a local, a state or a federal regulatory authority assesses that a certain water quality parameter needs to be measured or reported on, it demonstrates a positive driver for Hach. The company has worked with such regulatory agencies for decades, and helped write many of the methods enforced today. As such, they are able to best modify their product and adapt to new regulatory movements ahead of competitors.

An example is Hach's Portable parallel analyzer, the SL1000 (Exhibit VII). Essentially, it tests chlorine content in water. This was launched in 2018, and is priced at $3,500. Over the course of the 8 to 10 year life of the product, the customers are going to run tests using single-use consumables, such as a razor and razorblade model. Further, these cost around $1,000 of chemistry typically a year, over the course between 8 to 10 years. The reagents earns about 3x the value of the original instrument, but with additional miscellaneous parameters added such as mineral content, this figure can be pumped up to around 4x the original price.

The product, however, differs from a razor/razorblade relationship. Razors and razorblades solve a common problem, whereas Hach's products fill a specialized role within client value chains, and are mission-critical to the business. Hach has been a direct business model since being founded in 1947, thus enhancing its stickiness. The market of water has hundreds of thousands of discrete customers, both municipal and industrial.

Hach has grown its EBITDA margin 15% to 25% since 2010, and organically grew revenues from $350M to an industry-leading $1B.

Source(s): Company Filings, Bloomberg

Life Sciences Segment: Subsidiaries Overview

Leica Microsystems (13% of 2018 Life Science Revenue)

Leica manufactures high-precision microscopes used in life-science research. Primary microscopy products include light microscopes (visible light), confocal microscopes (laser), stereo microscopes and macroscopes (3D visualization), surgical microscopes and sample preparation products for electron microscopy as well as digital cameras and application-specific software.

SCIEX (13% of 2018 Life Science Revenue)

SCIEX developed the very first commercialized triple quadrupole mass spectrometry instrument. This enabled an atmospheric pressure ion source (API III), a breakthrough instrument for the pharmaceutical industry that enabled the analysis of drug metabolites in the blood of clinical trial patients. With further iterations of API, SCIEZX remains the dominant provider of triple quadrupole MS instruments (the largest MS instrument market opportunity), with a higher market share than Thermo Fisher Scientific. In 2010, SCIEX acquired the liquid chromatography business of Eksigent Technologies and introduced API systems for diagnostic purposes. A subsidiary, Molcular Devices (MDS) sells a portfolio of microplate readers, cellular imaging systems, and drug discovery applications that has over 100,000 placements in research laboratories worldwide.

Pall Corporation (50% of 2018 Life Sciences Revenue)

Pall is a leading provider of filtration, separation and purification technologies. Its product is used to remove solid, liquid and contaminants from liquids and gases in the biopharmaceutical, food, medical, aerospace, microelectronics and industrial sectors. They develop filters treated with gamma rays to separate white blood cells from whole blood in order to prevent the rejection of platelets during blood transfusions. The bioprocessing company is currently experiencing mid-double digit growth from increased market demand since its 2015 acquisition. Today, half of Pall's annual revenue is attributable to new products, in the Cadence Inline Diafiltration Modules and SP8 FALCON Confocal Microscope.

Integrated DNA Technologies (N/A)

In April 2018, Danaher acquired Integrated DNA technologies, a privately-held provider of nucleic acid products for life science research, for $2.8B. The company's primary business is the production of custom oglinucelotides for molecular biology applications such as next-gen sequencing, CRISPR genome editing, and manufactures products used in diagnostic tests for cancer. This represents Danaher's expansion into the genomics market, gaining an established platform for double-digit organic revenue growth and operating margins in the mid-30%.

Exhibit VIII

Danaher Corp. Life Sciences Acquisition History ($M)

Year	Company	Price ($M)	Sales	EV/Sales	Description
2010	AB SCIEX	$900	$650	1.4x	Mass Spectrometry instruments for life science research
2010	Molecular Devices	$200	N/A	N/A	Microplate readers, cellular imagin systems (attachments for spectrometry)
2015	Pall Corporation	$13,800	$2,800	4.9x	Water filtration and separation systems for life science research
2017	Phenomenx	$700	$200	3.5x	Novel chemistry for chromatographic separations
2018	Integrated DNA Tech	$2,800	$260	10.8x	Nuceleic acid products
2019	GE Biopharma	$21,400	$2,800	7.6x	Biopharmaceutical workflows

Source(s): DHR Company Filings

Life Sciences Segment: Life Pall Corporation

Pall Corporation virtually evented the concept of chromatography, which is a filtration process taught amongst the greatest medicine schools to date.

Chromatography is laboratory technique for the separation, identification and purification of a mixture that is either liquid or gaseous into its various components. For example, this application is used to separate whey proteins from its liquid to be repurposed and dehydrated into a powder. Thus, Pall executes on the filtration for biotechnology drugs, plasma and vaccines that has enabled its double digit growth for years.

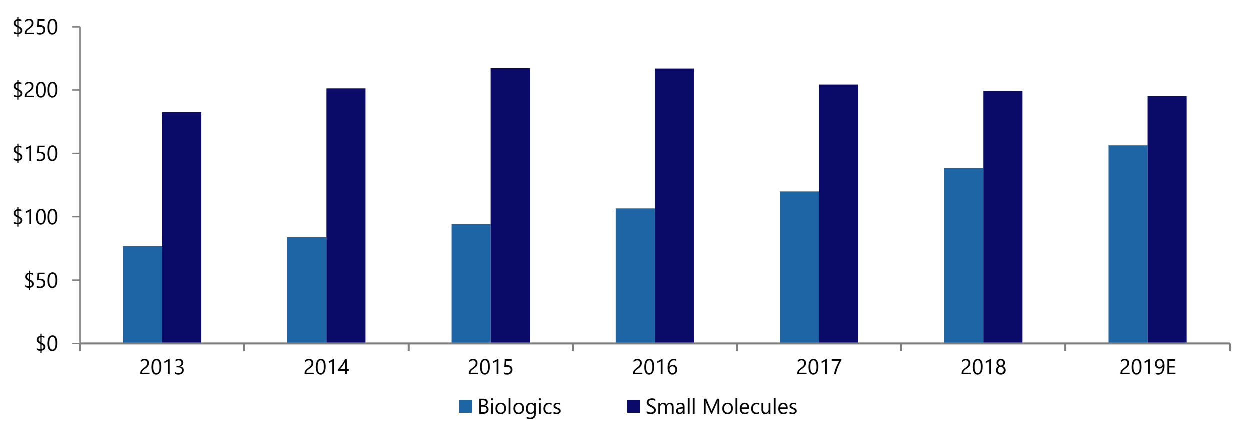
Pall operates a similar business model to Hach and its razor/razorblade model. Additionally, it is a mission-critical item for clients as filtration is the first step of drug development cycles. Its product is extremely prevalent within its market, and since its 2015 implementation, it has increased its sales leads by 10x. Downstream, as the tools are used for funnel management, the win rate at Pall has since increased by 15%.

Filtration products have risen in popularity specifically for biologics drug research. In 2015, biologics only made of 13% of drug manufacturing, whereas now it has increased to 20% and projected to reach 25% of the entire pharmaceutical market by 2020. The shift of drug research is moving towards biologics (Exhibit IX), which represents significant growth for Pall.

In the 20th century, pharmaceutical research was focused on medicines constructed from small molecules designed to control diseases. In contrast, in the past decade research has focused on biologics, which are manufactured from a living source and work by targeting specific chemicals involved in the body's immune system. Inherently, to the filtration business that means there is more application as the small molecules were more easy to produce and stable, whereas biologics require larger proteins, peptides, nucleic acids, etc. For example, human insulin is a biologic drug since it is a hormone constructed from the pancreas which helps the body turn blood sugar into energy. Ibuprofen, on the other hand is a traditional manufactured drug. Since biologics require more R&D and lead time is higher, it means client are generally stickier, demonstrated by increases in recurring revenue. Recurring revenue for Pall stands at around 70% of the portfolio, which has shifted from only 45% of the portfolio in 2016.

EXHIBIT IX

U.S. R&D Drug Spending (USD in Billions)



Source(s): McKinsey & Company

EXHIBIT XVI

Danaher Corp – Operating Unit Organic Growth

Segment	Operating Unit	Estimated Mix	LTM Growth	Product Categorization
Life Science	Pall	50.0%	DD	Spectrometry
	SCIEX	12.5%	HSD	Spectrometry
	Beckman Life Science	12.5%	HSD	Microscopy
	Leica Microsystems	10.0%	HSD	Micrsocopy
	IDT	5.0%	MT	Microscopy
	Molecular Devices	5.0%	N/A	Spectrometry
	Phenomenex	5.0%	N/A	Microscopy
	Total	**100.0%**	**7.5%**	
Diagnostics	Beckman Coulter Diagnostics	62.5%	LSD	Diagnostics
	Cepheid	15.0%	DD	Diagnostics
	Radiometer	10.0%	HSD	Diagnostics
	Leica Biosystems	10.0%	HSD	Diagnostics
	HemoCue	2.5%	N/A	Diagnostics
	Total	**100.0%**	**6.7%**	
E&A Solutions	Videojet	30.0%	HSD	Product ID
	Esko	20.0%	Decline	Product ID
	HACH	30.0%	DD	Water Quality
	ChemTreat	10.0%	MSD	Water Quality
	Trojan	10.0%	HSD	Water Quality
	Total	**100.0%**	**6.50%**	

Legend: LSD- low-single-digit; MSD- mid-single-digit; HSD- high-single-digit; DD- Double-digit; MT- mid-teens

Source(s): DHR Company Filings

Diagnostics Subsidiaries

Danaher's Diagnostics segment contributed to 31% of their revenue in 2018 and can be broken into critical care and clinical lab instruments, which both develop diagnostic systems for hospitals or clinical networks. Geographically, revenues in 2018 were: 38% North America, 19% Western Europe, 6% other developed markets and 37% high-growth markets.

DHR's high-growth markets are growing beyond 10%, as of 2018. Despite stagnation within the U.S., this segment poses the highest margins of 26.6% and has a loyal customer base of 84% recurring revenues. High switching costs stem from retraining costs and concerns about an equipment's functionality, leading to customer loyalty. Diagnostic equipment is used consistently in hospitals and and device downtime is costly.

Cepheid (15% of Diagnostics Revenues)

Danaher entered the molecular diagnostics market with Cepheid in 2016, a leading provider of fully-integrated systems for detection of infectious disease for hospitals and clinical laboratories. Cepheid's GeneXpert system is unique in that it integrates sample preparation with real time PCR detection. Through a proprietary closed-cartridge technology, the instrument is available with a broad test menu which includes hospital-acquired infections, critical infectious disease and women's health. In 2018, Cepheid's revenues grew 25% and has gained 3,000 new clients since the acquisition. Cepheid's revenues increased across all major geographies; even without the addition of developing countries, Cepheid's growth remained constant in the mid-teens. With GeneXpert's continued dominance, Cepheid's market reach is expected to broaden in the molecular IVD kit market. Furthermore, there is potential to expand into physician office labs with the introduction of the CLIA-waived Xpress, which received FDA clearance last year.

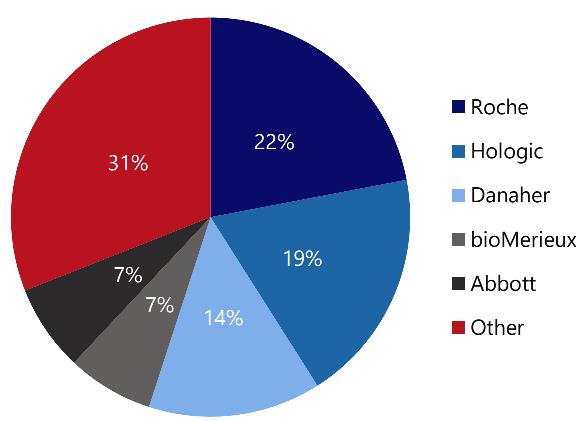
Beckman Coulter (63% of Diagnostics Revenues)

In 2011, Danaher acquired Beckman Coulter to expand its diagnostics presence to hospitals and clinical laboratories. Its biomedical testing instruments (30% of revenues) and consumables (70% of revenues) are used to analyze patient samples throughout the world, especially in China where the company has made significant progress. In the Chinese market, sales and support personnel has been grown from 200 in 2015 to 1,000. The company sells analyzers for chemistry, immunoassay, hematology, flow cytometry and microbiology as well as urinalysis.

For four quarters, Beckman Coulter has been growing at mid-single-digit organic revenue growth, driven by Danaher's expansion into high-growth markets with innovative products. Products such as the DXH 900, high volume hematology analyzer and the DXA 5000 Laboratory Automation system were introduced at the American Association for clinical chemistry trade this August. DXH 900's early sepsis indicator expanded Beckman Coulter's reach into the hematology business. DXA 5000, as an automation tool that recently launched in Europe and recently received approval from the FDA, has been receiving positive reviews from customers. The system's ability to reduce manual processing steps from 32 to 4 and detect pre-analytical sample quality has led to early adoption.

EXHIBIT XII

Molecular IVD Kit Market



Source(s): DHR Company Filings, FactSet, PJC Research

Diagnostics Subsidiaries

Radiometer (10% of Diagnostics Revenues)

Danaher initially entered diagnostics through the acquisition of Radiometer in 2004. Radiometer develops blood gas analyzers that are used to measure the concentrations of oxygen, carbon dioxide and other gases in blood as an indicator of how well a patient's lungs are functioning. Blood gas levels of ill patients can rapidly change and thus consistent monitoring is necessary. Management states ~500,000 samples are tested per day through radiometer equipment. Executing DBS, Radiometer maintained high single-digit organic revenue growth rates over the past five years and provided consistent revenues for Danaher after the acquisition. Currently, organic revenue growth ranges around the double-digits due to strong performance in China and Japan, where market share was gained in the immunoassay and blood gas markets. Performance was especially strong in Japan, due to the impact of a new VAT.

Leica Biosystems (10% of Diagnostics Revenues)

In 2005, Danaher acquired Leica Microsystems for $550M, gaining entry into the anatomical pathology market. The company is split into Leica Biosystems and Leica Microsystems (Life Sciences Segment). Leica Biosystems offers a complete workflow solution for anatomical pathology, including microtomes (tissue slices), staining automation, and microscopes. Leica Biosystems experienced success in Japan with its new product innovations. Recently, Leica Biosystems introduced Growdrums Phonetic, a DBS commercial tool that enables cross-functional collaboration amongst teams to align against business initiatives. Combining Growdrums Phonetic with Leica Biosystems's innovations in core histology and advanced staining products, revenue growth has remained consistent in the single digits in the past 2 years.

Conclusion

The Diagnostics segment is an area of growth and stability. Radiometer and Leica Biosystems maintain consistent organic growth while Cepheid and Beckman Coulter experience more accelerated growth with expansion into new markets. DBS is the differentiator that allows Danaher to continue producing high quality products and improve margins. For instance, Cepheid used the DBS framework to improve margins from break-even values to 20% EBITDA margins. Furthermore, transformative marketing and funnel management under the DBS framework was used to successfully acquire new accounts in North America. As long as Danaher continues to use DBS, product lines should experience continued success.

EXHIBIT XIII

Danaher Corp. Diagnostics Acquisition History ($M)

Year	Company	Price ($M)	Sales	EV/Sales	Description
2004	Radiometer	$ 730	$ 300	2.4x	Blood gas analyzer in hospitals
2005	Leica Microsystems	$ 550	$ 660	0.8x	Microscopes used in pathology
2006	Vision Systems	$ 520	N/A	N/A	Automated systems for tissue processing
2011	Beckman Coulter	$ 6,800	$ 3,700	1.8x	Diagnotic systems in hospitals
2012	Iris International	$ 338	$ 118	2.9x	Automated urine microscopy
2012	Aperio Technologies	N/A	N/A	N/A	Digital pathology solutions
2013	HemoCue	$ 300	$ 100	3.0x	Point-of-care tests for glucose, urine alumin and white blood cell count
2014	Devisor	N/A	$ 170	N/A	Breast Biopsy systems
2016	Cepheid	$ 4,000	$ 625	6.4x	Rapid molecular diagnostic systems and tests

Source(s): Bloomberg, DHR Company Filings

GE Biopharma Acquisition: Deep Dive

To finance the acquisition, multiple streams of capital have been looked to in creating the appropriate cash balance. As of Q3 2019, DHR has a cash balance of $14.2B, which can be broken down as follows: $3B came from an equity offering earlier in the year of half common and half preferred stock, $3.1B came from a long-term debt issuance net of $600M in maturing notes, and $640MM came from the IPO of 20% of the company's dental business. Along with an additional $4B debt issuance in Q4, the proceeds of $750MM from the necessary divestitures accompanying the acquisition, and an assumed $0.9B minimum cash balance, it seems that DHR has ~$3.2B left to finance. Analyst consensus seems to be that this will be raised through additional leverage. With $16.5B in long-term debt at the end of Q3 and the addition of both the $4B debt issuance in Q4 and the necessary residual financing, this should bring DHR's total Debt / 2019 and 2020 EBITDA to ~4.7x and 4.1x respectively. The difference here accounts for the acquisition closing and being reflected in EBITDA for the 2020 year.

While this is significantly more levered than they have been in the past few years, management has stated that they remain comfortable with the current debt profile and expect to focus on delivering in 2020. As can be seen from Exhibit XIII, leverage spiked to a similar level in 2015 due to the acquisition of Pall Corporation. Due to management's extensive M&A experience, we retain confidence in their ability to sustainably manage the debt balance and quickly return to a more conservative leverage profile.

EXHIBIT XIV

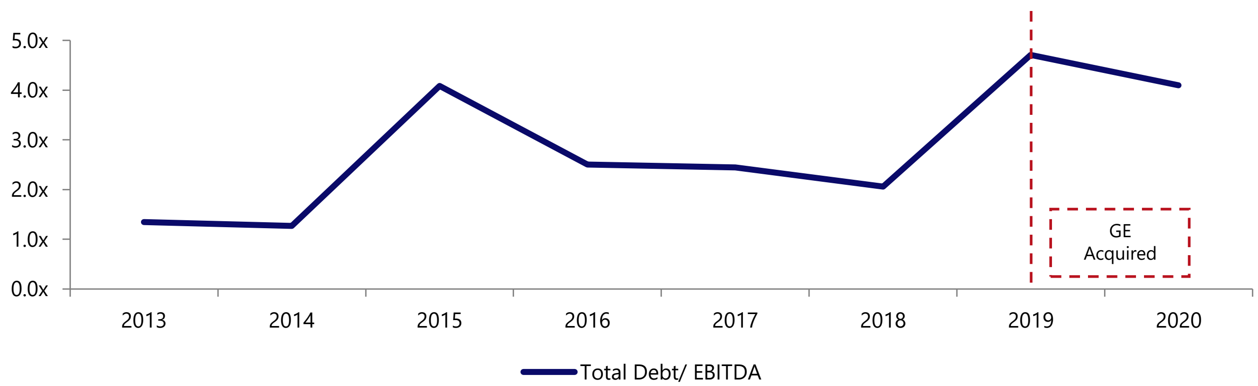
DHR Capital Accumulation

Capital Accumulation by DHR	
Q3 2019 Cash on Hand	$14,252
(+) Q4 2019 Debt Raise	$4,000
(-) Minimum Cash Balance	($800)
Current Cash Available	**$17,452**
GE Acquisition Price	$21,400
(-) Necessary Divestitures	($750)
Necessary Capital to Raise	**$3,198**

Source(s): DHR Company Filings

EXHIBIT XV

Total Debt/ EBITDA, Pre & Post Acquisition



Source(s): DHR Company Filings, S&P Capital IQ

EXHIBIT XVI

Danaher Corp – Operating Unit Organic Growth

Segment	Operating Unit	Estimated Mix	LTM Growth	Product Categorization
Life Science	Pall	50.0%	DD	Spectrometry
	SCIEX	12.5%	HSD	Spectrometry
	Beckman Life Science	12.5%	HSD	Microscopy
	Leica Microsystems	10.0%	HSD	Micrsocopy
	IDT	5.0%	MT	Microscopy
	Molecular Devices	5.0%	N/A	Spectrometry
	Phenomenex	5.0%	N/A	Microscopy
	Total	**100.0%**	**7.5%**	
Diagnostics	Beckman Coulter Diagnostics	62.5%	LSD	Diagnostics
	Cepheid	15.0%	DD	Diagnostics
	Radiometer	10.0%	HSD	Diagnostics
	Leica Biosystems	10.0%	HSD	Diagnostics
	HemoCue	2.5%	N/A	Diagnostics
	Total	**100.0%**	**6.7%**	
E&A Solutions	Videojet	30.0%	HSD	Product ID
	Esko	20.0%	Decline	Product ID
	HACH	30.0%	DD	Water Quality
	ChemTreat	10.0%	MSD	Water Quality
	Trojan	10.0%	HSD	Water Quality
	Total	**100.0%**	**6.50%**	

Legend: LSD- low-single-digit; MSD- mid-single-digit; HSD- high-single-digit; DD- Double-digit; MT- mid-teens

Source(s): Company Filings

Valuation

In assessing the valuation for DHR, we decided to construct a cash flow model using the scenarios laid out in the bridge below. This share price deconstruction allowed us to understand the value drivers within the company and the level of growth being priced in by the market. To further understand the cases, please refer to Exhibit XVII on the following page for a breakdown of the revenue growth figures and corresponding margins.

Under scenario 4, which underwrites ~7% revenue growth for the next six years on top of the GE acquisition, the price target of $123.58 implies downside of ~14%. This assumes that they continue to command a 33x cash flow multiple (as they do currently) which we view as quite aggressive due to the fact that the 1-year average sits at ~31x and the 5-year at ~25x. As can be seen from the exit multiple sensitivity in Exhibit XV, the implied upside / downside fluctuates ~2.75% for each turn.

While we believe that DHR is a great business with a proven management team and compelling market position, we feel that the valuation is too inflated at the current price. While it may not be the right moment now, if shares were to fall to around the $110-$115 range, we would be excited to enter a position and confident in a 10%-15% return from doing so. Until that time we will sit tight and continue to keep an eye on DHR for the future.

EXHIBIT XVII

NPV Calculation & CF Exit Multiple Sensitivity

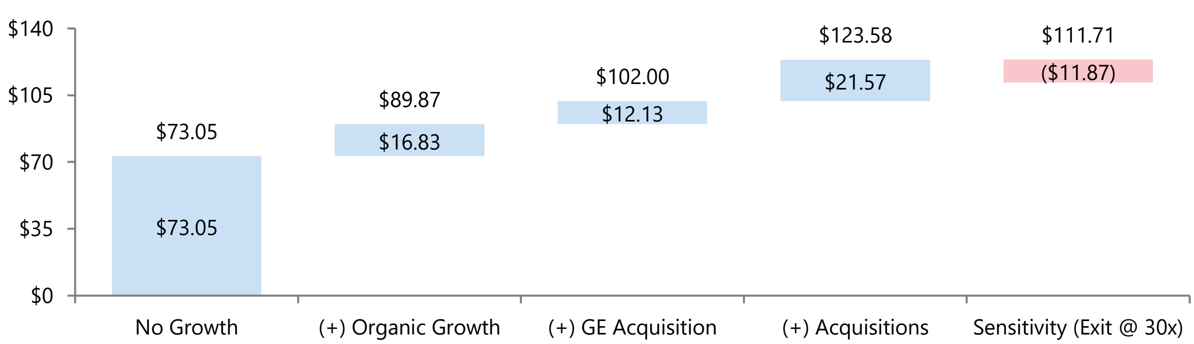
NPV Calculation (Scenario 4)	
Discount Rate	8.0%
Present Value	18,689
CF Exit Multiple	33.0x
Terminal Value	93,799
Enterprise Value	112,488
(-) Total Debt	(23,734)
Equity Value	88,754
Shares Outstanding	718
Implied Share Value	$123.58
Current Share Price	$142.99
Implied Upside	(13.6%)

CF Exit Multiple

29x	31x	33x	35x	37x
$107.75	$115.66	$123.58	$131.49	$139.41
(24.6%)	(19.1%)	(13.6%)	(8.0%)	(2.5%)

EXHIBIT XVIII

Implied Share Price Scenarios



Source(s): DHR Company Filings

Valuation: Case Assumptions

For the revenue assumptions laid out below, organic growth denotes the previous 5-year average of consolidated core revenue growth, allocated based on higher and lower growth segments (i.e. environmental is the most mature business line whereas the life sciences line is expected to see more growth going forward). For the GE acquisition scenario, we back solved to find the percentage increase that boosted revenue by $3.2B in 2020, representing management and street estimates, and then continued the organic growth from there. The inorganic growth case does not underwrite specific acquisitions, but takes the 5-year growth rate including acquisitions and allocates it to the segments based on prior acquisition history. In each case, the dental segment is removed completely as of 2020, representing the IPO and exchange offer completed in late 2019.

In terms of operating margins, what is important to note is the binary impact of the GE acquisition (highlighted cell). If the acquisition case is on, the margins improve from 19% to 25%, based on GE's superior operating margins, but otherwise are held constant. Capex as a % of revenue is held constant over each segment, as the historic range has been incredibly consistent. Lastly, it is assumed that any FCF post 2020 is used for debt repayment until a long-term average level of 2x Total Debt / EBITDA is reached.

EXHIBIT XIX

Scenario Assumptions

Revenue Growth	2019	2020	2021	2022	2023	2024
No Growth						
Life Sciences	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Diagnostics	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Dental	0.0%	-100.0%	0.0%	0.0%	0.0%	0.0%
Environmental	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Organic Growth						
Life Sciences	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%
Diagnostics	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%
Dental	3.0%	-100.0%	0.0%	0.0%	0.0%	0.0%
Environmental	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%
(+) GE Acquisition						
Life Sciences	4.0%	46.2%	4.0%	4.0%	4.0%	4.0%
Diagnostics	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%
Dental	3.0%	-100.0%	0.0%	0.0%	0.0%	0.0%
Environmental	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%
(+) Inorganic Growth						
Life Sciences	7.0%	53.2%	7.0%	7.0%	7.0%	7.0%
Diagnostics	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%
Dental	6.0%	-100.0%	0.0%	0.0%	0.0%	0.0%
Environmental	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%

Margins	2019	2020	2021	2022	2023	2024
Operating Profit (% of Revenue):						
Life Sciences	19.0%	25.0%	25.0%	25.0%	25.0%	25.0%
Diagnostics	17.2%	17.2%	17.2%	17.2%	17.2%	17.2%
Dental	12.2%	12.2%	12.2%	12.2%	12.2%	12.2%
Environmental	22.9%	22.9%	22.9%	22.9%	22.9%	22.9%
Capex (% of Revenue):						
Life Sciences	2.2%	2.2%	2.2%	2.2%	2.2%	2.2%
Diagnostics	6.1%	6.1%	6.1%	6.1%	6.1%	6.1%
Dental	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%
Environmental	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%
Effective Tax Rate	18%	18%	18%	18%	18%	18%
Interest Rate (WA)	1.83%	1.83%	1.83%	1.83%	1.83%	1.83%
Debt Balance	20,536	23,734	20,216	16,763	13,870	14,720

Source(s): DHR Company Filings, Credit Suisse, RBC Capital Markets, Evercore ISI, JP Morgan

References

1. Bloomberg
2. Credit Suisse
3. Danaher Corporation Company Reports
4. Ernst & Young
5. Glassdoor
6. Google Images
7. Ibis World
8. IQVIA
9. JP Morgan
10. Medtronic plc Company Reports
11. McKinsey & Company
12. RBC Capital Markets
13. S&P Capital IQ
14. U.S. FDA

APPENDIX I: Evaluation of Med-Tech Space at Large

When assessing Medtronic, Abbott and Danaher, the QUIC Healthcare team decided to adopt a segmented approach to the determination of their outlook. As such, the team has designed a series of criteria that will inform our decision for a further deep-dive on one of the names. These are informed by our industry and company-specific analyses presented in the following report.

In summary, while the medical devices space is undergoing a shift in overall landscape, we believe that this will further benefit the large players in the long run. A visual representation of the analysis we have conducted is shown below. As demonstrated by this assessment, we believe Medtronic and Dahaner warrant deeper dives, which we will pursue in our next report.

Exhibit XXII

Strength of Business Fundamentals of Key Holdings in Medical Devices Space

	Medtronic (NYSE:MDT)		Abbott (NYSE:ABT)		Danaher (NYSE:DHR)	
	Medtronic		Abbott		DANAHER	
Strength of Current Product Portfolio	Cardiac and Vascular		Established Pharma		Microscopy	
	Minimally invasive therapies		Nutritional (Similac)		Diagnostics	
	Restorative therapies		Diagnostics (Alinity)		Spectrometry	
	Diabetes		FreeStyle Libre		Water Quality	
	Covidien		MitraClip		Product ID	
R&D Strategy						
Accretion of R&D Pipeline	Exhibited through drivers identified on Page 9		Acquisitions complement current product portfolio		Substantial share key segments and aggressive inorganic growth in key markets	
Ability to Integrate Synergies	Exhibited primarily through Covidien and tuck-in acquisitions		Integration of products is smooth without notable issues		DBS System allows for timely, seamless integration within key segments	