

Research

Factory Mutual Insurance Co.

Primary Credit Analyst:

Patricia A Kwan, New York + 1 (212) 438 6256; patricia.kwan@spglobal.com

Secondary Contact:

John Iten, Princeton + 1 (212) 438 1757; john.iten@spglobal.com

Table Of Contents

Credit Highlights

Outlook

Assumptions

Business Risk Profile

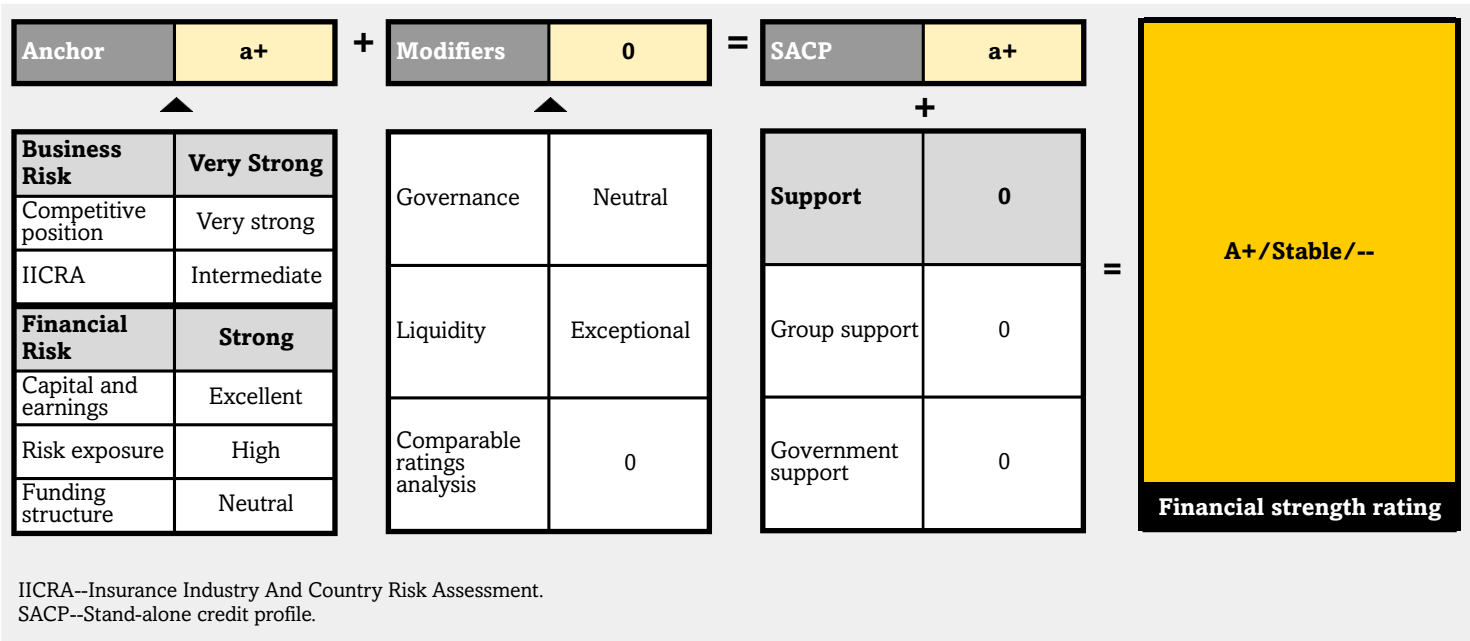
Financial Risk Profile

Other Key Credit Considerations

Related Criteria

Appendix

Factory Mutual Insurance Co.



Credit Highlights

Overview	
Strengths	Risks
World's largest commercial property insurer and formidable leader in specialized engineering-based property underwriting and research	Susceptibility to material losses arising from large limits and capacity in property underwriting
Highly valued customized loss prevention solutions complementing large commercial property products	High risk appetite for equity investments could expose capital to financial-market volatility
Strong long-term underwriting performance, though subject to outsized losses arising from natural catastrophes	Product diversity is narrow given its primary focus on commercial property coverage

FM Global's market leadership in providing insurance coverage and risk management service for large commercial and industrial properties is positioned to benefit from a favorable rate environment, although rising costs due to construction material and labor shortages could hinder earnings. Economic inflation and supply-chain obstacles could hamper earnings growth through 2022. However, favorable rate increases will alleviate margin pressure. Factory Mutual Insurance Co. (FM Global) has a leading position in global commercial property insurance. The company offers large limits on individual properties to clients that agree to implement the risk mitigation measures recommended by FM Global's extensive roster of risk management engineers, who perform onsite inspections of insured properties.

Capitalization has been a strong pillar to the rating. FM Global's capitalization, as measured by S&P Global Ratings' capital adequacy model, remains substantially redundant at the 'AAA' level. The company has been able to maintain excellent capital levels through periods of heightened catastrophe activity and capital markets volatility due to this capital buffer, proper risk policies, and use of reinsurance.

Potential earnings and capital volatility are high due to the nature of the insurance coverage FM Global provides and the company's investment strategy. As a large commercial property risk underwriter, volatility generated by single large location losses, aggregation of losses from single event, or a combination of both is inherent and expected. We believe the company's research-based engineering expertise and effective use of location-based reinsurance help mitigate outsized losses. Nonetheless, underwriting results each year can fluctuate widely depending on the level of large loss or natural catastrophe activity. At the same time, the company's risk appetite on equities could expose balance sheet capital to significant market risk. These risks are mitigated to a large degree by the company's substantial capital buffer and the generally uncorrelated nature of these risks.

The combination of very strong business risk and strong financial risk leads to a split anchor of 'aa-/a+'. We select the lower of the two, reflecting the company's narrow focus on commercial property.

Outlook: Stable

The stable outlook reflects S&P Global Ratings' view that the group has a very strong competitive position supported by its highly regarded reputation for assessing risk to prevent and mitigate loss and leading market presence in the large commercial property market. FM Global's extremely strong capital adequacy and generally strong operating results also allow it to absorb significant catastrophe losses and financial market volatility. Given FM Global's monoline focus on large commercial property, the potential for several large single losses or an elevated level of catastrophe losses is always present, making underwriting performance inherently volatile, and such losses have resulted in material underperformance in two of the past six years. But we expect a longer term average combined ratio of around 95%, assuming a normal level of catastrophe losses.

Downside scenario

We could lower the ratings in the next 24 months if FM Global's operating performance comes in substantially below our expectations and we believe that a systemic change has occurred that's weakened its competitive position. We may also lower our ratings if, during the next two years, FM Global's capital redundancy per our proprietary risk-adjusted capital model falls and remains below the 'AAA' confidence level due to significant underwriting losses or equity markets volatility.

Upside scenario

We are unlikely to upgrade FM Global in the next 24 months because of its narrow focus on commercial property business with material exposure to property catastrophe risk, which generates higher loss volatility when compared to 'AA-' rated peers.

Assumptions

- Real U.S. GDP growth of 1.6% in 2022, 0.2% in 2023, and 1.6% in 2024
- 10-year U.S. Treasury note yield of 2.8% in 2022, 3.3% in 2023, and 3.2% in 2024
- Unemployment rate of 3.7% in 2022, 4.3% in 2023, and in 5.3% 2024

- Core Consumer Price Index at 6.2% in 2022, 3.8% in 2023, and 2.0% in 2024

Source: "Economic Outlook U.S. Q4 2022: Teeter Totter", published Sept. 26, 2022

Key Metrics							
	--Year ended Dec. 31--						
Mil. \$	2023*	2022*	2021	2020	2019	2018	2017
P/C net premium written	8,936	8,676	5,799	5,092	4,479	4,097	3,780
P/C net combined ratio (%)	93.4	68.3	82.2	91.8	79.7	128.6	129.1
Net income	630	(428)	2,842	1,732	2,479	161	254
Return on revenue (%)	12.3	35.1	22.0	12.8	26.6	(17.2)	(19.3)
Return on shareholder's equity (%)	3.3	(2.3)	15.9	11.1	18.8	1.3	2.0
S&P Global Ratings capital adequacy	AAA	AAA	AAA	AAA	AAA	AAA	AAA

*2022-2023 forecast data reflect S&P Global Ratings base-case assumptions. Net income projections exclude realized investment gains/losses.

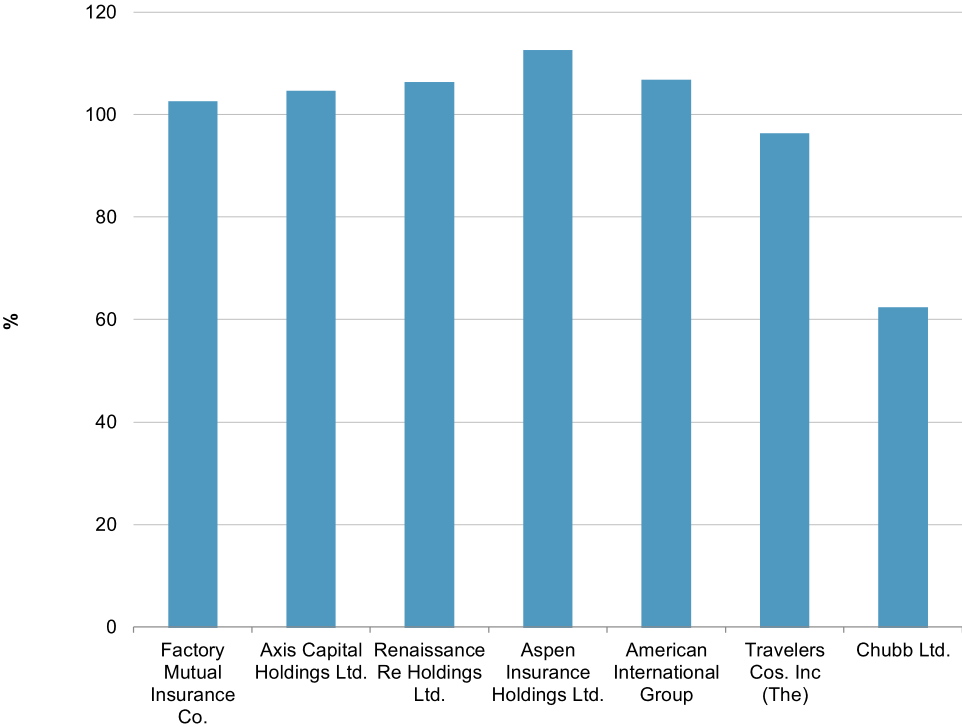
Business Risk Profile: Very Strong

FM Global is a global commercial property insurer and risk management services provider focused on the large commercial property market. Its operations are globally diversified and mostly in developed markets that we typically view as having intermediate industry risk due to the property/casualty (P/C) sector's inherent product risk in these markets.

We base our very strong assessment of FM Global's competitive position on its strong reputation and major presence in the large commercial property market. Its highly regarded reputation for engineering expertise in assessing client risks to prevent and mitigate losses gives it a significant commercial advantage over competitors, as shown by its high client retention and generally favorable underwriting performance. FM Global underwriters and claim adjusters are predominantly trained risk engineers with substantial technical expertise, supporting a deep-rooted engineer-focus risk culture. Client retention is enhanced by the membership credits given to policyholders in years when FM Global's operating performance and capital position are strong. These credits are based in part on their tenure as policyholders with the company.

FM Global's underwriting results have historically been favorable, as demonstrated by a 10-year (2012-2021) average combined ratio of about 92.5%. But historical performance has been significantly affected by catastrophe events in 2017 and 2018, which pushed the combined ratio close to 130% in both years before falling to about 82% in 2021 and 70% in the first nine months of 2022. Its most recent five-year (2017-2021) average combined ratio is 100.0%, highlighting the volatility inherent in its business concentration. We expect that another year of below average losses will lead the group to report a full-year combined ratio of around 70% in 2022. Projecting FM Global's underwriting performance is inherently difficult given the volatility of large losses and catastrophe-related losses, but we would expect the combined ratio on average to be around 95% (assuming about 30 percentage points in annual catastrophe losses).

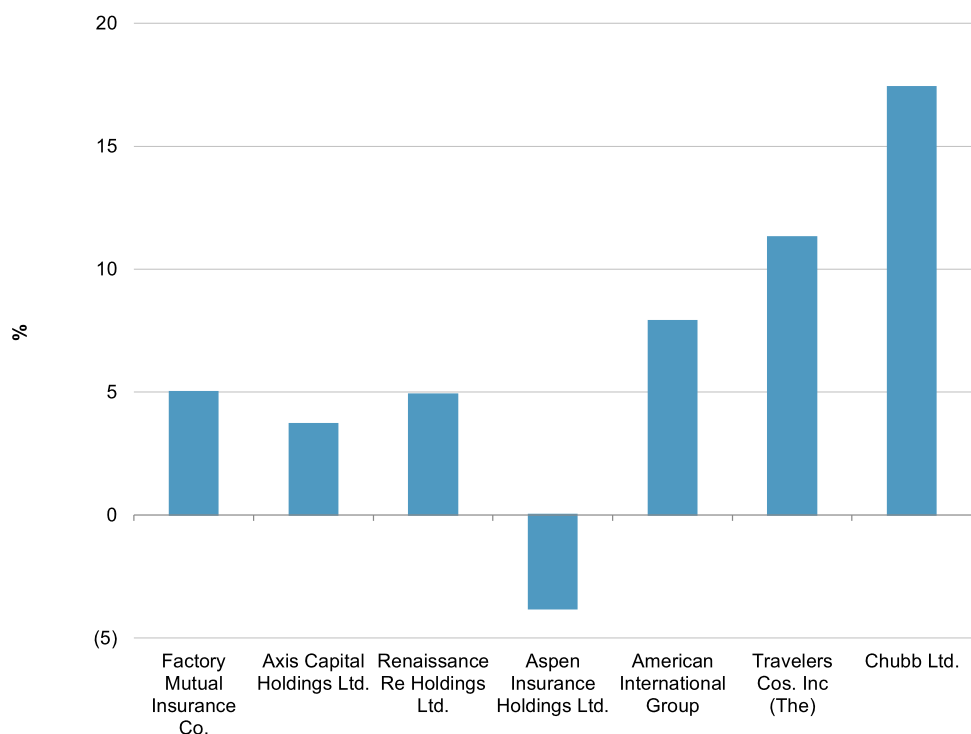
Chart 1
Combined Ratio Average (2017-2021)



Copyright © 2022 by Standard & Poor's Financial Services LLC. All rights reserved.

Chart 2

Return On Revenue Average (2017-2021)



Copyright © 2022 by Standard & Poor's Financial Services LLC. All rights reserved.

Financial Risk Profile: Strong

We view FM Global's capital adequacy as extremely strong, supported by strong earnings generation and its mutual insurer structure. We assess its capital redundancy as well into the 'AAA' range per our proprietary capital adequacy model. In our view, this mitigates the risk of substantial losses due to catastrophe events or a sharp decline in equity markets causing a significant decline in capital. While 2017 and 2018 underwriting and investment losses did not modify our capital assessment, we view the group's earnings volatility as partially offsetting its generally strong underwriting performance.

We regard FM Global's risk exposure as high, due to its large concentration in equity investments (around 43% of its investment portfolio as of year-end 2021, including private equity and equity-oriented hedge funds), significant exposure to catastrophic events, and some legacy asbestos and environmental exposure. Its high catastrophe exposure is a direct result of its large commercial property business concentration. While the group does have a high risk tolerance toward equities, the risk is partially offset by its diversification by issuer and sector.

As a mutual insurer it lacks access to the public equities markets, but FM Global has no debt in its capital structure,

consistently maintains sufficient levels of cash and short-term investments to avoid having to sell securities at an inopportune time to pay claims, and has access to large, highly rated reinsurers for capital support.

Other Key Credit Considerations

Governance

FM Global's senior management has maintained its longstanding strategy of providing extensive and competitive property insurance capacity to commercial, industrial, and institutional policyholders who share its commitment to proactive risk mitigation. FM Global believes the majority of losses are preventable, and it works diligently with its insureds to help foster best-in-class loss-prevention plans. Management has significant depth and breadth in the business, reflecting its tendency to promote from within the company.

Liquidity

FM Global's liquidity is exceptional, and we don't expect liquidity constraints to keep it from meeting its policyholder obligations due to its strong operating cash flows. As an alternative to dividends, FM Global provides a membership credit to policyholders when these are justified by strong underwriting results. Receipt of the credit is contingent upon renewal or anniversary of an existing policy and is paid to the policyholder as a reduction of their renewal premium for the coming year as membership credit. And more recently, the company has implemented a first-of-its-kind resilience credit for eligible FM Global policyholders to invest in climate risk improvement.

Environmental, social, and governance

ESG Credit Indicators

E-1	E-2	E-3	E-4	E-5	S-1	S-2	S-3	S-4	S-5	G-1	G-2	G-3	G-4	G-5
-----	-----	-----	------------	-----	-----	------------	-----	-----	-----	-----	------------	-----	-----	-----

ESG credit indicators provide additional disclosure and transparency at the entity level and reflect S&P Global Ratings' opinion of the influence that environmental, social, and governance factors have on our credit rating analysis. They are not a sustainability rating or an S&P Global Ratings ESG Evaluation. The extent of the influence of these factors is reflected on an alphanumerical 1-5 scale where 1 = positive, 2 = neutral, 3 = moderately negative, 4 = negative, and 5 = very negative. For more information, see our commentary "ESG Credit Indicators: Definition And Applications," published Oct. 13, 2021.

Environmental factors are a negative consideration in our credit rating analysis of FM Global. In our view, FM Global's potential earnings and capital volatility are high due to the nature of the insurance coverage FM Global provides. Because the company writes almost exclusively primary commercial property coverage with large limits, it is exposed to large individual losses from fires and accidents, as well as more widespread losses from natural catastrophe events. Therefore, underwriting results each year can fluctuate dramatically depending on the level of large loss or natural catastrophe activity. However, these risks are mitigated to a large degree by the company's substantial capital buffer at the 'AAA' level.

Related Criteria

- Criteria | Insurance | General: Insurers Rating Methodology, July 1, 2019
- General Criteria: Group Rating Methodology, July 1, 2019

- Principles Of Credit Ratings, Feb. 16, 2011
- Criteria | Insurance | General: Refined Methodology And Assumptions For Analyzing Insurer Capital Adequacy Using The Risk-Based Insurance Capital Model, June 7, 2010,

Appendix

Credit Metric History

Mil. \$	2021	2020
S&P Global Ratings capital adequacy	AAA	AAA
Total invested assets	25,361	22,124
Total shareholder equity	19,369	16,494
Gross premium written	7,959	7,205
Net premium written	5,799	5,092
Net premium earned	5,504	4,706
EBIT	3,483	2,161
Net income (attributable to all shareholders)	2,842	1,732
Return on revenue (%)	21.98	12.82
Return on assets (excluding investment gains/losses) (%)	4.79	2.68
Return on shareholders' equity (%)	15.85	11.15
Property/casualty: Net combined ratio (%)	82.17	91.82
Property/casualty: Net expense ratio (%)	25.65	26.35

Business And Financial Risk Matrix

Business risk profile	Financial risk profile							
	Excellent	Very Strong	Strong	Satisfactory	Fair	Marginal	Weak	Vulnerable
Excellent	aa+	aa	aa-	a+	a-	bbb	bb+	b+
Very Strong	aa	aa/aa-	aa-/a+	a+/a	a-/bbb+	bbb/bbb-	bb+/bb	b+
Strong	aa-/a+	a+/a	a/a-	a-/bbb+	bbb+/bbb	bbb-/bbb-	bb-/bb-	b+/b
Satisfactory	a	a/a-	a-/bbb+	bbb+/bbb	bbb/bbb-	bb+/bb	bb-/b+	b/b-
Fair	a-	a-/bbb+	bbb+/bbb	bbb/bbb-	bbb-/bb+	bb/bb-	b+/b	b-
Weak	bbb+/bbb	bbb/bbb-	bbb-/bb+	bb+/bb	bb/bb-	bb-/b+	b/b-	b-
Vulnerable	bbb-/bb+	bb+/bb	bb/bb-	bb-/b+	b+/b	b/b-	b-	b-

Note: Where table indicates two possible outcomes, we determine the anchor as follows: For financial risk profiles that we assess as satisfactory or stronger, we consider the relative strength of both the business risk and financial risk profiles within the cell. This is based on a holistic assessment of the relative strengths of the rating factors of the business risk profile and financial risk profile. For financial risk profiles that we assess as fair or weaker, we typically place more weight on the relative strength of the rating factors of the financial risk profile.

Ratings Detail (As Of November 8, 2022)*

Operating Companies Covered By This Report

Factory Mutual Insurance Co.

Financial Strength Rating

Local Currency

A+/Stable/--

Ratings Detail (As Of November 8, 2022)*(cont.)

Issuer Credit Rating	
<i>Local Currency</i>	A+ / Stable / --
Affiliated FM Insurance Co.	
Financial Strength Rating	
<i>Local Currency</i>	A+ / Stable / --
Issuer Credit Rating	
<i>Local Currency</i>	A+ / Stable / --
F.M. Insurance Co. Ltd.	
Financial Strength Rating	
<i>Local Currency</i>	A+ / Stable / --
Issuer Credit Rating	
<i>Local Currency</i>	A+ / Stable / --
FM Insurance Europe S A	
Financial Strength Rating	
<i>Local Currency</i>	A+ / Stable / --
Issuer Credit Rating	
<i>Local Currency</i>	A+ / Stable / --
Domicile	Rhode Island

*Unless otherwise noted, all ratings in this report are global scale ratings. S&P Global Ratings' credit ratings on the global scale are comparable across countries. S&P Global Ratings' credit ratings on a national scale are relative to obligors or obligations within that specific country. Issue and debt ratings could include debt guaranteed by another entity, and rated debt that an entity guarantees.

Copyright © 2023 by Standard & Poor's Financial Services LLC. All rights reserved.

No content (including ratings, credit-related analyses and data, valuations, model, software or other application or output therefrom) or any part thereof (Content) may be modified, reverse engineered, reproduced or distributed in any form by any means, or stored in a database or retrieval system, without the prior written permission of Standard & Poor's Financial Services LLC or its affiliates (collectively, S&P). The Content shall not be used for any unlawful or unauthorized purposes. S&P and any third-party providers, as well as their directors, officers, shareholders, employees or agents (collectively S&P Parties) do not guarantee the accuracy, completeness, timeliness or availability of the Content. S&P Parties are not responsible for any errors or omissions (negligent or otherwise), regardless of the cause, for the results obtained from the use of the Content, or for the security or maintenance of any data input by the user. The Content is provided on an "as is" basis. S&P PARTIES DISCLAIM ANY AND ALL EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR USE, FREEDOM FROM BUGS, SOFTWARE ERRORS OR DEFECTS, THAT THE CONTENT'S FUNCTIONING WILL BE UNINTERRUPTED OR THAT THE CONTENT WILL OPERATE WITH ANY SOFTWARE OR HARDWARE CONFIGURATION. In no event shall S&P Parties be liable to any party for any direct, indirect, incidental, exemplary, compensatory, punitive, special or consequential damages, costs, expenses, legal fees, or losses (including, without limitation, lost income or lost profits and opportunity costs or losses caused by negligence) in connection with any use of the Content even if advised of the possibility of such damages.

Credit-related and other analyses, including ratings, and statements in the Content are statements of opinion as of the date they are expressed and not statements of fact. S&P's opinions, analyses and rating acknowledgment decisions (described below) are not recommendations to purchase, hold, or sell any securities or to make any investment decisions, and do not address the suitability of any security. S&P assumes no obligation to update the Content following publication in any form or format. The Content should not be relied on and is not a substitute for the skill, judgment and experience of the user, its management, employees, advisors and/or clients when making investment and other business decisions. S&P does not act as a fiduciary or an investment advisor except where registered as such. While S&P has obtained information from sources it believes to be reliable, S&P does not perform an audit and undertakes no duty of due diligence or independent verification of any information it receives. Rating-related publications may be published for a variety of reasons that are not necessarily dependent on action by rating committees, including, but not limited to, the publication of a periodic update on a credit rating and related analyses.

To the extent that regulatory authorities allow a rating agency to acknowledge in one jurisdiction a rating issued in another jurisdiction for certain regulatory purposes, S&P reserves the right to assign, withdraw or suspend such acknowledgment at any time and in its sole discretion. S&P Parties disclaim any duty whatsoever arising out of the assignment, withdrawal or suspension of an acknowledgment as well as any liability for any damage alleged to have been suffered on account thereof.

S&P keeps certain activities of its business units separate from each other in order to preserve the independence and objectivity of their respective activities. As a result, certain business units of S&P may have information that is not available to other S&P business units. S&P has established policies and procedures to maintain the confidentiality of certain non-public information received in connection with each analytical process.

S&P may receive compensation for its ratings and certain analyses, normally from issuers or underwriters of securities or from obligors. S&P reserves the right to disseminate its opinions and analyses. S&P's public ratings and analyses are made available on its Web sites, www.standardandpoors.com (free of charge), and www.ratingsdirect.com and www.globalcreditportal.com (subscription), and may be distributed through other means, including via S&P publications and third-party redistributors. Additional information about our ratings fees is available at www.standardandpoors.com/usratingsfees.