

# RatingsDirect®

---

## IBG LLC

**Primary Credit Analyst:**

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

**Secondary Contact:**

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

### Table Of Contents

---

Credit Highlights

Outlook

Rationale

Ratings Score Snapshot

Related Criteria

Related Research

# IBG LLC

## Credit Highlights

### Issuer Credit Rating

BBB+/Stable/--

### Overview

Key strengths	Key risks
Very strong capitalization and modest risk appetite	Some reduced operational risk from complex model-driven options market-making business
Growing geographic diversity	Lower recurring revenue than some retail peers
Low-cost brokerage business	Sensitivity to changes in brokerage customers' confidence

## Outlook

The stable outlook reflects our expectation that IBG will solidify its market position with a focus on the less confidence-sensitive retail segment, ably manage competitive price pressures, and maintain strong profitability. We also expect it will maintain its risk-adjusted capital (RAC) ratio well above 25%, its gross stable funding ratio (GSFR) above 110%, and solid liquidity.

### Downside scenario

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

- Profitability erodes substantially,
- The firm suffers material losses or an increase in risk,
- Its commitment to strong capitalization unexpectedly erodes, or
- Liquidity deteriorates.

### Upside scenario

We see little upside to the ratings over the outlook horizon given peer relativities.

## Rationale

Our ratings on IBG and subsidiary Interactive Brokers reflect the consolidated firm's solid market position, very strong capitalization, strong earnings, adequate funding and liquidity, and reduced risks following the wind-down of most options market-making activities. We believe the highly competitive and transactional nature of its businesses and the confidence-sensitive nature of institutional trading clients partly offset these strengths.

IBG is a holding company that, through its regulated broker-dealer subsidiaries, is a major global electronic broker serving retail and institutional clients. We believe IBG's market position and profitability benefit from its technology-enabled, low-cost provider status, which allows its clients to trade in more than 150 exchanges and 25

currencies. While the firm's brokerage has been the leader in daily average revenue trades (DARTS), it is substantially smaller than its main retail peers in terms of total client assets, with \$355.9 billion as of March 31, 2022. IBG remains reliant on market-sensitive revenue. It continues to grow its retail, financial advisor, and other stickier clients, but, unlike its peers, it has institutional trading clients, which we view as more confidence-sensitive.

With a high 67% profit margin in 2021 despite close-to-zero interest rates, IBG has successfully navigated the "zero commission" trend that hit the industry starting in November 2019. Unlike its competitors, IBG offers customers both its traditional low-commission pricing option and a zero-commission option that includes revenue-increasing measures (such as higher rates on margin loans) to offset the reduction in commissions.

IBG's RAC ratio of 34% as of March 31, 2022, is the highest among the U.S. securities firms we rate and a key rating strength. It provides, in our view, an ample cushion to absorb potential losses arising in the large margin loan book (\$48.3 billion as of March 31, 2022) or associated with customers' active derivatives trading activity (such as the over \$100 million loss in April 2021 to indemnify clients in West Texas Intermediate energy futures). IBG has wound down its options market-making business, which is now only active in Hong Kong and India. This has reduced risk substantially.

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

#### **Anchor: Reflects U.S. securities firms' economic and industry risks**

The 'bbb-' anchor (the starting point for our rating) is in line with other securities firms rated in the U.S. The starting point for U.S. securities firms is two notches lower than the 'bbb+' U.S. bank anchor to reflect our view of incrementally higher industry risk relative to banks.

The 'bbb+' U.S. bank anchor also reflects our view of banking industry risk in the U.S., which balances the regulatory enhancements made after the global financial crisis, a high level of core deposits, and deep capital markets against the risks that come with the country's large nonbank financial system. The trend on industry risk is positive, reflecting an improving track record of bank regulation and the steady performance of banks over many years. We could positively revise the industry score as well as the anchor to 'a-' in the next two years if the stringency of regulation remains in place, the economy continues to grow, and banks maintain strong balance sheets. (See "How The Economy, Profitability, And Regulations Could Support Certain U.S. Bank Ratings," May 24, 2021).

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.

A potential improvement in the U.S. bank anchor to 'a-' in the next two years based on improved bank regulatory track record may not cause us to raise the securities firm anchor. That said, we believe better bank regulation can have

some indirect benefits for securities firms, such as better access to funding from a healthy bank sector. U.S. banks generally had the capital and liquidity to continue to provide funding through the pandemic, which benefited NBFIs sectors.

**Table 1**

<b>IBG LLC--Key Metrics</b>					
	<b>--Fiscal year ended Dec. 31--</b>				
<b>(Mil. \$)</b>	<b>2021</b>	<b>2020</b>	<b>2019</b>	<b>2018</b>	<b>2017</b>
Adjusted assets	109,067	95,642	71,642	60,514	61,133
Adjusted common equity	10,176	8,966	7,906	7,123	6,404
Total adjusted capital	10,176	8,966	7,906	7,123	6,404
Operating revenues	2,714	2,218	1,937	1,900	1,609
Noninterest expenses	924	949	736	703	651
Net income	308	195	161	169	76
Core earnings	1,636	1,179	1,089	1,122	723

### **Business position: 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 and smaller 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 has been the leader in DARTS among the U.S. brokers that report DARTS and has grown client assets much more rapidly than peers. However, with \$355.9 billion in total client assets as of March 31, 2022, IBG remains much smaller than some rated U.S. retail discount brokerage peers.

The firm's business mix has shifted from market making to brokerage, which now accounts for 97% of revenue. The company retains some market-making in India and Hong Kong, as well as some other functionality in specific products (such as some "delta one" products).

IBG 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 functionality to meet the needs of a broad range of client types, aggressive pricing, and geographic expansion continue to foster strong growth in the electronic brokerage business. These strengths have allowed the firm to continue to grow its brokerage business, with total accounts up 36% year over year (as of end-May 2022).

We believe that 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. IBG continues to grow these accounts with direct and indirect retail customers now accounting for 54% and 28% of commissions, respectively, up slightly from 2019. They also accounted for 37% and 47% of customer equity, respectively, with growth in both direct and indirect clients.

Unlike its purely retail peers, IBG has a material amount of hedge fund and proprietary trading clients, which account for about 18% of IBG's commissions and 16% of client equity (down from 24% and 19% in 2019, respectively). We consider these clients more confidence-sensitive and higher risk given their use of portfolio margining. We would view

negatively a material increase in IBG's portion of institutional clients.

Given its unique customer mix and response, IBG has been much less affected than some peers by the 2019 move by leading discount brokers to reduce retail commissions on U.S. equities and exchange-traded funds (ETFs) and the per-trade commission on listed options to zero. Unlike its competitors that have entirely switched to a zero-commission offering on cash equity and ETFs (resulting in lower profitability), IBG offers a traditional low- (but not zero-) commission pricing option (IBKR Pro) and a zero-commission option (IBKR Lite). For clients who choose the IBKR Pro offering, IBG clears and executes clients' 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. Since most clients choose IBKR Pro, we think the company is potentially less exposed than peers to risks related to payment for order flows--an area that is under U.S. regulatory scrutiny (notably by the SEC).

With operations across 33 countries in Europe, Asia, and the Americas, IBG has good and growing geographic diversification. Foreign operations include a small amount of revenue from market making in Hong Kong and India, but mostly electronic brokerage, support clearing, and customer service across multiple product types, predominantly exchange traded or settled. Brokerage clients from outside North America account for about 54% of client equity and 55% of commission revenue. A large portion of IBG's international client activity is in U.S.-listed stocks. Russian nationals represented less than 1% of total revenue in 2021.

The 2019 promotion of long-time 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 and ownership's commitment to very strong capitalization, limited risk appetite, and focus on lower-risk brokerage.

**Table 2**

IBG LLC--Business Position					
	--Fiscal year ended Dec. 31--				
(Mil. \$)	2021	2020	2019	2018	2017
Total revenues	2,714.00	2,218.00	1,937.00	1,900.00	1,609.00
Total revenue growth (year over year)	22.36	14.51	1.95	18.09	15.26
Net interest income/operating revenues	42.30	39.31	55.91	48.89	42.45
Fee income/operating revenues	57.77	58.03	43.47	48.32	46.30
Market-sensitive income/operating revenues	0.00	0.00	1.39	2.05	2.49
Pretax profit/operating revenues	65.84	56.63	59.73	62.95	65.20
Core earnings/average adjusted common equity	17.09	13.98	14.49	16.59	11.85

### Capital, leverage, and earnings: Very strong risk-adjusted capital

We view capitalization as very strong given an expected RAC ratio of more than 34%, management and ownership's commitment to maintain conservative capital levels, and strong risk-adjusted earnings. The company added about \$1.2 billion of equity in 2021 (and an additional \$260 million in first-quarter 2022). At end-March 2022, the RAC ratio was 34%, 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.

Further, the firm has no additional risks not covered in RAC given its minimal illiquid and level 3 assets. 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 below 50%. Interactive Brokers Group Inc.'s status as a public company gives IBG some flexibility to raise additional capital if needed. At the same time, Mr. Peterffy's controlling ownership limits investor pressure to distribute capital.

IBG's extensive use of technology gives it a low expense base, allowing it to be a low-cost provider while still generating pretax margins typically above 60%. Earnings are also strong on a risk-adjusted basis, with average core earnings to S&P Global Ratings risk-weighted assets of 4.96%, higher than peers' average.

All of IBG's regulated subsidiaries have considerable excess regulatory capital, which in total was \$7.4 billion at March 31, 2022.

IBG remains reliant on market-sensitive revenue. In 2021, the prolonged decline in short-term interest rates and the increase in trading activity decreased the contribution of net interest income to about 42%, from 56% in 2019. Already announced as well as expected interest rate hikes by the Federal Reserve should support IBG's profitability. The company estimates the first 50 basis points (bps) rise, announced by the Fed in May, will add about \$289 million of net revenue to the bottom line in the first full year. Additional hikes should translate into lower incremental revenue (about \$50 million for each 25 bps hike), notably because the company intends to pass through future raises to most U.S. customers through higher interest on brokerage cash balances of more than \$10,000.

**Table 3**

<b>IBG LLC--Capital</b>					
	<b>--Fiscal year ended Dec. 31--</b>				
<b>(%)</b>	<b>2021</b>	<b>2020</b>	<b>2019</b>	<b>2018</b>	<b>2017</b>
Leverage ratio (U.S. GAAP)	9.33	9.37	11.04	11.77	10.48
Adjusted total equity/adjusted assets	9.33	9.37	11.04	11.77	10.48
Adjusted common equity/total adjusted capital	100.00	100.00	100.00	100.00	100.00
Total equity double leverage	100.21	100.56	101.17	101.56	102.94

GAAP--Generally accepted accounting principles.

**Table 4**

<b>IBG LLC--Earnings</b>					
	<b>--Fiscal year ended Dec. 31--</b>				
<b>(%)</b>	<b>2021</b>	<b>2020</b>	<b>2019</b>	<b>2018</b>	<b>2017</b>
Personnel expenses/operating revenues	14.70	14.65	14.87	13.89	15.48
Cost to income ratio	34.05	42.79	38.00	37.00	40.46
Core earnings/operating revenues	60.28	53.16	56.22	59.06	44.92
Internal capital generation/prior year's equity	3.01	2.06	1.83	2.19	0.83
Net interest income/average earning assets	15.07	12.51	16.94	15.18	10.52

**Risk position: Excess capital helps offset diminishing operational risks**

We believe the firm's good risk management and 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, IBG limits its credit risk and collateral-posting requirements by trading almost exclusively in listed or exchange settled securities and cash foreign exchange. Counterparty risk on other financial institutions is limited thanks to self-clearing (whereby the company is exposed to highly-rated clearinghouses). Cash foreign exchange, metals, and contracts for difference transactions are done only with large, highly rated banks.

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 market conditions and client exposures, concentration, or leverage, it will also limit exposure or client risk through its pricing, imposing additional limitations or increasing margin requirements.

We view IBG's management of its large margin loan book (\$48.3 billion as of March 31, 2022) as adequate, and its total margin loan losses were very small in 2021 despite the large volatility in meme stocks in January. However, IBG has had some other notable margin loan losses. Most recently, IBG recognized an aggregate loss of approximately \$42 million on margin loans in first-quarter 2019 related to some customers' relatively large positions in a U.S.-listed company whose accounts fell into deficit when the stock price dropped precipitously. That said, the amount was very small relative to IBG's total capital, and the firm still posted solid net income in the quarter.

Aside from margin lending, the firm incurs some market risk from clients' trading options. 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 such risk is well monitored through adequate margining, with the firm constantly revising its volatility stress assumptions based on market conditions. Nonetheless, clients' derivatives activity caused IBG to indemnify \$104 million of clients' losses in April 2021 related to an IBG systems 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 \$577 million of securities on the balance sheet at the end of March 2022, against a balance sheet of about \$114 billion.

Operational risk has fallen with the wind-down of most options market-making operations, except in India and Hong Kong. Still, the use of proprietary models (i.e., algorithms) and trading systems to execute a large volume of trades in the residual market-making segment increases operational risk, as a malfunctioning system could potentially result in the accumulation of undesired positions and expose the company to principal losses. We believe the strength of IBG's capitalization offsets the firm's exposure to low-probability, high-impact events given it has a cushion of approximately \$5.9 billion of total adjusted capital above our 15% RAC ratio threshold for very strong capitalization.

**Table 5**

<b>IBG LLC--Risk Position</b>					
	<b>--Fiscal year ended Dec. 31--</b>				
<b>(%)</b>	<b>2021</b>	<b>2020</b>	<b>2019</b>	<b>2018</b>	<b>2017</b>
Annualized adjusted assets growth rate	14.04	33.50	18.39	(1.01)	11.87

**Table 5**

<b>IBG LLC--Risk Position (cont.)</b>					
	<b>--Fiscal year ended Dec. 31--</b>				
<b>(%)</b>	<b>2021</b>	<b>2020</b>	<b>2019</b>	<b>2018</b>	<b>2017</b>
Adjusted common equity/managed assets	9.33	9.37	11.03	11.76	10.47

**Funding and liquidity: Neutral to the rating**

We view IBG's funding and liquidity as neutral to the rating given its very liquid balance sheet, excess stable funding of its less liquid assets, and good liquidity management. IBG's GSFR--available stable funding to the illiquid portion of its assets--was solid at 157% as of March 31, 2022.

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 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 0.8x as of March 31, 2022. The LCM is artificially low because, unlike most other firms, IBG's securities borrowing and repo transactions are mostly not financing transactions. Further, we believe IBG's practices and accounting for customer securities lending activity understates the firm's liquidity in the LCM given collateral received on securities-borrowed transactions is segregated for clients.

IBG has a very liquid balance sheet composed of cash; margin loans; exchange-listed marketable securities, which are marked-to-market daily; segregated customer assets; receivables from trade counterparties; and margins posted at central counterparties. Level 3 assets are negligible.

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. The firm maintains significant unencumbered liquidity to offset its exposure to margin and collateral calls. IBG also has uncommitted secured broker bank lines to fund everyday needs and to provide ready access to the liquidity of its unencumbered securities.

IBG's brokerage business doesn't carry securities inventory, so its funding needs are limited primarily to customer margin loans (\$48.3 billion as of March 31, 2022), which are largely funded by customer free credit balances. We view positively the firm's practice of calculating its regulatory reserves daily.

**Table 6**

<b>IBG LLC--Funding And Liquidity</b>					
	<b>--Fiscal year ended Dec. 31--</b>				
<b>(%)</b>	<b>2021</b>	<b>2020</b>	<b>2019</b>	<b>2018</b>	<b>2017</b>
Gross stable funding ratio	137.01	164.35	181.82	192.58	136.33
Short-term wholesale funding/adjusted assets	10.97	10.56	9.12	7.15	9.94
Liquidity coverage metric (x)	0.65	0.70	1.04	1.06	0.88
Customer deposits/adjusted assets	0.00	0.00	0.00	0.00	0.00
Brokerage customer payables/adjusted assets	78.52	79.34	78.51	79.31	77.78



**Comparable ratings adjustment: Positive**

We believe an 'a-' GCP is warranted based on peer comparison. For example, its capital position is stronger than Jefferies Financial Group, which has a GCP of 'bbb+'.

**External influence: We deduct one notch from IBG LLC for structural subordination**

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.

**Ratings Score Snapshot**

Issuer Credit Rating: BBB+/Stable/--

GCP: a-

- Anchor: bbb-
- Business Position: Adequate (0)
- Capital, Leverage, and Earnings: Very Strong (+2)
- Risk Position: Adequate (0)
- Funding and Liquidity: Adequate and Adequate-High (0)
- Comparable Ratings Adjustment: +1

External Influence: -1

- Government Influence: 0
- Group Influence: -1
- Rating Above the Sovereign: 0

**Related Criteria**

- 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
- Criteria | Financial Institutions | General: Risk-Adjusted Capital Framework Methodology, July 20, 2017
- General Criteria: Methodology For Linking Long-Term And Short-Term Ratings, April 7, 2017
- General Criteria: Principles Of Credit Ratings, Feb. 16, 2011

## Related Research

- IBG LLC Rating Raised To 'BBB+' On Strengthening Franchise, Strong Profitability, Lower Risks; Outlook Revised to Stable, April 26, 2022

### Ratings Detail (As Of June 16, 2022)\*

#### 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/--

22-Nov-2017 BBB/Positive/--

#### 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 © 2022 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](http://www.standardandpoors.com) (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.standardandpoors.com/usratingsfees](http://www.standardandpoors.com/usratingsfees).

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