Healthcare Industry: Quarterly Trends and Spread Chartbook

Rebates rattle, but unlikely to break, the pharmaceutical supply chain.

Morningstar Credit Ratings, LLC
8 October 2018

Contents

Julie Utterback, CFA
Vice President, Healthcare
+1 312-696-6278
julie.utterback@morningstar.com

Michael Zbinovec
Assistant Vice President, Healthcare
+1 312-348-3136
michael.zbinovec@morningstar.com

Executive Summary

During the third quarter, pharmaceutical pricing dynamics remained under scrutiny. Specifically, regulators have highlighted the elimination of rebates as a way to protect consumers since patients' out-of-pocket expenses are influenced by the list, rather than net, price of each therapy. Despite this potential change, the elimination of rebates appears manageable for players within the pharmaceutical supply chain, even for the pharmacy benefit managers that are shouldering most of the blame for rebating by regulators. Also, with the consolidation planned in the PBM sector, the direct influence of rebates on profits looks likely to continue falling for PBMs, given their diversifying revenue streams. For example, CVS/Aetna and Cigna/Express Scripts plan to merge by the end of 2018. While increasing leverage to fund these mergers creates the potential for rating downgrades at the combining entities, we think the convergence of the managed care and PBM sectors could create powerful entities that help bend the healthcare cost curve in the longer term.

Key Takeaways

- All our rating actions during the third quarter were affirmations. And we only made two outlook changes during the period, which were for LabCorp (to stable from negative) and Thermo Fisher (to positive from stable).
- New debt issuance in the third quarter of $41 billion greatly outweighed issuance during the same period last year. Year to date in 2018, debt issuance has risen substantially related to three firms funding major acquisitions: CVS, Bayer, and Cigna. Without these merger-related bond deals, issuance in the healthcare industry during 2018 would have been roughly in line with issuance during the same period of 2017.
- Since the end of the second quarter, healthcare sector bonds have tightened roughly in line with Morningstar Inc.'s Corporate Bond Index. In the pharmaceutical sector, bonds from biopharmaceutical developers Celgene and Amgen and specialty drug firm Mylan recently traded the widest relative to Morningstar Inc.'s Corporate Bond Index when adjusted for rating, while bonds from Shire, Allergan, and AstraZeneca traded the tightest. In medical technology, Stryker's bonds continued to trade at the widest spread relative to the index in the sector, despite denying Boston Scientific merger rumors, while Abbott's bonds tightened substantially after recent refinancing activities. Despite significant tightening during the quarter, firms in the supply chain—the pharmaceutical distributors in particular—continue to offer the widest spreads on average relative to the index in the healthcare industry.

Healthcare Headlines

Credit Rating Actions

During the third quarter, all our rating actions in the healthcare industry were affirmations. And we made only two outlook changes: 1) Laboratory Corp of America Holdings (BBB+, stable) up from negative, and 2) Thermo Fisher Scientific Inc's (BBB, positive) up from stable.

Exhibit 1 Credit Rating Actions

Health Care Issuer	Ticker	Old Rating	Current Rating	Rating Action/ Review Status	Action Date
Laboratory Corp of America Holdings	LH	BBB+	BBB+	Affirmed	8/24/2018
Agilent Technologies Inc	A	A-	A-	Affirmed	8/27/2018
Quest Diagnostics Inc	DGX	BBB+	BBB+	Affirmed	8/27/2018
Thermo Fisher Scientific Inc	TMO	BBB	BBB	Affirmed	8/27/2018
Mylan NV	MYL	BBB-	BBB-	Affirmed	9/14/2018
Becton, Dickinson and Co	BDX	BBB	BBB	Affirmed	9/17/2018
Bristol-Myers Squibb Company	BMY	AA-	AA-	Affirmed	9/28/2018
Merck & Co Inc	MRK	AA	AA	Affirmed	9/28/2018

Source: Morningstar Credit Ratings, LLC as of September 28, 2018

Other Healthcare Events

- In the controversy surrounding U.S. pharmaceutical pricing inflation, rebates have come under fire. Within the supply chain, pharmaceutical firms, pharmacy benefit managers, and insurers all appear to be pointing fingers at one another as the source of the rebate problem. However, from a credit perspective, we believe it really doesn't matter who the culprit is, and ultimately, changing the rebating practice looks unlikely to move the needle on any of our credits in the pharmaceutical supply chain. For more on the subject, please read, "Rebates Rattle the Pharmaceutical Supply Chain," which was published on Sept. 10, 2018.
- As a means to moderate pharmaceutical spending in the U.S., the FDA unveiled its "Biosimilar Action Plan" in July with the hope of expediting the process for developing and approving follow-on biological medicines to drive greater competition in the marketplace. In addition, the agency looks to increase its outreach and educational efforts pertaining to the benefits of biosimilars while it tries to counter anti-competitive behavior by innovator drug firms, such as denying samples to biosimilar developers. The FDA views the plan as dynamic and presently focuses on 16 deliverables that range from establishing the Office of Therapeutic Biologics and Biosimilars to hosting webinars for educating healthcare professionals. The FDA has approved 12 biosimilars to date, of which four are marketed including Pfizer Inc (AA-, stable) and partner Celltrion's Inflectra, a biosimilar version of Johnson and Johnson's (AAA, stable) autoimmune medicine Remicade, and more recently Mylan NV (BBB-, negative) and Biocon Ltd's (not rated) Fulphila, a biosimilar of Amgen Inc's (A, stable) Neulasta.
- Antitrust regulators have indicated that they will allow the planned merger between Cigna Corp (non-NRSRO rating: BBB/UR-) and Express Scripts Holding Co (A-/UR-), which management intends to complete by the end of 2018. This decision is likely positive for the combination of CVS Health Corp (BBB+/UR-) and Aetna Inc (not rated), which is also scheduled to close later this year.

Recent New Debt Issuance

Healthcare companies on our coverage list issued $41 billion of new bonds in the third quarter of 2018, or significantly more than the $10 billion issued in the third quarter of 2017. The majority of that new issuance was related to acquisition funding, particularly Cigna's issuance to fund the Express Scripts merger. Through the first three quarters of the year, the companies we covered in this sector issued around $140 billion of new bonds, more than doubling the $60 billion issued during the same period in 2017. This year's issuance was heavily influenced by three major mergers—CVS/Aetna ($40 billion of new issuance), Bayer/Monsanto ($21 billion), and Cigna/Express Scripts ($20 billion)—that contributed to $81 billion in new bond issuance in 2018. Without those three deals, bond issuance ($59 billion) would have been close to what was issued during the same period in 2017 ($60 billion).

Exhibit 2 Third-Quarter Debt Issuance

Announcement Date	Healthcare Issuer	Ticker	M* rating	Size (mm)	Projected use of proceeds
8/9/2018	HCA Healthcare Inc	HCA	BB+	$2,000	Redeem existing debt and general corporate purposes
8/14/2018	AstraZeneca PLC	AZN	BBB+	$3,000	General corporate purposes including redeeming existing debt
9/4/2018	Pfizer Inc	PFE	AA-	$5,000	General corporate purposes including redeeming existing debt
9/6/2018	Cigna Corp	CI	BBB/UR-	$20,000	Fund acquisition of Express Scripts
9/10/2018	Roche Holdings AG	RHHBY	AA-	$1,400	Fund acquisition of Foundation Medicine
9/13/2018	AbbVie Inc	ABBV	BBB+	$6,000	Redeem $3 billion existing debt and general corporate purposes
9/27/2018	Abbott Laboratories	ABT	A-	EUR 3,420	Redeem existing debt
Total				$41,333	

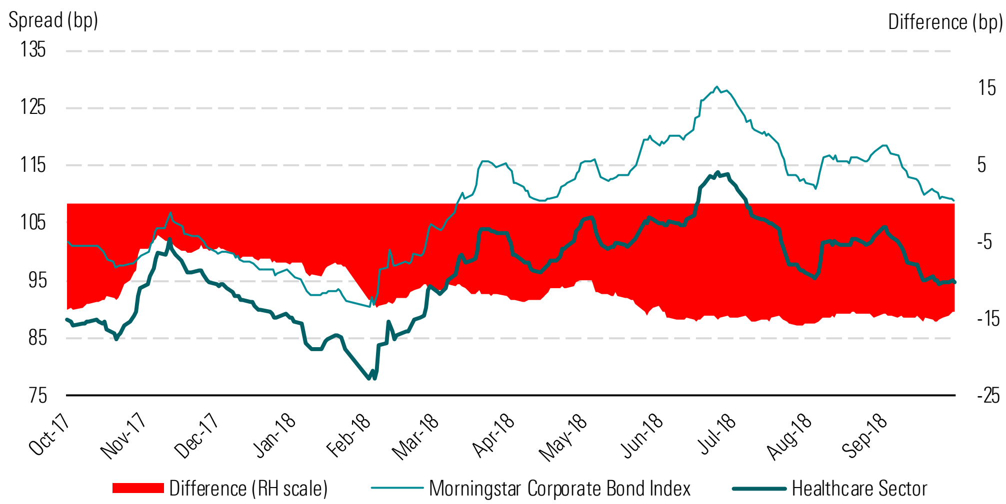
Source: Morningstar Credit Ratings, LLC and company reports.

Healthcare Industry Spreads

Trailing 12 Months

The healthcare industry has continued to perform roughly in line with the broad corporate market during the past 12 months with spreads in healthcare widening by 7 basis points and Morningstar Inc.'s Corporate Bond Index widening by 8 basis points during that period. Since the U.S. presidential election in November 2016, healthcare industry spreads have performed in line with the broad index, too, with healthcare spreads tightening by 28 basis points as Morningstar Inc.'s Corporate Bond Index tightened by 26 basis points. Regulatory actions under the current administration have had limited effects from a credit perspective on most of the healthcare firms we cover, yielding a largely neutral impact on creditors, so far.

Exhibit 3 Healthcare Industry Spreads vs. Morningstar Inc's Corporate Bond Index (Trailing 12 Months)

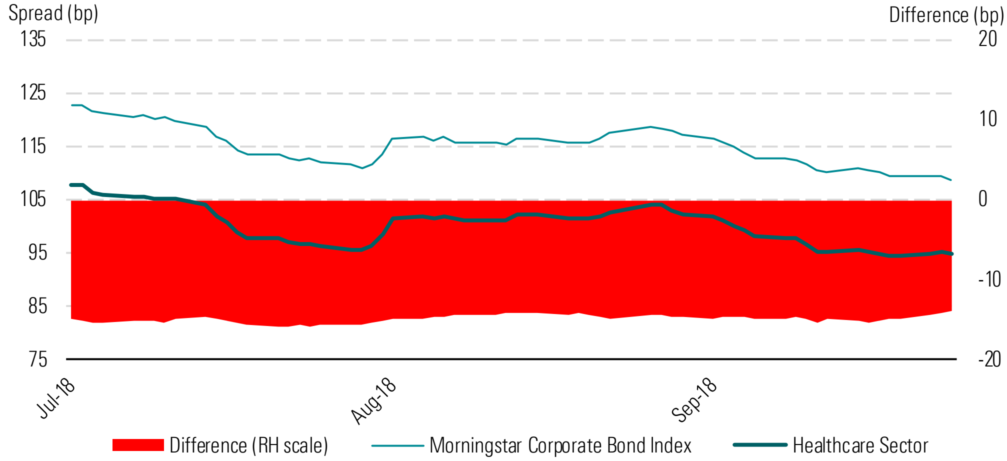


Source: Morningstar Credit Ratings, LLC and Morningstar, Inc as of Oct. 3, 2018

Trailing Three Months

Since our last quarterly report in early July, spreads in the healthcare sector (13 basis points of tightening) have tightened similarly to Morningstar Inc.'s Corporate Bond Index (14 basis points of tightening). Interestingly, after withdrawing some ratings on companies in the second quarter, average sector spreads on the companies we still cover tightened more significantly than the broader healthcare sector highlighted in this data. Overall though, we think the healthcare sector and broad corporate market have been benefiting from positive tax reform-related effects. Specifically within healthcare, consequences from recent pharmaceutical pricing reform efforts may not be as dire as initially feared throughout the pharmaceutical supply chain. And while the PBM and managed care sectors are set to converge further in late 2018, large acquisition activities that weaken issuers' balance sheets have been limited in 2018, which may have had a positive effect on sector performance, as well.

Exhibit 4 Healthcare Industry Spreads vs. Morningstar Inc's Corporate Bond Index (Since July 10, 2018)

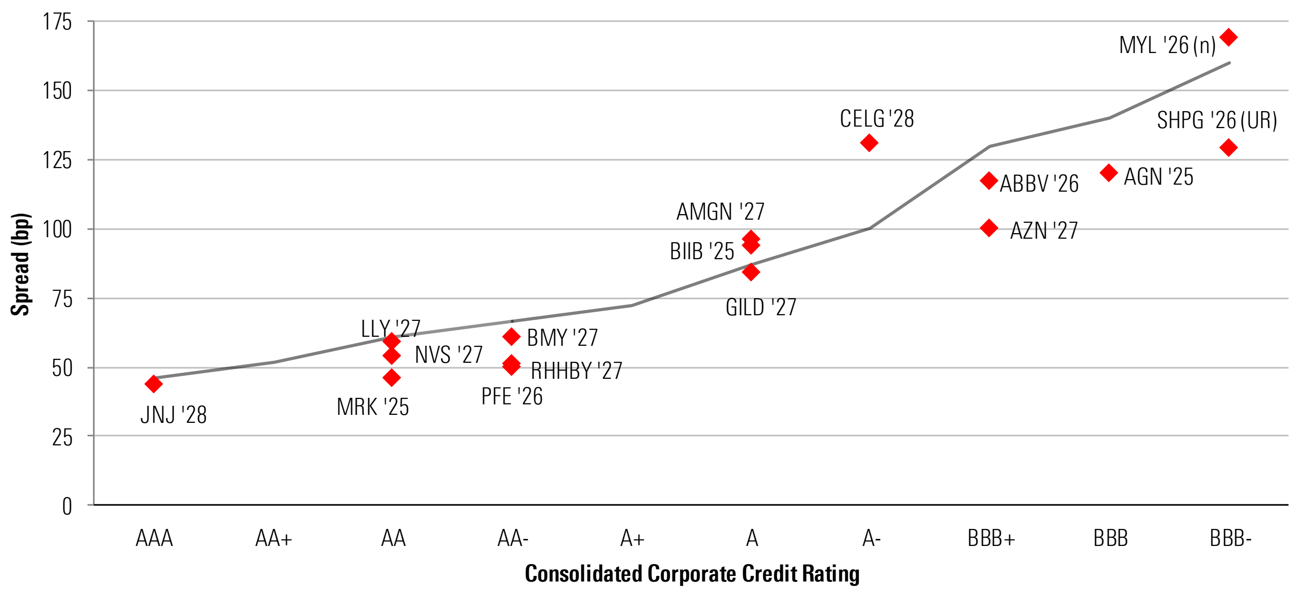


Source: Morningstar Credit Ratings, LLC and Morningstar Inc. as of Oct. 3, 2018

Spread Charts by Healthcare Sector

Pharmaceuticals

Exhibit 5 Pharmaceuticals vs. Morningstar Corporate Bond Index



Source: Morningstar Credit Ratings, LLC, Morningstar Inc., and Interactive Data as of Oct. 3, 2018
(UR) = rating under review / (p) = positive outlook / (n) = negative outlook.

Sector Trends

Average spreads in the pharmaceutical sector tightened by 18 basis points since our previous publication in July. This change is slightly better than the 13-basis-point tightening for the healthcare sector and 14-basis-point tightening in Morningstar Inc.'s Corporate Bond Index during the period. Relative to the index, bonds that recently traded more than 10 basis points wider than the index were those from biopharmaceutical developer Celgene Corp (A-, stable). On the flipside, bonds from Shire PLC (BBB-/UR), AstraZeneca PLC (BBB+, stable), and Allergan PLC (BBB, stable) recently traded tighter by 20 basis points or more than the index when adjusting for rating category. Innovation remains the lifeblood of the pharmaceutical industry, and so far in 2018, drug developers have achieved a significant amount of novel drug approvals by the U.S. Food and Drug Administration. In the first six months of the year, the regulatory agency cleared a total of 42 novel medicines and biologics for commercialization in the U.S., including 22 clearances in the second quarter. These approvals compare with 47 approvals of new pharmaceuticals for all of 2017.

Issuer Highlights

- Mylan's BBB- rating reflects stubbornly inflated leverage exacerbated by operational pressure stemming from a challenging pricing dynamic in the U.S. generics market and dwindling performance of its best-selling EpiPen brand (severe allergic reactions). We are cautious of Mylan's ability to improve leverage after repeated delays in achieving its original leverage target (net leverage below 3 times) after its purchase of Meda in 2016, which supports our negative outlook. Mylan now targets average gross leverage over the long term of 3.0 times with the time frame yet defined. Retention of the current rating depends on the firm easing elevated leverage, but operational missteps could degrade the Cash Flow Cushion and Solvency Score pillar enough to push the rating below investment-grade.

- Shire's rating remains Under Review Developing since Takeda Pharmaceutical Co Ltd (not rated) announced in May its pursuit of the company for approximately $62 billion. The proposed purchase will pressure Takeda's balance sheet as funding is planned to come from available cash and incremental debt amounting to 46% of the purchase price and stock totaling 54% of the price. The firm plans to drop net debt leverage to 2.0 times or less over the medium term (initially from approximately 5 times by our estimation) through strong cash generation. We do not cover Takeda, though, and the acquirer's changing capital structure will ultimately determine the rating of the combined entity.

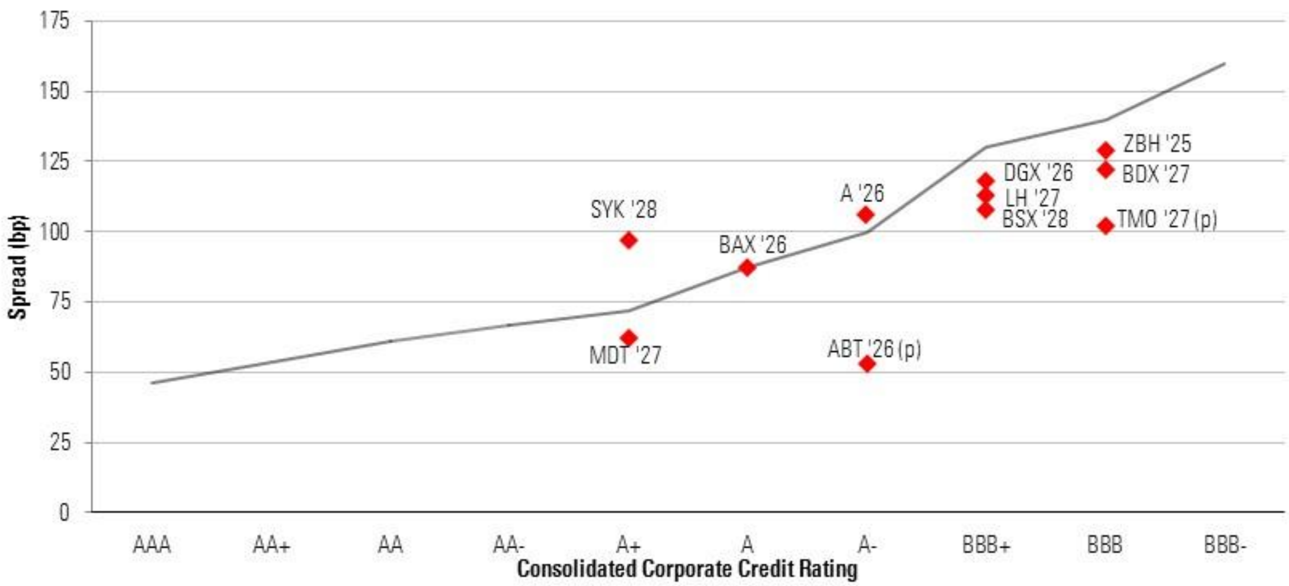
Exhibit 6 Investment-Grade Pharmaceutical Spreads

Health Care Issuer	Rating	Rating Outlook/ Review Status	Coupon	Maturity	Yield	Spread	Difference From Index	Average Difference
Celgene Corp	A-	Stable	3.90%	2/20/2028	4.48%	+131	31	
Mylan NV	BBB-	Negative	3.95%	6/15/2026	4.83%	+169	9	
Amgen Inc	A	Stable	3.20%	11/2/2027	4.10%	+96	9	
Biogen Inc	A	Stable	4.05%	9/15/2025	4.06%	+94	7	
Novartis AG	AA	Stable	3.10%	5/17/2027	3.75%	+59	-2	
Johnson & Johnson	AAA	Stable	2.90%	1/15/2028	3.61%	+44	-2	
Gilead Sciences Inc	A	Stable	2.95%	3/1/2027	4.00%	+84	-3	
Roche Holding AG	AA-	Stable	2.38%	1/28/2027	3.76%	+61	-6	
Eli Lilly and Co	AA	Stable	3.10%	5/15/2027	3.69%	+54	-7	-7
AbbVie Inc	BBB+	Stable	3.20%	5/14/2026	4.31%	+117	-13	
Merck & Co Inc	AA	Stable	2.75%	2/10/2025	3.56%	+46	-15	
Pfizer Inc	AA-	Stable	3.00%	12/15/2026	3.66%	+51	-16	
Bristol-Myers Squibb Company	AA-	Stable	3.25%	2/27/2027	3.66%	+50	-17	
Allergan PLC	BBB	Stable	3.80%	3/15/2025	4.30%	+120	-20	
AstraZeneca PLC	BBB+	Stable	3.13%	6/12/2027	4.16%	+100	-30	
Shire PLC	BBB-	UR	3.20%	9/23/2026	4.44%	+129	-31	

Source: Morningstar Credit Ratings, LLC, Morningstar, Inc., and Interactive Data as of Oct. 3, 2018

Medical Technology

Exhibit 7 Medical Technology vs. Morningstar Corporate Bond Index



Source: Morningstar Credit Ratings, LLC, Morningstar Inc., and Interactive Data as of Oct. 3, 2018.
(UR) = rating under review / (p) = positive outlook / (n) = negative outlook.

Sector Trends

During the quarter, the average spread in bonds of covered medical technology firm tightened by 24 basis points, performing better than Morningstar's Corporate Bond Index (14 basis points of tightening) and the broad healthcare sector (13 basis points of tightening). The biggest mover in the sector was Abbott Laboratories (A-, positive); its bonds due 2026 tightened 57 basis points since our last publication. Although we maintain a positive outlook on Abbott's rating, the company's plan to redeem $1.6 billion of the $3.0 billion outstanding on that issue, among others after issuing EUR 3.4 billion of bonds in late September, was probably the key bond catalyst during the past few months. Even when excluding Abbott's tightening, bonds in this sector tightened by about 20 basis points on average, and overall, bonds in this sector trade about 13 basis points tighter than the index. A notable outlier on the wide end of the spectrum remains Stryker Corp (A+, stable), despite denying June rumors that it was considering acquiring Boston Scientific Corp (BBB+, stable). Stryker's spreads (+97 basis points) remain wider than the index at A+ (+72 basis points) and its key credit peer Medtronic PLC (+62 basis points) and closer to Boston's bonds (+108 basis points). Also, in life sciences, the American Clinical Laboratory Association's lawsuit against the current head of the U.S. Department of Health and Human Services related to ongoing Medicare reimbursement cuts for lab testing was dismissed in September. Even with the current reimbursement plan maintained, we do not expect these ongoing cuts to directly affect LabCorp's or Quest Diagnostics Inc's (BBB+, stable) credit ratings. However, since smaller labs could face tough headwinds as rate cuts accelerate in the medium term, event risk will surround both firms, as we expect smaller labs to increasingly aim to sell out to their larger peers.

Issuer Highlights

- Abbott's A- rating and positive outlook reflect its low Business Risk and declining leverage. After the leverage-increasing St. Jude and Alere acquisitions were completed during 2017, Abbott owed $28 billion of debt at the end of 2017, or gross debt/EBITDA over 4 times. Since then, Abbott's management highlighted a plan to reduce debt by about $8 billion by the end of 2018 primarily with newly accessible cash from U.S. tax reform. Abbott paid down $4 billion of debt in January 2018, positively influencing the firm's Cash Flow Cushion and Solvency Score pillars enough to cause our one-notch upgrade in February 2018. After that, the firm reduced debt even further to $21 billion as of June, or gross leverage of 3.0 times and net leverage of 2.4 times by our estimates. With this ongoing deleveraging, we see the potential for the firm's Cash Flow Cushion and Solvency Score pillars to continue improving, which influences our positive rating outlook.
- In August, we increased our rating outlook to stable from negative on LabCorp. This outlook change reflects that LabCorp has deleveraged toward more manageable levels near the top of its gross leverage target range of 2.5 to 3.0 times. This deleveraging and recent equity value appreciation has positively influenced LabCorp’s Distance to Default score, and these factors have contributed to boosting our rating outlook to stable from negative.
- In August, we increased our rating outlook to positive from stable on Thermo Fisher. This outlook change recognizes the quick deleveraging since its latest acquisition (Patheon in August 2017). After that deal closed, Thermo's debt rose to $22 billion, or 4.1 times pro forma EBITDA. Since then, though, Thermo quickly deleveraged, and at the end of June, Thermo owed $19 billion, or pro forma debt/EBITDA of 3.3 times. This quick deleveraging, which was enabled by a suspended share repurchase program and much reduced acquisition program, suggests that management is committed to operating with reasonable leverage on its balance sheet. Also, with the firm growing in size and scale in the life sciences industry, we believe Thermo’s competitive advantages are growing, and our rating could rise should Thermo remain committed to operating with leverage near its target of 3 times in the long run.

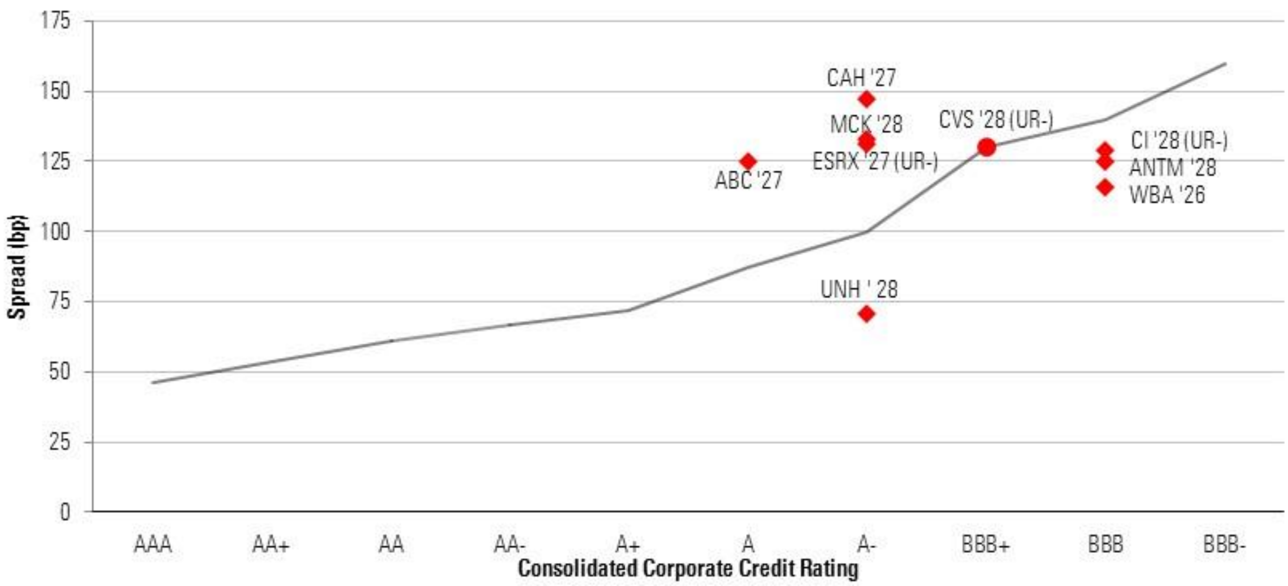
Exhibit 8 Medical Technology Spreads

Health Care Issuer	Rating	Rating Outlook/ Review Status	Coupon	Maturity	Yield	Spread	Difference From Index	Average Difference
Stryker Corp	A+	Stable	3.65%	3/7/2028	4.14%	+97	25	
Agilent Technologies	A-	Stable	3.05%	9/22/2026	4.10%	+106	6	
Baxter International Inc	A	Stable	2.60%	8/15/2026	4.01%	+87	0	
Medtronic PLC	A+	Stable	3.35%	4/1/2027	3.78%	+62	-10	
Zimmer Biomet Holdings Inc	BBB	Stable	3.55%	4/1/2025	4.40%	+129	-11	
Quest Diagnostics Inc	BBB+	Stable	3.45%	6/1/2026	4.32%	+118	-12	-13
Laboratory Corp of America Holdings	BBB+	Stable	3.60%	9/9/2027	4.29%	+113	-17	
Becton, Dickinson and Co	BBB	Stable	3.70%	6/6/2027	4.38%	+122	-18	
Boston Scientific Corp	BBB+	Stable	4.00%	3/1/2028	4.25%	+108	-22	
Thermo Fisher Scientific Inc	BBB	Positive	3.20%	8/15/2027	4.18%	+102	-38	
Abbott Laboratories	A-	Positive	3.75%	11/30/2026	3.67%	+53	-47	

Source: Morningstar Credit Ratings, LLC, Morningstar, Inc., and Interactive Data as of Oct. 3, 2018

Pharmaceutical and Medical Care Supply Chain

Exhibit 9 Pharmaceutical and Medical Care Supply Chain vs. Morningstar Corporate Bond Index



Source: Morningstar Credit Ratings, LLC, Morningstar Inc., and Interactive Data as of Oct. 3, 2018
(UR) = rating under review / (p) = positive outlook / (n) = negative outlook.

Sector Trends

Spreads in the pharmaceutical and medical care supply chain tightened 33 basis points since our last healthcare quarterly report in July. This compares with the broad healthcare sector that tightened 13 basis points and Morningstar's Corporate Bond Index that tightened 14 basis points. This spread tightening happened, despite the potential new competitor (the Amazon-led consortium) and intense regulator scrutiny of sector practices (such as rebates), which has put sector players under the microscope during the past year. Those factors probably contribute to bond spreads in this sector that remain trading around 8 basis points wider than the index on average. In particular, the pharmaceutical distributors continue to trade at wider spreads than the index relative to their ratings. Notably, with the pending combinations of Cigna/Express Scripts and CVS/Aetna, we added the managed care organizations to this sector in this publication, although we did not include their spreads in the average change quarter over quarter, as their relatively tight spreads would have skewed the current average even lower. Considering the planned mergers that are expected to close by the end of 2018, several ratings remain under review with negative implications related to increasing leverage. Antitrust regulators recently gave Cigna the nod to acquire Express Scripts. With UnitedHealth already operating as a top-tier provider of managed care, pharmacy benefit management, and other healthcare services, we suspect the CVS and Aetna merger will likely be approved by regulators, as well. In general, we view the convergence of the pharmaceutical supply chain with managed care organizations as a step in the right direction to control healthcare costs in the United States. However, credit ratings of the combined entities look likely to fall relative to the stand-alone organizations because of rising financial leverage.

Issuer Highlights

- Express Scripts Holding Co's A- credit rating remains under review with negative implications based on its plan to be acquired by Cigna. This deal, which is projected to close around the end of 2018, promises to substantially increase leverage at the combined entity relative to the stand-alone entities. Therefore, we expect Express Scripts' credit profile to weaken materially and to be connected to Cigna's rating if this deal closes as currently planned. As of June, Express Scripts owed $15.0 billion of debt and held $2.3 billion in cash, resulting in gross and net leverage around 2.0 and 1.7 times, respectively, for the trailing 12-month period. Cigna has stated that it anticipates initially owing $41 billion in debt after the merger is completed, and pro forma leverage looks set to rise to over 3 times if the merger with Cigna closes as expected at the end of 2018, or much higher than Express Scripts' stand-alone leverage. This rising leverage looks likely to cut into Express Script's A- rating and could even cut into Cigna's BBB rating. Notably, though, Cigna management appears committed to deleveraging to maintain its investment-grade status, which will likely inform our credit view of the combined entity.
- Our BBB+ credit rating on CVS was placed under review with negative implications in December 2017 based on its planned combination with managed-care organization Aetna. This acquisition is expected to close in late 2018 and increase pro forma gross leverage to the mid-4s. CVS already issued $40 billion of new debt in early 2018 to help fund the merger. Management aims to reduce gross leverage to the mid-3s in the next couple years and to low-3s in the long term. However, that projected leverage is higher than the firm's previous goal, and the company's willingness to boost and keep leverage well above its previous target suggests a downgrade may be warranted in the merger scenario on weakening Cash Flow Cushion and Distance to Default pillars.

Exhibit 10 Pharmaceutical and Medical Care Supply Chain Spreads

Health Care Issuer	Rating	Rating Outlook/ Review Status	Coupon	Maturity	Yield	Spread	Difference From Index	Average Difference
Cardinal Health Inc	A-	Stable	3.41%	6/15/2027	4.63%	+147	47	
AmerisourceBergen Corp	A	Stable	3.45%	12/15/2027	4.42%	+125	38	
McKesson Corp	A-	Stable	3.95%	2/16/2028	4.50%	+133	33	
Express Scripts Holding Co	A-	UR-	3.40%	3/1/2027	4.46%	+131	31	8
CVS Health Corp	BBB+	UR-	4.30%	3/25/2028	4.48%	+130	0	
Cigna Corp	*BBB*	UR-	4.38%	10/15/2028	4.47%	+129	-11	
Anthem Inc	*BBB*	Stable	4.10%	3/1/2028	4.42%	+125	-15	
Walgreen Boots Alliance Inc	BBB	Stable	3.45%	6/1/2026	4.30%	+116	-24	
UnitedHealth Group Inc	*A-*	Stable	3.85%	6/15/2028	3.89%	+71	-29	

Source: Morningstar Credit Ratings, LLC, Morningstar, Inc., and Interactive Data as of Oct. 3, 2018
*Morningstar's insurance company ratings are not NRSRO ratings.

High-Yield Healthcare

Sector Trends

High-yield pharmaceutical firms—Bausch Health Companies Inc's (B-, negative) and Teva Pharmaceutical Industries Ltd (BB, stable)—have been trying to strengthen their precarious financial positions throughout 2018. While Bausch Health eased its debt load by only $350 million in the first six months of 2018 to $25.1 billion (or 7.6 times gross debt/EBITDA for the trailing 12 months), the firm addressed a tower of coming debt maturities in 2018-20 (totaling $13.6 billion at the end of 2016). Through refinancing transactions and amending its bank agreements, the firm effectively extended most of these maturities into 2023 and beyond, leaving around only $4.7 billion due through 2022. Firmer financial standing affords Bausch Health some time to reverse current operational distress. Teva, though, made significant strides in the first half of 2018 toward its goal of reducing gross debt by $3.5 billion this year, having repaid about $2.2 billion of debt funded in part with asset sale proceeds. But, the firm is still far from its current net leverage target of below 4 times EBITDA by 2020, considering it owed $30.2 billion and held cash and investments of $1.9 billion on June 30, 2018, yielding net leverage of 5.2 times for the latest 12 months. We think that achievement of this net leverage goal would require both significant debt reduction and increased profitability that depends on solid execution against its new business strategy meant to stabilize operational deterioration.

Issuer Highlights

- Our rating outlook on Tenet (B-) is positive, and we see a path for the firm to hit its net leverage target of 5 times or less by the end of 2019 through planned and potential divestiture proceeds along with rising profits. Given the possibility for deleveraging to a more manageable level over the next couple of years that could yield improvement in its Cash Flow Cushion, Solvency Score, and Distance to Default pillars, we see potential to upgrade Tenet's rating within that time frame.
- Our outlook for Bausch Health's B- rating is negative since we view the firm's operational recovery as highly uncertain given that its operations will only potentially bottom in the next year or so. Bausch has strengthened its balance sheet, though, by achieving its goal of decreasing debt by more than $5 billion by February 2018 while it extended nearing debt maturities through a series of refinancing activities. We expect that incremental marketing and research expenses needed to foster growth of new dermatology, gastrointestinal, and eye care products may hold EBITDA generation flat on a compounded annual basis through 2022 based on modestly increasing revenue, in our estimation. As such, we think that free cash flow averaging around $1.4 billion per year over the next five years tied to relatively steady operations may be the primary vehicle for leverage improvement.

Exhibit 11 High-Yield Healthcare Senior Unsecured Bonds

Health Care Issuer	Rating	Rating Outlook/ Review Status	Coupon	Maturity	Worst Date	Price	YTW	STW
HCA Healthcare Inc	BB+	Stable	5.63%	9/1/2028	3/1/2028	100.75	5.52%	+235
Teva Pharmaceutical Industries Ltd	BB	Stable	3.15%	10/1/2026	10/1/2026	83.00	5.84%	+270
Mallinckrodt PLC	B+	Stable	5.50%	4/15/2025	4/15/2025	84.25	8.71%	+561
Tenet Healthcare Corp	B-	Positive	7.00%	8/1/2025	8/1/2025	99.40	7.11%	+399
Bausch Health Companies Inc	B-	Negative	6.13%	4/15/2025	4/15/2025	96.13	6.87%	+377
						Average	6.81%	+368

Source: Morningstar Credit Ratings, LLC, Morningstar, Inc., and Interactive Data as of Oct. 3, 2018

Appendix

IG Pharmaceutical Tickers	**JNJ**	**MRK**	**NVS**	**LLY**	**BMY**	**PFE**	**Roche**	**GILD**	**GSK**	**AMGN**	**BIIB**
Morningstar LLC Rating	AAA	AA	AA	AA	AA-	AA-	AA-	A	A	A	A
Outlook	Stable	Stable	Stable	Stable	Stable	Stable	Stable	Stable	Stable	Stable	Stable
Information from Morningstar's Equity Research Group:											
Moat	Wide	Wide	Wide	Wide	Wide	Wide	Wide	Wide	Wide	Wide	Wide
Moat Trend	Stable	Stable	Stable	Stable	Stable	Stable	Stable	Stable	Stable	Stable	Stable
Uncertainty	Low	Low	Low	Medium	Medium	Low	Low	Medium	Medium	Medium	Medium
TTM as of Date ($s in millions)	7/1/2018	6/30/2018	6/30/2018	6/30/2018	6/30/2018	7/1/2018	6/30/2018	6/30/2018	6/30/2018	6/30/2018	6/30/2018
Revenues	$80,684	$41,260	$52,237	$23,874	$21,600	$53,243	CHF 55,066	$23,197	£30,014	$23,188	$12,872
Adj'd EBITDA	$26,362	$14,495	$15,613	$7,211	$5,728	$20,461	CHF 22,984	$12,271	£8,600	$12,428	$7,038
Adj'd EBITDA %	33%	35%	30%	30%	27%	38%	42%	53%	29%	54%	55%
Total Debt	$32,083	$23,338	$32,356	$12,220	$7,387	$40,518	CHF 20,719	$29,060	£28,062	$34,497	$5,928
Cash & Investments	$18,139	$17,627	$13,146	$8,969	$8,192	$13,431	CHF 8,983	$25,917	£4,127	$29,395	$4,384
Net Total Debt/(Cash)	$13,944	$5,711	$19,210	$3,251	($805)	$27,087	CHF 11,736	$3,143	£23,935	$5,102	$1,544
Market Capitalization	$370,596	$188,640	$199,089	$113,755	$101,768	$261,274	$209,218	$101,477	$97,306	$133,325	$70,560
Enterprise Value	$384,540	$194,351	$218,299	$117,006	$100,963	$288,361	$221,379	$104,620	$131,301	$138,427	$72,104
Debt % of EV	8%	12%	15%	10%	7%	14%	10%	28%	30%	25%	8%
TD/EBITDA	1.2x	1.6x	2.1x	1.7x	1.3x	2.0x	0.9x	2.4x	3.3x	2.8x	0.8x
Net TD/EBITDA	0.5x	0.4x	1.2x	0.5x	-0.1x	1.3x	0.5x	0.3x	2.8x	0.4x	0.2x
Adj TD/EBITDAR*	1.5x	1.8x	2.4x	2.3x	1.4x	2.2x	1.3x	2.4x	3.6x	2.8x	0.9x
Interest Expense	$1,015	$757	$854	$249	$190	$1,285	CHF 647	$1,144	£704	$1,342	$226
EBITDA/Interest	26.0x	19.1x	18.3x	28.9x	30.1x	15.9x	35.5x	10.7x	12.2x	9.3x	31.2x
(EBITDA-CapX)/Int	22.5x	16.8x	16.3x	25.1x	25.1x	14.4x	29.9x	10.1x	10.2x	8.8x	27.4x
OCF	$22,056	$5,252	$13,450	$4,175	$5,062	$17,459	CHF 18,283	$9,231	£6,991	$11,295	$5,703
CapX	($3,563)	($1,813)	($1,710)	($959)	($953)	($1,960)	(CHF 3,607)	($767)	-£1,447	($653)	($842)
FCF	$18,493	$3,439	$11,740	$3,216	$4,109	$15,499	CHF 14,676	$8,464	£5,544	$10,642	$4,861
FCF/Debt	58%	15%	36%	26%	56%	38%	71%	29%	20%	31%	82%
Share Repurchases	($2,715)	($3,340)	($3,079)	($2,251)	($789)	($6,063)	(CHF 385)	($1,758)	-£4	($15,539)	($3,000)
Dividends	($9,178)	($5,187)	($6,966)	($2,262)	($2,586)	($7,825)	(CHF 7,248)	($2,857)	-£3,916	($3,488)	$0
Net FCF	$6,600	($5,088)	$1,695	($1,296)	$734	$1,611	CHF 7,043	$3,849	£1,624	($8,385)	$1,861

Source: Company Filings and Morningstar Credit Ratings, LLC as of Oct. 3, 2018

*Adj TD includes total debt plus underfunded pension liabilities plus 8 times rents

IG Pharmaceutical Tickers	**CELG**	**ABBV**	**AZN**	**AGN**	**SHPG**	**MYL**
Morningstar LLC Rating	A-	BBB+	BBB+	BBB	BBB-/UR	BBB-
Outlook	Stable	Stable	Stable	Stable		Negative
Information from Morningstar's Equity Research Group:						
Moat	Narrow	Narrow	Wide	Wide	Narrow	None
Moat Trend	Positive	Negative	Negative	Stable	Positive	Negative
Uncertainty	Medium	Medium	Medium	Medium	Medium	Very High
TTM as of Date ($s in millions)	6/30/2018	6/30/2018	6/30/2018	6/30/2018	6/30/2018	6/30/2018
Revenues	$14,127	$30,946	$22,342	$16,157	$15,400	$11,719
Adj'd EBITDA	$6,228	$13,308	$4,372	$7,896	$6,292	$3,038
Adj'd EBITDA %	44%	43%	20%	49%	41%	26%
Total Debt	$21,251	$37,109	$19,667	$25,351	$17,915	$14,742
Cash & Investments	$3,410	$3,743	$3,859	$1,696	$260	$330
Net Total Debt/(Cash)	$17,841	$33,366	$15,808	$23,654	$17,655	$14,412
Market Capitalization	$63,936	$144,395	$99,528	$65,640	$52,928	$18,679
Enterprise Value	$81,777	$177,761	$115,336	$89,294	$70,583	$33,091
Debt % of EV	26%	21%	17%	28%	25%	45%
TD/EBITDA	3.4x	2.8x	4.5x	3.2x	2.8x	4.9x
Net TD/EBITDA	2.9x	2.5x	3.6x	3.0x	2.8x	4.7x
Adj TD/EBITDAR*	3.5x	3.0x	5.1x	3.3x	3.0x	4.9x
Interest Expense	$627	$1,116	$695	$1,009	$548	$531
EBITDA/Interest	9.9x	11.9x	6.3x	7.8x	11.5x	5.7x
(EBITDA-CapX)/Int	9.4x	11.4x	4.5x	7.5x	10.1x	5.3x
OCF	$4,806	$11,366	$3,165	$6,219	$4,525	$2,097
CapX	($315)	($541)	($1,263)	($319)	($769)	($243)
FCF	$4,491	$10,825	$1,902	$5,900	$3,756	$1,854
FCF/Debt	21%	29%	10%	23%	21%	13%
Share Repurchases	($9,118)	($9,457)	$0	($2,030)	$0	($932)
Dividends to Shareholders	$0	($4,724)	($3,514)	($1,170)	($323)	$0
Net FCF	($4,627)	($3,356)	($1,612)	$2,700	$3,433	$921

Source: Company Filings and Morningstar Credit Ratings, LLC as of Oct. 3, 2018

*Adj TD includes total debt plus underfunded pension liabilities plus 8 times rents

Medical Technology Tickers	**MDT**	**SYK**	**BAX**	**ABT**	**A**	**BSX**	**DGX**	**LH**	**TMO**	**ZBH**	**BDX**
Morningstar LLC Rating	A+	A+	A	A-	A-	BBB+	BBB+	BBB+	BBB	BBB	BBB
Outlook	Stable	Stable	Stable	Positive	Stable	Stable	Stable	Stable	Positive	Stable	Stable
Information from Morningstar's Equity Research Group:											
Economic Moat	Wide	Wide	Narrow	Narrow	Narrow	Narrow	Narrow	Narrow	Narrow	Wide	Narrow
Moat Trend	Stable	Stable	Stable	Stable	Stable	Stable	Stable	Positive	Positive	Stable	Stable
Uncertainty	Medium	Medium	Medium	Medium	Medium	High	Medium	Medium	Medium	Medium	Medium
Pro Forma Credit Metrics ($s in millions)											
TTM as of Date ($s in millions)	7/27/2018	6/30/2018	6/30/2018	6/30/2018	7/31/2018	6/30/2018	6/30/2018	6/30/2018	6/30/2018	6/30/2018	6/30/2018
Revenues	$29,947	$13,040	$11,000	$29,575	$4,809	$9,499	$7,670	$11,166	$23,578	$7,918	$16,716
Adj'd EBITDA	$9,041	$3,623	$2,346	$6,860	$1,118	$2,513	$1,558	$2,124	$5,899	$2,702	$5,215
Adj'd EBITDA %	30%	28%	21%	23%	23%	26%	20%	19%	25%	34%	31%
Total Debt	$25,223	$7,202	$3,498	$20,670	$1,799	$5,765	$3,713	$6,457	$19,420	$9,513	$22,250
Cash and Investments	$11,004	$1,920	$2,857	$4,204	$2,131	$287	$132	$221	$937	$481	$1,384
Net Total Debt/(Cash)	$14,219	$5,282	$641	$16,466	($332)	$5,478	$3,581	$6,236	$18,483	$9,032	$20,866
Market Capitalization	$131,630	$65,560	$40,560	$126,380	$22,990	$53,390	$14,520	$17,510	$99,630	$26,340	$69,220
Enterprise Value	$145,849	$70,842	$41,201	$142,846	$22,658	$58,868	$18,101	$23,746	$118,113	$35,372	$90,086
Debt % of EV	17%	10%	8%	14%	8%	10%	21%	27%	16%	27%	25%
TD/EBITDA	2.8x	2.0x	1.5x	3.0x	1.6x	2.3x	2.4x	3.0x	3.3x	3.5x	4.3x
Net TD/EBITDA	1.6x	1.5x	0.3x	2.4x	-0.3x	2.2x	2.3x	2.9x	3.1x	3.3x	4.0x
Adj TD/EBITDAR*	3.0x	2.2x	2.3x	3.2x	2.0x	2.5x	3.0x	3.5x	3.5x	3.6x	4.5x
Interest Expense	$1,102	$248	$90	$901	$77	$236	$161	$254	$680	$317	$728
EBITDA/Interest	8.2x	14.6x	26.1x	7.6x	14.5x	10.6x	9.7x	8.4x	8.7x	8.5x	7.2x
(EBITDA-CapX)/Int	7.2x	12.2x	18.7x	6.3x	11.9x	9.5x	7.8x	7.0x	7.7x	7.2x	5.9x
OCF	$5,649	$1,704	$1,938	$5,997	$1,003	$917	$1,188	$1,437	$4,350	$1,750	$3,071
CapX	($1,081)	($606)	($666)	($1,181)	($199)	($273)	($296)	($331)	($668)	($426)	($896)
FCF	$4,568	$1,098	$1,272	$4,816	$804	$644	$892	$1,106	$3,682	$1,324	$2,175
FCF/Debt	18%	15%	36%	23%	45%	11%	24%	17%	19%	14%	10%
Share Repurchases	($1,762)	($300)	($1,250)	($150)	($336)	$0	($215)	($232)	$0	$0	$0
Dividends	($2,546)	($670)	($347)	($1,912)	($187)	$0	($252)	$0	($248)	($195)	($886)
Net FCF	$260	$128	($325)	$2,754	$281	$644	$425	$874	$3,434	$1,129	$1,289

Source: Company Filings and Morningstar Credit Ratings, LLC as of October 3, 2018

*Adj TD includes total debt plus underfunded pension liabilities plus 8 times rents

Supply Chain Tickers	**ABC**	**MCK**	**CAH**	**UNH**	**CVS**	**CVS/AET**	**WBA**	**ESRX**	**CI**	**CI/ESRX**	**ANTM**
Morningstar LLC Rating	A	A-	A-	A-**	BBB+/UR-	BBB+/UR-	BBB	A-/UR-	BBB/UR-**	BBB/UR-**	BBB**
Outlook	Stable	Stable	Stable	Stable**	na	na	Stable	na	na	na	Stable**
Information from Morningstar's Equity Research Group:											
Economic Moat	Wide	Wide	Wide	Narrow	Narrow	Narrow	None	Wide	None	na	Narrow
Moat Trend	Stable	Stable	Stable	Negative	Positive	Positive	Stable	Stable	Negative	na	Negative
Uncertainty	Medium	Medium	Medium	Medium	Medium	Medium	Medium	Medium	High	na	Medium
Pro Forma Credit Metrics ($s in millions)											
TTM as of Date ($s in millions)	6/30/2018	6/30/2018	6/30/2018	6/30/2018	6/30/2018	6/30/2018	5/31/2018	6/30/2018	6/30/2018	6/30/2018	6/30/2018
Revenues	$167,038	$209,913	$137,959	$213,657	$186,967	$247,710	$134,830	$100,473	$43,747	$144,220	$90,588
Adj'd EBITDA	$2,404	$4,114	$3,534	$18,658	$12,433	$18,185	$8,453	$7,517	$5,294	$12,811	$6,007
Adj'd EBITDA %	1%	2%	3%	9%	7%	7%	6%	7%	12%	9%	7%
Total Debt	$4,394	$9,752	$9,013	$35,055	$65,109	$80,768	$15,043	$14,991	$5,304	$41,564	$19,286
Cash	$2,389	$2,199	$1,763	$18,368	$43,901	$5,401	$1,818	$2,942	$3,634	$360	$4,682
Net Total Debt/(Cash)	$2,005	$7,553	$7,250	$16,687	$21,208	$75,367	$13,225	$12,048	$1,670	$41,203	$14,604
Market Capitalization	$19,690	$26,070	$16,180	$260,730	$81,340	$103,517	$73,240	$53,590	$51,670	$80,670	$71,810
Enterprise Value	$21,695	$33,623	$23,430	$277,417	$102,548	$178,884	$86,465	$65,638	$53,340	$121,873	$86,414
Debt % of EV	20%	29%	38%	13%	63%	45%	17%	23%	10%	34%	22%
TD/EBITDA	1.8x	2.4x	2.6x	1.9x	5.2x	4.4x	1.8x	2.0x	1.0x	3.2x	3.2x
Net TD/EBITDA	0.8x	1.8x	2.1x	0.9x	1.7x	4.1x	1.6x	1.6x	0.3x	3.2x	2.4x
Adj TD/EBITDAR*	2.0x	3.2x	2.7x	2.1x	5.7x	4.9x	3.6x	2.1x	1.3x	3.4x	3.3x
Interest Expense	$211	$276	$331	$1,275	$1,507	$2,429	$685	$621	$250	$1,650	$690
EBITDA/Interest	11.4x	14.9x	10.7x	14.6x	8.3x	7.5x	12.3x	12.1x	21.2x	7.8x	8.7x
(EBITDA-CapX)/Int	9.7x	12.7x	9.5x	13.0x	6.3x	6.1x	10.1x	11.6x	19.2x	7.3x	7.2x
EBITDAR/(Interest+Rent)	9.0x	7.1x	8.5x	11.6x	3.7x	4.1x	2.8x	10.8x	14.3x	7.0x	6.1x
OCF	$2,126	$2,543	$2,768	$17,345	$7,764	$15,441	$7,444	$5,499	$4,830	$10,329	$3,861
CapX	($343)	($607)	($384)	($2,058)	($2,906)	($3,355)	($1,507)	($338)	($497)	($835)	($1,035)
FCF	$1,783	$1,936	$2,384	$15,287	$4,858	$12,086	$5,937	$5,161	$4,333	$9,494	$2,826
FCF/Debt	41%	20%	26%	44%	7%	15%	39%	34%	82%	23%	15%
Share Repurchases	($400)	($1,716)	($550)	($3,605)	($400)	($945)	($6,288)	($1,339)	($2,140)	($3,479)	($2,284)
Dividends	($331)	($271)	($581)	($3,041)	($2,039)	($2,695)	($1,786)	$0	$0	$0	($749)
Net FCF	$1,052	($51)	$1,253	$8,641	$2,419	($3,640)	($2,137)	$3,822	$2,193	$6,015	($207)

Source: Company Filings and Morningstar Credit Ratings, LLC as of October 3, 2018

*Adj TD includes total debt plus underfunded pension liabilities plus 8 times rents

**Managed care (ANTM, CI, UNH) ratings are not NRSRO.

HY Healthcare Tickers	**HCA**	**TEVA**	**MNK**	**THC**	**BHC**
Morningstar LLC Rating	BB+	BB	B+	B-	B-
Outlook	Stable	Stable	Stable	Positive	Negative
Information from Morningstar's Equity Research Group:					
Moat	Narrow	None	None	None	None
Moat Trend	Stable	Negative	Negative	Stable	Negative
Uncertainty	High	Extreme	Extreme	Very High	Extreme
TTM as of Date ($s in millions)	6/30/2018	6/30/2018	6/30/2018	6/30/2018	6/30/2018
Revenues	$45,210	$20,835	$2,791	$18,883	$8,505
Adj'd EBITDA	$8,483	$5,450	$1,186	$2,646	$3,322
Adj'd EBITDA %	19%	26%	43%	14%	39%
EBITDAR	$8,772	$5,650	$1,210	$2,857	$3,399
EBITDAR %	19%	27%	43%	15%	40%
Total Debt	$33,192	$30,237	$6,357	$14,867	$25,088
Cash & Investments	$868	$1,861	$236	$403	$838
Net Total Debt/(Cash)	$32,324	$28,376	$6,122	$14,464	$24,250
Market Capitalization	$47,980	$22,249	$2,301	$2,890	$9,599
Enterprise Value	$80,304	$50,625	$8,423	$17,354	$33,849
Debt % of EV	41%	60%	75%	86%	74%
TD/EBITDA	3.9x	5.5x	5.4x	5.6x	7.6x
Net TD/EBITDA	3.8x	5.2x	5.2x	5.5x	7.3x
Adj TD/EBITDAR*	4.0x	5.6x	5.4x	6.0x	7.6x
Interest Expense	$1,727	$937	$369	$1,029	$1,761
EBITDA/Interest	4.9x	5.8x	3.2x	2.6x	1.9x
(EBITDA-CapX)/Int	3.0x	5.0x	2.8x	2.0x	1.8x
EBITDAR/(Interest+Rent)	4.4x	5.0x	3.1x	2.3x	1.8x
OCF	$5,607	$3,954	$767	$1,260	$1,728
CapX	($3,285)	($771)	($152)	($627)	($149)
FCF	$2,322	$3,183	$615	$633	$1,579
FCF/Debt	7%	11%	10%	4%	6%
Share Repurchases	($1,978)	$0	($328)	$0	$0
Dividends	($245)	($482)	$0	$0	$0
Distributions to non-controlling interests	($385)	($38)	$0	($275)	$0
Net FCF	($286)	$2,663	$287	$358	$1,579

Source: Company Filings and Morningstar Credit Ratings, LLC as of Oct. 3, 2018

*Adj TD includes total debt plus underfunded pension liabilities plus 8 times rents

Morningstar® Credit Research

For More Information
Todd Serpico
+1 312 384 5488
Todd.Serpico@morningstar.com

MORNINGSTAR®

22 West Washington Street
Chicago, IL 60602 USA