The September 2017 Senior Credit Officer Opinion Survey on Dealer Financing Terms

The September 2017 Senior Credit Officer Opinion Survey on Dealer Financing Terms collected qualitative information on changes over the previous three months in credit terms and conditions in securities financing and over-the-counter (OTC) derivatives markets. The 23 institutions participating in the survey account for almost all dealer financing of dollar-denominated securities to nondealers and are the most active intermediaries in OTC derivatives markets. The survey was conducted during the period between August 14, 2017, and August 29, 2017. The core questions asked about changes between June 2017 and August 2017.[1]

Core Questions
(Questions 1–79)[2]

Responses to the core questions in the September survey offered a few insights regarding recent developments in dealer-intermediated markets. With regard to the **credit terms applicable to, and mark and collateral disputes with, different counterparty types across the entire range of securities financing and OTC derivatives transactions**, responses to the core questions revealed the following:

- About one-sixth of respondents reported an easing in price terms for their hedge fund and trading real estate investment trust, or REIT, clients (see the exhibit "Management of Concentrated Credit Exposures and Indicators of Supply of Credit"). Among the dealers that indicated easing of terms, more aggressive competition from other institutions was cited as the most important reason. Price and nonprice terms were basically unchanged for all other classes of counterparties.
- About one-fifth of dealers noted an increase in the intensity of efforts by hedge fund and nonfinancial corporation clients to negotiate more favorable terms. A smaller fraction of respondents reported that the provision of differential terms to most-favored hedge fund clients had increased somewhat over the past three months.

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[1] For questions that ask about credit terms, reported net percentages equal the percentage of institutions that reported tightening terms ("tightened considerably" or "tightened somewhat") minus the percentage of institutions that reported easing terms ("eased considerably" or "eased somewhat"). For questions that ask about demand, reported net fractions equal the percentage of institutions that reported increased demand ("increased considerably" or "increased somewhat") minus the percentage of institutions that reported decreased demand ("decreased considerably" or "decreased somewhat").

[2] Question 80, not discussed here, was optional and allowed respondents to provide additional comments.

- A small fraction of dealers reported a decrease in the duration and persistence of mark and collateral disputes with mutual funds, exchange-traded funds, pension plans, and endowments.

With respect to the **use of financial leverage**, about one-sixth of dealers, on net, reported an increase in the use of financial leverage by hedge funds over the past three months (see the exhibit "Use of Financial Leverage"). Use of financial leverage by other classes of counterparties was basically unchanged.

With regard to **OTC derivatives markets**, dealers reported the following:

- Initial margin requirements on OTC derivatives were basically unchanged, on net, for average and most-favored clients.
- Small fractions of dealers reported that the duration and persistence of mark and collateral disputes have decreased on OTC derivatives contracts referencing foreign exchange and interest rates. The volume of mark and collateral disputes was basically unchanged for each contract type.

With respect to **securities financing transactions**, respondents indicated the following:

- About one-fifth of dealers, on net, noted a decrease over the past three months in financing rates (collateral spreads over the relevant benchmarks) for average clients in equities and for preferred clients in agency residential mortgage-backed securities and commercial mortgage-backed securities. A small net fraction of respondents reported a decrease in financing rates for preferred clients in equities.
- Across all asset classes, dealers reported that maximum amounts of funding, maximum maturity, and haircuts were basically unchanged. Respondents also indicated little change in demand for funding and for term funding with a maturity greater than 30 days (see the exhibit "Measures of Demand for Funding and Market Functioning").
- Dealers reported that the liquidity and market functioning for each asset class was basically unchanged over the past three months.

Special Questions on Client Trading in Equity Volatility Products

(Questions 81–89)

Volatility in equity markets, whether measured in realized returns or implied in option prices, has been near historically low levels since the beginning of 2017. In the special questions for the survey this quarter, dealers were asked about the current exposure to equity volatility and changes in such exposure by different classes of investors, and the means by which different classes of investors take positions in equity volatility. Position-taking can assume the form of volatility strategies constructed from equity options that are exposed to changes in market volatility but neutral with respect to changes in equity prices (for example, straddles), or it can utilize volatility products, such as futures and options on the Chicago Board Options Exchange Volatility Index (VIX), volatility-linked

exchange-traded funds and notes (hereafter exchange-traded products, or ETPs), and variance swaps.

Dealers were asked to characterize the current **use of volatility strategies and products by clients**. Responses indicated significant use across most client classes, most notably by hedge fund clients.

- For hedge fund clients, about three-fourths of respondents reported that volatility strategies and products are either widely employed by a large number of clients or employed by some clients or in some situations. Within this group of respondents, nearly one-third reported that these strategies and products were widely employed.

- For ETPs and insurance companies, about two-fifths of respondents reported that volatility strategies and products are either widely employed or employed by some clients or in some situations.

- With regard to mutual funds and pension plans and endowments, about one-third of respondents reported that volatility strategies and products were employed by some clients or in some situations.

- Smaller fractions of respondents reported active use of volatility strategies and products by separately managed accounts established with investment advisers and by nonfinancial corporations. Even for these clients, however, roughly two-fifths of respondents noted that these strategies and products were used at least by a few clients or in a few situations.

Dealers were also asked to characterize the **change in use of volatility strategies and products relative to September 2015**. Only small net fractions of respondents reported increased use of volatility strategies and products by ETPs and mutual funds. For all other client types, respondents indicated that the use of volatility strategies and products remained basically unchanged.

A set of questions asked about the **instruments used by clients to take positions** with respect to equity volatility. For each of four classes of clients, respondents were asked to rank up to three instrument types by client usage.

- For hedge fund clients, about two-thirds of respondents pointed to exchange-traded equity options as the most heavily used instrument, and nearly all respondents ranked VIX futures and options as an important instrument. Over one-half of respondents ranked OTC equity options as important, and about one-third of respondents cited variance swaps and volatility swaps as heavily used instruments.

- For ETPs, about three-fourths of respondents pointed to exchange-traded equity options as the most heavily used instrument. Nearly all respondents ranked either

VIX futures and options or OTC equity options as the second most important.

- For pension plans and endowment clients, about one-half of respondents ranked exchange-traded equity options as the most heavily used instrument. OTC equity options and VIX futures and options were cited as important instruments by about four-fifths and one-half of respondents, respectively.

- For insurance companies, respondents most frequently pointed to OTC equity options as the most heavily used instrument type. About four-fifths of respondents ranked these instruments either first or second in importance. Roughly one-half of respondents cited exchange-traded equity options, VIX futures and options, and variance swaps and volatility swaps as heavily used instruments.

Dealers were asked to assess **how clients were positioned for a sustained increase in equity volatility**. For ETPs and insurance companies, over one-third of respondents, on net, indicated either that most clients are net long (that is, taking positions that rise in value when volatility rises) or that more clients are net long than net short. For hedge funds, mutual funds, and separately managed accounts established with investment advisers, roughly one-fourth of respondents, on net, indicated either that most clients are net long or that more clients are net long than net short.

With regard to **changes in net positioning** relative to September 2015, a net fraction of about one-fifth of respondents reported that mutual fund clients are more likely to have increased short positions or decreased long positions or both than the reverse. For other classes of clients, most respondents indicated either no significant change in volatility exposure or that the shares of clients that have increased long positions or decreased short positions or both are roughly equal to the shares that have increased short positions or decreased long positions or both. Among respondents that indicated a directional change in volatility exposure, those reporting that more clients have increased long positions or decreased short positions or both were roughly equal in number to those reporting that more clients have increased short positions or decreased long positions or both.

Finally, dealers were queried on the factors most important in **managing counterparty exposure** to clients that are short equity volatility. Nearly all respondents identified the collection of initial and variation margin as the most important control. Limits on long–short gross notional exposure and client net financing balances held in prime brokerage accounts were each cited as important by nearly one-half of respondents.

This document was prepared by Michael Gordy, Division of Research and Statistics, Board of Governors of the Federal Reserve System. Assistance in developing and administering the survey was provided by staff members in the Capital Markets Function, Statistics Function, and the Markets Group at the Federal Reserve Bank of New York.