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## IBG LLC

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# IBG LLC

## Major Rating Factors

### Strengths:

- Very strong capitalization
- Growing, geographically diverse, low-cost brokerage business
- Modest risk appetite

### Weaknesses:

- Consolidated group's operational risk driven by the complex model-driven options market-making business
- Earnings are mostly transactional in nature
- Brokerage customer confidence sensitivity

### Counterparty Credit Rating

BBB/Stable/--

## Outlook

The stable outlook on IBG LLC reflects S&P Global Ratings' opinion that IBG's brokerage business, international operations, and margin loans will continue to grow as the market-making business transitions. Further, it reflects our expectation that the firm's risk-adjusted capital (RAC) ratio will remain above 20%, the gross stable funding ratio (GSFR) in excess of 110%, and the liquidity coverage metric (LCM) above 90%.

We could raise the ratings on IBG if the firm continues to diversify its client base toward more sticky and less confidence-sensitive retail and financial adviser clients, maintains its commitment to hold very strong levels of capital, and successfully manages its margin loan exposures with minimal losses. We could also view the sale of the firm's market-making segment positively if the firm retains the capital from the sale.

We could lower the ratings if the consolidated RAC ratio falls to less than 20%, if IBG suffers a material loss, or if its liquidity coverage metric deteriorates below 90% on a sustained basis.

## Rationale

Our ratings on IBG and its subsidiary, Interactive Brokers LLC, reflect the consolidated firm's solid market position, very strong capitalization, and good earnings. We believe these strengths are partially offset by exposure to model and operational risks and the highly competitive and transactional nature of the firm's market-making and electronic brokerage businesses. The firm's funding and liquidity profile is supportive of the rating, and its related key metrics (GSFR and LCM) both remain above our key thresholds for a downgrade.

Our issuer credit rating on IBG is one notch lower than the group credit profile ('bbb+'), reflecting the entity's structural subordination, consistent with our criteria for analyzing nonoperating holding companies.

### **Anchor: Reflects the incremental industry risks securities firms face relative to banks**

IBG's 'bbb-' anchor reflects its blended economic risk and U.S. home-country industry risk. Our 'bbb-' anchor for the

U.S. securities firms sector draws on our Banking Industry Country Risk Assessment methodology and our view of the economic and industry risk in the U.S. (see "Banking Industry Country Risk Assessment: U.S.," published Aug. 20, 2015). The anchor for U.S. securities firms is two notches below the anchor for U.S. banks ('bbb+') to reflect the incremental risks that securities firms face relative to banks from securities firms' typical lack of central bank access, less comprehensive regulatory oversight, higher competitive risk, and less stable revenue.

**Business position: Market position is solid, but the brokerage business is sensitive to investor confidence**

We believe IBG has a solid market position with an established presence as a major global electronic market maker and broker in exchange-listed options, stocks, bonds, foreign exchange, and futures at more than 100 market centers worldwide. The firm continues to expand its brokerage business, with total accounts up 15% year over year. We expect the brokerage business to continue to grow as its high functionality and low prices attract customers to the platform. However, the firm's earnings are largely transactional in nature, which we view as potentially somewhat less stable than contractually recurring fees and stable sources of net interest income.

We view favorably IBG's growth in retail and financial adviser clients as we believe these customers are more sticky and less confidence-sensitive than institutional clients like hedge funds and proprietary trading companies. We would view negatively an increase in institutional clients because of their relatively higher risk given their use of portfolio margining and confidence-sensitive nature.

The company has started exploring strategic options for its market-making business, including a potential sale or partnership. While we believe the sale of this business would likely reduce the firm's market and operational risk considerably, the ultimate impact on the rating would depend on the extent to which this business's risks have been removed, whether IBG retains the segment's capital, and what the impact is on the firm's funding and liquidity.

We view IBG's management and governance as a neutral rating factor. Although we believe there is some key man risk from CEO and majority shareholder Thomas Peterffy, we view favorably management's commitment to strong capitalization, limited risk appetite, and a focus on lower-risk brokerage.

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

Our favorable view of IBG's capital is supported by the firm's consolidated RAC ratio of 31% as of Sept. 30, 2016, adequate regulatory capital at its regulated subsidiaries, and high quality of capital.

Our view is further supported by the firm's minimal illiquid and Level 3 assets, lack of material risks not covered in RAC, and our expectations that shareholders will continue to support very strong capitalization. Interactive Brokers Group Inc.'s status as a public company gives IBG some flexibility to raise additional capital. All of IBG's regulated subsidiaries have considerable excess regulatory capital, particularly its institutional broker.

We view IBG's earnings as strong given the firm's good risk-adjusted returns, with average core earnings to risk-weighted assets of more than 3%. We expect the retention of earnings to support the firm's capitalization as the brokerage business continues to grow.

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

We believe the firm's risk management and loss experience remain supportive of the rating despite a few outsized loss events over the last few years. As of Sept. 30, 2016, IBG had approximately \$3 billion of total adjusted capital above our 15% threshold to maintain its "very strong" capital assessment. We believe that the strength of IBG's capitalization helps to offset the consolidated firm's exposure to low-probability, high-impact operational risk events from its reliance on models and technology to execute and manage the risks of its high trade volume.

IBG's management looks to ensure its risk taking is defined with regard to fluid market conditions, its capital base, and its business strategy. IBG's substantial market risk in its market-making business has been managed well to date.

The firm uses its proprietary options-and-futures pricing model to evaluate and monitor the risks in its portfolio. The firm constantly rebalances its market bids and positions to manage risk exposure, both on its options and futures positions and the underlying securities. The firm uses value at risk and various other measures of risk exposure, but it does not have hard risk limits by exchange. IBG caps its total exposures so that it would not lose more than 5% of its total equity in an extreme scenario in which the market loses or gains 30% instantaneously.

The model and trading system have many built-in risk control measures, including a limit on the number of options, futures, or shares that can be executed at a given quote. To limit exposure to rapid price changes due to external events or news that the model can't take into account, the firm has senior trading managers monitor major news services and market conditions. These trading managers can manually override or suspend activity until the model has had time to react. Trading managers can also manually widen the quoted spread on specific securities.

IBG limits its credit risk and collateral-posting requirements by trading almost exclusively in listed securities and cash foreign exchange. Counterparty risk with clearing houses is limited given their high credit ratings and mutualization of risk. Cash foreign exchange, metals, and contracts for difference transactions are done only with large, highly rated banks. The firm limits its risk via its due diligence and surveillance of its counterparty's credit risk, and through limiting net exposures to individual counterparties.

For margin lending, the firm employs a 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 will also limit exposure or client risk through its pricing, imposing additional limitations or increase margin requirements.

The firm's loss track record had been very good, until two outsize margin lending events that occurred in the last few years. On Jan. 15, 2015, the release of the peg between the Swiss franc and the euro by the Swiss Central Bank--and the sudden appreciation of the value of the Swiss franc against most currencies--caused customer account debits (related to customer losses in excess of their account deposits). This led to the firm writing down its customer accounts by \$129 million. In October 2013, some brokerage customers had taken relatively large positions in four Singapore Exchange stocks, which quickly lost more than 90% of their value. The customer accounts fell into deficits, and IBG lost \$77 million. We view the firm's loss experiences as on par with that of peers, when viewing these losses in the context of the firm's otherwise very good loss experience. IBG was well prepared for Brexit and had no material losses related to the event.

We view positively the firm's conservative risk appetite. IBG doesn't hold securities inventory in its brokerage business, and its market risk tolerance in the market-making business is low. In market making it seeks to hedge out exposure to the direction of market prices. This means IBG seeks to be "long" on market volatility--that is, its exposure is the difference between implied volatility (the price at which it sets bids/offers) and the market's actual volatility. The market-making model prices the increased risk that a position would add to the overall portfolio into its bid-and-ask quotes. This risk limitation helps IBG avoid taking on excessive risk in any single position as investors hit the bid or lift the ask. It also limits exposure to extreme market movements as it effectively shortens exposure to equity markets as they fall.

That said, we believe the firm's complex model-based trading strategy and its automated trade execution and risk systems increase its risk. IBG has a very good long-term track record of careful management, which we believe can lower the probability of material operational events, like malfunctioning systems, potentially resulting in large principal losses during material events, but no system is foolproof. However, we believe that the strength of IBG's capitalization helps to offset exposure to such low-probability, high-impact event risk.

The company's proprietary options-and-futures pricing model continuously adjusts its bid-and-offer quotes based on current market prices and portfolio risks. The automated system then posts bid-and-offer quotes for stocks, options, and futures at the various exchanges. IBG is exposed to losses if the assumptions, correlations, or prices the models use are inaccurate. The firm's oversight includes a team of analysts to constantly monitor its trading and exposures, and senior management deconstructs trading profits and losses (P&L) daily. This consists of figuring out what accounts for the P&L that occurs every day (e.g., changes in market parameters or in intraday positions). Daily P&L that remains unexplained by the identified drivers can lead to model revisions. The existence of systematic flaws seems unlikely given that the model has been in use since 1982 and is constantly analyzed and corrected as needed.

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

IBG has a solid GSFR--available stable funding to gross stable funding needs--of 151%. However, this is partially offset by its material exposure to customer confidence sensitivity given the firm's institutional customer base. Further, the firm's large derivatives portfolio represents additional needs not captured in the GSFR.

The brokerage business doesn't carry securities inventory, so its funding needs are limited primarily to customer margin loans, which are largely funded by customer free credit balances. Securities owned are predominately market-making inventory and hedges. Funding needs for options are limited and not reflected in the amounts reported on the balance sheet, while the rest of the inventory is easily funded liquid, exchange-traded equities. IBG maintains considerable excess unencumbered liquid assets that it can use to meet both the firm's and clients' funding needs. In addition, the firm has substantial latitude to adjust its positions and hedging based on the availability and economics of various funding sources or its liquidity needs.

The focus on liquid exchange-traded products makes liquidity management more straightforward and limits the number of counterparties to post margin collateral with. The firm's limited over-the-counter trading does not represent a significant issue. Illiquid assets comprise less than 5% of total adjusted capital and less than 1% of assets are Level 3.

We expect that IBG's LCM--balance sheet liquidity sources divided by balance sheet liquidity needs--will remain above our key threshold of 90% over the next 24 months. We view positively the firm's daily regulatory reserve calculation

and believe its practices and accounting for customer securities lending activity understate the firm's liquidity in the LCM.

The firm has some exposure to margin and collateral calls on its open exchange-traded derivatives positions and collateralized short-term funding agreements. The firm maintains significant unencumbered liquidity to offset its exposure to margin and collateral calls, including approximately \$17.8 billion of repledgeable collateral available from securities lending transactions and customer margin assets. IBG has uncommitted secured broker bank lines both to fund everyday needs and to provide a ready ability to access the liquidity of its unencumbered securities.

### Comparable ratings adjustment: None

We do not make any further adjustment based on a comparison versus peers.

### External influence: None

We do not factory any external influence into our rating on IBG.

## Ratings Score Snapshot

Ratings Score Snapshot--IBG LLC	
Issuer Credit Rating	BBB/Stable/--
Unsupported GCP	bbb+
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	0
External Influence	0
Government Influence	0
Group Influence	0
Rating Above the Sovereign	0

## Related Criteria And Research

### Related Criteria

- Nonbank Financial Institutions Rating Methodology, Dec. 9, 2014
- Group Rating Methodology, Nov. 19, 2013
- Ratings Above The Sovereign--Corporate And Government Ratings: Methodology And Assumptions, Nov. 19, 2013
- Revised Market Risk Charges For Banks In Our Risk-Adjusted Capital Framework, June 22, 2012
- Banking Industry Country Risk Assessment Methodology And Assumptions, Nov. 9, 2011
- Bank Capital Methodology And Assumptions, Dec. 6, 2010
- Use Of CreditWatch And Outlooks, Sept. 14, 2009
- Commercial Paper I: Banks, March 23, 2004

## Ratings Detail (As Of December 1, 2016)

### IBG LLC

Counterparty Credit Rating BBB/Stable/--

### Counterparty Credit Ratings History

11-Dec-2014 BBB/Stable/--

19-Dec-2008 BBB+/Stable/--

08-May-2007 BBB/Stable/--

### Sovereign Rating

United States of America AA+/Stable/A-1+

### Related Entities

#### Interactive Brokers LLC

Issuer Credit Rating BBB+/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.

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