The September 2023 Senior Credit Officer Opinion Survey on Dealer Financing Terms

Summary

The September 2023 Senior Credit Officer Opinion Survey on Dealer Financing Terms (SCOOS) collected qualitative information on changes in credit terms and conditions in securities financing and over-the-counter (OTC) derivatives markets between mid-May 2023 and mid-August 2023. In addition to the core questions, the survey included a set of special questions about risk-management practices and client activity in the trading of zero-days-to-expiry (0DTE) options. The 21 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 between August 14, 2023, and August 28, 2023. The core questions asked about changes between mid-May 2023 and mid-August 2023.

Core Questions

(Questions 1-79)²

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:

- Approximately two-fifths of dealers, on net, reported that they had increased the resources and attention they devoted to managing their concentrated credit exposure to other dealers and other financial intermediaries over the past three months. The net fractions reporting an increase in this survey and the June 2023 survey were the highest observed since the June 2020 SCOOS (see the exhibit "Management of Concentrated Credit Exposures and Indicators of Supply of Credit"). Nearly all dealers reported that the resources and attention they devoted to managing their concentrated credit exposure to central counterparties were unchanged. Almost all of the respondents indicated that changes in central counterparty practices have had either minimal or no effect on the credit terms they offer to clients on bilateral transactions that are not cleared.
- For all types of counterparties, the vast majority of dealers reported that both price and nonprice terms on securities financing transactions and OTC derivatives remained basically unchanged over the past three months.

With respect to clients' **use of financial leverage**, all dealers reported that the use of financial leverage remained basically unchanged over the past three months (see the exhibit "Use of Financial Leverage").

¹ 0DTE options expire on the same day the option trades are initiated, and daily margining requirements of the Options Clearing Corporation do not apply to these options.

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

With respect to **OTC derivatives markets**, responses to the core questions revealed the following:

- All dealers reported no changes in nonprice terms in master agreements.
- Nearly all dealers reported no changes in margin requirements for all types of OTC derivatives.
- The volume of mark and collateral disputes remained basically unchanged over the past three months for all types of OTC derivatives.

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

- Approximately one-fourth of dealers, on net, indicated increased funding demand for
 equities (including through stock loans) over the past three months (see the exhibit
 "Measures of Demand for Funding and Market Functioning"). Approximately oneseventh of dealers, on net, indicated increased funding and term funding demand for nonagency residential mortgage-backed securities.
- The vast majority of dealers indicated that securities financing terms remained unchanged over the past three months for all types of securities collateral.
- Nearly all dealers indicated that liquidity and market functioning for all types of securities remained unchanged over the past three months.
- The volume, duration, and persistence of mark and collateral disputes for all other securities remained basically unchanged over the past three months.

Special Questions on Risk-Management Practices and Client Activity in the Trading of Zero-Days-to-Expiry Options

(Questions 81–88)

In 2022, the Chicago Board Options Exchange introduced additional expiration cycles for weekly options on the S&P 500 index and on several index-linked exchange-traded funds (ETFs), thereby providing daily expirations for those options. This development was accompanied by a large increase in trading volume in options that expire on the same day the option trades are initiated, known as 0DTE options. These options now account for about half of all trading volume of S&P 500 index options and options on some index-linked ETFs. In the special questions, dealers were asked about the activity of their institutional clients who are actively trading 0DTE options and the dealers' management of counterparty risk associated with those clients.

Only dealers with clients who regularly trade equity options and also actively trade 0DTE options were asked to complete the special questions. Approximately one-half of survey

participants (10 out of 21) reported to have such clients. In this section, fractions of responses are stated relative to the sample of the 10 responding dealers.³

With respect to the activity of institutional clients who actively trade 0DTE options, the dealers indicated the following:

- All dealers indicated that clients who actively trade 0DTE options constitute a small fraction of clients trading equity options.
- One-half of dealers indicated that for clients who actively trade 0DTE options, such trades account for less than 5 percent of option trades by option premiums paid or received. One-fifth of the dealers indicated that 0DTE trades account for between 10 and 20 percent of option trades, and one-fifth indicated that they account for over 50 percent of such trades.
- Only two-fifths of the dealers indicated an ability to identify 0DTE option strategies typically used by their clients. The survey asked about the share of 0DTE option trades (in dollars of option premiums paid or received) for each of the following types of strategies: spread trades with limited upside and downside (for example, bull or bear spreads, butterfly spreads, and iron condor); directional trades (long, or short, put or call); directional volatility trades (for example, long, or short, straddle or strangle); and calendar spread trades (trades involving opposing legs in 0DTE and longer-dated options). The responses revealed that each type of strategy accounts for at least a small share of 0DTE trading volume. Additionally, a few dealers reported a moderate share for spreads and calendar spreads, and a few dealers reported a large share for spreads and for directional trades.
- When asked about changes in clients' appetite for downside risk in 0DTE trades on days with elevated volatility early in the trading session, the great majority of dealers indicated that they were unable to judge that.

With respect to the management of counterparty risk associated with clients actively trading **ODTE options**, the dealers reported the following:

- Three-fifths of the dealers reported that they collect margin on 0DTE option trades before the end of the trading session only when market volatility is elevated and that the margin is determined by the risk of the client's overall portfolio. Two-fifths of the dealers do not collect margin on 0DTE options.
- Over two-thirds of dealers ranked the collection of initial and variation margin among their top three most prevalent risk controls for overall portfolios of clients actively trading 0DTE options, with three-fifths of dealers selecting it as the most prevalent risk control measure. Fractions of one-half or more reported limits on potential future exposure, limits on profits and losses predicted by a stress test, and the monitoring of

³ Among the remaining dealers, seven indicated that they do not have institutional clients who regularly trade equity options, and four indicated that none of their clients who regularly trade equity options also actively trade 0DTE options.

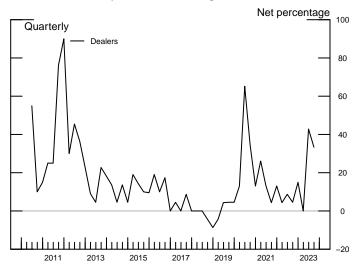
overall leverage and risk exposure among their top three most prevalent risk controls. Nearly all dealers indicated that the tightness of the three most prevalent risk controls for clients actively trading 0DTE options remained basically unchanged since the beginning of 2022.

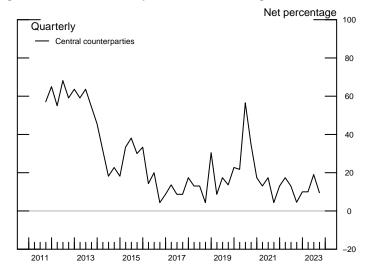
• In response to the question on how frequently each of their top three most prevalent risk-control measures is monitored, dealers provided responses that varied by the type of risk control. The responses for the collection of initial and variation margin were nearly evenly split between being monitored periodically during the trading session, once a day after markets closed, and the former or the latter depending on market volatility and the size of the exposure. The responses further indicated that limits on potential future exposure and limits on stress-test profits and losses are predominantly monitored once a day after the market closes. Finally, the limits on long—short gross notional exposure and the monitoring of clients' overall leverage and risk exposure are predominantly checked periodically during the trading session.

This document was prepared by Valery Polkovnichenko, 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, the Statistics Function, and the Markets Group at the Federal Reserve Bank of New York.

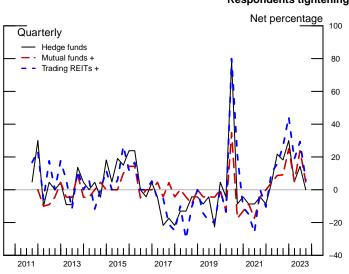
Management of Concentrated Credit Exposures and Indicators of Supply of Credit

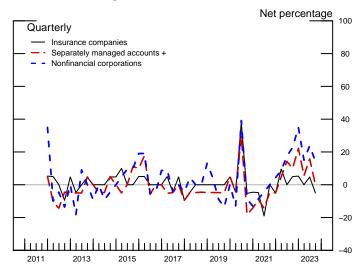
Respondents increasing resources and attention to management of concentrated exposures to the following:



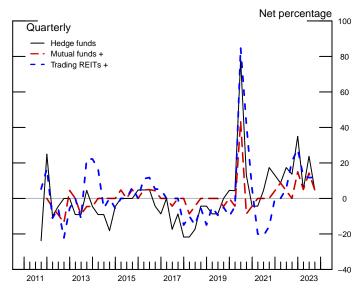


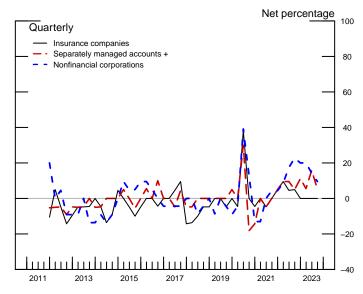
Respondents tightening price terms to the following:





Respondents tightening nonprice terms to the following:





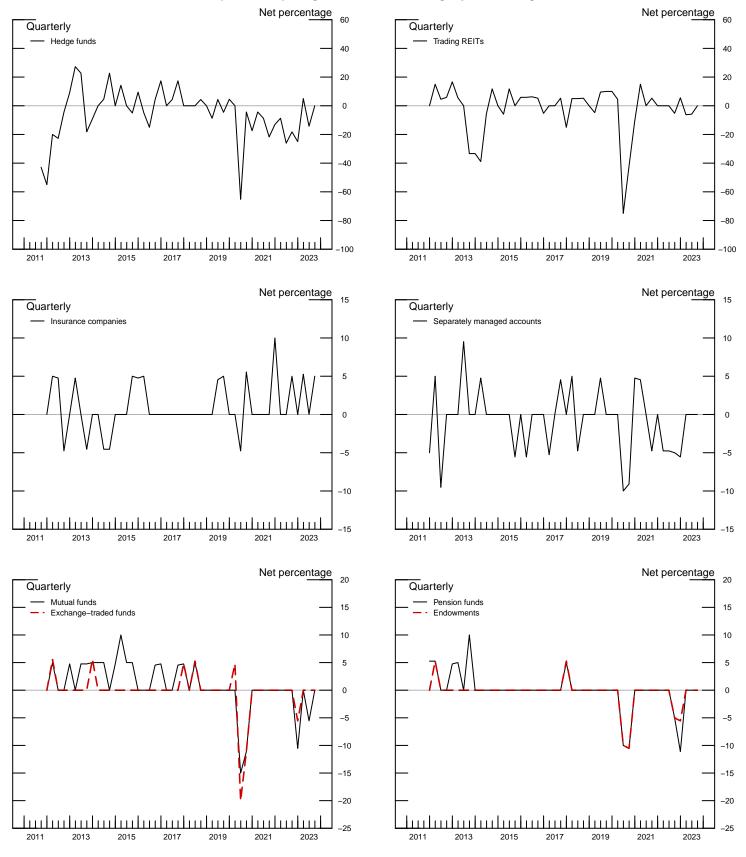
Note: REIT is real estate investment trust.

+ The question was added to the survey in September 2011.

Source: Federal Reserve Board, Senior Credit Officer Opinion Survey on Dealer Financing Terms.

Use of Financial Leverage

Respondents reporting increased use of leverage by the following:

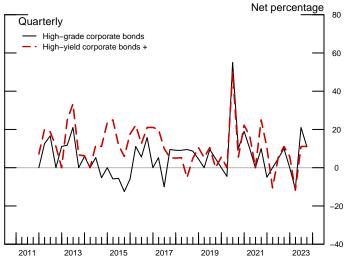


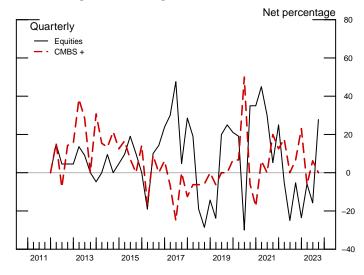
Note: REIT is real estate investment trust.

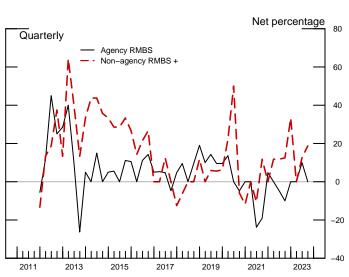
Source: Federal Reserve Board, Senior Credit Officer Opinion Survey on Dealer Financing Terms.

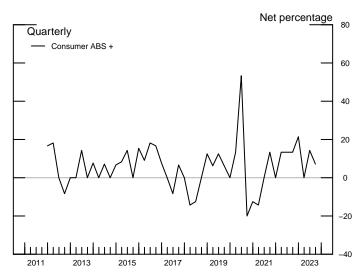
Measures of Demand for Funding and Market Functioning

Respondents reporting increased demand for funding of the following:

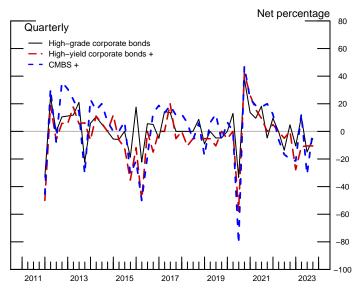


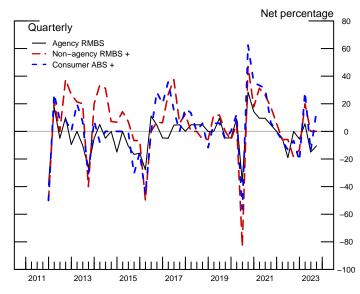






Respondents reporting an improvement in liquidity and functioning in the underlying markets for the following:





Note: CMBS is commercial mortgage-backed securities; RMBS is residential mortgage-backed securities; ABS is asset-backed securities.

+ The question was added to the survey in September 2011.

Source: Federal Reserve Board, Senior Credit Officer Opinion Survey on Dealer Financing Terms.