# MOODY'S INVESTORS SERVICE

# RATING METHODOLOGY

22 June 2021

#### TABLE OF CONTENTS

| Scope   | 1  |
|---|----|
| Rating approach   | 3  |
| Media scorecard   | 4  |
| Discussion of the scorecard factors                               | 9  |
| Other considerations  | 13 |
| Using the scorecard to arrive at a<br>scorecard-indicated outcome | 15 |
| Assigning issuer-level and<br>instrument-level ratings            | 16 |
| Key rating assumptions  | 17 |
| Limitations   | 17 |
| Moody's related publications                                      | 18 |

#### Contacts

| Neil Begley<br>Senior Vice President<br>neil.begley@moodys.com             | +1.212.553.7793         |
|--|-------------------------|
| Jason Cuomo<br>Senior Vice President<br>jason.cuomo@moodys.com             | +1.212.553.7795         |
| Agustin Alberti<br>VP-Senior Analyst<br>agustin.alberti@moodys.co          | +34.91.768.8309         |
| Christian Azzi<br>VP-Senior Analyst<br>christian.azzi@moodys.com           | + <b>1.212.553.7718</b> |
| Gunjan Dixit<br>VP-Sr Credit Officer<br>gunjan.dixit@moodys.com            | +44.20.7772.8628        |
| Gregory A. Fraser,<br>CFA<br>VP-Senior Analyst<br>gregory.fraser@moodys.cc | +1.212.553.4385         |
| Victor Garcia, CFA<br>AVP-Analyst<br>victor.garcia@moodys.con              | +34.91.768.8240         |
| <b>Scott Van den Bosch</b><br>VP-Sr Credit Officer                         | +1.212.553.0193         |

scott.vandenbosch@moodys.com

» Contacts continued on last page

# Rating Methodology Media

This rating methodology replaces the *Media Industry* methodology published in June 2017. We have reordered and have made editorial updates to various sections of the methodology, and we have changed the presentation of the scorecard. These updates do not change our methodological approach.

#### Scope

This methodology applies to media companies globally, including broadcasters, cable networks, publishers and other media companies, that are primarily\* engaged in the sale of advertising or content but do not have significant other sources of revenue and cash flow. Most of these companies purchase content or create content that drives advertising revenue.

For television and radio broadcasters, the quality and reach of original content, such as news, and acquired content, such as shows, sports and music, drive advertising revenue. Television broadcasters also generate revenue from retransmission fees paid by distributors, such as cable, satellite and telephone companies, which deliver the content to consumers. Like television broadcasters, cable networks also generate advertising and distribution revenue, but they typically control more of the content.

Outdoor advertisers, which generally rely primarily on advertising revenue, are also covered under this methodology. These companies lease advertising space on billboards and other displays to customers.

This methodology also applies to a wide variety of companies that are primarily engaged in the print and digital publishing industry, such as publishers of newspapers, magazines, directories, textbooks and databases. These companies rely on revenue from advertisers or sell content to consumers. For example, newspaper and textbook publishers sell content on digital or print platforms. Some companies, such as commercial printers and check printers, provide print-related services, and other companies provide niche media-related services.

Technological advances and competitive pressures have prompted essentially all media companies to extend the distribution of their products and services to digital platforms, creating shifts in revenue and cost structures. As customers consume media in new ways,

\*The determination of a company's primary business is generally based on the preponderance of the company's business risks, which are usually proportionate to the company's revenues, earnings and cash flows.

business models have evolved and companies have experienced different degrees of success in the transition from print. Companies that have significantly or completely transitioned their business to digital platforms, or that were founded as digital-only businesses, fall within the scope of this methodology if they derive the majority of their revenue or cash flow from the sale of advertising or content.

We cover more-diversified media companies under the methodology for business and consumer service, because these companies typically derive significant portions of cash flow from segments not tied to advertising or subscription fees, such as theme parks or movie studios. Companies primarily engaged in providing the physical assets to distribute content to consumers are covered under our methodologies for pay television and telecommunications.

## **Rating approach**

In this rating methodology, we explain our general approach to assessing credit risk of issuers in the media industry globally, including the qualitative and quantitative factors that are likely to affect rating outcomes in this sector. We seek to incorporate all material credit considerations in ratings and to take the most forward-looking perspective that visibility into these risks and mitigants permits.

The following schematic illustrates our general framework for the analysis of media companies, which includes the use of a scorecard.<sup>1</sup> The scorecard-indicated outcome is not expected to match the actual rating for each company. For more information, see the "Other considerations" and "Limitations" sections.

Exhibit 1



Illustration of the media methodology framework

\* This factor has no sub-factors.

+ Some of the methodological considerations described in one or more cross-sector rating methodologies may be relevant to ratings in this sector. A link to a list of our sector and crosssector methodologies can be found in the "Moody's related publications" section. Source: Moody's Investors Service

## Media scorecard

For general information about how we use the scorecard and for a discussion of scorecard mechanics, please see the "Using the scorecard to arrive at a scorecard-indicated outcome" section. The scorecard does not include or address every factor that a rating committee may consider in assigning ratings in this sector. Please see the "Other considerations" and "Limitations" sections.

Exhibit 2

Media scorecard

|     | SCALE<br>(15%)                                   | B  | USINESS PROFILE (3               | 0%)   | LEVER   | AGE and COVERA   | AGE (45%)  |   | FINANCIAL POLICY (10%)  |
|-----|--|--|----------------------------------|---|---|--|--|---|---|
|     | Revenue<br>(USD Billion) <sup>[1]</sup><br>(15%) | Market Position (10%)  | Market Share<br>Trajectory (10%) | Business Model<br>(10%)   | Debt /<br>EBITDA<br>(Broadcasters<br>and Cable<br>Networks,<br>Outdoor<br>Advertisers<br>and Other) <sup>[2]</sup><br>(25%) | Debt /<br>EBITDA<br>(Publishers) <sup>[2]</sup><br>(25%) | (EBITDA –<br>CAPEX) /<br>Interest Expense<br>(Broadcasters<br>and Cable<br>Networks,<br>Outdoor<br>Advertisers and<br>Other) <sup>[3]</sup><br>(20%) | (EBITDA –<br>CAPEX) /<br>Interest Expense<br>(Publishers) <sup>[3]</sup><br>(20%) |   |
| Aaa | ≥ \$40   | Broadcasters: Effectively all revenue<br>generated from stations with lead<br>rankings, with > 90% of revenues from<br>exceptionally attractive markets. In the<br>US, this means the top 10 markets.<br>Cable Networks, Outdoor Advertisers<br>and Other: Overwhelmingly dominant<br>market share or brand; and exclusive<br>content with effectively all major media<br>properties in leading market positions.<br>Publishers: Strong dominance with<br>minimal competition for content/services<br>that are difficult to replicate; and very high<br>entry barriers generally backed by<br>government protection. | Substantial increase             | Broadcasters and Cable Networks,<br>Outdoor Advertisers and Other:<br>Exceptional revenue diversification;<br>revenues are extremely stable or<br>subscription-based; and exceptional<br>potential to benefit from emerging<br>business opportunities, including<br>technology or new media.<br>Publishers: 3+ distinct business<br>segments; exceptional business and<br>geographic revenue diversification; largest<br>market<br>< 25% of revenue; and exceptional<br>potential to benefit from emerging<br>business opportunities, including<br>technology or new media. | ≤ 0.5x  | ≤ 0.5x   | ≥ 15x  | ≥ 15x   | Expected to have extremely<br>conservative financial policies<br>(including risk and liquidity<br>management); very stable metrics;<br>essentially no event risk; and public<br>commitment to very strong credit<br>profile over the long term. |

|    | SCALE  |  |   |  |   |  |  |   |   |
|----|--|--|---|--|---|--|--|---|---|
|    | (15%)  | В  | USINESS PROFILE (3                      | 0%)  | LEVER   | AGE and COVERA   | GE (45%)   |   | FINANCIAL POLICY (10%)  |
|    | Revenue<br>(USD Billion) <sup>(1)</sup><br>(15%) | Market Position (10%)  | Market Share<br>Trajectory (10%)        | Business Model<br>(10%)  | Debt /<br>EBITDA<br>(Broadcasters<br>and Cable<br>Networks,<br>Outdoor<br>Advertisers<br>and Other) <sup>[2]</sup><br>(25%) | Debt /<br>EBITDA<br>(Publishers) <sup>[2]</sup><br>(25%) | (EBITDA –<br>CAPEX) /<br>Interest Expense<br>(Broadcasters<br>and Cable<br>Networks,<br>Outdoor<br>Advertisers and<br>Other) <sup>[3]</sup><br>(20%) | (EBITDA –<br>CAPEX) /<br>Interest Expense<br>(Publishers) <sup>(3)</sup><br>(20%) |   |
| Aa | \$20 - \$40                                      | Broadcasters: Vast majority of revenue<br>generated from stations with lead<br>rankings, with > 80% of revenues from<br>highly attractive markets. In the US, this<br>means the top 25 markets.<br>Cable Networks, Outdoor Advertisers<br>and Other: Very dominant market share<br>or brand; and exclusive or premium<br>content with most major media properties<br>in leading market positions.<br>Publishers: Strong dominance with<br>some competition for content/services<br>from smaller providers; content is difficult<br>to replicate without investment at a scale<br>beyond most competitors; and high entry<br>barriers generally backed by government<br>protection. | Low-double-digit<br>percentage increase | Broadcasters and Cable Networks,<br>Outdoor Advertisers and Other:<br>Excellent revenue diversification; revenues<br>are predominantly stable or subscription-<br>based; and excellent potential to benefit<br>from emerging business opportunities,<br>including technology or new media.<br>Publishers: 3+ distinct business<br>segments; excellent business and<br>geographic revenue diversification; and<br>excellent potential to benefit from<br>emerging business opportunities, including<br>technology or new media. | 0.5x - 1x   | 0.5x - 1x  | 10x - 15x  | 12x - 15x   | Expected to have very conservative<br>financial policies (including risk and<br>liquidity management); stable metrics;<br>minimal event risk that would cause a<br>rating transition; and public<br>commitment to strong credit profile<br>over the long term.                            |
| A  | \$10 - \$20                                      | Broadcasters: Majority of revenue<br>generated from stations with lead<br>rankings, with > 70% of revenues from<br>very attractive markets. In the US, this<br>means the top 35 markets.<br>Cable Networks, Outdoor Advertisers<br>and Other: Leading market share or<br>brand; premium content with majority of<br>revenues generated by media properties<br>in leading positions.<br>Publishers: Strong position with some<br>competition for content/services from<br>smaller providers; content can be<br>replicated but requires sizable investment<br>by competitors; entry barriers exist but<br>partially market-based with government<br>oversight.                       | Single-digit<br>percentage increase     | Broadcasters and Cable Networks,<br>Outdoor Advertisers and Other: Very<br>good revenue diversification; majority of<br>revenues are stable or subscription-based;<br>very good potential to benefit from<br>emerging business opportunities, including<br>technology or new media.<br>Publishers: 3+ distinct business<br>segments; very good business and<br>geographic revenue diversification; very<br>good potential to benefit from emerging<br>business opportunities, including<br>technology or new media.            | 1x - 1.5x   | 1x - 1.5x  | 7x - 10x   | 9x - 12x  | Expected to have predictable financial<br>policies (including risk and liquidity<br>management) that preserve creditor<br>interests. Although modest event risk<br>exists, the effect on leverage is likely to<br>be small and temporary; strong<br>commitment to a solid credit profile. |

|     | SCALE<br>(15%)                                   |   | USINESS PROFILE (3               | 200/)   |   | AGE and COVERA   |  |   | FINANCIAL POLICY (10%)  |
|-----|--|---|----------------------------------|---|---|--|--|---|---|
|     | Revenue<br>(USD Billion) <sup>[1]</sup><br>(15%) |   | Market Share<br>Trajectory (10%) | Business Model<br>(10%)   | Debt /<br>EBITDA<br>(Broadcasters<br>and Cable<br>Networks,<br>Outdoor<br>Advertisers<br>and Other) <sup>[2]</sup><br>(25%) | Debt /<br>EBITDA<br>(Publishers) <sup>[2]</sup><br>(25%) | (EBITDA –<br>CAPEX) /<br>Interest Expense<br>(Broadcasters<br>and Cable<br>Networks,<br>Outdoor<br>Advertisers and<br>Other) <sup>[3]</sup><br>(20%) | (EBITDA –<br>CAPEX) /<br>Interest Expense<br>(Publishers) <sup>[3]</sup><br>(20%) |   |
| Baa | \$4 - \$10                                       | Broadcasters: Majority of revenue<br>generated from stations with lead<br>rankings, with > 50% of revenues from<br>attractive markets. In the US, this means<br>the top 50 markets.<br>Cable Networks, Outdoor Advertisers<br>and Other: Above-average market share<br>or brand; premium content and majority of<br>revenues generated by media properties<br>in leading market positions.<br>Publishers: Largest provider in a field of<br>competitors; content/services can be<br>replicated but requires sizable investment<br>by competitors; entry barriers exist but<br>largely market-based with modest<br>government oversight. | Flat to marginally increasing    | Broadcasters and Cable Networks,<br>Outdoor Advertisers and Other: Good<br>revenue diversification; moderate level of<br>revenues are stable or subscription-based;<br>good potential to benefit from emerging<br>business opportunities, including<br>technology or new media.<br>Publishers: 3+ distinct business<br>segments; good business and geographic<br>revenue diversification; good potential to<br>benefit from emerging business<br>opportunities, including technology or new<br>media.                   | 1.5x - 2.5x   | 1.5x - 2x  | 4x - 7x  | 6x - 9x   | Expected to have financial policies<br>(including risk and liquidity<br>management) that balance the<br>interests of creditors and shareholders;<br>some risk that debt-funded acquisitions<br>or shareholder distributions could lead<br>to a weaker credit profile.                   |
| Ва  | \$1.25 - \$4                                     | Broadcasters: Majority of revenue<br>generated from stations with lead<br>rankings, with > 50% of revenues from<br>fairly attractive markets. In the US, this<br>means the top 75 markets.<br>Cable Networks, Outdoor Advertisers<br>and Other: Average market share;<br>competitive content and majority of<br>revenues generated by media properties<br>in leading market positions.<br>Publishers: Leading provider but<br>competition exists; ongoing investment<br>necessary to sustain brand<br>name/position, but content/services can<br>be differentiated; cost of entry is<br>reasonable for most providers.                  | Generally flat                   | Broadcasters and Cable Networks,<br>Outdoor Advertisers and Other:<br>Average revenue diversification; a fairly<br>modest portion of revenues are stable or<br>subscription-based; some potential to<br>benefit from emerging business<br>opportunities, including technology or new<br>media.<br>Publishers: 2+ distinct business<br>segments; average business and<br>geographic revenue diversification; some<br>potential to benefit from emerging<br>business opportunities, including<br>technology or new media. | 2.5x - 4.25x  | 2x - 3x  | 2.25x - 4x   | 3x - 6x   | Expected to have financial policies<br>(including risk and liquidity<br>management) that tend to favor<br>shareholders over creditors; above-<br>average financial risk resulting from<br>shareholder distributions, acquisitions<br>or other significant capital structure<br>changes. |

|     | SCALE<br>(15%)  | D   | USINESS PROFILE (3               | 09/)  | LEVED   |  |   |   | FINANCIAL POLICY (10%)   |
|-----|---|---|----------------------------------|---|---|--|---|---|--|
|     | (13%)<br>Revenue<br>(USD Billion) <sup>[1]</sup><br>(15%) |   | Market Share<br>Trajectory (10%) | Business Model<br>(10%)   | Debt /<br>EBITDA<br>(Broadcasters<br>and Cable<br>Networks,<br>Outdoor<br>Advertisers<br>and Other) <sup>[2]</sup><br>(25%) | Debt /<br>EBITDA<br>(Publishers) <sup>[2]</sup><br>(25%) | (EBITDA –<br>CAPEX) /<br>Interest Expense<br>(Broadcasters<br>and Cable<br>Networks,<br>Outdoor | (EBITDA –<br>CAPEX) /<br>Interest Expense<br>(Publishers) <sup>[3]</sup><br>(20%) |  |
| в   | \$0.5 - \$1.25  | <ul> <li>Broadcasters: Less than majority of revenue generated from stations with lead rankings, with &gt; 40% of revenues from modestly attractive markets. In the US, this means the top 100 markets.</li> <li>Cable Networks, Outdoor Advertisers and Other: Average market share; less than majority of revenues generated by media properties in leading market positions.</li> <li>Publishers: Among leading providers in competitive field or strong niche position; content/services can be differentiated through investment.</li> </ul>   | Marginally declining<br>to flat  | Broadcasters and Cable Networks,<br>Outdoor Advertisers and Other: Below-<br>average revenue diversification; a modest<br>portion of revenues are stable or<br>subscription-based; some risk or threat<br>from changes in technology and business<br>environment.<br>Publishers: 2+ distinct business<br>segments; below-average business and<br>geographic revenue diversification; some<br>risk or threat from changes in technology<br>and business environment.                     | 4.25x - 6.25x   | 3x - 5x  | 1.5x - 2.25x  |   | Expected to have financial policies<br>(including risk and liquidity<br>management) that favor shareholders<br>over creditors; high financial risk<br>resulting from shareholder<br>distributions, acquisitions or other<br>significant capital structure changes. |
| Caa | \$0.25 - \$0.5  | Broadcasters: Less than majority of<br>revenue generated from stations with<br>lead rankings, with > 25% of revenues<br>from modestly attractive markets. In the<br>US, this means the top 100 markets.<br>Cable Networks, Outdoor Advertisers<br>and Other: Below-average market share;<br>moderate percentage of revenues<br>generated by media properties in leading<br>market positions.<br>Publishers: Similar-size competitors<br>exist where content/services can be<br>differentiated; or is a leading or<br>specialized niche participant in industry<br>where products/services have more<br>commodity attributes and large number of<br>competitors exist. | Moderate<br>deterioration        | Broadcasters and Cable Networks,<br>Outdoor Advertisers and Other: Modest<br>level of revenue diversification; revenues<br>are largely cyclical or lack stability over<br>cycles; above-average risk or threat from<br>changes in technology and business<br>environment.<br>Publishers: 2+ distinct business<br>segments; modest level of business and<br>geographic revenue diversification; above-<br>average risk or threat from changes in<br>technology and business environment. | 6.25x - 8.75x   | 5x - 8x  | 1x - 1.5x   |   | Expected to have financial policies<br>(including risk and liquidity<br>management) that create elevated risk<br>of debt restructuring in varied<br>economic environments.   |

|    | SCALE  |   |                                  |  |   |  |  |   |  |
|----|--|---|----------------------------------|--|---|--|--|---|--|
|    | (15%)  | BU  | JSINESS PROFILE (3               | 0%)  | LEVER   | AGE and COVERA   | AGE (45%)  |   | FINANCIAL POLICY (10%)   |
|    | Revenue<br>(USD Billion) <sup>[1]</sup><br>(15%) | Market Position (10%)   | Market Share<br>Trajectory (10%) | Business Model<br>(10%)  | Debt /<br>EBITDA<br>(Broadcasters<br>and Cable<br>Networks,<br>Outdoor<br>Advertisers<br>and Other) <sup>[2]</sup><br>(25%) | Debt /<br>EBITDA<br>(Publishers) <sup>[2]</sup><br>(25%) | (EBITDA –<br>CAPEX) /<br>Interest Expense<br>(Broadcasters<br>and Cable<br>Networks,<br>Outdoor<br>Advertisers and<br>Other) <sup>[3]</sup><br>(20%) | (EBITDA –<br>CAPEX) /<br>Interest Expense<br>(Publishers) <sup>[3]</sup><br>(20%) |  |
| Ca | < \$0.25   | Broadcasters: Only a modest<br>percentage of stations have lead<br>rankings; revenues are generated<br>predominantly from small markets.<br>Cable Networks, Outdoor Advertisers<br>and Other: Poor market share; modest<br>percentage of revenues generated by<br>media properties in leading market<br>positions.<br>Publishers: Smaller participant in an<br>industry with commodity content/services<br>and large number of competitors, many of<br>which have more investment capacity. | Significant<br>deterioration     | Broadcasters and Cable Networks,<br>Outdoor Advertisers and Other: Lack of<br>revenue diversification; revenues are<br>largely cyclical and lack stability over<br>cycles; high risk or threat from changes in<br>technology and business environment.<br>Publishers: Single business segment;<br>lack of business and geographic revenue<br>diversification; high risk or threat from<br>changes in technology and business<br>environment. | > 8.75x   | > 8x   | < 1x   | < 1x  | Expected to have financial policies<br>(including risk and liquidity<br>management) that create elevated risi<br>of debt restructuring even in healthy<br>economic environments. |

[1] For the linear scoring scale, the Aaa endpoint value is \$60 billion. A value of \$60 billion or better equates to a numeric score of 0.5. The Ca endpoint value is \$0.04 billion. A value of \$0.04 billion or worse equates to a numeric score of 20.5. For broadcasters, revenue is calculated on a two-year average basis.

[2] For the linear scoring scale, the Aaa endpoint value is 0x. A value of 0x equates to a numeric score of 0.5. The Ca endpoint value is 15x. A value of 15x or worse equates to a numeric score of 20.5, as does a negative Debt/EBITDA value. For broadcasters, Debt/EBITDA is calculated using two-year average EBITDA.

[3] For the linear scoring scale, the Aaa endpoint value is 40x. A value of 40x or better equates to a numeric score of 0.5. The Ca endpoint value is (1)x. A value of (1)x or worse equates to a numeric score of 20.5. For broadcasters, interest coverage is calculated using two-year average EBITDA minus capital expenditures.

Source: Moody's Investors Service

## **Discussion of the scorecard factors**

In this section, we explain our general approach for scoring each scorecard factor or sub-factor, and we describe why they are meaningful as credit indicators.

#### Factor: Scale (15% weight)

#### Why it matters

Scale is important because it enables a media company to spread costs across a larger base of advertisers, distributors or subscribers, obtain premium rates from advertisers and distributors, and negotiate more-favorable terms with content suppliers, talent and other vendors.

#### How we assess it for the scorecard

Scale is measured (or estimated in the case of forward-looking expectations) using total reported annual revenue in billions of US dollars. For broadcasters, we use a two-year average to smooth the volatility created by the predictable, significant boost in political-advertising revenue broadcasters receive during election years.<sup>2</sup>

## Factor: Business Profile (30% weight)

#### Why it matters

The business profile of a media company provides insights into how competitive it is within its markets, whether it is gaining or losing market share, and how diversified it is. This factor is important because a company's pricing power, prospects for growth and ability to adapt to demand are meaningful drivers of its future cash flows.

The factor comprises three sub-factors. In the scorecard definitions, we break out two of the sub-factors — market position and business model — by media segment.

## Market Position

This sub-factor is a useful indicator of a media company's position relative to its peers and within its target markets. The degree of competition a company faces is important because it directly affects its pricing power, its ability to keep and add customers, and hence the quality and level of its cash flow. A strong market position also allows a media company to hire superior talent and to better negotiate with advertisers and vendors, including content suppliers.

For broadcasters, the percentage of revenue generated from attractive markets is also important because these markets command premium pricing and typically generate a disproportionate share of overall advertising revenue. Advertisers and consumers are often willing to pay a premium in larger markets or markets with other favorable characteristics, such as the ability to reach key demographic groups.

For cable networks, exclusive content and a strong brand provide better negotiating leverage with distributors and advertisers, as well as higher demand from consumers to support expanded distribution channels, such as direct-to-consumer online offerings. Leading outdoor advertising companies benefit from barriers to entry, given the finite supply of outdoor advertising properties.

For publishers, a strong brand and high-quality content that is differentiated from competitors drive readership, which is essential for selling advertising space and content. A publisher that operates in a market with fewer media outlets can achieve and maintain a solid market position with lower investment, so the competitive environment, which can vary by region, is important.

## Market Share Trajectory

Growth in a media company's share of the market relative to the growth of the overall market is another barometer of its competitive strength and future performance. Also, a company whose market share growth lags behind peers may experience difficulty attracting and retaining skilled employees, may require more promotional sales practices, and can face challenges or higher costs when raising new capital.

#### Business Model

The business model, which incorporates a company's level of diversity, revenue from stable or cyclical sources, and potential to benefit from or be challenged by emerging technology, is important because it influences the degree of resilience or vulnerability to secular and cyclical changes.

Media companies rated under this methodology have exposure to cyclical advertising demand to varying degrees, so revenue diversification and recurring revenue streams (such as carriage fees or subscriptions) can help protect a company during economic downturns. Since many broadcasters, newspapers and outdoor advertisers rely on local advertising, geographic diversification helps insulate them from regional economic cycles.

Diversification into new business opportunities, including technology or new media, is another important aspect of a company's business model, as is content differentiation. Alternatives to print, broadcast and cable television, such as online distribution, have low barriers to entry and an effectively limitless supply of advertising and content. A media company's ability to build and sustain a digital audience hinges on its ability to differentiate itself through the quality of the content it provides across all media platforms and to commercialize that content. Evaluating the digital strategy is important because these diversification efforts can increase risk and may cannibalize the existing revenue base, whereas resistance to experimentation and efforts to preserve the status quo could ultimately lead to greater erosion of cash flow.

#### How we assess it for the scorecard

Scoring for this factor is based on three sub-factors: Market Position, Market Share Trajectory and Business Model. In the scorecard definitions, we break out two of the sub-factors — Market Position and Business Model — by media segment.

## MARKET POSITION:

Grid scoring for this qualitative sub-factor involves analytical judgment of the overall market position of a media company. Quantitative indicators may be useful when available but can be inconsistent, given the range of media sub-sectors, the variations in how companies disclose market information and, in many cases, a lack of definitive indicators to quantify market position. As such, we generally look at an assortment of quantitative and qualitative data for the company and its key peers in our scoring for this sub-factor.

#### Broadcasters

In this sub-factor, we assess both the broadcaster's share of the market and the size of the market, We typically estimate the percentage of revenue from stations in which a broadcaster has lead rankings. For example, a radio company with a No.1 or No. 2 share of listeners in 17 of its 20 markets would score highly for this sub-factor.

For broadcasters in the US, the scoring for this sub-factor also typically considers how many of a company's total stations are in top designated market areas (or DMAs, which are based on an estimate of the number of television households) or metropolitan survey areas (or MSAs, based on population statistics). However, top broadcasters in lower-ranked markets can maintain stronger competitive positions than weakly positioned broadcasters in larger markets.

For broadcasters outside of the US, we typically gauge the attractiveness of a company's markets using population statistics, per capita gross domestic product, audience share, market structure or other metrics.

### Cable Networks, Outdoor Advertisers and Other

For cable networks, outdoor advertisers and other media companies, we may estimate market share and evaluate the strength of a company's competitive position based on information in financial statements. We may also consider information about audience share, total viewership and fee per subscriber for cable networks provided by third-party sources.

## Publishers

We focus on a publisher's ability to distinguish itself from its competitors in terms of its products, services, delivery and overall value to customers. A company with highly commoditized products or services with limited content differentiation, such as some directory publishers or commercial printers, will generally have weaker scores for this sub-factor. For newspaper and magazine companies, we

typically consider total online and print readership. For other publishing companies, we generally assess metrics such as books sold or pieces mailed. We also consider barriers to entry.

## MARKET SHARE TRAJECTORY:

We typically score this sub-factor based on our expectations for future market share performance in light of current results and recent trends. We generally estimate a company's performance relative to the sub-sector in which it operates to gauge whether its competitive position is improving or deteriorating. For example, we may compare a radio broadcaster's expected revenue growth to growth expectations for the overall radio market. For newspapers and magazines, we typically review company and industry trends in circulation and single-copy sales as well as trends in advertising. We typically use information found in company reports as well as industry statistics and other external sources of information in forming our estimates.

If a company operates in multiple subsectors, we generally assess market share trajectory using a weighted average approach, based on the revenue mix.

## **BUSINESS MODEL:**

In assessing this qualitative sub-factor, we generally use a combination of quantitative indicators, estimates and analytical judgment to arrive at an overall assessment of a company's business model.

We typically evaluate the level of diversification across geographic markets, product lines or segments. Broadcasters usually provide a breakdown of stations by city and by network affiliation. For cable networks, we typically evaluate revenue diversification or concentration based on the number of channels and revenue per channel. For publishers, we typically consider the number of distinct and separate operating businesses as well as the number of geographic regions in which the publisher operates and the relative contribution of each to total revenue.

We generally compare the amount of revenue from stable sources, such as carriage or subscription fees, to the amount of revenue from advertising to assess how stable or cyclical revenue is. We may also consider the contribution to revenue from any long-term contracts and the duration of the contracts.

For most media companies, we consider the percentage of revenue that would benefit from the development of new technologies relative to the percentage of revenue that is vulnerable to shifts in consumer behavior and increasing media fragmentation. We also typically assess the flexibility of the cost structure, which affects a company's ability to benefit from emerging business opportunities.

In evaluating the revenue contribution and potential contribution from emerging businesses, we typically gauge the risk of severe cash flow deterioration that could result from the shift to a digital platform, including the risk that traditional revenue sources will be cannibalized. We may also incorporate other changes in the business environment that could threaten or boost cash flow, such as regulatory changes or the level of government support.

#### Factor: Leverage and Coverage (45% weight)

#### Why it matters

Leverage and coverage measures are indicators of a company's financial flexibility and long-term viability, including its ability to adapt to changes in the economic and business environment in the segments in which it operates.

The factor comprises two sub-factors.

#### Debt / EBITDA

The ratio of total debt to earnings before interest, taxes, depreciation and amortization (Debt/EBITDA) is an indicator of debt serviceability and financial leverage. The ratio is commonly used in this sector as a proxy for comparative financial strength.

#### (EBITDA – Capex) / Interest Expense

The ratio of earnings before interest, taxes, depreciation and amortization minus capital expenditures to interest expense ((EBITDA-Capex)/Interest Expense) indicates a company's ability to meet its interest obligations and invest in fixed assets with EBITDA.

#### How we assess it for the scorecard

Scoring for this factor is based on two sub-factors: Debt/EBITDA and (EBITDA – Capex)/Interest Expense).

### DEBT / EBITDA:

The numerator is total debt, and the denominator is EBITDA.

For broadcasters, the numerator is total debt and the denominator is a two-year average of EBITDA.<sup>3</sup> If political-advertising revenue contributes very little to total revenue, we may also consider scenarios with annual EBITDA or EBITDA on a last-12-month basis, instead of a two-year average.

## (EBITDA – CAPEX) / INTEREST EXPENSE:

The numerator is EBITDA minus capital expenditures, and the denominator is interest expense.

For broadcasters, the numerator is two-year average EBITDA minus capital expenditures and the denominator is interest expense.<sup>4</sup> If political-advertising revenue contributes very little to total revenue, we may also look at scenarios with annual EBITDA minus capital expenditures or EBITDA minus capital expenditures on a last-12-month basis, instead of a two-year average.

## Factor: Financial Policy (10% weight)

#### Why it matters

Management and board tolerance for financial risk is an important rating determinant, because it directly affects debt levels, credit quality, and the risk of adverse changes in financing and capital structure.

Our assessment of financial policies includes the perceived tolerance of a company's governing board and management for financial risk and the future direction for the company's capital structure. Considerations include a company's public commitments in this area, its track record for adhering to commitments, and our views on the ability of the company to achieve its targets.

Financial risk tolerance serves as a guidepost to investment and capital allocation. An expectation that management will be committed to sustaining an improved credit profile is often necessary to support an upgrade. For example, we may not upgrade the ratings of a company that has built flexibility within its rating category if we believe the company will use that flexibility to fund a strategic acquisition, cash distribution to shareholders, spin-off or other leveraging transaction. Conversely, a company's credit rating may be better able to withstand a moderate leveraging event if management places a high priority on returning credit metrics to pre-transaction levels and has consistently demonstrated the commitment to do so through prior actions. Liquidity management<sup>5</sup> is an important aspect of overall risk management and can provide insight into risk tolerance.

Many media companies have acquired other companies within and across media sub-sectors in order to consolidate their market positions, expand into new businesses or benefit from cost synergies. Given the limited growth opportunities in many traditional media sub-sectors, some companies face pressure to return cash to shareholders or develop new, faster-growth revenue streams. The quickening pace of technological change and the proliferation of competitors in online sub-categories could result in further M&A as companies seek to build scale, defend market share, acquire technical expertise, increase their subscriber base or diversify their revenues.

### How we assess it for the scorecard

We assess the company's desired capital structure or targeted credit profile, its history of prior actions, including its track record of risk and liquidity management, and its adherence to its commitments. Attention is paid to management's operating performance and use of cash flow through different phases of economic and industry cycles. Also of interest is the way in which management responds to key events, such as changes in the credit markets and liquidity environment, legal actions, competitive challenges, and regulatory pressures.

Management's appetite for M&A activity is assessed with a focus on the type of transactions (i.e., core competency or new business) and funding decisions. Frequency and materiality of acquisitions and previous financing choices are evaluated. A history of debt-financed or credit-transforming acquisitions will generally result in a lower score for this factor.

We also consider a company's and its owners' past record of balancing shareholder returns and debt holders' interests. A track record of favoring shareholder returns at the expense of debtholders is likely to be viewed negatively in scoring this factor.

## Other considerations

Ratings may reflect consideration of additional factors that are not in the scorecard, usually because the factor's credit importance varies widely among the issuers in the sector or because the factor may be important only under certain circumstances or for a subset of issuers. Such factors include financial controls and the quality of financial reporting; corporate legal structure; the quality and experience of management; assessments of corporate governance as well as environmental and social considerations; exposure to uncertain licensing regimes and possible government interference in some countries. Regulatory, litigation, liquidity, technology and reputational risk as well as changes to consumer and business spending patterns, competitor strategies and macroeconomic trends also affect ratings.

Following are some examples of additional considerations that may be reflected in our ratings and that may cause ratings to be different from scorecard-indicated outcomes.

#### Management Strategy

The quality of management is an important factor supporting a company's credit strength. Assessing the execution of business plans over time can be helpful in assessing management's business strategies, policies, and philosophies and in evaluating management performance relative to performance of competitors and our projections. Management's track record of adhering to stated plans, commitments and guidelines provides insight into management's likely future performance, including in stressed situations.

#### Environmental, Social and Governance Considerations

Environmental, social and governance (ESG) considerations may affect the ratings of issuers in the media sector. For information about our approach to assessing ESG issues, please see our methodology that describes our general principles for assessing these risks.<sup>6</sup>

Among the areas of focus in corporate governance, for example, are audit committee financial expertise, the incentives created by executive compensation packages, related party transactions, interactions with outside auditors and ownership structure.

#### Financial Controls

We rely on the accuracy of audited financial statements to assign and monitor ratings in this sector. The quality of financial statements may be influenced by internal controls, including the proper tone at the top, centralized operations, and consistency in accounting policies and procedures. Auditors' reports and on the effectiveness of internal controls, auditors' comments in financial reports and unusual restatements of financial statements or delays in regulatory filings may indicate weaknesses in internal controls.

#### Liquidity

Liquidity is an important rating consideration for all media companies, although it may not have a substantial impact in discriminating between two issuers with a similar credit profile. Liquidity can be particularly important for companies in highly seasonal operating environments where working capital needs must be considered, and ratings can be heavily affected by extremely weak liquidity. We form an opinion on likely near-term liquidity requirements from the perspective of both sources and uses of cash. For more details on our approach, please see our liquidity cross-sector methodology.<sup>Z</sup>

#### **Excess Cash Balances**

Some companies in this sector may maintain cash balances (meaning liquid short-term investments as well as cash) that are far in excess of their operating needs. This excess cash can be an important credit consideration; however, the underlying policy and motivations of the issuer in holding high cash balances are often as or more important in our analysis than the level of cash held. We have observed significant variation in company behavior based on differences in financial philosophy, investment opportunities, availability of committed revolving credit facilities and shareholder pressures.

Most companies need to retain some level of cash in their business for operational purposes. The level of cash required to run a business can vary based on the region(s) of operation and the specific sub-sectors in which the company operates. Some companies have very predictable cash needs and others have much broader intra-period swings, for instance related to mark-to-market collateral requirements under hedging instruments. Some companies may hold large levels of cash at times because they operate without committed, long-term bank borrowing facilities. Some companies may hold cash on the balance sheet to meet long-term contractual

liabilities, whereas other companies with the same types of liabilities have deposited cash into trust accounts that are off balance sheet. The level of cash that companies are willing to hold can also vary over time based on the cost of borrowing and macroeconomic conditions. The same issuer may place a high value on cash holdings in a major recession or financial crisis but seek to pare cash when inflation is high. As a result, cash on the balance sheet is most often considered qualitatively, by assessing the issuer's track record and financial and liquidity policies, rather than by measuring how a point-in-time cash balance would affect a specific metric.

Across all corporate sectors, an important shareholder-focused motivation for cash holdings, sometimes over very long periods, is cash for acquisitions. In these cases, we do not typically consider that netting cash against the issuer's current level of debt is analytically meaningful; however, the cash may be a material mitigant in our scenario analyses of potential acquisitions, share buybacks or special dividends. Tax minimization strategies have at times been another primary motivation for holding large cash balances. Given shareholder pressures to return excess cash holdings, when these motivations for holding excess cash are eliminated, we generally expect that a large portion of excess cash will be used for dividends and share repurchases.

By contrast, some companies maintain large cash holdings for long periods of time in excess of their operating and liquidity needs solely due to conservative financial policies, which provides a stronger indication of an enduring approach that will benefit creditors. For instance, some companies have a policy to routinely pre-fund upcoming required debt payments well in advance of the stated maturity. Such companies may also have clearly stated financial targets based on net debt metrics and a track record of maintaining their financial profile within those targets.

While the scorecard in this methodology uses a leverage ratio with total (or gross) debt rather than net debt, we do consider excess cash holdings in our rating analysis, including in our assessment of the financial and liquidity policy. For companies where we have clarity into the extent to which cash will remain on the balance sheet and/or be used for creditor-friendly purposes, excess cash may be considered in a more quantitative manner. While we consider excess cash in our credit assessment for ratings, we do not typically adjust the balance sheet debt for any specific amount because this implies greater precision than we think is appropriate for the uncertain future uses of cash. However, when cash holdings are unusually large relative to debt, we may refer to debt net of cash, or net of a portion of cash, in our credit analysis and press releases in order to provide additional insight into our qualitative assessment of the credit benefit. Alternatively, creditor-friendly use of cash may be factored into our forward view of metrics, for instance when the cash is expected to be used for debt-repayment. We may also cite rating threshold levels for certain companies based on net debt ratios, particularly when these companies have publicly stated financial targets based on net debt metrics.

Even when the eventual use for excess cash is likely to be for purposes that do not benefit debtholders, large holdings provide some beneficial cushion against credit deterioration, and cash balances are often considered in our analysis of near-term liquidity sources and uses. Such downside protection is usually more important for low rated companies than for highly rated companies due to differences in credit stability and the typically shorter distance from potential default for issuers at the lower end of the ratings spectrum.

#### Additional Metrics

The metrics included in the scorecard are those that are generally most important in assigning ratings to companies in this industry; however, we may use additional metrics to inform our analysis of specific companies. These additional metrics may be important to our forward view of metrics that are in the scorecard or other rating factors.

For example, free cash flow is not always an important differentiator of credit profiles. Strong companies with excellent investment opportunities may demonstrate multiyear periods of negative free cash flow while retaining solid access to capital and credit, because these investments will yield stable cash flows in future years. Weaker companies with limited access to credit may have positive free cash flow for a period of time because they have curtailed the investments necessary to maintain their assets and future cash-generating prospects. However, in some cases, free cash flow can be an important driver of the future liquidity profile of an issuer, which, as noted above, can have a meaningful impact on ratings.

#### **Event Risk**

We also recognize the possibility that an unexpected event could cause a sudden and sharp decline in an issuer's fundamental creditworthiness, which may cause actual ratings to be lower than the scorecard-indicated outcome. Event risks — which are varied and can range from leveraged recapitalizations to sudden regulatory changes — can overwhelm even a stable, well-capitalized firm. Some

other types of event risks include M&A, asset sales, spin-offs, litigation, pandemics, significant cyber-crime events and shareholder distributions.

## Parental Support

Ownership can provide ratings lift for a particular company in the media sector if it is owned by a highly rated owner(s) and is viewed to be of strategic importance to those owners. In our analysis of parental support, we consider whether the parent has the financial capacity and strategic incentives to provide support to the media company in times of stress or financial need (e.g., a major capital investment), or has already done so in the past. Conversely, if the parent puts a high dividend burden on the issuer, which in turn reduces its flexibility, the ratings would reflect this risk.

Government-related issuers may receive ratings uplift due to expected government support. However, for certain issuers, government ownership can have a negative impact on the underlying Baseline Credit Assessment.<sup>8</sup> For example, price controls, onerous taxation and high distributions can have a negative effect on an issuer's underlying credit profile.

#### Other Institutional Support

In some countries, large corporate issuers have received government or banking support in the event of financial difficulties because of their overall importance to the functioning of the economy. In Japan, our corporate ratings consider the support that has operated there for large and systemically important organizations. Over the years, this has resulted in lower levels of default than might otherwise have occurred. Our approach considers whether the presence of group and banking relationships may provide support when systemically important companies encounter significant financial stress.

## Using the scorecard to arrive at a scorecard-indicated outcome

#### 1. Measurement or estimation of factors in the scorecard

In the "Discussion of the scorecard factors" section, we explain our analytical approach for scoring each scorecard factor or sub-factor,<sup>9</sup> and we describe why they are meaningful as credit indicators.

The information used in assessing the sub-factors is generally found in or calculated from information in the company's financial statements or regulatory filings, derived from other observations or estimated by Moody's analysts. We may also incorporate non-public information.

Our ratings are forward-looking and reflect our expectations for future financial and operating performance. However, historical results are helpful in understanding patterns and trends of a company's performance as well as for peer comparisons. Financial ratios,<sup>10</sup> unless otherwise indicated, are typically calculated based on an annual or 12-month period (for broadcasters, we typically use two-year averages for some metrics). However, the factors in the scorecard can be assessed using various time periods. For example, rating committees may find it analytically useful to examine both historical and expected future performance for periods of several years or more.

All of the quantitative credit metrics incorporate our standard adjustments<sup>11</sup> to income statement, cash flow statement and balance sheet amounts for items such as underfunded pension obligations and operating leases. We may also make other analytical adjustments that are specific to a particular company.

#### 2. Mapping scorecard factors to a numeric score

After estimating or calculating each factor or sub-factor, each outcome is mapped to a broad Moody's rating category (Aaa, Aa, A, Baa, Ba, B, Caa or Ca, also called alpha categories) and to a numeric score.

Qualitative factors are scored based on the description by broad rating category in the scorecard. The numeric value of each alpha score is based on the scale below.

Exhibit 3

| Α | aa | Aa | Α | Baa | Ва | В  | Caa | Са |
|---|----|----|---|-----|----|----|-----|----|
|   | 1  | 3  | 6 | 9   | 12 | 15 | 18  | 20 |

Source: Moody's Investors Service

Quantitative factors are scored on a linear continuum. For each metric, the scorecard shows the range by alpha category. We use the scale below and linear interpolation to convert the metric, based on its placement within the scorecard range, to a numeric score, which may be a fraction. As a purely theoretical example, if there were a ratio of revenue to interest for which the Baa range was 50x to 100x, then the numeric score for an issuer with revenue/interest of 99x, relatively strong within this range, would score closer to 7.5, and an issuer with revenue/interest of 51x, relatively weak within this range, would score closer to 10.5. In the text or table footnotes, we define the endpoints of the line (i.e., the value of the metric that constitutes the lowest possible numeric score, and the value that constitutes the highest possible numeric score).

Exhibit 4

| Aaa     | Aa      | Α       | Baa      | Ва        | В         | Caa       | Са        |
|---------|---------|---------|----------|-----------|-----------|-----------|-----------|
| 0.5-1.5 | 1.5-4.5 | 4.5-7.5 | 7.5-10.5 | 10.5-13.5 | 13.5-16.5 | 16.5-19.5 | 19.5-20.5 |

Source: Moody's Investors Service

#### 3. Determining the overall scorecard-indicated outcome

The numeric score for each sub-factor (or each factor, when the factor has no sub-factors) is multiplied by the weight for that subfactor (or factor), with the results then summed to produce an aggregate numeric score. The aggregate numeric score is then mapped back to a scorecard-indicated outcome based on the ranges in the table below.

Exhibit 5

#### Scorecard-indicated outcome

| Scorecard-indicated outcome | Aggregate numeric score |
|-----------------------------|-------------------------|
| Aaa                         | × ≤ 1.5                 |
| Aa1                         | 1.5 < × ≤ 2.5           |
| Aa2                         | 2.5 < × ≤ 3.5           |
| Aa3                         | 3.5 < × ≤ 4.5           |
| A1                          | 4.5 < × ≤ 5.5           |
| A2                          | 5.5 < × ≤ 6.5           |
| A3                          | 6.5 < × ≤ 7.5           |
| Baa1                        | 7.5 < × ≤ 8.5           |
| Baa2                        | 8.5 < × ≤ 9.5           |
| Baa3                        | 9.5 < × ≤ 10.5          |
| Ba1                         | 10.5 < × ≤ 11.5         |
| Ba2                         | 11.5 < × ≤ 12.5         |
| Ba3                         | 12.5 < × ≤ 13.5         |
| B1                          | 13.5 < × ≤ 14.5         |
| B2                          | 14.5 < × ≤ 15.5         |
| B3                          | 15.5 < × ≤ 16.5         |
| Caa1                        | 16.5 < × ≤ 17.5         |
| Caa2                        | 17.5 < × ≤ 18.5         |
| Caa3                        | 18.5 < × ≤ 19.5         |
| Ca                          | 19.5 < × ≤ 20.5         |
| С                           | × > 20.5                |

Source: Moody's Investors Service

For example, an issuer with an aggregate numeric score of 11.7 would have a Ba2 scorecard-indicated outcome.

In general, the scorecard-indicated outcome is oriented to the corporate family rating (CFR) for speculative-grade issuers and to the senior unsecured rating for investment-grade issuers. For issuers that benefit from rating uplift from parental support, government ownership or other institutional support, we consider the underlying credit strength or Baseline Credit Assessment for comparison to the scorecard-indicated outcome. For an explanation of the Baseline Credit Assessment, please refer to *Rating Symbols and Definitions* and to our cross-sector methodology for government-related issuers.<sup>12</sup>

## Assigning issuer-level and instrument-level ratings

After considering the scorecard-indicated outcome, other considerations and relevant cross-sector methodologies, we typically assign a CFR to speculative-grade issuers or a senior unsecured rating for investment-grade issuers. For issuers that benefit from rating uplift from government ownership, we may assign a Baseline Credit Assessment.<sup>13</sup>

Individual debt instrument ratings may be notched up or down from the CFR or the senior unsecured rating to reflect our assessment of differences in expected loss related to an instrument's seniority level and collateral. The documents that provide broad guidance for such notching decisions are the rating methodology on loss given default for speculative-grade non-financial companies, the methodology for notching corporate instrument ratings based on differences in security and priority of claim, and the methodology for assigning short-term ratings.<sup>14</sup>

## Key rating assumptions

For information about key rating assumptions that apply to methodologies generally, please see Rating Symbols and Definitions.<sup>15</sup>

#### Limitations

In the preceding sections, we have discussed the scorecard factors and many of the other considerations that may be important in assigning ratings. In this section, we discuss limitations that pertain to the scorecard and to the overall rating methodology.

### Limitations of the scorecard

There are various reasons why scorecard-indicated outcomes may not map closely to actual ratings.

The scorecard in this rating methodology is a relatively simple reference tool that can be used in most cases to approximate credit profiles of companies in this sector and to explain, in summary form, many of the factors that are generally most important in assigning ratings to these companies. Credit loss and recovery considerations, which are typically more important as an issuer gets closer to default, may not be fully captured in the scorecard. The scorecard is also limited by its upper and lower bounds, causing scorecard-indicated outcomes to be less likely to align with ratings for issuers at the upper and lower ends of the rating scale.

The weights for each factor and sub-factor in the scorecard represent an approximation of their importance for rating decisions across the sector, but the actual importance of a particular factor may vary substantially based on an individual company's circumstances.

Factors that are outside the scorecard, including those discussed above in the "Other considerations" section, may be important for ratings, and their relative importance may also vary from company to company. In addition, certain broad methodological considerations described in one or more cross-sector rating methodologies may be relevant to ratings in this sector.<sup>16</sup> Examples of such considerations include the following: how sovereign credit quality affects non-sovereign issuers, the assessment of credit support from other entities, the relative ranking of different classes of debt and hybrid securities, and the assignment of short-term ratings.

We may use the scorecard over various historical or forward-looking time periods. Furthermore, in our ratings we often incorporate directional views of risks and mitigants in a qualitative way.

#### General limitations of the methodology

This methodology document does not include an exhaustive description of all factors that we may consider in assigning ratings in this sector. Companies in the sector may face new risks or new combinations of risks, and they may develop new strategies to mitigate risk. We seek to incorporate all material credit considerations in ratings and to take the most forward-looking perspective that visibility into these risks and mitigants permits.

Ratings reflect our expectations for an issuer's future performance; however, as the forward horizon lengthens, uncertainty increases and the utility of precise estimates, as scorecard inputs or in other considerations, typically diminishes. Our forward-looking opinions are based on assumptions that may prove, in hindsight, to have been incorrect. Reasons for this could include unanticipated changes in any of the following: the macroeconomic environment, general financial market conditions, industry competition, disruptive technology, or regulatory and legal actions. In any case, predicting the future is subject to substantial uncertainty.

## Moody's related publications

Credit ratings are primarily determined through the application of sector credit rating methodologies. Certain broad methodological considerations (described in one or more cross-sector rating methodologies) may also be relevant to the determination of credit ratings of issuers and instruments. A list of sector and cross-sector credit rating methodologies can be found <u>here</u>.

For data summarizing the historical robustness and predictive power of credit ratings, please click here.

For further information, please refer to Rating Symbols and Definitions, which is available here.

Moody's Basic Definitions for Credit Statistics (User's Guide) can be found here.

## Authors:

Karen Berckmann

Jason Cuomo

Carl Salas

## **Endnotes**

- 1 In our methodologies and research, the terms "scorecard" and "grid" are used interchangeably.
- 2 As noted above, analysts and rating committees can also assess factors using different time periods. In the US, major elections follow a two-year cycle that strongly affects advertising revenues. In other jurisdictions, advertising revenues may follow different cycles.
- 3 For example, if we were calculating the ratio as of 12/31/20, the numerator would be total debt at 12/31/20, and the denominator would be the average of EBITDA in 2019 and 2020.
- 4 For example, if we were calculating the ratio as of 12/31/20, the numerator would be the average of EBITDA minus capital expenditures in 2019 and 2020, and the denominator would be interest expense for the 12 months ending 12/31/20.
- 5 Liquidity management is distinct from the level of liquidity, which is discussed in the "Other considerations" section.
- 6 A link to a list of our sector and cross-sector methodologies can be found in the "Moody's related publications" section.
- Z A link to a list of our cross-sector methodologies can be found in the "Moody's related publications" section.
- 8 For an explanation of the Baseline Credit Assessment, please refer to *Rating Symbols and Definitions* and to our cross-sector methodology for governmentrelated issuers. A link to a list of our sector and cross-sector methodologies and a link to *Rating Symbols and Definitions* can be found in the "Moody's related publications" section.
- 9 When a factor comprises sub-factors, we score at the sub-factor level. Some factors do not have sub-factors, in which case we score at the factor level.
- 10 For definitions of our most common ratio terms, please see *Moody's Basic Definitions for Credit Statistics (User's Guide)*. A link can be found in the "Moody's related publications" section.
- 11 For an explanation of our standard adjustments, please see the cross-sector methodology that describes our financial statement adjustments in the analysis of non-financial corporations.
- 12 A link to a list of our sector and cross-sector methodologies and a link to Rating Symbols and Definitions can be found in the "Moody's related publications" section.
- 13 For an explanation of the Baseline Credit Assessment, please refer to *Rating Symbols and Definitions* and to our cross-sector methodology for governmentrelated issuers. A link to a list of our sector and cross-sector methodologies and a link to *Rating Symbols and Definitions* can be found in the "Moody's related publications" section.
- 14 A link to a list of our sector and cross-sector rating methodologies can be found in the "Moody's related publications" section.
- 15 A link to Rating Symbols and Definitions can be found in the "Moody's related publications" section.
- 16 A link to a list of our sector and cross-sector methodologies can be found in the "Moody's related publications" section.

© 2021 Moody's Corporation, Moody's Investors Service, Inc., Moody's Analytics, Inc. and/or their licensors and affiliates (collectively, "MOODY'S"). All rights reserved.

CREDIT RATINGS ISSUED BY MOODY'S CREDIT RATINGS AFFILIATES ARE THEIR CURRENT OPINIONS OF THE RELATIVE FUTURE CREDIT RISK OF ENTITIES, CREDIT COMMITMENTS, OR DEBT OR DEBT-LIKE SECURITIES, AND MATERIALS, PRODUCTS, SERVICES AND INFORMATION PUBLISHED BY MOODY'S (COLLECTIVELY, "PUBLICATIONS") MAY INCLUDE SUCH CURRENT OPINIONS. MOODY'S DEFINES CREDIT RISK AS THE RISK THAT AN ENTITY MAY NOT MEET ITS CONTRACTUAL FINANCIAL OBLIGATIONS AS THEY COME DUE AND ANY ESTIMATED FINANCIAL LOSS IN THE EVENT OF DEFAULT OR IMPAIRMENT. SEE APPLICABLE MOODY'S RATING SYMBOLS AND DEFINITIONS PUBLICATION FOR INFORMATION ON THE TYPES OF CONTRACTUAL FINANCIAL OBLIGATIONS ADDRESSED BY MOODY'S CREDIT RATINGS. CREDIT RATINGS DO NOT ADDRESS ANY OTHER RISK, INCLUDING BUT NOT LIMITED TO: LIQUIDITY RISK, MARKET VALUE RISK, OR PRICE VOLATILITY. CREDIT RATINGS, NON-CREDIT ASSESSMENTS ("ASSESSMENTS"), AND OTHER OPINIONS INCLUDED IN MOODY'S PUBLICATIONS ARE NOT STATEMENTS OF CURRENT OR HISTORICAL FACT. MOODY'S PUBLICATIONS MAY ALSO INCLUDE QUANTITATIVE MODEL-BASED ESTIMATES OF CREDIT RISK AND RELATED OPINIONS OR COMMENTARY PUBLISHED BY MOODY'S ANALYTICS, INC. AND/OR ITS AFFILIATES. MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND PUBLICATIONS DO NOT CONSTITUTE OR PROVIDE INVESTMENT OR FINANCIAL ADVICE, AND MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND PUBLICATIONS ARE NOT AND DO NOT PROVIDE RECOMMENDATIONS TO PURCHASE, SELL, OR HOLD PARTICULAR SECURITIES. MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND PUBLICATIONS AND PUBLICATIONS AND PUBLICATIONS AND PUBLICATIONS AND DUBLICATIONS AND DUBLICATIONS AND PUBLICATIONS ON OT COMMENT ON THE SUITABILITY OF AN INVESTMENT FOR ANY PARTICULAR INVESTOR. MOODY'S ISSUES ITS CREDIT RATINGS, ASSESSMENTS AND OTHER OPINIONS AND PUBLISHES ITS PUBLICATIONS WITH THE EXPECTATION AND UNDERSTANDING THAT EACH INVESTOR WILL, WITH DUE CARE, MAKE ITS OWN STUDY AND EVAL

MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS, AND PUBLICATIONS ARE NOT INTENDED FOR USE BY RETAIL INVESTORS AND IT WOULD BE RECKLESS AND INAPPROPRIATE FOR RETAIL INVESTORS TO USE MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS OR PUBLICATIONS WHEN MAKING AN INVESTMENT DECISION. IF IN DOUBT YOU SHOULD CONTACT YOUR FINANCIAL OR OTHER PROFESSIONAL ADVISER.

ALL INFORMATION CONTAINED HEREIN IS PROTECTED BY LAW, INCLUDING BUT NOT LIMITED TO, COPYRIGHT LAW, AND NONE OF SUCH INFORMATION MAY BE COPIED OR OTHERWISE REPRODUCED, REPACKAGED, FURTHER TRANSMITTED, TRANSFERRED, DISSEMINATED, REDISTRIBUTED OR RESOLD, OR STORED FOR SUBSEQUENT USE FOR ANY SUCH PURPOSE, IN WHOLE OR IN PART, IN ANY FORM OR MANNER OR BY ANY MEANS WHATSOEVER, BY ANY PERSON WITHOUT MOODY'S PRIOR WRITTEN CONSENT.

MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND PUBLICATIONS ARE NOT INTENDED FOR USE BY ANY PERSON AS A BENCHMARK AS THAT TERM IS DEFINED FOR REGULATORY PURPOSES AND MUST NOT BE USED IN ANY WAY THAT COULD RESULT IN THEM BEING CONSIDERED A BENCHMARK.

All information contained herein is obtained by MOODY'S from sources believed by it to be accurate and reliable. Because of the possibility of human or mechanical error as well as other factors, however, all information contained herein is provided "AS IS" without warranty of any kind. MOODY'S adopts all necessary measures so that the information it uses in assigning a credit rating is of sufficient quality and from sources MOODY'S considers to be reliable including, when appropriate, independent third-party sources. However, MOODY'S is not an auditor and cannot in every instance independently verify or validate information received in the rating process or in preparing its Publications.

To the extent permitted by law, MOODY'S and its directors, officers, employees, agents, representatives, licensors and suppliers disclaim liability to any person or entity for any indirect, special, consequential, or incidental losses or damages whatsoever arising from or in connection with the information contained herein or the use of or inability to use any such information, even if MOODY'S or any of its directors, officers, employees, agents, representatives, licensors or suppliers is advised in advance of the possibility of such losses or damages, including but not limited to: (a) any loss of present or prospective profits or (b) any loss or damage arising where the relevant financial instrument is not the subject of a particular credit rating assigned by MOODY'S.

To the extent permitted by law, MOODY'S and its directors, officers, employees, agents, representatives, licensors and suppliers disclaim liability for any direct or compensatory losses or damages caused to any person or entity, including but not limited to by any negligence (but excluding fraud, willful misconduct or any other type of liability that, for the avoidance of doubt, by law cannot be excluded) on the part of, or any contingency within or beyond the control of, MOODY'S or any of its directors, officers, employees, agents, representatives, licensors or suppliers, arising from or in connection with the information contained herein or the use of or inability to use any such information.

NO WARRANTY, EXPRESS OR IMPLIED, AS TO THE ACCURACY, TIMELINESS, COMPLETENESS, MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OF ANY CREDIT RATING, ASSESSMENT, OTHER OPINION OR INFORMATION IS GIVEN OR MADE BY MOODY'S IN ANY FORM OR MANNER WHATSOEVER.

Moody's Investors Service, Inc., a wholly-owned credit rating agency subsidiary of Moody's Corporation ("MCO"), hereby discloses that most issuers of debt securities (including corporate and municipal bonds, debentures, notes and commercial paper) and preferred stock rated by Moody's Investors Service, Inc. have, prior to assignment of any credit rating, agreed to pay to Moody's Investors Service, Inc. for credit ratings opinions and services rendered by it fees ranging from \$1,000 to approximately \$5,000,000. MCO and Moody's Investors Service also maintain policies and procedures to address the independence of Moody's Investors Service credit ratings and credit rating processes. Information regarding certain affiliations that may exist between directors of MCO and rated entities, and between entities who hold credit ratings from Moody's Investors Service and have also publicly reported to the SEC an ownership interest in MCO of more than 5%, is posted annually at <u>www.moodys.com</u> under the heading "Investor Relations — Corporate Governance — Director and Shareholder Affiliation Policy."

Additional terms for Australia only: Any publication into Australia of this document is pursuant to the Australian Financial Services License of MOODY'S affiliate, Moody's Investors Service Pty Limited ABN 61 003 399 657AFSL 336969 and/or Moody's Analytics Australia Pty Ltd ABN 94 105 136 972 AFSL 383569 (as applicable). This document is intended to be provided only to "wholesale clients" within the meaning of section 761G of the Corporations Act 2001. By continuing to access this document from within Australia, you represent to MOODY'S that you are, or are accessing the document as a representative of, a "wholesale client" and that neither you nor the entity you represent will directly or indirectly disseminate this document or its contents to "retail clients" within the meaning of section 761G of the Corporations Act 2001. MOODY'S credit rating is an opinion as to the creditworthiness of a debt obligation of the issuer, not on the equity securities of the issuer or any form of security that is available to retail investors.

Additional terms for Japan only: Moody's Japan K.K. ("MJKK") is a wholly-owned credit rating agency subsidiary of Moody's Group Japan G.K., which is wholly-owned by Moody's Overseas Holdings Inc., a wholly-owned subsidiary of MCO. Moody's SF Japan K.K. ("MSFJ") is a wholly-owned credit rating agency subsidiary of MJKK. MSFJ is not a Nationally Recognized Statistical Rating Organization ("NRSRO"). Therefore, credit ratings assigned by MSFJ are Non-NRSRO Credit Ratings. Non-NRSRO Credit Ratings are assigned by an entity that is not a NRSRO and, consequently, the rated obligation will not qualify for certain types of treatment under U.S. laws. MJKK and MSFJ are credit rating agencies registered with the Japan Financial Services Agency and their registration numbers are FSA Commissioner (Ratings) No. 2 and 3 respectively.

MJKK or MSFJ (as applicable) hereby disclose that most issuers of debt securities (including corporate and municipal bonds, debentures, notes and commercial paper) and preferred stock rated by MJKK or MSFJ (as applicable) have, prior to assignment of any credit rating, agreed to pay to MJKK or MSFJ (as applicable) for credit ratings opinions and services rendered by it fees ranging from JPY125,000 to approximately JPY550,000,000.

MJKK and MSFJ also maintain policies and procedures to address Japanese regulatory requirements.

This publication does not announce a credit rating action. For any credit ratings referenced in this publication, please see the ratings tab on the issuer/entity page on www.moodys.com for the most updated credit rating action information and rating history.

REPORT NUMBER 1276775

#### Contacts

| <b>Lenny J. Ajzenman</b><br>Associate Managing<br>Director<br>lenny.ajzenman@moodys.com | +1.212.553.7735 | <b>Peter Firth</b><br>Associate Managing<br>Director<br>peter.firth@moodys.com           | +44.20.7772.5222 |
|---|-----------------|--|------------------|
| <b>Ivan Palacios</b><br>Associate Managing<br>Director<br>ivan.palacios@moodys.com      | +34.91.768.8229 | Marcos Schmidt<br>Associate Managing<br>Director<br>marcos.schmidt@moodys.com            | +55.11.3043.7310 |
| <b>Stephen Sohn</b><br>Associate Managing<br>Director<br>stephen.sohn@moodys.com        | +1.212.553.2965 | <b>Patrick Winsbury</b><br>Associate Managing<br>Director<br>patrick.winsbury@moodys.com | +61.2.9270.8183  |

#### **CLIENT SERVICES**

| Americas     | 1-212-553-1653  |
|--------------|-----------------|
| Asia Pacific | 852-3551-3077   |
| Japan        | 81-3-5408-4100  |
| EMEA         | 44-20-7772-5454 |

## MOODY'S INVESTORS SERVICE