

SECTOR IN-DEPTH

23 February 2022



Contacts

Dean Ungar, CFA +1.212.553.6968 VP-Sr Credit Officer dean.ungar@moodys.com

Michael Dion, CFA +1.212.553.1897

VP-Senior Analyst
mike.dion@moodys.com

Scott Robinson, CFA +1.212.553.3746
Associate Managing Director
scott.robinson@moodys.com

Marc R. Pinto, CFA +1.212.553.4352 MD-Financial Institutions marc.pinto@moodys.com

CLIENT SERVICES

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

Health Insurance — US

Health insurance earnings quarterly – Q4 2021

EBITDA growth for 2021 was 3% among our surveyed group of publicly traded health insurers, below our forecast of mid-to-upper single digits and also below growth in recent years. The weaker growth largely reflected higher COVID costs from the Delta and Omicron variants. It also included poor performance on the individual market as the extended special enrollment period led to significant growth, but also adverse selection and high medical costs. For 2022, EBITDA growth will likely accelerate to the low double digits, driven by lower COVID costs and better performance on the individual market. Medicaid results will likely be weakened by the resumption of eligibility redeterminations, which could be begin in April.

Notable events:

Competitive pressure intensifying in Medicare Advantage. Medicare advantage (MA) growth in the 2022 annual enrollment period was not uniformly strong as in recent years. Humana's enrollment grew only approximately 3%, well below initial forecasts, and Centene and Cigna expect membership growth to slow in 2022. Humana cited increased outreach to beneficiaries from competitors and aggregators that encourage people to call the number on their TV screen to get the best deal. It seems clear that competition is forcing more of a trade-off between growth and margin.

Déjà vu all over again in the individual market. The Biden administration, in its efforts to expand insurance coverage, established a special enrollment period for the ACA individual market exchanges and increased subsidies, raising enrollment by 2.8 million. But in a throwback to the early days of the ACA, it also led to significant adverse selection, which caused performance to decline. The insurers have responded with pricing actions and product redesign, which could lead to lower enrollment but better performance.

Expanded subsidies on the exchange set to expire at year-end. Temporary increases in the subsidies in the individual market were enacted early in 2021, contributing to record enrollment of 14.5 million during the 2022 annual enrollment, about 2.5 million more than 2021. Without new legislation to extend them, the increased subsidies will expire at year-end, which will adversely impact membership.

A single-payer bill failed in California. A single-payer health insurance bill, AB 1400, ultimately did not come up for a vote in the California Assembly in late January. The bill would have replaced the 34 million Californians in commercial insurance, Medicare, Medicaid and the individual market with CalCare, a state-run program.

A stable outlook for 2022 with improved earnings

In December, we affirmed our <u>stable outlook</u> for the health insurance sector. Earnings growth in 2021 was muted for our surveyed companies, reflecting elevated COVID costs exacerbated by the Delta and Omicron variants. Despite the weaker growth, health insurers' credit strength was largely unaffected. In fact, the growing diversification of the industry, with the increasing investment in unregulated health services, has boosted companies' credit strength, despite incrementally higher leverage. For 2022, earnings growth is likely to pick up, based on improved performance in the individual market, better commercial enrollment trends in line with projected economic growth, and continued growth in Medicare Advantage (MA), offset by declining Medicaid enrollment once eligibility redeterminations resume, which is likely to happen midway through the year.

Moody's credit implications Credometer

Below we review the credit implications of quarterly results for the seven publicly traded rated issuers. To help us better communicate our view of the quarterly results, we developed the Credometer. The Credometer is a pictorial way to show our conclusion about those credit implications. It has three sections: it goes from green, the most positive credit implications by our assessment, through red, which is negative. The gray section in the middle is neutral. The Credometer is not intended to indicate a possible rating action, but is simply a way to describe the incremental, directional impact of the quarterly earnings information on a company's credit profile.

Aetna Inc. (Baa2 stable)/CVS Health (Baa2 stable)



Aetna, part of CVS Healthcare, reported Q4 2021 EBITDA of \$589 million, an increase of 170% from last year, as a result of a lower benefit ratio and lower COVID costs. However, for 2021, Aetna's EBITDA was \$5.3 billion, which was 17.5% lower than 2020, primarily driven by higher COVID costs, including the impact of the deferral of elective procedures and other discretionary utilization. Total revenue increased 8.4% and 8.9% for the three months and year ended December 31, 2021, respectively, compared to the prior year, primarily driven by growth in the Government Services business. Total medical membership rose 1.9% in 2021 as a result of growth in Medicare Advantage, Medicare Supplement, and Medicaid members, offset by a reduction in commercial membership.

Aetna's medical benefit ratio rose 3 bps to 87.0% in Q4 2021 compared to the prior year because of the absence of the ACA risk corridor receipt and the repeal of the HIF for 2021. Aetna experienced favorable development of prior-periods' healthcare cost estimates in its Commercial and Government Services businesses during Q4 2021. Prior years' healthcare costs payable estimates also developed favorably by \$788 million during the year ended December 31, 2021.

For 2022, Aetna forecasts that total revenue will rise 7%-9%, with adjusted operating income growth of 15%-17%, and the medical benefit ratio will be between 83.7%-84.7%. The company also forecasts total medical membership will rise to 23.8-24.1 million, or 0%-1% overall.

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.

Anthem, Inc. (Baa2 stable)



Anthem's results in Q4 2021 were solid and capped off a successful year. In Q4 2021, EBITDA of \$2.2 billion was almost double the previous year, which included significant COVID support expenditures. For the full year 2021, EBITDA of \$10.3 billion increased 8.7%, reflecting strong membership growth, the benefit from the acquisition of MMM Healthcare, which closed at the end of Q2, and the continued growth of IngenioRx, the company's pharmacy benefit manager, which was launched in 2020. However, adjusting for unusually strong net investment income in 2021 and the impact of MMM, we estimate that annual organic EBITDA growth was approximately 4.0%.

Total membership (ex. BlueCard) increased by 2.3 million (6%) to 39.2 million. The growth was led by Medicaid, which increased by more than 1.7 million members (20%), driven by the continued suspension of eligibility redeterminations. Membership increases were also aided by growth in Medicare Advantage (MA), which was up 30%, including MMM. IngenioRx's operating earnings increased 24% and comprised 22% of Anthem's operating earnings. Leverage levels are moderate. Debt-to-capital with Moody's adjustments increased to 40% from 38.7% in Q4 2020 and debt-to-EBITDA was 2.3x, up from 2.2x

The outlook for 2022 is positive. Management is projecting at least a 12.0% increase in operating revenue, despite the resumption of Medicaid eligibility redeterminations, which will slow down Medicaid growth. The company had its best ever selling season for national accounts and expects continued strong growth in MA. Finally, IngenioRx remains well-positioned for strong growth.

Centene Corporation (Ba1 stable)



Centene's EBITDA of \$1.1 billion in Q4 2021 was up from \$619 million the previous year, reflecting elevated COVID costs. For the year, EBITDA of \$5.4 billion was up 2.8% and was low relative to its strong membership growth, which increased 7.1% (ex. standalone Medicare prescription drug plans) to 22.5 million led by Medicaid and Medicare Advantage. However, this was largely offset by high medical costs from the Delta variant, Omicron and increased levels of testing. It also reflects poor performance on the individual market as a result of increased medical utilization from members, including those who joined during the special enrollment period. Leverage remains high. Debt-to-capital with Moody's lease adjustments was 45.7% at year-end up from 41.4% the prior year and adjusted debt-to-EBITDA was 3.9x, up from 3.3x. Leverage was adversely impacted by the Circle Health acquisition in Q3, which has significant operating lease obligations.

For 2022, Centene is expecting 5% organic revenue growth (9% including the Magellan acquisition which closed in the beginning of 2022). Besides Magellan, this primarily reflects Medicaid and Medicare growth. The earnings outlook is mixed. The marketplace business should perform much better. Despite significant pricing adjustments, Centene was able to maintain its marketplace membership level but should substantially improve profitability, although not to its long-term pretax margin target of 5% – 7.5%. However, Medicaid is likely to be weakened by the resumption of redeterminations, pharmacy carve-outs and a projected increase in the medical loss ratio of 130 basis points as utilization normalizes post pandemic.

Cigna Corporation (Baa1 stable)



Cigna Corporation (Cigna) generated Q4 2021 EBITDA of \$2.6 billion, up 8.9% year-over-year. For the full year, EBITDA of \$11.2 billion, was down 1.9% year-over-year. These sluggish results reflect headwinds at Cigna Healthcare (CH), the insurance business, offset by strength at Evernorth (EN), the health services business and partly reflect the loss of earnings from the sale of the group life and disability business at the end of 2020. Pretax adjusted income from operations of \$3.6 billion at CH, about 1/3 of consolidated pretax adjusted operating income, was down 10% in 2021 because of high COVID-related testing, treatment and vaccine costs, poor performance in the individual market and higher than expected stop-loss claims.

In contrast, EN, which accounts for approximately two thirds of consolidated pretax adjusted income, did well. EN is primarily the large pharmacy benefits manager, Express Scripts, but now also includes MDLive, the telehealth provider, among other services. In 2021, pretax adjusted income from operations of \$5.8 billion increased 8% led by strong growth in specialty pharmacy, which now accounts for a third of EN's revenue, and it is among the fastest growing parts of the business.

Leverage remains high with debt-to-capital with Moody's adjustments of 42.8% and debt-to-EBITDA of 3.1x. Management indicated that it would use the proceeds from the pending sale of its international business for stock repurchase, a credit negative. Cigna is forecasting modest growth in 2022 as medical costs are projected to remain high.

Humana Inc. (Baa3 stable)



Humana Inc. reported Q4 2021 EBITDA of \$434 million, a decline from recent previous 2021 quarters but higher than last year's fourth quarter loss, which reflected much higher COVID related expenditures and elevated Medicare Advantage expenses, particularly in large group accounts in Q4 2021. Despite the weak fourth quarter, for the full year, Humana's EBITDA was \$4.3 billion, which rose 1.2% from 2020, reflecting scale and operating cost efficiencies. Revenue increased 10% and 8%, respectively, in Q4 2021 and full year 2021 because of Medicare Advantage membership and premium growth, as well as the impact of Kindred at Home revenue from external customers (before the third quarter of 2021, Kindred at Home's results were non-consolidating reflective of Humana's minority ownership interest).

In 2021, Humana's retail segment generated 3.1% membership growth versus the prior year, driven by additional individual Medicare Advantage members, which more than offset a decline in Group Medicare Advantage members. However, the group and specialty segment membership declined in 2021 because of a sharp reduction in commercial medical and dental members.

Humana realized a much higher level of favorable prior period development in during 2021, at \$825 million, compared to the prior year, \$313 million, as a result of the reversal of actions taken in 2020, including the suspension of certain financial recovery programs for a period of time. The suspension during 2020 was intended to provide financial and administrative relief for providers facing challenges as a result of the pandemic.

Humana's debt/LTM EBITDA improved during the fourth quarter to 2.9x from 3.4x in 3Q 2021 despite the weak fourth quarter because of the strength of its nine months operating results more than offsetting a slight increase in total leverage during the quarter.

For 2022, Humana provided EPS guidance of at least \$23.08 a share on a GAAP basis, which includes a COVID headwind of \$1.00. It also commits to achieving \$1 billion of additional value through cost savings, productivity initiatives, and value acceleration from previous investments to create capacity to fund growth and investment in the Medicare Advantage business and further expansion of Healthcare Services capabilities.

Molina Healthcare, Inc (Ba3 stable)



Molina had a strong quarter and year and has a strong earnings outlook. EBITDA of \$275 million in Q4 2021 was up from \$21 million in the prior year, which reflected the impact of retroactive risk corridors implemented by the states in response to the lower utilization of medical services resulting from COVID-19. For the full year 2021, EBITDA of \$1.25 billion was up 15.5% year-over-year, the best in our surveyed group. Molina's earnings benefited from organic growth along with three acquisitions in mid-to-late 2020. These results were achieved despite approximately \$272 million of incremental pretax COVID costs and a lower than expected result in the individual market because of adverse selection from the 2021 special enrollment period. Performance in Medicaid (76% of premium revenue) and MA (13%) were in line with expectations.

For 2022, the company has several key earnings growth drivers, including the realization of approximately \$272 million in embedded pretax earnings covering lower COVID costs, better Medicare risk adjustment and the incremental impact of recent acquisitions, partly offset by the resumption of eligibility redeterminations in Medicaid. Furthermore, management has rightsized and restructured its marketplace exposure by removing adverse selection-friendly products. Therefore, the company expects to return to individual market profitability and to increase earnings despite a steep decline membership. Growth will also come from new Medicaid contract wins in Nevada and Kentucky and growth in MA. Leverage has improved. Adjusted debt-to-capital remains high but improved to 48.5% from 53.8% a year ago and adjusted debt-to-EBITDA is a solid 1.9x.

UnitedHealth Group (A3 stable)



<u>UnitedHealth Group, Inc.</u> (UnitedHealth) reported Q4 2021 EBITDA of \$6.3 billion, an increase of 49% from last year, which reflected significant COVID-related expenditures. For the full year, UnitedHealth's EBITDA of \$27.1 billion, which we estimate included approximately \$2.2 billion of COVID costs, was up 7.0% from 2020, reflecting business momentum as well strong net investment income. The year was marked by solid membership growth of 4.5% at UnitedHealth's insurance subsidiary, UnitedHealthcare, led by industry leading growth in MA and strong growth in Medicaid, which was aided by the suspension of eligibility redeterminations. Still, operating earnings were down 3% as a result of the impact of COVID in both years (a positive effect in 2020 and a negative effect in 2021).

At Optum, UnitedHealth's health service subsidiaries, growth was strong across the board but especially at OptumHealth, the provider business. For the year, Optum contributed half UnitedHealth's consolidated operating earnings, a first. Optum also achieved 19% operating earnings growth and was the main driver of the overall annual EBITDA growth as UHC was more affected by COVID in both years (a positive in 2020 and a negative in 2021). Leverage further improved during the quarter with debt-to-capital with Moody's adjustments improving to 39.7% (38% unadjusted) from 40.8% in Q3 2021 and adjusted debt-to-EBITDA improving to 1.8x from 2.0x.

For 2022, we estimate that EBITDA growth at UnitedHealth will improve to the low double-digit range based on lower COVID costs, continued membership growth in MA and commercial along with positive momentum at Optum.

EBITDA growth constrained by COVID in 2021, set to improve this year

Exhibit 1
EBITDA up only 2.6%, but should improve as headwinds abate

	Q4 2021	Q4 2020	% Change	YTD 2021	YTD 2020	% Change
Aetna	589	218	170.2%	5,302	6,423	-17.5%
Anthem	2,209	1,122	96.9%	10,329	9,502	8.7%
Centene	1,126	619	81.9%	5,414	5,268	2.8%
Cigna	2,627	2,413	8.9%	11,164	11,382	-1.9%
Humana	434	-288	-250.7%	4,330	4,279	1.2%
Molina	275	21	1209.5%	1,253	1,085	15.5%
UnitedHealth	6,312	4,249	48.6%	27,073	25,296	7.0%
Total	13,572	8,354	62.5%	64,865	63,235	2.6%

Note: Our EBITDA calculation excludes non-recurring items and includes non-operating items such as investment income and realized/unrealized gains Source: Moody's Investors Service, company filings

In our Q4 2020 Health insurance earnings quarterly report we forecast EBITDA growth in the mid-single digits. As it turned out, EBITDA for 2021 was up 2.6% (4.8% excluding Aetna) and was largely in line with our expectations. But the drivers were varied. COVID costs were higher than expected because of the Delta and Omicron variants in addition to the expected testing and treatment costs. The individual market also performed worse than we expected. During the year 2.8 million additional people signed up for 2021 after the Biden Administration implemented a special enrollment period from February 15 – August 15 and passed temporary increases in subsidies. However, as happened with the initial roll-out of The Affordable Care Act, this led to adverse selection and losses in the individual market for several of the insurers.

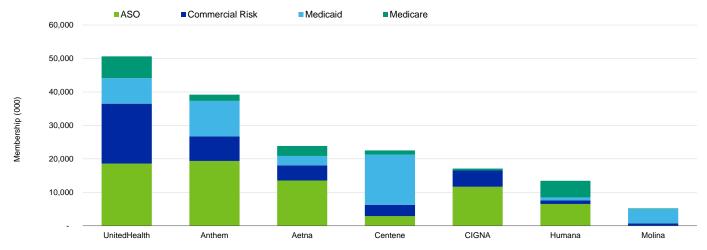
These negative effects were offset by continued strong secular growth in MA, for which enrollment increased 14.0% for our rated, publicly traded companies during 2021. This is well above the average for the industry, which we estimate at approximately 8.0%. Medicaid, which continues to benefit from the suspension of eligibility redeterminations until the public health emergency expires, had a 14.3% increase in enrollment, benefiting earnings. And companies with significant non-regulated health services businesses also got an earnings boost, such as UnitedHealth (Optum), Anthem (IngenioRx) and Cigna (Evernorth).

For 2022, we expect EBITDA growth to accelerate moderately to the low double digits as MA growth continues, the commercial market improves assuming a normalizing economy, COVID costs decline, and the individual market performance improves. Medicaid results will be weakened by the resumption of eligibility redeterminations, which could be begin in April.

Membership - Government leads strong growth in 2021, but will slow in 2022

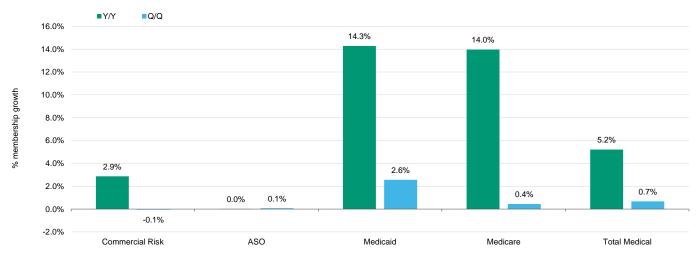
Exhibit 2

Membership by LOB – Q4 2021: Medicaid growth is a temporary driver



Note: Overall, the publicly traded insurers we rate cover 172.0 million medical members, which we estimate is about half the total in the country. Source: Moody's Investors Service, company filings

Exhibit 3
The pandemic has hurt commercial and benefited Medicaid



Source: Moody's Investors Service, company filings

Membership growth in 2021 was strong led by Medicaid and MA. Growth should slow in 2022 but be more profitable. As discussed elsewhere in this report, the suspension of eligibility redeterminations for Medicaid during the pandemic public health emergency has resulted in outsized membership growth in 2021 of 14.3%. We expect the public health emergency, which has been renewed every three months since the pandemic began to expire in either April or July. At that point, eligibility redeterminations to resume. Since the pandemic began, Medicaid (and the Children's Health Insurance Program) has grown by over 12 million (17.4%) to 83.6 million as of July 2021.

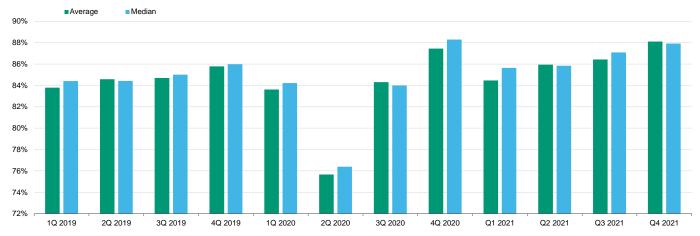
As we have written in the January edition of the <u>Healthcare Quarterly</u>, we expect approximately 4 million people over time could be disenrolled among our rated health insurers, with Medicaid-focused Centene and Molina being the most vulnerable. We also expect

slower growth in MA overall as Humana, Centene and Cigna in particular had slower growth in the annual enrollment period amid increased competition and efforts to preserve margins. We still, however, see the longer-term MA growth story as attractive. Finally, we expect to see modest growth in the mature commercial sector amid another year of solid economic growth as the US continues to emerge from the pandemic. Commercial, which is a low-single digit grower in the best of times, represents 65% of members in our surveyed group and constrains the overall growth of the industry.

Medical costs remained high in Q4 because of Omicron, should moderate this year

Exhibit 4

Delta variant and special enrollment period drive up medical costs; 2022 MLR expected to improve



Source: Moody's Investors Service, company filings

Medical costs increased in Q4 from the previous quarter. In part this is typical seasonality as people seek more treatment in Q4 before a new deductible kicks in January with the start of the new policy year. But this year also reflected the rise of Omicron, which was unexpected, as well as the high costs related to the individual market discussed elsewhere in this report. As we look to 2022, we do expect to see improvement overall in the medical loss ratio (MLR), as pricing and product redesign bolsters the individual market MLR in particular, partly offset by higher non-COVID utilization.

Quarterly EBITDA growth bolsters debt-to-EBITDA, little change in debt-to-capital

Exhibit 5
The quest for vertical integration continues to trump leverage

	Debt/Capital		Debt/EBITDA			
	Q4 2021	Q3 2021	Q4 2020	Q4 2021	Q3 2021	Q4 2020
Aetna / CVS	50.3%	51.4%	55.2%	3.59x	3.91x	4.07x
Anthem	39.9%	39.9%	38.7%	2.30x	2.55x	2.18x
Centene	45.7%	46.0%	41.4%	3.94x	4.20x	3.27x
Cigna	42.8%	43.1%	40.7%	3.11x	3.23x	2.99x
Humana	44.6%	43.9%	34.2%	2.90x	3.40x	1.62x
Molina	48.5%	49.2%	53.8%	1.92x	2.37x	2.19x
UnitedHealth	39.7%	40.8%	40.4%	1.79x	1.97x	1.82x
Average	44.5%	44.9%	43.5%	2.79x	3.09x	2.59x

Source: Moody's Investors Service, company filings

In Q4 there were no debt issuances of note among our surveyed group. Therefore, debt-to-capital with Moody's lease adjustments improved by a modest 30 basis points from Q3 on average. Notably, only UnitedHealth and Anthem are below 40% and just below at that. Debt-to-EBITDA, in contrast, improved more meaningfully from Q3, to 2.8x on average from 3.1x. This improvement reflects the strong growth in EBITDA in Q4 compared to the prior year, which as previously discussed, reflected especially high COVID support efforts by the companies as well as the impact of retroactive rate adjustment and risk corridors implemented by states to adjust for the low non-COVID utilization in 2020.

We estimate that UnitedHealth's adjusted leverage will increase to a range of 42.5% - 43.5% and adjusted debt-to-EBITDA will increase to 2.1x - 2.2x assuming the long-pending \$13+ billion Change Healthcare acquisition closes in April – a significantly more modest increase than we estimated when the deal was announced in early 2021.

Moody's related publications

Methodology:

» US Health Insurance Companies Methodology, November 2019

Outlook

» Health Insurance - US: 2022 Outlook, 14 December 2021

Sector research:

- » Health Insurers US: Developments to watch: 2022, 31 January 2022
- » Health Insurance US: Health insurance earnings quarterly Q3 2021, 18 November
- » Health Insurance-US: Industry has flexibility to offset inflationary pressures, at least for now, 25 October 2021
- » Financial Institutions-North America: Looming Medicare trust fund depletion is credit negative for MA insurers, 14 September 2021
- » Health Insurance-US: Health insurance earnings quarterly Q2 2021, 17 August 2021
- » Health insurers-US: Developments to watch: Midyear update, 26 July 2021
- » Health Insurance-US: Sector's evolution brings increased scale and diversification but also higher leverage, 14 July 2021
- » Health Insurance-US: Biden executive order promoting competition could be credit negative for health insurers, 14 July 2021
- » Health Insurance-US: Pandemic split: investment-grade bond spreads tighten, lower-grade spreads widen, 14 April 2021
- » Health Insurance-US: American Rescue Plan Act of 2021 is credit positive for health insurers, 15 March 2021
- » Health Insurance-US: Health Insurance Earnings Quarterly Q4 2020, 25 February 2021
- » Justice Department motion to cancel Supreme Court hearing on Medicaid work rule is credit positive for health insurers, 24 February 2021

Topic page:

» Coronavirus effects

To access any of these reports, click on the entry above. Note that these references are current as of the date of publication of this report and that more recent reports may be available. All research may not be available to all clients.

© 2022 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 DO NOT 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 EVALUATION OF EACH SECURITY THAT IS UNDER CONSIDERATION FOR PURCHASE, HOLDING, OR SALE,

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 www.moodys.com 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 JPY100,000 to approximately JPY550,000,000.

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

REPORT NUMBER 1315871

CLIENT SERVICES

 Americas
 1-212-553-1653

 Asia Pacific
 852-3551-3077

 Japan
 81-3-5408-4100

 EMEA
 44-20-7772-5454

