

# RatingsDirect®

---

## IBG LLC

**Primary Credit Analyst:**

Thierry Grunspan, Columbia + 1 (212) 438 1441; thierry.grunspan@spglobal.com

**Secondary Contact:**

Robert B Hoban, New York + 1 (212) 438 7385; robert.hoban@spglobal.com

### Table Of Contents

---

Ratings Score Snapshot

Credit Highlights

Outlook

Anchor: Reflects U.S. Securities Firms' Economic And Industry Risks

Business Position: A Growing Brokerage Business With Lower Recurring Revenue

Capital And Earnings: Very Strong Risk-Adjusted Capital

Risk Position: Excess Capital Helps Offset Risks

Funding And Liquidity: A Highly Liquid Balance Sheet And Solid Funding

Additional Rating Factors

Key Statistics

Related Criteria

# IBG LLC

## Ratings Score Snapshot

**Issuer Credit Rating**  
 BBB+/Stable/--

**SACP: a-**      **Support: 0**      **Additional factors: -1**

Anchor	bbb-		ALAC support	0	<b>Holding company ICR</b>  <b>BBB+/Stable/--</b>
Business position	Adequate	0			
Capital and earnings	Very strong	+2			
Risk position	Adequate	0			
Funding	Adequate	0			
Liquidity	Adequate				
CRA adjustment	+1		Sovereign support	0	

ALAC--Additional loss-absorbing capacity. CRA--Comparable ratings analysis. GRE--Government-related entity. ICR--Issuer credit rating. SACP--Stand-alone credit profile.

## Credit Highlights

### Overview

Key strengths	Key risks
Very strong capitalization.	Some operational risk from its complex, model-driven options market-making business.
A modest risk appetite.	Sensitivity to change in brokerage customers' confidence.
Geographic growth.	Recurring revenue that is lower than that of some of its peers.
A low-cost brokerage business.	

*Our ratings on IBG LLC and subsidiary Interactive Brokers LLC reflect the firm's strong market position, its strong capitalization, a positive earnings trend, and its adequate funding and liquidity.* We believe the highly competitive and transactional nature of the business, along with the confidence-sensitive nature of institutional trading, partly offsets these strengths.

*The company is well positioned amid elevated interest rates.* Higher rates propelled net interest income in 2023 and the first quarter of 2024.

*IBG's risk-adjusted capital (RAC) ratio of 31.8% as of Dec. 31, 2023, illustrates very strong capitalization.* This remains the highest RAC ratio among the securities firms we rate--a key rating strength.

## Outlook

The stable outlook reflects S&P Global Ratings' expectation that IBG will continue to operate with a focus on the less confidence-sensitive retail segment while maintaining strong profitability. We also expect that the firm will maintain its RAC ratio well above 25%, its gross stable funding ratio (GSFR) in excess of 110%, and solid liquidity.

### Downside scenario

Over the next 12-24 months, we could lower the ratings on IBG if:

- Profitability eroded substantially,
- The firm suffered material losses or an increase in risk,
- Its commitment to strong capitalization unexpectedly eroded (for example, following a large acquisition), or
- Liquidity deteriorated.

### Upside scenario

We see little upgrade potential over the outlook horizon, given the relatively high rating and the firm's smaller franchise relative to those of its higher-rated peers.

## Anchor: Reflects U.S. Securities Firms' Economic And Industry Risks

The 'bbb-' anchor for securities firms rated in the U.S. reflects both risks shared with the banking sector and risks specific to the U.S. securities sector.

Our 'bbb+' U.S. bank anchor reflects our view of economic risk from the U.S.'s diversified, high-income, and resilient economy. We have a stable trend on economic risk, as our economists expect the U.S. economy to grow relatively slowly in 2024 as inflation falls closer to the Federal Reserve's target, potentially allowing for rate cuts in the second half of the year. Our view of banking industry risk balances the regulatory enhancements made after the global financial crisis, the relatively good risk-adjusted profitability of the banking system, and the country's deep capital markets against its history of periodic financial crises and the complexity of the financial and regulatory system. The trend on industry risk is stable, reflecting further enhancements to regulation that are likely to follow the bank failures in the first half of 2023, a declining but still high share of deposit funding, and our expectation that banks will continue to generate sufficient risk-adjusted profits to build capital (see "Banking Industry Country Risk Assessment: U.S.," published Oct. 12, 2023).

The securities firm anchor is two notches below the bank anchor to reflect our view of the sector's incrementally higher industry risk relative to banks. These include lower, but still material, regulatory oversight and institutional framework; higher competitive risk; and typically, less stable, more transactional revenue. Also, even accounting for the liquidity of domestic capital markets, differences in assets, and the U.S. investor insurance scheme (The Securities Investor Protection Corp.), funding risk for securities firms is higher than for banks, in our view, because securities firms typically lack central bank access.

## Business Position: A Growing Brokerage Business With Lower Recurring Revenue

We believe IBG has a solid market position as a global electronic broker to direct and indirect retail as well as small institutional clients. It allows clients to trade exchange-listed options, stocks, bonds, foreign exchange, futures, and mutual funds at more than 150 market centers worldwide. IBG is the leader in daily average revenue trades (DARTs) per account among the U.S. brokers that report DARTs, and it has grown client assets much more rapidly than its peers. However, with \$465.9 billion in total client equity as of March 31, 2024, IBG remains much smaller than some of its rated U.S. retail discount brokerage peers.

The firm's mix of business has shifted from market-making to brokerage, which now accounts for 99% of revenue. The company retains some options market-making outside the U.S., as well as some offerings in specific products (such as some "delta one" products).

IBG offers brokerage clients a high-functionality platform. The firm has differentiated its platform to serve the specific needs of its customer segments beyond retail traders and investors, including introducing brokers, registered investment advisers, and institutional clients like hedge funds. The capabilities of the firm's trading platform, its tailored ability to meet the needs of a broad variety of client types, its aggressive pricing, and its geographic expansion continue to foster strong growth in the electronic brokerage business, with total accounts up 25% while customer equity was up 36% year over year as of the end of March 2024.

The contribution of trading-related income (mostly commissions on customers' transactions), which we view as potentially less stable than contractually recurring fees and stable sources of net interest income, is higher at IBG than at most rated retail brokerage peers. The firm's main source of revenue other than trading is net interest income. In light of the most recent rate cycle, IBG's net interest income grew 17% year over year to \$747 million in the first quarter of 2024. The company continues to benefit as rate hikes add incremental revenue (about \$58 million for every 25-basis-point hike in the U.S., primarily from higher net interest income on some margin loans and brokerage cash balances below \$10,000).

Unlike most of its peers, IBG largely passes through Federal Reserve rate hikes to most U.S. customers (specifically, those maintaining cash balances of more than \$10,000). As a result, the sensitivity of net interest income to a change in rates is lower than it is for peers, but total cash credit balances have been more stable than they've been for peers (most of which have experienced double-digit percentage declines) since the beginning of 2022.

We believe retail customers, including direct retail customers and those served through registered investment advisers and introducing brokers, are more stable and less confidence-sensitive than institutional clients. Direct and indirect retail customers account for 56% and 21% of commissions, respectively (and for 43% and 40% of customer equity). We expect introducing brokers to become a bigger percentage of customer equity and commissions this year as IBG onboards more clients in this segment.

Unlike its purely retail peers, IBG has a significant number of hedge fund and proprietary trading clients, which accounted for 23% of IBG's commissions and 17% of client equity as of September 2023. The proprietary trading

segment saw the fastest commission growth in the first quarter of this year, and the company plans to consolidate and expand its hedge fund customer base by extending trading hours. We consider these clients more confidence-sensitive and higher risk.

That being said, IBG's hedge fund clientele is, for now, overwhelmingly made up of small entities, which are underserved by the major investment banks and which focus on simple products (such as margin loans, or securities lending or borrowing). This is a strong mitigating factor, and we would view negatively a material increase in the number of institutional clients trading complex products (such as over-the-counter derivatives).

Given its unique customer mix and response, IBG has been much less affected by leading discount brokers' move to reduce retail commissions on U.S. equities and exchange-traded funds and the per-trade commission on listed options to zero. Unlike competitors that have entirely switched to zero-commission offerings on cash equity and exchange-traded funds, IBG offers both a traditional low-commission (but not zero-commission) pricing option in IBKR Pro as well as a zero-commission option in IBKR Lite. For clients that choose IBKR Pro, IBG clears and executes their transactions without selling order flow to wholesale trading firms. By contrast, IBKR Lite generates revenue from payment for order flow and from higher margin rates and lower deposit rates that, in part, offset the zero commission.

The company claims that clients of IBKR Pro benefit from better execution prices compared with peers' prices. Because most clients choose IBKR Pro, we think the company is potentially less exposed than its peers to risks related to payment for order flows--an area that is under regulatory scrutiny.

Trading volumes at IBG have benefited from the surge in retail options trading in the U.S. since the start of the pandemic and, notably, from zero-day-to-expiration equity index options.

With operations spread across 33 countries in Europe, Asia, and the Americas, IBG has good and increasing geographic diversification. Its foreign operations include a small amount of market-making outside the U.S., but they mostly include electronic brokerage, as well as support clearing and customer service across multiple product types (predominantly exchange traded or settled). Brokerage clients from outside North America accounted for about 53% of client equity and 48% of commission revenue in September 2023, up from 51% and 49%, respectively, in 2022. A large proportion of IBG's international clients activity is in U.S.-listed stocks.

The 2019 promotion of longtime president Milan Galik to CEO addressed the issue of succession for founder and majority shareholder Thomas Peterffy, who continues as chairman of the board and remains closely involved in the business. We view favorably senior management's and ownership's commitment to very strong capitalization and a limited risk appetite, as well as their focus on lower-risk brokerage.

## **Capital And Earnings: Very Strong Risk-Adjusted Capital**

We view IBG's capitalization as very strong, given the expected RAC ratio (above 30%), management and ownership's commitment to maintaining conservative capital levels, and the firm's strong risk-adjusted earnings. As of Dec. 31, 2023, the RAC ratio was 31.8%, reflecting the firm's commitment to strong capitalization and limited payout. This is the strongest RAC ratio out of all the U.S. securities firms we rate.

Furthermore, the firm has no additional risks not covered in RAC, given the minimal levels of illiquid and Level 3 assets that it has. We expect the firm to continue to grow equity through good retention of earnings, with very limited stock buybacks and an annual capital payout ratio remaining well below 50% (despite the recent increase in the quarterly dividend to 25 cents per share). Interactive Brokers Group Inc.'s status as a public company gives IBG some flexibility to raise additional capital if needed.

At the same time, Peterffy's controlling ownership limits investor pressure to distribute capital. As of the end of December 2023, 25.4% of IBG LLC was ultimately owned by the public company, and 74.6% of it was owned by IBG Holdings LLC, an entity that Peterffy controls. At the end of the first quarter of 2024, IBG LLC had \$14.7 billion of total equity.

IBG's extensive use of technology gives it a low expense base, which enables it to be a low-cost provider while still generating pretax margins typically above 60%. At the end of March 2024, the company generated a 72% pretax margin. The company's earnings are also strong on a risk-adjusted basis, with three-year average core earnings to S&P Global Ratings' risk-weighted assets of 6.4%, higher than the peer average.

All of IBG's regulated subsidiaries have considerable excess regulatory capital--a total of \$10.2 billion as of Dec. 31, 2023.

## **Risk Position: Excess Capital Helps Offset Risks**

We believe the firm's good risk management, relatively modest risk appetite, and loss experience remain supportive of the rating, despite some periods with higher-than-peer losses on client margin loans.

In its brokerage business (including the prime brokerage business with hedge funds), IBG limits its credit risk and collateral-posting requirements by trading almost exclusively in listed or exchange-settled securities and cash foreign exchange. Cash foreign exchange, metals, and contracts for difference (CFD) transactions are done only with large, highly rated banks, and the company doesn't trade over-the-counter derivatives (except CFDs) with hedge fund clients.

For margin lending, the firm employs real-time margin compliance monitoring technology, which allows it to quickly liquidate customers' positions if their equity falls below margin requirements. Based on the firm's assessment of client exposures, concentration or leverage, and market conditions, it also limits exposure or client risk through its pricing, imposing additional limitations or increasing margin requirements.

We view IBG's management of its margin loan book (\$51.2 billion as of March 31, 2024) as adequate. For example, its total margin loan losses in 2021 were minuscule despite the high volatility in meme stocks that year. However, IBG has had some notable margin loan losses in the past. For example, it recognized an aggregate loss of approximately \$42 million on margin loans in the first quarter of 2019; it was related to some customers' large positions in a U.S.-listed company whose stock price dropped precipitously.

The firm also incurs some market risk from clients' options trading. For example, in a market crash scenario (with stock prices down or volatility up), clients selling put options might be unable to meet their financial commitments, putting IBG on the hook to counterparties (most likely clearinghouses) to absorb the losses.

We believe this risk is well monitored through adequate margining (with a "short option charge" that, in combination with other charges, pushes margins for short options traders higher than what clearinghouses would normally request), as well as through "exposure fees" that increase pricing for traders that would pose the highest risk to the company in a stress scenario. Nonetheless, clients' derivatives activity caused IBG to indemnify \$104 million of client losses in April 2020--losses that were related to an IBG system issue that prevented clients from seeing or acting on negative prices in West Texas Intermediate energy futures.

Aside from clients' derivatives trading positions, trading risk is small, with only \$1.1 billion of securities on the balance sheet as of March 31, 2024, although principal risk has slightly picked up following the launch of fractional shares trading for clients.

In partnership with Paxos Trust Co. and Zero Hash LLC, IBG allows clients to trade four crypto assets (bitcoin and ethereum among them), but it does not bear clearing or custody risks. Moreover, clients' crypto assets are at a very low level (\$289 million as of the end of March 2024).

Operational risk has fallen with the wind-down of most market-making operations, except in a few markets outside the U.S. Still, the use of proprietary models (that is, algorithms) and trading systems to execute a large volume of trades in the residual market-making segment exposes the firm to operational risk because a malfunctioning algorithm could result in the accumulation of undesired directional positions and expose the company to principal losses.

That being said, the strength of IBG's capitalization offsets the firm's exposure to low-probability, high-impact events; it has a cushion of approximately \$7.4 billion of total adjusted capital above our 15% RAC ratio threshold for very strong capitalization.

Unlike peers such as Charles Schwab that cash sweep a majority of brokerage cash to their own banks and invest in securities to grow net interest income (at the banks), IBG does not own a bank, and it deposits clients' cash at third-party banks (or invests into short-term U.S. Treasuries). As a result, it insulates itself from interest rate risk (and from rising rates, which may affect the value of the securities portfolio).

## **Funding And Liquidity: A Highly Liquid Balance Sheet And Solid Funding**

Our view of IBG's funding and liquidity incorporates its very liquid balance sheet, excess stable funding of its less liquid assets, and good liquidity management. IBG's GSNR--available stable funding to the illiquid portion of its assets--was solid at 204% as of Dec. 31, 2023.

While most of IBG's clients are more stable retail customers, we believe IBG's institutional customers (such as hedge funds) expose it to more customer confidence sensitivity than its purely retail peers, given the firm's reliance on client balances to support client activity.

IBG's liquidity coverage metric (LCM)--balance-sheet liquidity sources relative to balance-sheet liquidity needs--was 0.9x as of Dec. 31, 2023. The LCM is artificially low because, unlike at most other firms, IBG's securities borrowing and repo transactions are mostly not financing transactions. Furthermore, we believe IBG's practices and accounting for customer securities lending activity understate the firm's liquidity in the LCM, given that the collateral received on

securities-borrowed transactions is segregated for clients.

IBG has a highly liquid balance sheet composed of cash; margin loans; exchange-listed marketable securities, which are marked to market daily; segregated customer assets; receivables from customers; and margins posted at central counterparties. Illiquid assets are less than 10% of total adjusted capital, and less than 1% of assets are Level 3.

The firm is exposed to margin and collateral calls on its open exchange-traded derivatives positions (on behalf of clients) as well as its securities loaned and open client positions. It maintains significant unencumbered liquidity to offset its exposure to margin and collateral calls, including more than \$100 billion of re-pledgeable collateral available from securities lending transactions and customer margin assets. For example, IBG is allowed to pledge to Options Clearing Corp. (the largest equity options clearinghouse in the U.S.) stocks owned by clients with open derivatives positions.

IBG also has uncommitted secured and unsecured broker bank lines, both to fund everyday needs and to provide ready access to the liquidity of its unencumbered securities.

IBG's brokerage business carries minimum securities inventory, so its funding needs are limited primarily to customer margin loans (\$51.4 billion as of March 31, 2024), which are largely funded by customer free credit balances.

## Additional Rating Factors

We base the 'a-' group credit profile on peer comparisons. For example, IBG's capital position is stronger than that of Jefferies Financial Group, which has a group credit profile of 'bbb+'. Therefore, we make a positive one-notch adjustment.

Our rating on Interactive Brokers LLC, IBG's U.S. broker-dealer subsidiary, is at the same level as the 'a-' group credit profile because it is an operating company. Our issuer credit rating on IBG is one notch lower than the group credit profile, reflecting the entity's structural subordination as a nonoperating holding company for regulated subsidiaries.

## Key Statistics

**Table 1**

IBG LLC--Key figures					
--Fiscal year ended Dec. 31--					
(Mil. \$)	2023	2022	2021	2020	2019
Adjusted assets	128,380	115,095	109,067	95,642	71,642
Adjusted common equity	14,024	11,567	10,176	8,966	7,906
Total adjusted capital	14,024	11,567	10,176	8,966	7,906
Operating revenue	4,340	3,067	2,714	2,218	1,937
Noninterest expenses	1,264	1,066	924	949	736
Net income	600	380	308	195	161
Core earnings	2,812	1,842	1,636	1,179	1,089



**Table 2**

<b>IBG LLC--Business position</b>					
	<b>--Fiscal year ended Dec. 31--</b>				
<b>(%)</b>	<b>2023</b>	<b>2022</b>	<b>2021</b>	<b>2020</b>	<b>2019</b>
Total revenue (mil. \$)	4,340	3,067	2,714	2,218	1,937
Total revenue growth (%)	41.51	13.01	22.36	14.51	1.95
Net interest income/operating revenue	64.38	54.39	42.30	39.31	55.91
Fee income/operating revenue	35.88	49.10	57.77	58.03	43.47
Pretax profit/operating revenue	70.71	65.15	65.84	56.63	59.73
Core earnings/average adjusted common equity	21.98	16.94	17.09	13.98	14.49

**Table 3**

<b>IBG LLC--Capital</b>					
	<b>--Fiscal year ended Dec. 31--</b>				
<b>(%)</b>	<b>2023</b>	<b>2022</b>	<b>2021</b>	<b>2020</b>	<b>2019</b>
Leverage ratio, U.S. GAAP	10.92	10.05	9.33	9.37	11.04
Adjusted total equity/adjusted assets	10.92	10.05	9.33	9.37	11.04
Adjusted common equity/total adjusted capital	100.00	100.00	100.00	100.00	100.00

GAAP--Generally accepted accounting principles.

**Table 4**

<b>IBG LLC--Earnings</b>					
	<b>--Fiscal year ended Dec. 31--</b>				
<b>(%)</b>	<b>2023</b>	<b>2022</b>	<b>2021</b>	<b>2020</b>	<b>2019</b>
Personnel expenses/operating revenue	12.14	14.80	14.70	14.65	14.87
Cost-to-income ratio	29.12	34.76	34.05	42.79	38.00
Core earnings/operating revenue	64.79	60.06	60.28	53.16	56.22
Internal capital generation/prior year's equity	4.82	3.34	3.01	2.06	1.83

**Table 5**

<b>IBG LLC--Funding and liquidity</b>					
	<b>--Fiscal year ended Dec. 31--</b>				
<b>(%)</b>	<b>2023</b>	<b>2022</b>	<b>2021</b>	<b>2020</b>	<b>2019</b>
Gross stable funding ratio	203.75	198.44	137.01	164.35	181.82
Short-term wholesale funding/adjusted assets	8.94	7.91	10.97	10.56	9.12
Liquidity coverage metric (x)	0.90	1.00	0.65	0.70	1.04
Brokerage customer payables/adjusted assets	78.68	80.97	78.52	79.34	78.51

**IBG LLC--Rating component scores**

<b>Issuer Credit Rating</b>	<b>BBB+/Stable/--</b>
SACP	a-
Anchor	bbb-
Business position	Adequate
Capital and earnings	Very strong

**IBG LLC--Rating component scores (cont.)**

<b>Issuer Credit Rating</b>	<b>BBB+/Stable/--</b>
Risk position	Adequate
Funding	Adequate
Liquidity	Adequate
Comparable ratings analysis	+1
Support	0
ALAC support	0
GRE support	0
Group support	0
Sovereign support	0
Additional factors	-1

ALAC--Additional loss-absorbing capacity. GRE--Government-related entity. SACP--Stand-alone credit profile.

**Related Criteria**

- Criteria | Financial Institutions | General: Risk-Adjusted Capital Framework Methodology, April 30, 2024
- Criteria | Financial Institutions | General: Financial Institutions Rating Methodology, Dec. 9, 2021
- Criteria | Financial Institutions | Banks: Banking Industry Country Risk Assessment Methodology And Assumptions, Dec. 9, 2021
- General Criteria: Environmental, Social, And Governance Principles In Credit Ratings, Oct. 10, 2021
- General Criteria: Group Rating Methodology, July 1, 2019
- General Criteria: Methodology For Linking Long-Term And Short-Term Ratings, April 7, 2017
- General Criteria: Principles Of Credit Ratings, Feb. 16, 2011

**Ratings Detail (As Of June 5, 2024)\*****IBG LLC**

Issuer Credit Rating BBB+/Stable/--

**Issuer Credit Ratings History**

26-Apr-2022 BBB+/Stable/--

24-Nov-2020 BBB/Positive/--

04-May-2020 BBB/Stable/--

**Sovereign Rating**

United States AA+/Stable/A-1+

**Related Entities****Interactive Brokers LLC**

Issuer Credit Rating A-/Stable/A-2

\*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 © 2024 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.spglobal.com/ratings](http://www.spglobal.com/ratings) (free of charge), and [www.ratingsdirect.com](http://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/usratingsfees](http://www.spglobal.com/usratingsfees).

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