

# 2023 Median Ratios: Not-for-Profit Hospitals and Healthcare Systems

"Fitch views the expected year-over-year deterioration in sector medians as a full reversal from certain all-time highs seen in 2022 (based on 2021 data) to what will likely be defined as operational all-time lows this year.

Longer-term industry dynamics continue to suggest protracted margin compression compared to historical trends as additional expenses, primarily labor, remain elevated. We continue to expect a return to monthly break-even in 2023 for the majority of the rated portfolio, albeit at a slower pace than anticipated heading into the year. While we believe 2023 financial results will be better than those of 2022, this will not represent a full rebound, given the tremendous ongoing pressures on many credits in the sector."

Kevin Holloran, Senior Director, USPF Healthcare

## Related Research

Wage Growth Levels Off as Job Openings Remain High for U.S. NFP Hospitals (June 2023)

End of Continuous Medicaid Enrollment Negative for NFP Hospitals (April 2023)

Labor Picture Continues to Brighten for U.S. NFP Hospitals (April 2023)

Early NFP Hospital Medians Show Expected Deterioration; Will Worsen (March 2023)

US Not-for-Profit Hospital Cyberattacks Could Signal Greater Risk (February 2023)

Investment Value Declines Erode Not-for-Profit Hospitals' Liquidity (January 2023)

Staff Shortages Improving for U.S. NFP Hospitals (December 2022)

Labor Pains to Intensify for U.S. NFP Hospitals in 2023 (December 2022)

## Analysts



**Kevin Holloran**  
+ 1 512 813-5700  
[kevin.holloran@fitchratings.com](mailto:kevin.holloran@fitchratings.com)



**Mark Pascaris**  
+1 312 368-3135  
[mark.pascaris@fitchratings.com](mailto:mark.pascaris@fitchratings.com)

## Median Ratios: Significantly Weaker vs. Prior Year

In 2022, we warned that the 2022 medians (based on 2021 data) would likely be the sector peak, and that the 2023 medians would show a significant reversal. To that end, Fitch Ratings' 2023 medians (using audited 2022 data) largely show sizable and widespread deterioration in operating margins and balance sheet metrics, a stark contrast to last year (*See Summary Table on page 5*). Similarly, last year, the 2021 medians also reflected a reversed trend from the prior-year medians (i.e. were much stronger).

The difficult start to 2022 began with a deepening financial deficit caused by acuity reductions and labor challenges. Macro headwinds started to form in late 2021 and accelerated in early 2022, with labor shortages, inflationary expenses, reduced elective volumes and surgeries, and increased medical admissions to varying degrees across the rated portfolio. These trends continued for much of the rest of the year for the majority of the rated credits, with the median operating margin now at just 0.2%. This means that approximately one-half of our rated portfolio recorded a negative operating margin in 2022, ranging widely from a high of 27% to a low of negative 21.5%.

The more significant signs of operational challenges (defined as operating EBITDA margin) were seen at the lower end of the rating spectrum (the below-investment-grade [BIG] categories). The BIG categories reported a very modest 0.3% operating EBITDA margin, compared with 6.9% in fiscal 2021, a 95.6% decrease. The mid investment-grade (IG) category (A category) reported a 4.8% operating EBITDA margin, versus 8.8% in fiscal 2021, a 45.5% decrease.

Losses were more modest at the high end of the IG rating spectrum (AA category), with only a 29.2% decrease to 6.8% operating EBITDA margin from 9.6% the prior year.

Most significantly, the lower end of the rating spectrum (BIG categories) saw a 37.5% decrease in cash to adjusted debt, to 47%. Equally notable, there were also significant downward adjustments to key balance sheet metrics concentrated at the high end of the rating spectrum, with a 16.8% decrease in cash to adjusted debt to 207% for 'AA' category credits.

On a more positive note, despite the loss of about 44 days' cash on hand in the 2022 medians to 216 days, the key balance sheet metrics remained comparable to favorable with pre-pandemic levels; days' cash on hand averaged approximately 206 days for the 2013 through 2019 medians. The same can be said for other key measurements such as cash to debt and leverage (debt to capitalization).

## Pandemic to "Labordemic"

The coronavirus pandemic has morphed into an endemic issue, akin to seasonal influenza. Access to vaccines and inherent immunity through exposure have removed the coronavirus as a meaningful rating event at this time.

What dominates now is the sectors' need for significant additional staffing, particularly nursing, which emerged as a critical weakness in the sector, resulting in massively increased staffing expenditures (employed and contracted) as the new norm for much of the sector.

Labor shortages, both clinical and non-clinical, will continue through 2023, and likely longer in many markets, with high-growth markets generally better able to mitigate staffing shortages.

## Key Takeaways

Some key takeaways from the 2023 medians include the following.

- Across-the-board deterioration in operating margins, regardless of size or rating category, of approximately 300 basis points.
- The median rating remained at 'A+', while the most common (mode) rating remained at 'AA-'.
- Reduced strength in all key balance sheet metrics, across all rating categories, highlighted by a reduction in median days' cash on hand by 44 days.
- Key balance sheet metrics (such as days' cash on hand, cash to debt and leverage) remained comparable to favorable with pre-pandemic levels, indicating that much of the financial cushion built up during 2021 has greatly eroded, but credits still remain commensurate with historical levels.

## Complex/Difficult Sector Environment

As 2022 will likely be the worst operational year on record for many providers (even compared to the 2008-2009 "Great Recession"), the sector did take a step back. It remains to be seen if, as 2023 progresses and operations gradually improve, this step back will become a sidestep along a very complicated sector journey, or the new normal.

- We are likely still another year away from some level of "normal" for the sector, particularly in terms of labor availability.
- For some providers, volumes continue to fall short of pre-pandemic trends. For others, volumes are at or even above pre-pandemic levels. More notable is the shift from surgical to medical, particularly for the first half of 2022, combined with the longstanding inpatient to outpatient migration.
- Some services have been curtailed, either from lack of demand or lack of staffing, both of which limited traditional top-line revenue growth in 2022. However, this also demonstrates to contract labor companies the limits to labor spending that many providers have hit.
- Some risk-based business still appears to be on the backburner due to the unpredictability of the expense base, with a continued focus on basic costs, instead of price, quality, equality, transparency, etc.
- While there was, surprisingly, no sectorwide significant change in payor mix due to the pandemic, Fitch still believes the sector will see a gradually eroding payor mix overall with Medicare and Medicaid volumes accounting for an increasing percentage of inpatients.

## Overall 'A+' Median Rating; 'AA-' Most Common

The median rating in Fitch's portfolio remains at 'A+', while the most common rating in the agency's portfolio remains at 'AA-'. About 27% of the rated hospitals and health systems in this median report have a 'AA-' rating, with 40.5% in the overall 'AA' rating category. Another 37.2% of Fitch's ratings are in the broad 'A' rating category, 15.8% are in the 'BBB' rating category, and only 6.5% are rated BIG. (See the *Ratings Distribution* chart on page 6.)

## Operating Performance: Weaker for All

Median operating and operating EBITDA margins declined notably to 0.2% and 5.8%, respectively, in fiscal 2022 from 3.0% and 8.9% in the prior year. The deterioration seen in operating income is attributed to multiple factors but is primarily due to the cost of labor shortages, generationally elevated inflation and the depletion of prior pandemic-era relief funding. Moreover, the decline in operating margins may be slightly understated, as many health systems with June 30 fiscal year ends had a stronger start to the fiscal year (which for them began the second half of 2021).

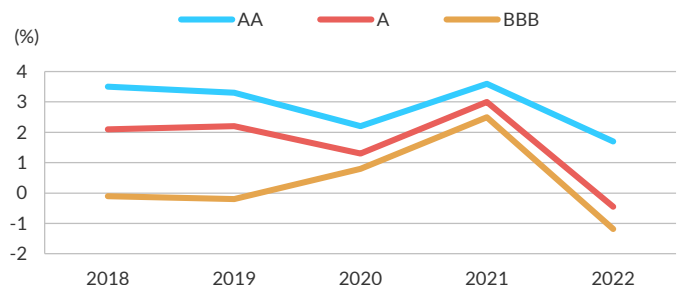
Median excess margin and EBITDA are even more negatively affected compared to operating margins at 1.9% and 7.3%, respectively. This is far removed from last year's 6.6% and 12.4% margins, respectively. Non-operating income sources (e.g. investment returns) were notably diluted due to the market volatility seen in 2022.

## Trends Vary by Rating Category

The 'AA' category operating margin median declined the least of any rating category, falling to 1.7% from 3.6% the prior year. The operating EBITDA margin followed suit, decreasing to 6.8% from 9.6% yoy. The pattern for 'A' rating category medians was more pronounced, decreasing to 0% from 3.0% the prior year. Of note, the 'AA' and 'A' category credits account for some three-quarters of Fitch's rated portfolio. However, when comparing individual ratings versus categories, the 'A+' and 'A-' ratings show negative median operating margins.

The 'BBB' category operating margin medians notably trended to the negative at -1.2% versus 2.5% the prior year. The BIG category suffered the largest losses, shifting downward from 1.3% the prior year to a very weak negative 6.1% for the current set of medians (although the small sample size of BIG credits is noted). (See *tables on pages 7 and 8.*)

### Operating Margin



Source: Fitch Ratings

Fitch believes that different strategies will be necessary to advance healthcare on a transformative level, and return to sustainable levels of cash flow and, ultimately, to break-even or better on Medicare rates - a long-stated, but rarely achieved sector goal.

## Liquidity Metrics Deteriorate Significantly

Key median liquidity metrics (days' cash on hand and cash to debt) were markedly reduced compared to the prior year. Days' cash declined by approximately 44 days (down 17%) to 216 from 260, and cash to debt saw a similar percentage decline to 147% from 186% yoy. Despite the precipitous decline, which comes after a rapid strengthening in 2021, liquidity metrics remain strong for the sector, and while no longer at all-time highs, still compare favorably to pre-pandemic levels. The metrics continue to provide some cushion against equity market volatility, inflationary pressures and added expenses due to labor scarcity. (See tables on pages 7 and 8.)

### Spiking Leverage Metrics

Median 2022 leverage ratios worsened by a substantial amount. Median debt to capitalization deteriorated to 34.2%, compared with 31.7% the prior year, and is the highest level since the 2017 median level of 34.3%

Fitch utilizes cash to adjusted debt to find measures consistent across the sector and rating spectrum. Adjusted debt comprises underfunded defined benefit pension liabilities below an 80% funded level (for traditional Employee Retirement Income Security Act [ERISA] and church plans) as a long-term debt equivalent.

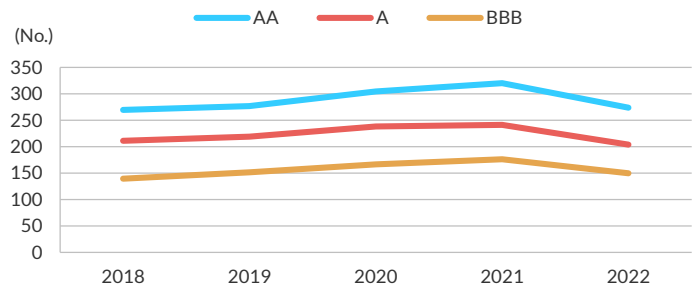
Overall cash to adjusted debt declined notably to 143% from 180% yoy, or a 20.4% decrease. Cash to adjusted debt is the most highly correlated metric in Fitch medians across the various rating categories, highest in the 'AA' category and lowest in the BIG category, with all rating categories seeing declines in this year's medians. (See tables on pages 7 and 8.)

## Balance Sheet Ratios

The overall median for cash to debt declined to 147% from 186% yoy. Fitch's 'AA' rating category decreased to 215% from 253%, and the 'A' rating category declined to 130% from 153% yoy. Market losses suffered in 2022 and added operating expenses account for the decreases.

At the higher end of the rating scale, days' cash declined, to 273 and 204 days for the 'AA' and 'A' categories, respectively, versus 320 and 241 days in the prior year. Similar declines on a percentage basis occurred in the 'BBB' rating category, which saw a dip to 149 days from 176 days in the prior year, and the compression in cash on hand in the BIG rating category declined to 75 days from 90 days the prior year.

### Days Cash on Hand



Source: Fitch Ratings

Fitch credits the similarity (on a percentage basis) for the decline in days' cash on hand at higher-rated providers compared to the lower-rated providers, despite generally more aggressive asset allocations at the higher ratings, to a better ability to flex capital projects; and the lack of egregious declines in operating margins and operating EBITDA margins.

## Capital Spending

Average age of plant changed little, with the 2022 level at 12.1 years, compared with 11.9 years for 2021. Maintenance of the average age of plant was driven by a somewhat surprising increase in overall capital spending, particularly at the 'AA' and 'BBB' category ratings, with capital spending as a percentage of depreciation expense increasing to 119% and 103%, respectively.

A narrow band remains in Fitch's rated portfolio around the median average age of plant (11.1 years to 15.1 years), and the accounting treatment when an asset is acquired (or whether the depreciation schedule aligns with the life of the assets) can swing this calculation up and down. Consequently, Fitch places more emphasis on the multiyear trend of capital spending compared to annual depreciation expense (capital spending ratio), rather than average age of plant, in its ratings.

The annual capital spending ratio is more mixed but up overall, increasing unexpectedly for the sector to about 110% in 2022, compared with 100% the prior year.

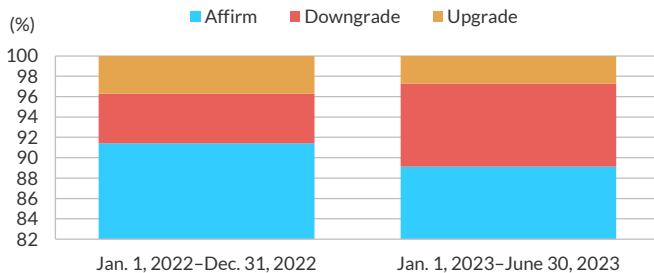
There is variability at the different rating categories, as expected. For example, at the high end of the rating scale, the capital spending ratio was most acute (the AA category was at 119%, compared with 101% the prior year). This was mirrored by a similar shift in capital spending at the 'BBB' category, to 103% from 83% yoy. The 'A' category saw flat spending compared to the prior year at about 105% in both years, while the BIG category saw the only decline, to 72% from 94% the prior year (as lower-rated credits scrambled to preserve liquidity in a challenged environment). As noted, the BIG category is a small sample size and more susceptible to shifts in capital spending. (See tables on pages 7 and 8.)

## Rating Actions: Tilting Negative

Rating actions in 2022 displayed general credit stability, notwithstanding the dire tone of the medians. Fitch affirmed 91% of its healthcare ratings while downgrading 5% and upgrading 4%. While Stable Rating Outlooks still dominate the sector, with 92% Stable in 2022, Negative Rating Outlooks are beginning to outpace Positive Rating Outlooks, at 6% and 2%, respectively.

Affirmations are generally consistent, with trends for the first six months of 2023 (Jan. 1, 2023 through June 30, 2023) showing a similar trend, albeit with a smaller sample size, but rating actions have taken a decidedly negative tone. During this time frame, Fitch affirmed 89% of its ratings, but upgraded only 3% of issuers while downgrading 8%. Similarly, year to date, Negative Rating Outlooks continue to outpace Positive Rating Outlooks (3% to 1%). (See *Ratings Actions Chart on page 6*.) Even as macro-wide operating margins slowly rebound in 2023, Fitch expects the trend of downgrades and Negative Rating Outlooks to outpace upgrades and Positive Rating Outlooks, particularly for systems whose operating margins in 2023 are no better, or worse than, in 2022.

### Not-for-Profit Hospitals and Healthcare Systems – Rating Actions



Source: Fitch Ratings

### Summary

As we close out fiscal 2022 with this set of medians, our goal, as always, is to provide thoughtful and clear forward-looking analysis and communications. When we released last year's medians, there was a belief that the sector had peaked in 2021 and would experience stress in 2022, with recovery beginning in 2023. As we have seen year to date, the negative associated pressures have lingered longer than expected due to continued labor shortages, inflationary expenses and shifting volume composition.

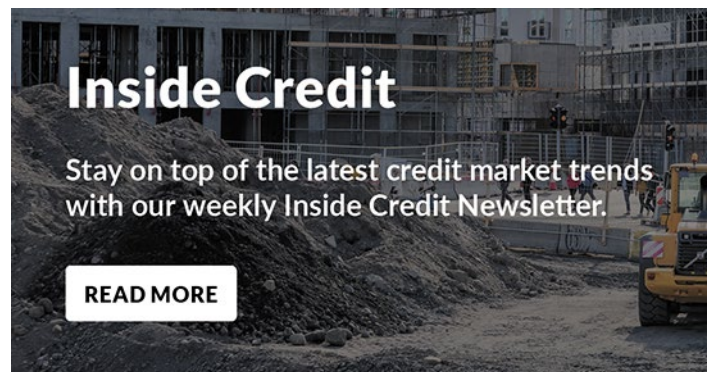
For 2023 and beyond, Fitch forecasts the following.

- The sector will continue to experience weak margins in 2023 and into 2024, due to an inelastic revenue model, pronounced labor challenges and lingering inflationary pressures, unless payors, governmental or otherwise, begin to hike annual rate increases more in line with this new normal.
- The credit gap between stronger and weaker credit profiles will continue to widen, with a growing credit split within the upper end of the rating scale, with some providers easing through 2022 and 2023 with very little difficulty compared to others.
- Many providers will seek to engage in a wave of significant M&A, although the current regulatory and legislative environment may limit activity for health systems operating in the same market, encouraging more out-of-market mergers.
- Organizations will likely need to find transformative ways to move from traditional fee-for-service reimbursement and the potential benefits of accepting first-dollar coverage.

### Methodology

Fitch included its rated standalone hospitals and health systems for this report; children's hospitals are not included (children's hospital medians are reported separately). In addition, some credits are excluded for analytical purposes or lack of data. Fitch notes that the small sample size for some of the individual rating categories can create greater volatility in the data and that sample size should be considered when reviewing yoy changes.

For all data points in this report, Medicare Accelerated and Advance Payment Program funds were excluded from Fitch's cash and cash-equivalent ratios, as Fitch has always viewed these funds as a temporary loan, and not permanent cash on the balance sheet.



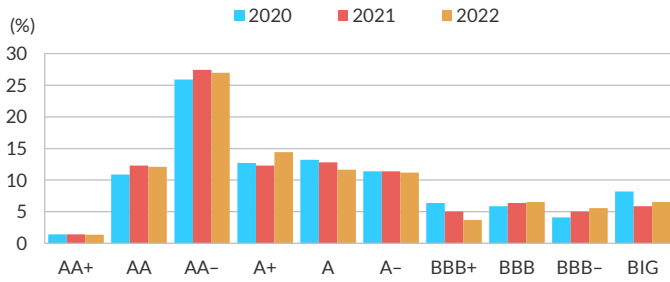
## Data Appendix

## Nonprofit Hospital and Healthcare System Overall Medians — 2022

	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013
Sample Size	215	219	213	220	220	232	249	246	235	243
Days Cash on Hand	216.1	260.3	241.4	219.8	214.9	213.9	195.5	203.8	203.4	193.9
Days in Accounts Receivable	47.3	47.2	44.6	46.8	45.9	47.0	47.3	47.9	48.2	49.3
Cushion Ratio (x)	25.6	29.7	25.3	22.8	22.5	20.9	18.7	18.2	17.6	16.4
Days in Current Liabilities	69.6	89.4	91.4	64.3	62.8	61.7	63.8	65.7	66.4	64.8
Cash to Debt (%)	147.1	185.5	162.8	159.3	155.4	159.0	142.8	138.5	141.8	127.7
Cash to Adjusted Debt (%)	143.4	180.1	150.6	138.9	130.6	130.4				
Operating Margin (%)	0.2	3.0	1.5	2.3	2.1	1.9	2.8	3.5	3.0	2.2
Operating EBITDA Margin (%)	5.8	8.9	7.3	8.7	8.6	8.5	9.5	10.3	9.7	9.2
Excess Margin (%)	1.9	6.6	3.3	4.5	4.0	4.2	3.8	5.2	4.8	3.7
EBITDA Margin (%)	7.3	12.4	9.3	10.6	10.4	10.3	10.5	12.2	11.7	10.9
Net Adjusted Debt to Adjusted EBITDA	-2.0	-2.1	-2.1	-1.3	-1.1	-1.1				
Personnel Costs as % of Total Op. Revenue	54.3	52.8	55.0	53.3	54.0	54.9	54.8	53.6	54.4	55.0
EBITDA Debt Service Coverage (x)	3.2	5.7	4.0	4.1	4.0	3.8	3.6	4.3	4.0	3.5
Op. EBITDA Debt Service Coverage (x)	2.4	3.8	3.1	3.3	3.4	3.2	3.2	3.7	3.5	3.0
Maximum Annual Debt Service as % of Revenues	2.2	2.2	2.3	2.4	2.5	2.6	2.6	2.8	2.9	3.1
Debt to EBITDA (x)	4.2	2.7	3.8	3.3	3.4	3.3	3.5	3.1	3.1	3.6
Debt to Capitalization (%)	34.2	31.7	33.6	33.1	33.7	34.3	37.0	38.4	36.6	37.8
Average Age of Plant (Years)	12.1	11.9	11.7	11.6	11.2	11.2	11.0	10.8	10.6	10.6
Capital Expenditures as % of Depreciation Expense	109.5	100.4	109.5	117.7	117.0	121.4	115.8	111.9	106.6	115.7

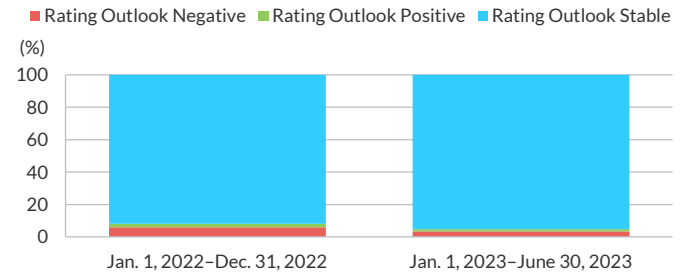
Source: Fitch Ratings

### Rating Distribution



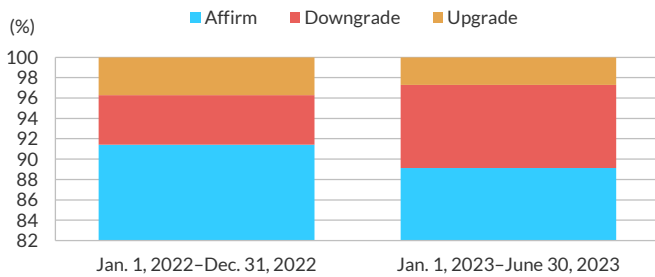
Source: Fitch Ratings

### Not-for-Profit Hospitals and Healthcare Systems – Rating Outlooks



Source: Fitch Ratings

### Not-for-Profit Hospitals and Healthcare Systems – Rating Actions



Source: Fitch Ratings

## Data Appendix – Medians by Rating Category

## Nonprofit Hospital and Healthcare System Category Medians – 2022

	2022	2021	2022	2021	2022	2021	2022	2021	2022	2021
	Median	Median	AA	AA	A	A	BBB	BBB	BIG	BIG
Sample Size	215	219	87	90	80	80	34	25	14	13
Total Operating Revenue (\$ Mil.)	1,227,013	1,160,179	2,118,856	2,125,216	1,162,916	1,012,531	791,168	748,682	410,242	445,803
Days Cash on Hand	216.1	260.3	273.4	319.7	203.8	241.2	149.4	175.7	75.1	90.4
Days in Accounts Receivable	47.3	47.2	46.0	46.1	47.9	48.2	51.1	50.3	49.4	47.9
Cushion Ratio (x)	25.6	29.7	40.1	44.0	21.7	25.0	14.9	16.6	7.8	10.1
Days in Current Liabilities	69.6	89.4	74.7	92.8	64.6	83.9	67.7	94.7	74.6	92.1
Cash to Debt (%)	147.1	185.5	215.0	252.9	130.4	153.0	98.5	107.3	54.8	75.9
Cash to Adjusted Debt (%)	143.4	180.1	207.1	249.1	129.0	151.8	90.4	102.3	47.2	75.5
Operating Margin (%)	0.2	3.0	1.7	3.6	0.0	3.0	-1.2	2.5	-6.1	1.3
Op. EBITDA Margin (%)	5.8	8.9	6.8	9.6	4.8	8.8	4.7	7.9	0.3	6.9
Excess Margin (%)	1.9	6.6	3.7	8.5	1.8	5.7	-0.2	4.8	-1.0	3.6
EBITDA Margin (%)	7.3	12.4	8.6	13.9	7.1	11.9	5.6	10.8	4.8	9.8
Net Adjusted Debt to Adjusted EBITDA	-2.0	-2.1	-3.5	-3.2	-1.3	-1.6	0.3	-0.1	2.4	1.0
Personnel Costs as % of Total Operating Revenue	54.3	52.8	54.4	52.0	55.1	52.8	52.8	51.6	59.3	55.1
EBITDA Debt Service Coverage (x)	3.2	5.7	4.6	7.4	3.0	4.9	2.0	4.0	1.6	3.3
Op. EBITDA Debt Service Coverage (x)	2.4	3.8	3.5	4.7	2.1	3.7	1.8	3.0	0.1	2.5
Maximum Annual Debt Service as % of Revenues	2.2	2.2	1.9	2.0	2.4	2.4	2.5	2.5	2.6	2.8
Debt to EBITDA (x)	4.2	2.7	3.5	2.3	4.4	3.1	6.6	3.4	8.0	3.5
Debt to Capitalization (%)	34.2	31.7	26.1	24.4	38.6	34.7	40.4	41.1	58.7	56.6
Average Age of Plant (Years)	12.1	11.9	11.1	10.8	13.0	12.5	12.7	13.0	15.1	15.6
Capital Expenditures as % of Depreciation Expense	109.5	100.4	119.2	100.8	105.5	105.3	103.3	83.4	72.3	94.4

EBITDA – Earnings before interest, taxes, depreciation and amortization. CFFOBI – Cash flow from operations before interest.

Source: Fitch Ratings

## Data Appendix – Medians by Individual Rating

## Nonprofit Hospital and Healthcare System Medians for Investment-Grade Ratings – 2022

	2022	2021	2022	2021	2022	2021	2022	2021	2022	2021	2022	2021	2022	2021	2022	2021
	AA	AA	AA-	AA-	A+	A+	A	A	A-	A-	BBB+	BBB+	BBB	BBB	BBB-	BBB-
Sample Size	26	27	58	60	31	28	25	30	24	25	8	12	14	15	12	13
Total Operating Revenue (\$ Mil.)	2,947,733	3,112,121	1,760,019	1,508,520	1,508,818	1,572,435	943,480	711,659	846,332	794,763	999,436	819,097	799,890	772,286	563,749	650,596
Days Cash on Hand	322.9	380.3	242.5	293.7	204.8	252.9	222.3	247.5	187.6	230.9	179.7	206.4	126.9	150.3	152.2	169.9
Days in Accounts Receivable	45.3	47.0	45.9	45.1	47.1	49.2	46.7	48.2	48.9	46.6	53.5	54.4	46.8	43.7	51.2	52.0
Cushion Ratio (x)	50.2	55.6	33.2	36.3	23.1	30.7	21.8	22.6	17.3	22.5	20.7	20.5	14.4	14.9	12.2	12.7
Days in Current Liabilities	81.3	101.2	69.3	86.7	64.3	77.9	61.9	84.4	73.6	91.6	71.8	108.5	68.5	96.2	63.5	81.3
Cash to Debt (%)	273.9	317.1	196.6	226.4	146.2	162.8	122.1	153.0	111.3	132.0	143.0	108.9	87.9	106.8	87.0	82.9
Cash to Adjusted Debt (%)	272.2	300.5	190.7	213.9	139.6	159.9	118.4	153.0	108.3	129.1	137.4	127.6	80.5	103.6	67.8	59.3
Operating Margin (%)	2.5	5.4	1.1	3.2	-1.8	3.1	1.1	2.8	-1.3	4.6	1.5	3.2	-3.0	0.4	0.1	3.5
Op. EBITDA Margin (%)	7.7	10.9	6.5	9.4	4.1	8.8	6.2	8.6	3.3	9.8	7.6	7.9	2.8	6.2	5.5	10.8
Excess Margin (%)	4.6	10.8	2.8	8.0	1.7	6.9	3.2	5.5	1.0	5.7	0.8	5.6	-0.8	3.4	-0.1	4.6
EBITDA Margin (%)	9.3	15.0	8.0	13.5	6.7	12.5	8.6	11.3	6.0	11.9	6.8	10.9	4.5	8.2	6.1	11.4
Net Adjusted Debt to Adjusted EBITDA	-4.0	-3.5	-3.2	-2.9	-2.0	-2.1	-0.7	-1.6	-0.3	-1.3	-1.7	-0.7	1.2	-0.1	1.2	1.3
Personnel Costs as % of Total Operating Revenue	54.1	50.8	54.6	53.3	54.3	51.9	54.7	54.9	60.5	50.5	51.3	50.9	55.5	53.5	52.2	53.1
EBITDA Debt Service Coverage (x)	6.9	9.9	4.2	6.7	3.1	5.6	3.5	4.7	2.6	4.6	3.0	4.8	1.7	3.7	2.2	3.5
Op. EBITDA Debt Service Coverage (x)	5.2	5.9	3.2	4.3	1.9	3.7	2.7	3.5	1.7	3.6	2.8	3.3	1.1	2.5	2.4	3.3
Maximum Annual Debt Service as % of Revenues	1.6	1.7	2.0	2.1	2.5	2.4	2.4	2.5	2.4	2.2	2.3	2.6	2.4	2.5	2.7	2.5
Debt to EBITDA (x)	3.0	1.8	3.5	2.4	4.5	2.8	3.8	3.2	6.3	3.4	3.6	3.5	6.4	3.2	7.9	2.8
Debt to Capitalization (%)	23.7	21.1	29.3	27.0	38.0	33.0	38.6	34.9	41.6	37.9	37.5	41.8	42.1	39.7	40.2	43.3
Average Age of Plant (Years)	10.7	9.9	11.4	11.1	13.2	12.4	13.5	12.8	12.0	11.6	12.4	12.8	12.3	11.7	13.7	15.0
Capital Expenditures as % of Depreciation Expense	122.5	127.4	112.4	97.2	129.7	107.2	103.7	90.2	92.1	97.9	168.1	101.5	117.9	86.3	88.9	74.2

Source: Fitch Ratings

## Data Appendix – Medians (Standalone)

## Standalone

	2022	2021	2020	2019	2018	2017	2016	2015
Sample Size	103	104	99	97	99	93	90	85
Days Cash on Hand	209.7	237.5	232.1	213.3	214.5	211.1	203.1	202.3
Days in Accounts Receivable	46.8	46.2	44.4	46.2	45.5	46.4	46.3	48.0
Cushion Ratio (x)	24.3	24.7	23.3	21.7	20.4	19.7	18.0	16.4
Days in Current Liabilities	68.2	89.4	88.1	61.2	59.7	62.0	60.4	65.2
Cash to Debt (%)	145.4	179.7	150.5	157.6	147.4	156.0	143.0	138.0
Cash to Adjusted Debt (%)	138.6	175.7	135.8	131.7	118.3	122.1	111.7	110.9
Operating Margin (%)	0.2	3.8	1.7	2.0	1.6	2.3	3.2	3.8
Op. EBITDA Margin (%)	5.8	9.7	8.4	8.7	8.4	8.8	9.7	10.8
Excess Margin (%)	2.0	7.0	3.7	3.8	3.7	4.2	4.6	5.7
EBITDA Margin (%)	7.5	13.0	10.4	10.6	10.5	10.4	10.4	12.0
Net Adjusted Debt to Adjusted EBITDA (%)	-1.6	-1.6	-1.6	-1.0	-0.8	-0.9	-0.4	-0.4
Personnel Costs as % of Total Operating Revenue	54.7	53.1	55.1	54.4	54.6	55.4	54.2	54.1
EBITDA Debt Service Coverage (x)	3.1	5.2	4.1	3.8	3.3	3.5	3.6	4.0
Op. EBITDA Debt Service Coverage (x)	2.2	3.8	3.1	3.0	2.6	3.0	3.2	3.4
Maximum Annual Debt Service as % of Revenues	2.3	2.5	2.7	2.6	2.7	2.9	3.0	3.2
Debt to EBITDA (x)	3.8	2.5	3.4	3.2	3.5	3.3	3.2	2.9
Debt to Capitalization (%)	33.6	29.7	32.6	32.8	35.0	34.3	37.2	37.0
Average Age of Plant (Years)	12.7	12.3	12.0	11.7	11.2	11.1	10.7	10.6
Capital Expenditures as % of Depreciation Expense	103.7	101.2	108.4	107.0	114.6	131.4	120.3	111.9

Source: Fitch Ratings

## Data Appendix – Medians (Systems)

## Systems

	2022	2021	2020	2019	2018	2017	2016	2015
Sample Size	112	115	114	106	103	98	96	82
Days Cash on Hand	219.0	270.4	255.0	230.2	224.6	241.4	215.2	230.5
Days in Accounts Receivable	47.8	47.7	44.6	46.8	46.2	47.7	47.9	48.0
Cushion Ratio (x)	26.0	31.7	29.0	26.5	24.2	23.0	20.8	22.2
Days in Current Liabilities	72.5	89.8	95.0	66.8	65.1	63.9	66.2	67.4
Cash to Debt (%)	152.4	189.4	169.9	165.7	167.5	170.9	165.2	169.5
Cash to Adjusted Debt (%)	147.0	185.0	161.1	149.9	147.3	145.3	132.4	137.9
Operating Margin (%)	0.2	2.7	1.3	2.5	2.4	1.9	3.1	3.8
Op. EBITDA Margin (%)	5.7	8.1	6.7	8.9	8.7	8.7	9.3	10.3
Excess Margin (%)	1.7	6.1	3.1	4.9	4.7	4.3	4.3	5.6
EBITDA Margin (%)	7.1	12.1	8.5	10.6	10.5	10.4	10.4	12.0
Net Adjusted Debt to Adjusted EBITDA (%)	-2.4	-2.5	-2.6	-1.5	-1.3	-1.5	-1.2	-1.1
Personnel Costs as % of Total Operating Revenue	54.2	52.3	55.0	53.0	53.9	54.9	54.8	53.2
EBITDA Debt Service Coverage (x)	3.4	5.8	3.9	4.5	4.1	4.1	3.7	4.4
Op. EBITDA Debt Service Coverage (x)	2.7	3.8	3.2	3.7	3.5	3.2	3.4	3.7
Maximum Annual Debt Service as % of Revenues	2.0	2.1	2.2	2.2	2.5	2.7	2.7	2.7
Debt to EBITDA (x)	4.3	2.8	4.4	3.4	3.4	3.3	3.4	2.9
Debt to Capitalization (%)	34.9	31.9	35.2	32.9	32.4	33.1	33.8	33.0
Average Age of Plant (Years)	11.9	11.8	11.4	11.5	11.3	10.9	10.6	10.5
Capital Expenditures as % of Depreciation Expense	110.7	99.1	110.1	125.0	128.3	126.1	122.1	121.8

Source: Fitch Ratings

## Data Appendix – Rated Credits

## List of Rated Credits – Hospitals

As of June 30, 2023	Long-Term Rating
AdventHealth (FL)	AA
Adventist Health (CA)	A
Advocate Aurora Health, Inc. (WI)	AA
Allina Health System (MN)	AA-
Altru Health System (ND)	BBB-
AnMed Health (SC)	AA-
Asante Health System (OR)	A+
Ascension Health Alliance (MO)	AA+
Ashtabula County Medical Center (OH)	BBB+
Atlanticare Health System, Inc. and Affiliates (NJ)	AA-
Ballad Health (TN)	A
Banner Health System (AZ)	AA-
Baptist Health Care Corporation Obligated Group (FL)	BBB
Baptist Healthcare System (KY)	A+
BayCare Health System Inc. (FL)	AA
Bayhealth Medical Center, Inc. (DE)	AA
Baystate Medical Center (MA)	A+
Beacon Health System, Inc. (IN)	AA-
Beloit Health System (WI)	A
Benefis Health System (MT)	A+
Berkshire Health System and Affiliates (MA)	AA-
Bexar County Hospital District (TX)	AA+
Billings Clinic (MT)	AA-
Blanchard Valley Health Association (OH)	A+
Bon Secours Mercy Health, Inc. (OH)	AA-
Brooks Rehabilitation (FL)	A-
Bryan Medical Center (NE)	AA-
Butler Health System (PA)	BBB
Cape Cod Healthcare, Inc. and Affiliates (MA)	AA-
Care New England (RI)	BB-
Carle Foundation (IL)	AA-
CaroMont Health, Inc. and Affiliates (NC)	AA-
Carson Tahoe Healthcare (NV)	A-
Catholic Health Services of Long Island (NY)	A-
Cedars-Sinai Health System (CA)	AA-
Centra Health (VA)	A-
Centracare Health System (MN)	AA-
Christus Health (TX)	A+
Columbia Memorial Hospital (OR)	A-
CommonSpirit Health (CO)	A-
Commonwealth Health Corporation, Inc. (KY)	AA-
Community Foundation of Northwest Indiana (IN)	AA
Concord Hospital and Subsidiaries (NH)	AA-
Cone Health (NC)	AA
Confluence Health Obligated Group (WA)	A-

## List of Rated Credits – Hospitals

As of June 30, 2023	Long-Term Rating
Conway Hospital, Inc. (SC)	A-
Cottage Health System Obligated Group (CA)	AA-
Covenant Health (MA)	BBB
Covenant Health (TN)	A+
CoxHealth (MO)	A
Dallas County Hospital District (TX)	AA-
Dartmouth-Hitchcock Obligated Group (NH)	A
Deaconess Health System (IN)	AA
Denver Health & Hospital Authority (CO)	BBB
Duke University Health System, Inc. (NC)	AA-
Eisenhower Medical Center (CA)	BBB-
El Camino Hospital (CA)	AA-
El Paso County Hospital District (TX)	A-
Emanate Health and Affiliates (CA)	A+
Erlanger Health System (TN)	BBB+
Essentia Health (MN)	A-
FirstHealth of the Carolinas, Inc. (NC)	AA
Forrest County General Hospital (MS)	A+
Franciscan Alliance, Inc. (IN)	AA
Fred Hutchinson Cancer Center (WA)	A+
Frederick Health Hospital, Inc. (MD)	A-
Froedtert Health (WI)	AA
Good Shepherd Rehabilitation Network and Controlled Entities (PA)	A-
Grande Ronde Hospital (OR)	BBB-
Greater Baltimore Medical Center, Inc. (MD)	A+
Greater Fairbanks Community Hospital Foundation, Inc. (The) (AK)	A+
Guadalupe Regional Medical Center (TX)	BB
Guthrie Clinic (PA)	A+
Hackensack Meridian Health (NJ)	AA-
Halifax Community Health System (FL)	A-
Hannibal Regional Healthcare System (MO)	A-
Harris County Hospital District (TX)	AA
Hartford HealthCare (CT)	A+
Hawai'i Pacific Health (HI)	AA-
Heritage Valley Health System (PA)	AA-
Hoag Memorial Hospital Presbyterian (CA)	AA
Holland Community Hospital (MI)	AA-
Holy Redeemer Health System (PA)	BB+
HonorHealth (AZ)	A+
Hospital Sisters Services Inc. (IL)	A+
Hunterdon Medical Center (NJ)	A+
Hurley Medical Center (MI)	BBB-
Indiana University Health (IN)	AA

## List of Rated Credits — Hospitals

As of June 30, 2023	Long-Term Rating
Inspira Health Network (NJ)	AA-
Jennie Stuart Medical Center (KY)	BBB-
John Fitzgibbon Memorial Hospital (MO)	CCC
Johns Hopkins Health System (MD)	AA-
Jupiter Medical Center (FL)	BBB
Kaiser Permanente (CA)	AA-
Karnes County Hospital District (dba Otto Kaiser Memorial Hospital) (TX)	A
King's Daughters Medical Center (KY)	A
Lifespan Corporation (RI)	BBB+
Loma Linda University Medical Center (CA)	BB+
Main Line Health System, Inc. (PA)	AA-
Maricopa County Special Health Care District dba Valleywise Health (AZ)	BBB
Marietta Area Health Care Inc. dba Memorial Health System (OH)	B+
Marin General Hospital (CA)	BBB
Marshall Medical Center (CA)	BB+
Martin County Hospital District (TX)	BBB+
Mary Free Bed Guild (MI)	A
Mary Washington Healthcare (VA)	A
Mayers Memorial Hospital District (CA)	BBB
McLaren Health Care Corporation (MI)	AA-
McLeod Regional Medical Center (SC)	AA-
Memorial Health Services (CA)	AA-
Memorial Hospital at Gulfport (MS)	BBB-
Memorial Sloan-Kettering Cancer Center (NY)	AA
Mercy Health Corporation (IL)	A
Meritus Health (MD)	A
Methodist Hospitals, Inc. (The) (IN)	BBB-
Midland County Hospital District (TX)	AA-
MidMichigan Health (MI)	AA-
Montage Health and Related Corporations (CA)	AA
Monument Health (SD)	AA-
Mosaic Health System (MO)	AA-
Mount Nittany Medical Center (PA)	A+
Mount Sinai Hospital (NY)	A
Mount Sinai Medical Center of Greater Miami, Inc. (FL)	A-
MultiCare Health System (WA)	A+
Munson Healthcare Obligated Group (MI)	AA
Murray-Calloway County Public Hospital Corporation and Subsidiaries (KY)	BBB
Nebraska Medicine (NE)	AA-
Nebraska Methodist Health System, Inc. (NE)	A
New York and Presbyterian Hospital (NY)	AA
North Mississippi Health Services (MS)	AA
North Oaks Health System (LA)	A-
Northeast Georgia Health System (GA)	A

## List of Rated Credits — Hospitals

As of June 30, 2023	Long-Term Rating
Northwell Health (NY)	A-
Norton Healthcare, Inc. and Affiliates (KY)	A+
Novant Health, Inc. (NC)	AA-
Oaklawn Hospital (MI)	BBB-
OhioHealth Corporation (OH)	AA+
Oregon Health & Science University (OR)	AA-
Orlando Regional Healthcare System (FL)	AA-
OSF Healthcare System (IL)	A+
Owensboro Health, Inc. (KY)	BBB-
Palomar Health (CA)	BBB-
PeaceHealth (WA)	A+
Penn Highlands Healthcare (PA)	A-
Peterson Regional Medical Center (TX)	A
Pioneers Memorial Healthcare District (CA)	B
Premier Health Partners (OH)	A-
Presbyterian Healthcare Services (NM)	AA
Prime Healthcare Foundation (CA)	BBB
Prisma Health (SC)	A-
ProMedica Health System, Inc. (OH)	BB-
Providence Health and Services (WA)	A
Redlands Community Hospital (CA)	A-
Regional West Health Services and Affiliates (NE)	BB+
Rehabilitation Institute of Chicago (IL)	A
Reid Hospital and Health Care Services (IN)	A
Renown Health (NV)	A+
Rex Healthcare, Inc. (NC)	A+
Rush System for Health (IL)	AA-
Saint Francis Healthcare System (MO)	AA
Salem Hospital (OR)	AA-
Sanford Health (SD)	AA-
Sarasota County Public Hospital District (FL)	AA-
Scripps Health (CA)	AA
Shands Jacksonville HealthCare, Inc. (FL)	BBB-
Sierra View Local Health Care District (CA)	A
Silver Cross Health System (IL)	A-
Sky Lakes Medical Center (OR)	A
South Nassau Communities Hospital (NY)	BBB+
South Shore Hospital (MA)	BBB
Southcoast Health System, Inc. (MA)	A-
Southern Illinois Healthcare (IL)	AA-
SSM Health Care (MO)	AA-
St. Clair Hospital (PA)	AA-
St. Elizabeth Medical Center (KY)	AA
St. Francis Regional Medical Center (MN)	A
St. Joseph's/Candler Health System, Inc. (GA)	A
St. Luke's Episcopal Presbyterian Hospitals (MO)	A+
St. Luke's Health System, Ltd. (ID)	A+

## List of Rated Credits — Hospitals

As of June 30, 2023	Long-Term Rating
St. Tammany Parish Hospital Service District No. 1 (LA)	AA-
Stamford Health System (CT)	BBB+
Stanford Hospital and Clinics (CA)	AA
Summa Health System and Subsidiaries (OH)	BBB+
Sutter Health (CA)	A+
Tampa General Hospital (FL)	A
Tarrant County Hospital District (TX)	AA
Temple University Health System (PA)	BBB
The Queen's Health Systems and Subsidiaries (HI)	AA
ThedaCare, Inc. (WI)	AA-
Tower Health (PA)	CCC+
TriHealth (OH)	AA-
Trinity Health Credit Group (MI)	AA-
Tufts Medicine (MA)	BBB
UMass Memorial Health Care, Inc. (MA)	A-
UnityPoint Health (IA)	AA-
University Health System, Inc. (TN)	BBB
University Hospital (NJ)	BB-

## List of Rated Credits — Hospitals

As of June 30, 2023	Long-Term Rating
University of Chicago Medical Center (IL)	AA-
University of Colorado Health, Inc. (CO)	AA
University of Kansas Hospital Authority (KS)	AA-
University of Vermont Medical Center Inc. (VT)	A+
UofL Health, Inc. (KY)	BBB+
UPMC Health System (PA)	A
Valley Health System Obligated Group (NJ)	A+
Vanderbilt University Medical Center (TN)	A
Virginia Hospital Center Arlington Health System (VA)	AA-
Virtua Health (NJ)	AA-
WakeMed Health & Hospitals (NC)	A+
Wayne Healthcare (OH)	BB+
WellSpan Health (PA)	AA-
Willis-Knighton Medical Center (LA)	AA-
Wise Health System (TX)	BB+
Wright Memorial Hospital (JB WrightTrust) (MO)	BBB-
Yale New Haven Health Obligated Group (CT)	AA-
Yavapai Community Hospital (AZ)	A+

## DISCLAIMER &amp; DISCLOSURES

All Fitch Ratings (Fitch) credit ratings are subject to certain limitations and disclaimers. Please read these limitations and disclaimers by following this link: <https://www.fitchratings.com/understandingcreditratings>. In addition, the following <https://www.fitchratings.com/rating-definitions-document> details Fitch's rating definitions for each rating scale and rating categories, including definitions relating to default. Published ratings, criteria, and methodologies are available from this site at all times. Fitch's code of conduct, confidentiality, conflicts of interest, affiliate firewall, compliance, and other relevant policies and procedures are also available from the Code of Conduct section of this site. Directors and shareholders' relevant interests are available at <https://www.fitchratings.com/site/regulatory>. Fitch may have provided another permissible or ancillary service to the rated entity or its related third parties. Details of permissible or ancillary service(s) for which the lead analyst is based in an ESMA- or FCA-registered Fitch Ratings company (or branch of such a company) can be found on the entity summary page for this issuer on the Fitch Ratings website.

In issuing and maintaining its ratings and in making other reports (including forecast information), Fitch relies on factual information it receives from issuers and underwriters and from other sources Fitch believes to be credible. Fitch conducts a reasonable investigation of the factual information relied upon by it in accordance with its ratings methodology, and obtains reasonable verification of that information from independent sources, to the extent such sources are available for a given security or in a given jurisdiction. The manner of Fitch's factual investigation and the scope of the third-party verification it obtains will vary depending on the nature of the rated security and its issuer, the requirements and practices in the jurisdiction in which the rated security is offered and sold and/or the issuer is located, the availability and nature of relevant public information, access to the management of the issuer and its advisers, the availability of pre-existing third-party verifications such as audit reports, agreed-upon procedures letters, appraisals, actuarial reports, engineering reports, legal opinions and other reports provided by third parties, the availability of independent and competent third-party verification sources with respect to the particular security or in the particular jurisdiction of the issuer, and a variety of other factors. Users of Fitch's ratings and reports should understand that neither an enhanced factual investigation nor any third-party verification can ensure that all of the information Fitch relies on in connection with a rating or a report will be accurate and complete. Ultimately, the issuer and its advisers are responsible for the accuracy of the information they provide to Fitch and to the market in offering documents and other reports. In issuing its ratings and its reports, Fitch must rely on the work of experts, including independent auditors with respect to financial statements and attorneys with respect to legal and tax matters. Further, ratings and forecasts of financial and other information are inherently forward-looking and embody assumptions and predictions about future events that by their nature cannot be verified as facts. As a result, despite any verification of current facts, ratings and forecasts can be affected by future events or conditions that were not anticipated at the time a rating or forecast was issued or affirmed.

The information in this report is provided "as is" without any representation or warranty of any kind, and Fitch does not represent or warrant that the report or any of its contents will meet any of the requirements of a recipient of the report. A Fitch rating is an opinion as to the creditworthiness of a security. This opinion and reports made by Fitch are based on established criteria and methodologies that Fitch is continuously evaluating and updating. Therefore, ratings and reports are the collective work product of Fitch and no individual, or group of individuals, is solely responsible for a rating or a report. The rating does not address the risk of loss due to risks other than credit risk, unless such risk is specifically mentioned. Fitch is not engaged in the offer or sale of any security. All Fitch reports have shared authorship. Individuals identified in a Fitch report were involved in, but are not solely responsible for, the opinions stated therein. The individuals are named for contact purposes only. A report providing a Fitch rating is neither a prospectus nor a substitute for the information assembled, verified and presented to investors by the issuer and its agents in connection with the sale of the securities. Ratings may be changed or withdrawn at any time for any reason in the sole discretion of Fitch. Fitch does not provide investment advice of any sort. Ratings are not a recommendation to buy, sell, or hold any security. Ratings do not comment on the adequacy of market price, the suitability of any security for a particular investor, or the tax-exempt nature or taxability of payments made in respect to any security. Fitch receives fees from issuers, insurers, guarantors, other obligors, and underwriters for rating securities. Such fees generally vary from US\$1,000 to US\$750,000 (or the applicable currency equivalent) per issue. In certain cases, Fitch will rate all or a number of issues issued by a particular issuer, or insured or guaranteed by a particular insurer or guarantor, for a single annual fee. Such fees are expected to vary from US\$10,000 to US\$1,500,000 (or the applicable currency equivalent). The assignment, publication, or dissemination of a rating by Fitch shall not constitute a consent by Fitch to use its name as an expert in connection with any registration statement filed under the United States securities laws, the Financial Services and Markets Act of 2000 of the United Kingdom, or the securities laws of any particular jurisdiction. Due to the relative efficiency of electronic publishing and distribution, Fitch research may be available to electronic subscribers up to three days earlier than to print subscribers.

For Australia, New Zealand, Taiwan and South Korea only: Fitch Australia Pty Ltd holds an Australian financial services license (AFS license no. 337123) which authorizes it to provide credit ratings to wholesale clients only. Credit ratings information published by Fitch is not intended to be used by persons who are retail clients within the meaning of the Corporations Act 2001.

Fitch Ratings, Inc. is registered with the U.S. Securities and Exchange Commission as a Nationally Recognized Statistical Rating Organization (the "NRSRO"). While certain of the NRSRO's credit rating subsidiaries are listed on Item 3 of Form NRSRO and as such are authorized to issue credit ratings on behalf of the NRSRO (see <https://www.fitchratings.com/site/regulatory>), other credit rating subsidiaries are not listed on Form NRSRO (the "non-NRSROs") and therefore credit ratings issued by those subsidiaries are not issued on behalf of the NRSRO. However, non-NRSRO personnel may participate in determining credit ratings issued by or on behalf of the NRSRO.

Copyright © 2023 by Fitch Ratings, Inc., Fitch Ratings Ltd. and its subsidiaries. 33 Whitehall Street, NY, NY 10004. Telephone: 1-800-753-4824, (212) 908-0500. Fax: (212) 480-4435. Reproduction or retransmission in whole or in part is prohibited except by permission. All rights reserved.