Summary

This report describes developments in the liquidity and functioning of corporate bond markets from January 1, 2017, through March 31, 2017. In this update, we use the same measures of liquidity used in the previous reports for both primary and secondary market conditions. The main findings are:

1) On balance, liquidity in the primary market—as indicated by the pace of primary corporate bond issuance—remained accommodative in the United States, picking up from a quieter Q4 2016. Both investment- and speculative-grade corporate bond issuance volumes in Q1 2017 stood comparable to the volumes over the same period in 2016. As in recent quarters, the majority of proceeds from speculative-grade issuance continued to be earmarked for refinancing. The healthy pace of bond issuance appeared to be the result of opportunistic borrowing by firms at low corporate interest rates. Yields on both investment- and speculative-grade corporate bonds were little changed relative to Q4 2016, still standing near historically low ranges over the past decade. In addition, spreads for investment-grade corporate bonds over comparable-maturity Treasury securities, on net, remained unchanged, while spreads for speculative-grade bonds tightened somewhat since the last report.

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1 This report has been agreed to by the staffs of the Office of the Comptroller of the Currency, the Federal Reserve Board, the Federal Deposit Insurance Corporation, the Securities and Exchange Commission, and the Commodity Futures Trading Commission (such agencies, collectively referred to as the Agencies). The Agencies have expressed no view regarding the analysis, findings, or conclusions contained in this report.
2) Measures of secondary bond market liquidity that reflect the ease and cost with which investors can buy and sell corporate bonds remained accommodative and largely unchanged in Q1. The average daily trading volume for both investment- and speculative-grade bonds remained at the higher end of the ranges observed over the last five years, while the average daily trading turnover for both investment- and speculative-grade bonds fluctuated around a level typical for the past five years. After adjusting for seasonal patterns, average bid-ask spreads for investment-grade bonds were roughly unchanged on net since the last report, standing around the lower ranges of its distribution since 2010. The average bid-ask spreads for speculative-grade bonds increased slightly in the early days of the quarter and remained steady since then, fluctuating below the median levels observed since 2010. The fraction of trades with large face value – at least $1 million – and the average size of such trades for both investment- and speculative-grade bonds were little changed from their Q4 2016 levels. Meanwhile, dealers’ inventories of corporate and foreign bonds continued to increase slightly, but remained near their lowest levels over the past decade.

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2 See Exhibit 2, “Trading Volume and Turnover (Seasonally Adjusted)” and “Trading Volume by Rating (Seasonally Adjusted).”

3 The average daily trading turnover is a measure of trading volume relative to the face value of bonds outstanding.

4 “Corporate and foreign bonds,” as defined in the Federal Reserve’s Financial Accounts of the United States, includes, in addition to bonds issued in the United States by U.S. corporations and foreign corporate and sovereign entities, all other fixed income instruments (excluding syndicated loans) that are issued in the United States, such as privately-issued mortgage-backed securities.
### Exhibit 1

**Corporate Bond Liquidity Monitor**

#### Gross Issuance of Nonfinancial Corporate Bonds

- **Quarterly**
  - **Investment Grade**
  - **Speculative Grade**

Billions of dollars

*Includes unrated bonds.*

Source: Mergent.

#### Ten-Year BBB Bond Yield and Spread to Treasury*

- **Monthly**
  - **Yield** (right scale)
  - **Spread** (left scale)

Percent

*Estimated from curve fit to Merrill Lynch bond yields. Treasury yields from smoothed yield curve estimated from off-the-run securities. Within-month average value.*

Source: Staff calculations incorporating data from BofA Merrill Lynch Global Research, used with permission.

#### Use of Proceeds for Speculative Grade Issues*

- **Quarterly**
  - **General Purposes**
  - **M&A**
  - **LBO and Recapitalization**
  - **Refinancing**

Billions

*General Purposes includes capital expenditures and other purposes not included in the designated breakdown.*

Source: Standard and Poor’s LCD. S&P and its third-party information providers expressly disclaim the accuracy and completeness of the information provided to the Board, as well as any errors or omissions arising from the use of such information. Further, the information provided herein does not constitute, and should not be used as, advice regarding the suitability of securities for investment purposes or any other type of investment advice.
Exhibit 2
Corporate Bond Liquidity Monitor

Number of Traded Bonds as a Fraction of Total Bonds Universe in TRACE

5-day moving average

Percent of par

Mar. 31


Note: Excludes 144a bonds.
Source: FINRA, Mergent, Moody's DRD.

Trading Volume and Turnover (Seasonally Adjusted)

Percent

5-day moving average

Turnover (left scale)

Volume (right scale)

Mar. 31


Note: Excludes 144a bonds.
Note: Turnover series is annualized by multiplying the daily turnover by 251.
Source: FINRA, Mergent, Moody's DRD.

Trading Volume by Rating (Seasonally Adjusted)

Billions of dollars

5-day moving average

Investment Grade

Speculative Grade

Mar. 31


Source: FINRA.
Exhibit 3
Corporate Bond Liquidity Monitor

Bid-Ask Spread for All Bonds*

5-day moving average

- Investment Grade
- Speculative Grade

Mar. 31

Bid-Ask Spread for All Bonds* (Seasonally Adjusted)

5-day moving average

- Investment Grade
- Speculative Grade

Mar. 31

Bid-Ask Spread for Investment Grade Bonds*

5-day moving average

- Financial
- Non-Financial

Mar. 31

*Note: All measures are computed for non-defaulted bonds on the secondary market. Excludes 144a bonds. Bid-Ask spread is the difference between trade size-weighted average dealer bid prices and ask prices. Source: Finra, Thomson Reuters SDC, FISD, Moody’s DRD.
Exhibit 4
Corporate Bond Liquidity Monitor

Percentage of Trades Greater than 1 Million in Par Value (Seasonally Adjusted)

![Graph showing percentage of trades greater than 1 million in par value.](image)

Note: Excludes 144a bonds.
Source: FINRA, Mergent, Moody's DRD.

Average Size of Trades Greater than 1 Million in Par Value (Seasonally Adjusted)

![Graph showing average size of trades greater than 1 million in par value.](image)

Note: Excludes 144a bonds.
Source: FINRA, Mergent, Moody's DRD.

Broker-Dealer Holdings of Corporate and Foreign Bonds*

![Graph showing broker-dealer holdings of corporate and foreign bonds.](image)

*Series FL663063305.Q. Aggregate holdings of U.S. corporate and foreign bonds by U.S. domiciled security brokers and dealers. It includes all other fixed income instruments (excluding syndicated loans) that are issued in the United States, such as privately-issued mortgage backed securities. Source: Federal Reserve. Financial Accounts of the United States.