January 18, 2023

This report does not constitute a rating action.

Key Takeaways

- We look at what disruption means for the world out to 2030.
- Governments face a ticking financial clock from aging populations.
- The chaotic end of zero-COVID in China is unlikely to hamper a gathering recovery.

The geopolitical order, global economy, and capital markets are being reshaped by a cascading series of disruptions: pandemic, war, inflation, extreme weather, the collapse of cryptocurrencies, supply chain chaos, and energy disruption. In our first issue of *Look Forward*, our economists, analysts, researchers, and data experts take the long view to consider what this era of instability means. They focus on energy security, climate and sustainability, technology and digital disruptions, supply chains, capital markets, and geopolitical shocks.

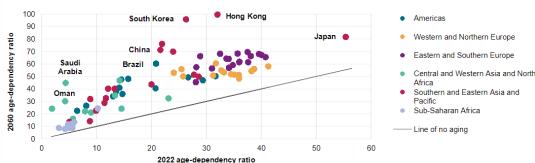
Look Forward: A World In Disruption

Governments worldwide face a ticking clock as the global population grows increasingly older.

It was announced this week that China's population has fallen for the first time since 1961. We expect the old-age dependency ratio (the number of elderly population relative to the working age population) will worsen in every country covered in our global aging report, with no exceptions. For most sovereigns, demographers expect the old-age dependency ratio will go further and double by 2060. In the absence of policy action to cut age-related spending, the median net general government debt will rise to 101% of GDP in advanced economies and 156% of GDP in emerging economies by 2060, from an estimated 44% and 48%, respectively, in 2025. In such a scenario, just over half of the 81 sovereigns we have analyzed would have credit metrics that we associate with speculative-grade sovereign credit ratings ('BB+' or below) by 2060.

Executive Summary: Global Aging 2023





We don't expect China's abrupt abandonment of its zero-COVID policy and the consequent surge in cases to cast a long shadow on economic prospects for 2023. S&P Global Ratings believes the accelerated reopening of the economy and end of zero-COVID keeps GDP on a path

Contacts

Gareth Williams

London Head of Corporate Credit Research +44-20-7176-7226 gareth.williams@spglobal.com

Gregoire Rycx

Paris Senior Analyst gregoire.rycx@spglobal.com

Gregg Lemos-Stein

New York
Chief Analytical Officer,
Corporate Ratings
+1-212-438-1809
gregg.lemos-stein@spglobal.com

Joe Maguire

New York Lead Research Analyst joe.maguire@spglobal.com



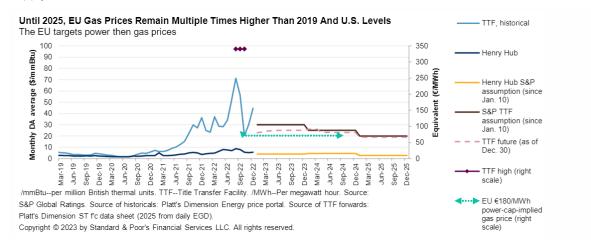
for 4.8% growth this year, with private consumption likely to recover strongly. Mobility is already increasing after December's surge in infections, and we forecast 5.8% retail sales growth (expetroleum) for China in 2023. The re-opening of China's economy will increase price pressures domestically and globally. But China's consumer inflation is likely to rise much less than in the U.S. and Europe in 2022.

Economic Research: China's Earlier Policy Shift Advances Its Recovery
China Retail Outlook 2023: More Bricks, Fewer Clicks
China's Defaulted Developers Hope For The Best, Prepare For The Worst

Real-time economic indicators pointed to a further deceleration in U.S. economic activity this month. Household spending moderated over the holidays owing to high prices and borrowing costs. But lower gasoline prices, now down 35% from the all-time high, have helped improve people's moods in January. Pricing pressure has moderated according to a number of real-time indicators we track. In December, overall CPI and core CPI, excluding food and fuel, were down 0.1% and up 0.2%, respectively, on a month-over-month basis, and year-over-year readings fell further below their respective August and September peaks. Less positively, the U.S. Services PMI slipped into contraction territory (to 49.6) for the first time since May 2020, while the U.S. Manufacturing PMI remained in contraction territory for two straight months.

S&P Global Ratings has lowered 2023 European and U.S. gas price assumptions. The European 2023 price revision primarily reflects the steady, and above-expectation, underlying reduction in Europe's demand for natural gas, which we estimate exceeded 20% over August-December 2022. We expect much of this demand reduction, which was material even with normalized temperatures, to be sustainable. Even so, European gas prices are likely to remain multiple times higher than their U.S. equivalent, adding to competitive pressures on European industry.

<u>S&P Global Ratings Lowers 2023 European And U.S. Gas Price Assumptions On More Balanced</u> <u>Supply And Demand</u>



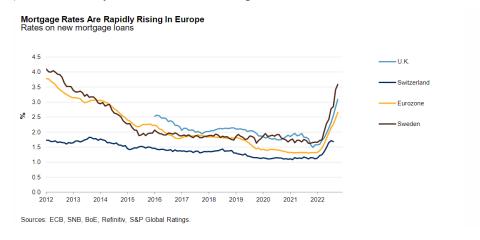
Global Structured Finance 2023 Outlook. Global structured finance issuance fell about 29% last year, as high inflation, volatile interest rates, and geopolitical uncertainty kept issuers on the sidelines. We expect these conditions to continue to hamper issuance. Our 2023 global issuance forecast is down about 7% year over year. An expected slowdown in global economic growth, with a mild recession projected in the U.S. and EMEA, will likely affect segments of both the consumer and commercial sectors underlying major structured finance asset classes. This year, we anticipate delinquency and net loss rates will trend upward from low bases across most asset classes as growth slows and unemployment edges higher. We anticipate some ratings stress, albeit primarily in speculative-grade categories.

spglobal.com/ratings January 18, 2023

A more severe than forecast recession, especially as it affects the employment picture, would naturally lead to more ratings movement higher up in capital structures. We also expect areas of focus to revolve around the strength of global housing markets and the potential magnitude of home price declines, the effect of the forthcoming economic slowdown(s) on leveraged loan and CLO credit quality, and the fundamentals of global office markets.

Global Structured Finance 2023 Outlook

We forecast a decline--but no crash--in house prices in most European countries this year, and through 2024 for others, with few if any prospects of a strong rebound through 2025. House prices are likely to suffer from rapidly rising mortgage rates and will take time to adjust fully, with some countries taking longer than others. We have found that such an adjustment could last up to 10 quarters and is typically twice as pronounced as after a low-rate regime. That said, the past has shown that housing prices in Europe are quite inelastic to decline. And today's drivers (such as limited supply, a strong labor market, high household wealth, and what appear to be shifts in preferences) may lessen the effect of rising interest rates.



Economic Research: European Housing Prices: A Sticky, Gradual Decline

Over the next decades, we think rising temperatures will be a bigger hurdle for emerging markets and developing economies than for advanced economies. Emerging markets and developing economies (EMDEs) contribute less than 14% of global greenhouse gas emissions but are among the most exposed to and least ready to cope with the effects of climate change. Recent extreme weather events serve as a reminder that climate change is intensifying. In a recent study, S&P Global estimates that, even if all countries meet their current climate policy pledges, low- and middle-income nations could face losses equivalent to 12% of GDP by 2050, compared with 3% for high- and upper-middle income countries.

Is Climate Change Another Obstacle To Economic Development?

We continue to believe the sustainable debt market will help advance sustainability goals

despite the challenges posed by persistent inflation and economic uncertainty. As new sustainability disclosure standards come into effect around the globe, stakeholders will have to grapple with the complexity and potential challenges regarding alignment of these initiatives. The increasing risk of environmental, social and governance (ESG)-related litigation, including over sustainability disclosure, will be another challenge for companies and investors to navigate.

Key sustainability trends that will drive decision-making in 2023

spglobal.com/ratings January 18, 2023

Asset Class Highlights

Corporates

Notable publications include:

- China Retail Will Shift Toward More Bricks, Fewer Clicks In 2023
- <u>U.S. Media & Entertainment Industry: Pouring Recessionary Gasoline On A Secular Fire, 2023</u> Edition
- <u>U.S. Telecom And Cable Sector Will Remain Calm Amid A Sea Of Recession Uncertainty In</u> 2023
- Assessing The Impact Of Higher Interest Rates On U.S. Media And Entertainment Companies Rated 'B-'
- S&P Global Ratings Lowers 2023 European And U.S. Gas Price Assumptions On More Balanced Supply And Demand
- China Consumer Products And Retail: Sales Pick Up As COVID Controls Wind Down
- Look Forward: A World In Disruption
- Industry Credit Outlook: EMEA Utilities 2023 Outlook: Eastern Europe: Credit Resilience

 Despite Increasing Affordability Concerns
- China's Widening Property-Sector Support Takes Aim At Balance Sheets
- Outlook For U.S. Public Power And Electric Cooperatives: Essentiality And Strategic Planning
 Temper Challenges

Financial Institutions

- In North America, we lowered the long-term issuer credit rating and senior unsecured debt ratings on crypto exchange Coinbase Global Inc. to 'BB-' from 'BB'. The outlook is negative. Coinbase's trading volumes have weakened meaningfully in the aftermath of the collapse of cryptocurrency exchange FTX (unrated) and regulatory risk is rising, in our view. We expect profitability to remain pressured in 2023, despite the recently announced reduction in operating expenses and tailwinds from rising interest rates.
- In LATAM, following a similar rating action on the sovereign, we revised rating outlook of 4
 Peruvian banks to negative from stable. We rarely rate financial institutions higher than the
 sovereign where they operate because we consider it unlikely that these institutions would
 remain unaffected by developments in domestic economies.
 - We also downgraded Mexico-based nonbank financial institutions, Mexarrend S.A.P.I de C.V. to 'CCC-' from 'CCC+'. We believe that Mexarrend S.A.P.I. de C.V.'s liquidity may have weakened over the last couple of months as access to financing remains challenging for the company, given the currently tight credit conditions for Mexico's nonbank financial institution sector. Additionally, we haven't received an updated strategy from the company to address its upcoming market debt maturities.
- We published several reports over the past few weeks including:
 - How Unrealized Losses On Securities Affect U.S. Bank Ratings. Rising interest rates have benefited U.S. banks' net interest income but led to declines in the fair value of securities held on the balance sheet. Unrealized losses on

Chief Analytical Officers

Corporate

Gregg Lemos-Stein

gregg.lemos-stein@spglobal.com

Financial Institutions

Alexandre Birry

alexandre.birry@spglobal.com

Infrastructure

Karl Nietvelt

karl.nietvelt@spglobal.com

Insurance

Simon Ashworth

simon.ashworth@spglobal.com

Sovereign

Roberto Sifon-Arevalo

roberto.sifonarevalo@spglobal.com

Structured Finance

Winston Chang

winston.chang@spglobal.com

U.S. Public Finance

Robin Prunty

robin.prunty@spglobal.com

investment securities have added somewhat to liquidity, capital, and confidence-sensitivity risks. We view the added risks as manageable for most banks, but we could take negative rating actions if the risk grows that unrealized losses will ultimately meaningfully weaken funding, liquidity, or capital.

- o <u>U.S. Banks Outlook 2023: A Strong Banking System Prepares For A Weakening Economy</u>. U.S. banks should earn a return on equity in the high-single or low-double digits in 2023, helped by higher interest rates. After rising close to a projected 20% in 2022, net interest income should increase by more than 10% this year, helping banks offset pressure on fee income and expenses.
- Japan Banking Outlook 2023: The Impact Of Raising Interest Rates.

 Accumulated capital, low nonperforming loan ratios, and our base-case growth forecast for the Japanese economy mean 2023 is likely to be a stable year for banks her. However, our global economic base case may not hold. Plenty, such as the inflation trend, is tinged with uncertainty.
- o The 2023 Credit Outlook For U.K. Banks: Higher Rates Buttress Earnings As Loan Losses Rise. Weak economic conditions will test U.K. banks in 2023, but rising interest rates should continue to bolster earnings. We project that U.K. banks' credit impairment charges will rise above the historical average in 2023 due to a multiquarter domestic recession.
- o <u>Italian Banks Outlook 2023: Prepared For Challenges Ahead.</u> Italian banks' financial strength will help them withstand 2023's challenges, including an economic downturn, potentially volatile credit markets, and the end of cheap and stable European Central Bank funding.
- o Rating Component Scores For The Top 200 Banks Globally--January 2023.
- o Rating Component Scores For U.S., Canadian, And Bermudian Banks (December 2022)

Sovereign

States of Guernsey Ratings Lowered To 'A+/A-1' On Eroded Asset Buffer; Outlook Stable

spglobal.com/ratings January 18, 2023

Structured Finance

U.S. CMBS:

U.S. CMBS - December 2022 Key Insights



Note: Arrows indicate directional change in rate compared to the previous month, YTD—Year-to-date, DQ—Delinquency, SS—Special servicing, Bps—Basis points, Source; S&P Global Ratings,

See "<u>SF Credit Brief: U.S. CMBS Delinquency Rate Rose 6 Bps But Remained Steady At 2.6% In December</u>" published Jan. 5, 2023.

- U.S. Credit Card ABS: We recently published an article on January 3, 2023: "U.S. Credit Card Quality Index: Monthly Performance--November 2022". The CCQI is a monthly performance index that aggregates performance information of securitized credit card receivables in the following key risk areas: receivables outstanding, yield, payment rate, charge-off rate, delinquencies, base rate, and excess spread rate.
- Australia and New Zealand ABS: See "ABS Performance Watch: Australia and New Zealand" on Jan. 12, 2023.
- Global Structured Finance Outlook: On Jan. 11, 2023, we published our "Global Structured Finance 2023 Outlook". Here are a couple "Key Takeaways" from that article:
 - o Global structured finance issuance fell about 29% in 2022, and the declines were generally uniform in the largest global markets as high inflation, volatile interest rates, and geopolitical uncertainty kept issuers on the sidelines. We expect these conditions to continue to hamper issuance. Our 2023 global issuance forecast is down about 7% year-over-year.
 - An expected slowdown in global economic growth, with a mild recession projected in the U.S. and EMEA, is likely to affect segments of both the consumer and commercial sectors underlying major structured finance asset classes.
 - Throughout 2022, the largest global labor markets remained generally resilient, with unemployment in check. We did not observe meaningful weakening of collateral performance across most structured finance sectors. In 2023, we anticipate delinquency and net loss rates will trend upward from low bases across most asset classes as economic growth slows and unemployment rates edge higher.

- In 2023, we anticipate some ratings stress, albeit primarily in speculative-grade categories. A more severe than forecast recession, especially as it affects the employment picture, would naturally lead to more ratings movement higher up in capital structures.
- o We also expect areas of focus to revolve around the strength of global housing markets and the potential magnitude of home price declines, the effect of the forthcoming economic slowdown(s) on leveraged loan and CLO credit quality, and the fundamentals of global office markets, to name a few.
- European Structured Finance Outlook: Record inflation and rising interest rates spell mounting pressure on collateral performance in consumer-related securitizations, although resilient labor markets may help cushion the blow. For corporate-backed transactions, credit prospects will also be dimmer in 2023, although we expect only a moderate rise in the speculative-grade corporate default rate. According to an S&P Global Ratings report published on Jan. 12, 2023, "European Structured Finance Outlook 2023: Close to The Edge," although the effects of higher prices and interest rates could put pressure on structured finance ratings, they have remained largely stable through recent periods of stress, such as the pandemic.

We have on Jan. 12, 2023 also published sector-specific outlooks for European ABS and RMBS (see "<u>European ABS Outlook 2023: Under Pressure</u>" and "<u>European RMBS Outlook 2023: Permafrost Or Thaw?</u>").

European securitization issuance may remain flat at about €80 billion in 2023, given greater interest rate certainty and normalizing monetary policy but muted underlying lending and a smaller call pipeline.

Borrower sentiment and lender risk appetite are both at a low ebb, suggesting that the volume of credit originations that could act as new securitization collateral may be slow to recover from current depressed levels. The wind-down of central banks' cheap term funding schemes may support more bank-originated supply, although most have sufficient liquidity to repay their borrowings without tapping capital markets.

- China Structured Finance Outlook: Here are a couple "Key Takeaways" from a recent article: We expect issuance in China's structured finance market to expand by a tepid 4% in 2023, as the economy gradually recovers after COVID restrictions are loosened. Issuance prospect will depend on the fundamentals of the respective sectors as the COVID impact fades. Collateral performances will continue to hold up across auto ABS, RMBS, and credit card ABS that we rate. Important sector trends to watch are the resumption timing of RMBS issuance, the issuance trajectory of consumer ABS and green auto ABS, to name a few. See "China Structured Finance Outlook 2023: Issuance Likely To Slowly Stir" published Jan. 11, 2023.
- Japan Structured Finance Outlook: Here are a couple "Key Takeaways" from a recent article: We expect Japan's economy to continue growing moderately in 2023, albeit at a slower pace due to a global recession. Performance of personal loans will likely remain generally stable, supported by low unemployment. Assets backing apartment loan RMBS and CMBS will likely somewhat underperform, while others will be stable. Overall, rating trends will generally remain stable. See "Japan Structured Finance Outlook: Economic Growth To Shield Performance" published Jan. 12, 2023.

U.S. CLO:

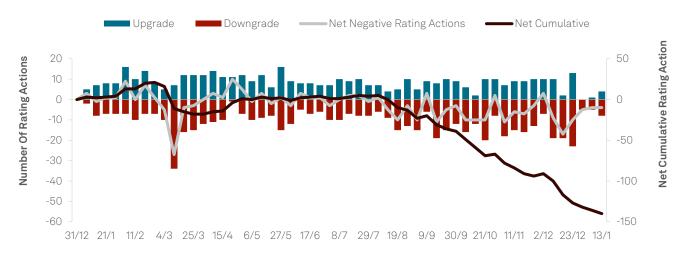


See "SF Credit Brief: CLO Insights U.S. BSL Index 2022 Wrap Up: Credit Metrics Deteriorated Slightly, But Par Gains And Healthy O/C Test Cushions Should Help In 2023" published Jan. 12, 2023.

- U.S. Auto ABS: Here are a couple "Key Takeaways" from a recent article: U.S. ABS prime and subprime performance saw mixed month-over-month performance in November. Prime transactions reported lower losses and improved recoveries, while subprime transactions reported higher losses and lower recoveries. Year-over-year performance declined for both. Prime and subprime delinquencies increased month over month and year over year--and were even higher than the November 2019 pre-pandemic levels--due to seasonal factors and early signs of consumer financial stress. Prime and subprime extension rates declined month over month from the elevated levels caused by Hurricane Ian, but they continued to exceed the year-over-year and November 2019 pre-pandemic levels. In December, we lowered our expected cumulative net loss levels on 28 U.S. ABS and three Canadian ABS transactions. The U.S. transactions saw 25 upgrades and 65 affirmations, while the Canadian transactions saw three upgrades and 10 affirmations. There were no downgrades. See " U.S. Auto Loan ABS Tracker: November 2022 Performance" published Jan. 11, 2023.
- Australia RMBS: Australian prime and nonconforming home-loan arrears rose in November. That's according to S&P Global Ratings' recently published (Jan. 11, 2023) "RMBS Arrears Statistics: Australia." The Standard & Poor's Performance Index (SPIN) for Australian prime mortgages excluding noncapital market issuance increased in November to 0.65% from 0.60% in October. Nonconforming arrears continued to rise, reaching 2.66% compared with 2.56% a month earlier. Across the prime sector, arrears increases were more pronounced in the earlier arrears category of 31 to 60 days. In the nonconforming sector, arrears increases were more pronounced in the more advanced 61- to 90-day category. This reflects loans transitioning through arrears categories. Arrears in the nonconforming sector have been increasing since July. It's still too early to observe these transitions in the prime sector, which began its upward arrears trajectory in October. "RMBS Arrears Statistics: Australia" provides a comprehensive analysis of arrears statistics on loans underlying Australian RMBS.

spglobal.com/ratings January 18, 2023

Chart 1
Global Rating Action During 2022 And 2023 YTD



Source: S&P Global Ratings. Net negative rating actions means downgrades minus upgrades. Net cumulative means total net negative rating action. Data as of Jan 13, 2022. Global rating actions include actions on both financial and non-financial corporates and sovereign issuers.

Table 1

Recent Rating Actions

Date	Action	Issuer	Industry	Country	То	From	Debt vol (mil. \$)
13-Jan	Downgrade	Qurate Retail Inc	Retail/Restaurants	U.S.	B-	B+	7,602
11-Jan	Downgrade	Coinbase Global Inc.,	NBFI	U.S.	BB-	BB	2,000
13-Jan	Upgrade	Bach Finance Ltd.	Consumer Products	Cayman Islands	В	B-	1,630
10-Jan	Downgrade	WIN Waste Innovations Holdings Inc.	Chemicals, Packaging & Environmental Services	U.S.	В	B+	1,000
11-Jan	Upgrade	Talcott Resolution Life Inc.,	Insurance	U.S.	BB+	BB	949
12-Jan	Downgrade	City Brewing Co., LLC (Blue Ribbon Holdings LLC)	Consumer Products	U.S.	CCC	B-	850
13-Jan	Downgrade	Martin Midstream Partners L.P.	Utilities	U.S.	CCC	B-	691
12-Jan	Upgrade	Stena AB	Oil & Gas	Sweden	BB-	B+	600
9-Jan	Upgrade	WH Intermediate, LLC	Consumer Products	U.S.	В	B-	600
13-Jan	Downgrade	States of Guernsey	Sovereign	Guernsey	A+	AA-	400

Source: S&P Global Ratings. Data as of Dec. 2, 2022. U.S. means United States and U.A.E. means United Arab Emirates. NBFI - NonBank Financial Institutions (ex. Insurance).

For further credit market Insights, please see our This Week In Credit newsletter.



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, 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&Ps 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 acknowledgement 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 nonpublic 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.spglobal.com/ratings (free of charge) and www.ratingsdirect.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.spglobal.com/ratings/usratingsfees.

STANDARD & POOR'S, S&P and RATINGSDIRECT are registered trademarks of Standard & Poor's Financial Services LLC.