

Who Participates in Repo?

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The U.S. repurchase agreement (repo) market links cash lenders to cash borrowers through short-term collateralized loans. This brief summarizes some facts about lenders and borrowers in the U.S. repo market using the new non-centrally cleared bilateral repo (NCCBR) data collection from the Office of Financial Research (OFR) combined with existing OFR transaction-level data. We quantify outstanding repo positions of financial institutions by type and identify which are net lenders versus net borrowers, within and across market segments. In H2 2025, total daily outstanding positions of both lenders and borrowers across all segments in the U.S. repo market averaged \$12.5 trillion. Government-sponsored enterprises (GSEs), money funds, and other investment funds lent nearly \$3.5 trillion on net. On the opposite side, hedge funds borrowed more than \$1.8 trillion on net. Broker-dealers and banks account for the majority of gross activity but hold small net positions except in the tri-party segment where they are large net borrowers.

Large financial institutions rely on the U.S. repurchase agreement (repo) market as a primary source of short-term funding, and repo rates provide a basis for financial market reference rates used to price consumer and business loans. The repo market has played a role during periods of market instability by serving as a source of liquidity and a channel for contagion during the 2007-08 financial crisis and the September 2019 market dislocation. Even so, market participants and regulators have had limited insight into repo market flows and positions, which has impeded their ability to measure and manage risk. This brief presents an entity-based view of repo

market flows and positions in H2 2025 using transaction-level data that covers the entire market.

The underlying data is from three sources: tri-party repo settlement data collected by Bank of New York Mellon (BNY) (available from 2013), the Office of Financial Research (OFR) centrally cleared repo collection (available from 2018), and the OFR non-centrally cleared bilateral repo (NCCBR) data collection.¹ The OFR began collecting NCCBR data from certain market participants in December 2024 and expanded the collection to a wider range of financial institutions in July 2025. The statistics presented

in this brief are a snapshot of H2 2025, covering the first two quarters that data on the complete market are available.

The tri-party, cleared, and NCCBR data contain the names of the financial companies or funds that were repo counterparties. These entity names were grouped into 11 types that represent common financial company and fund types.² Overall, more than 90% of repo entities with positive volume in H2 2025 are typed, accounting for more than 98% of total outstanding. Repo accounts that were not identifiable as one of the 11 types are grouped into the “other” category.

Gross Lending and Borrowing by Type

Gross and net repo outstanding across all segments varies by entity type (**Figure 1**). Financial companies that manage short-term investments like money funds tend to lend and use the repo market as a safe,

short-term investment, whereas financial companies like hedge funds that pursue leveraged strategies are more likely to be net borrowers. Others participate on both sides of the market by serving as intermediaries between net lenders and net borrowers and/or by using the repo market to manage cash and borrow securities.

Money funds are exclusively lenders and account for more than two-thirds or more than \$2.9 trillion of net lending. Investment funds, such as mutual funds, private equity funds, venture capital funds, exchange traded funds, and other closed-end funds, are also typically net lenders in the data, as are repo accounts associated with nonbank asset managers but not identifiable as specific funds. Unlike money funds, however, these institutions sometimes borrow and likely use the repo market as a safe, short-term investment and to fund their own investments. GSEs which include Freddie Mac, Fannie Mae, and regional

Figure 1: Lending and Borrowing by Account Type in H2 2025

	Lending		Borrowing		Net	% Lending
	\$ Billions	#	\$ Billions	#		
Money fund	2927.5	69	0.0	-	2927.5	100
Asset manager / other fund	610.2	189	121.2	95	489.0	83
GSE	237.0	20	7.6	14	229.4	97
Government	216.3	68	115.7	23	100.6	65
Other	320.3	281	340.3	263	-20.0	48
Pension fund	90.0	237	105.9	214	-15.9	46
Bank (non-G-SIB)	367.6	111	383.5	155	-15.9	49
Principal trading firms	373.4	11	435.0	10	-61.6	46
Non-primary broker-dealer	1086.8	71	1406.9	84	-320.1	44
Bank (G-SIB)	2517.2	28	2989.6	27	-472.4	46
Primary dealer	2832.2	24	3818.6	24	-986.4	43
Hedge fund	1007.0	148	2811.6	189	-1804.7	26

Note: “#” indicates the number of distinct firms (at the parent level) observed lending or borrowing during the period. % Lending = lending / (lending + borrowing). Rows are ranked by “Net” column. G-SIB = Global systemically important bank. GSE = government sponsored entity. Bank (non-G-SIB) include both domestic and foreign banks. Principal trading firms are firms that invest using their own capital. Unclassifiable accounts are grouped with smaller types in the “Other” category. Government includes accounts associated with state, local, and foreign governments. Lending and borrowing by the Federal Reserve is excluded.

Sources: Bank of New York, Office of Financial Research, Author’s analysis

Federal Home Loan Banks nearly exclusively lend, with 97% of their gross repo outstanding being cash lending.

Hedge funds borrow more than \$1.8 trillion on net, and, as a comparison, gross assets held by U.S. hedge funds were \$10.2 trillion at year-end 2024.³ Hedge funds utilize leveraged strategies by funding the purchase of a security by pledging that security as collateral in the repo market. The repo haircut, which is frequently zero in the NCCBR segment, caps the respective leverage that is obtainable.⁴ Hedge funds also borrow securities and lend cash to short the securities, meaning that they participate on both sides of the repo market.

Banks and broker-dealers are participants on both sides of the repo market as well, together accounting for more than half of total lending and borrowing.

Primary dealers and the banking arms of global systemically important banks (G-SIBs) account for the majority of this activity and appear to take positions similar to those of non-primary dealers and non-G-SIB banks.⁵ For more information, previous OFR research has described the strategies that dealers use in this market.⁶ The results in this brief complement and expand on these previous findings and show that banks are performing some of the same intermediary functions as dealers. Principal trading firms are active participants mostly in the NCCBR segment. They run nearly matched books and, similar to banks and broker-dealers, are slight net borrowers; 54% of their gross repo outstanding is borrowing.

Finally, repo accounts associated with governments (including domestic state and local governments,

Figure 2: U.S. Repo Market Overview

Data source Repo service name (subsegment name)	BNY		OFR Cleared Repo Collection					OFR NCCBR
	BNY Triparty	Federal Reserve ON RRP	FICC-BNY Sponsored GC Service	FICC BNY GCF Repo Service	FICC DVP Service (brokered)	FICC Sponsored DVP Service (unbrokered lending)	FICC Sponsored DVP Service (unbrokered borrowing)	NCCBR
Collateral management & settlement services	✓	✓	✓	✓				
General collateral only	✓	✓	✓	✓				
Central clearing			✓	✓	✓	✓	✓	✓
No sponsored members				✓	✓	✓		
Interdealer broker matching services				✓	✓			Optional
Counterparty transparency	✓	✓	✓			✓	✓	✓
Flexible contract terms	Optional							Optional
Fedwire eligible collateral only		✓	✓	✓	✓	✓	✓	✓
H2 2025 daily average outstanding (\$ trillions)	3.0	0.1	0.6	0.5	1.3	0.2	0.7	1.3

Note: The Federal Reserve ON RRP facility is managed on BNY’s platform but only is open to qualifying counterparties. Federal Reserve Standing Repurchase Agreement (SRP) operations were negligible in H2 2025. “General collateral only” refers to market segments where all repos are necessarily negotiated using GC classes; counterparties may transact at GC rates and terms in other segments if they choose. Bilateral trades in sponsored DVP and NCCBR may also be facilitated by interdealer brokers, but are generally not counterparty blind. Sponsored lending trades involve a sponsored lender and sponsoring borrower, sponsored borrowing trades involve a sponsored borrower and sponsoring lender. Flexible contract terms in triparty and NCCBR include optionality in tenor (e.g. open trades) and adjustable rates.

Sources: Bank of New York, Federal Reserve Bank of New York, Office of Financial Research, Author’s analysis

foreign national governments, and foreign sovereign wealth funds, but not central banks) are also net lenders. These entities may be managing government pension funds or cash on behalf of a government investment authority.

Net Lending and Borrowing of Types by Segment

Not only do different types of entities hold different gross and net positions, they also participate in different repo market segments. The services and costs associated with each segment vary, and financial institutions tend to participate in those segments that best suit their needs (**Figure 2**). This section briefly explains the segment choices available to financial institutions and then presents information on where different types of financial institutions participate.

The repo segments in the first four columns of **Figure 2** are managed on BNY's Triparty platform. All transactions in these segments are general collateral (GC) transactions. In these, cash lenders agree to accept any collateral within a predetermined basket, and the specific collateral is selected after other terms are set according to the participants' stated collateral preferences and a BNY algorithm.

The purple bar in **Figure 2** denotes the repo market segments that are centrally cleared by the Fixed Income Clearing Corporation (FICC). Some of these segments are also managed on BNY's Triparty platform. The performance of each centrally cleared transaction is guaranteed by FICC but requires participants to contribute to a default fund and can have higher margining. Counterparties in cleared transactions must be full netting members of FICC or be sponsored by a full netting member. In this data, the counterparty of a sponsored member is always its sponsoring member. For example, banks and broker-dealers that are FICC full netting members use FICC's Sponsored General Collateral Service to borrow from money funds that are not full netting members. Sponsored GC transactions are also managed on BNY's platform and benefit both from BNY's collateral management services and FICC's central clearing services.

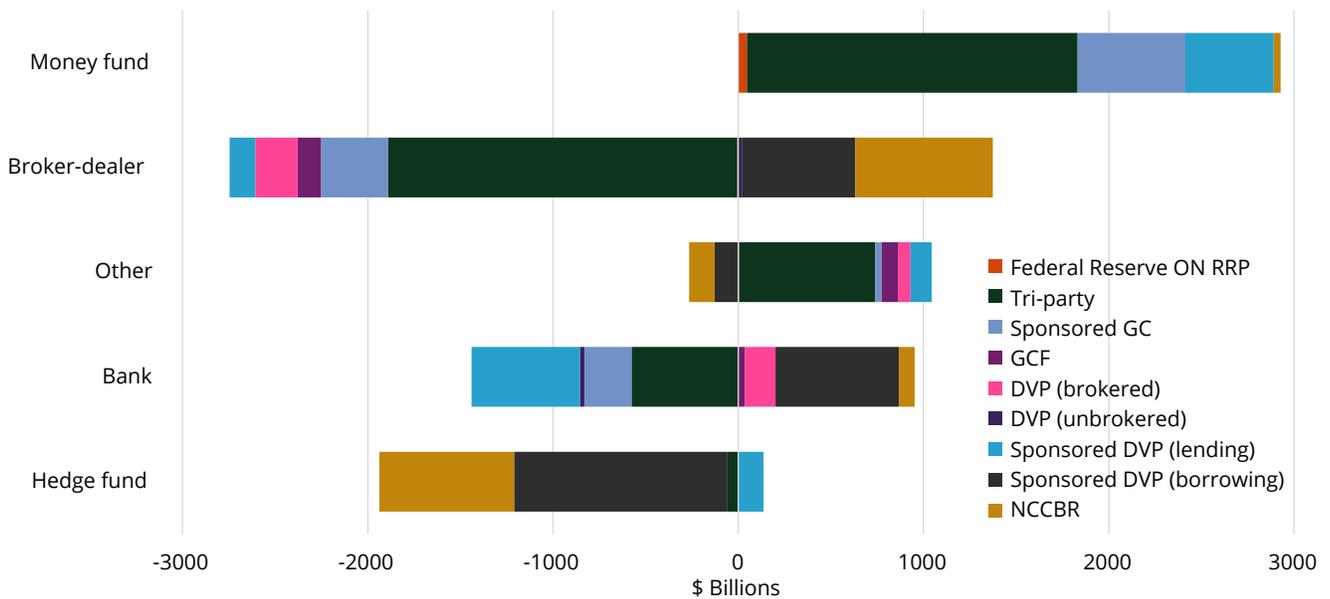
Some cleared segments are exclusively available to full netting members; these are denoted by the orange bar in **Figure 2**.⁷ FICC's GCF Repo Service is also managed on BNY's platform.⁸ Virtually all transactions in GCF are brokered by interdealer brokers (IDBs) that post set prices and arrange counterparty blind repos. FICC's DVP Service, which is not settled on BNY's platform and typically involves contracts requiring a specific piece of collateral, can be partitioned into brokered and unbrokered subsegments.⁹ FICC's Sponsored DVP Service supports specific collateral transactions between sponsoring and sponsored members, and these can be partitioned into a "sponsored lending" subsegment (with sponsored lenders, often money funds) and a "sponsored borrowing" subsegment (with sponsored borrowers, often hedge funds).

Finally, repos that are not managed by BNY and not centrally cleared by FICC are grouped into the NCCBR segment, which accounts for about 40% of the U.S. repo market. Repos in both the NCCBR and tri-party segment may have more flexible terms and use a broader range of collateral. NCCBR counterparties can also choose to use interdealer brokers, some of which arrange counterparty blind trades. More information about repo segments is available in past OFR briefs.¹⁰

Different entity types borrow and lend in different repo market segments. **Figure 3** shows net outstanding positions of entity types, netted within but not across segments.¹¹ Entity repo segment choices reflect their economic roles in the repo market. For example, money funds that use repo mainly as a safe, short-term investment predominantly lend in GC segments. This implies that these money funds are indifferent to the specific security collateralizing their lending provided it is in the specified class. Some money funds also access central clearing through the sponsored GC segment or the DVP sponsored lending subsegment because they or their sponsoring counterparty prefer the benefits of central clearing.

Unlike money funds, hedge funds are net borrowers and have concentrated activity in specific collateral subsegments. They do most of their gross borrowing and almost all of their gross lending in NCCBR,

Figure 3: H2 2025 Net Lending and Borrowing of Types by Segment



Note: Each color represents a segment in Figure 1. Values are netted within segments. Positive values indicate that entity type is a net lender in that segment, and negative values indicate that entity type is a net borrower in that segment. Summing across entity types, net borrowing equals net lending in each segment. The “Other” category includes other investment funds and nonbank, non-dealer repo participants.

Sources: Bank of New York, Federal Reserve Bank of New York, Office of Financial Research, Author’s analysis

which has flexibility regarding collateral, haircuts, and other contract terms. Overall, they are net borrowers in NCCBR. Hedge funds are also significant borrowers in the DVP sponsored borrowing subsegment.

Broker-dealers participate in all repo segments. They net borrow cash in tri-party and sponsored GC segments, as well as the DVP sponsored lending subsegment. They net lend cash in the NCCBR segment and the DVP sponsored borrowing subsegment. Their large net borrowing position in tri-party is not fully offset by net lending in other segments, making them net borrowers overall.

Banks also borrow in the tri-party segment and the DVP sponsored lending subsegment, and they lend in the DVP sponsored borrowing subsegment. Unlike broker-dealers, banks do not hold a significant net position in NCCBR. Broker-dealers and banks have substantial gross positions that are not captured in **Figure 3**, which shows only net positions. For example, they both participate heavily in the three

cleared subsegments available exclusively to full members of FICC—brokered DVP, unbrokered DVP, and GCF—but run nearly matched books and have small net positions.

Finally, the “Other” category in **Figure 3** includes a wide range of repo market participants pursuing different strategies. The large net lending position in the tri-party segment mostly reflects the positions of mutual funds, other investment funds, and asset managers that, like money funds, can use repo as a safe, short-term investment. The smaller net borrowing position in NCCBR and the DVP sponsored borrowing subsegment mainly reflects the positions of insurance companies, pension funds, and financial companies focusing on real estate, or REITs.

Pairwise Gross Positions of Types By Segment

This section builds on the analysis above with Sankey diagrams showing outstanding positions

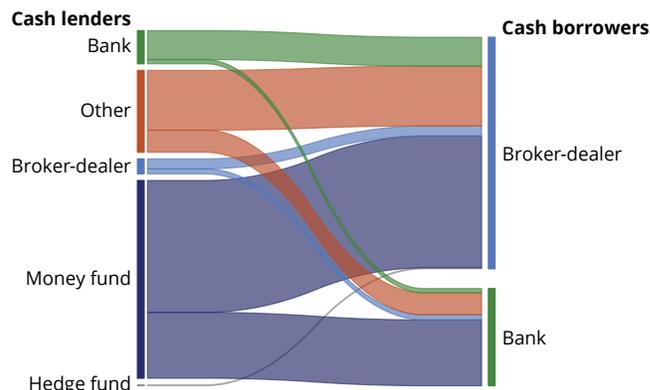
between repo market counterparties. Each line in the diagrams below represents the amount of gross repo outstanding between a pair of counterparty types. The relative size of the lines corresponds to the relative size of positions. These diagrams reveal which types of financial institutions lend to which others, and provide a high-level overview of intermediation patterns. The previous section established that cash enters the market primarily from money funds and investment funds via the tri-party segment and the DVP sponsored lending subsegment, and cash leaves the market primarily to hedge funds via the NCCBR segment and the DVP sponsored borrowing subsegment and to broker-dealers and banks via the tri-party segment. This section adds more detail by showing that dealers intermediate between money funds and hedge funds by taking the opposite side of their positions in the tri-party and NCCBR segments. Broker-dealers and banks also do substantial gross trading with each other, either for cash management or securities borrowing purposes.

Repo activity in the tri-party segment is dominated by money funds, broker-dealers, and banks (Figure 4). Cash flows mostly one-way from cash lenders to broker dealers and banks. Money funds lend about twice as much to broker-dealers than to banks. Other entities, mainly asset managers, mutual funds, pensions funds, other funds, and governments, also lend a substantial amount primarily to broker-dealers. Hedge funds are not material participants on either side of the tri-party market segment.

Due to reporting constraints, data from the OFR cleared repo collection are combined in one plot without separating the sponsored GC, GCF, brokered DVP, unbrokered DVP, sponsored lending, and sponsored borrowing subsegments (Figure 5). Repos brokered by inter-dealer brokers (IDBs) in the brokered DVP subsegment are counterparty blind to the repo participants and in the data, and these repos are plotted accordingly. Broker-dealers and banks are the only significant users of IDBs in cleared repo market segments. Broker-dealers transact more, suggesting that they play a slightly more important role in determining repo rates and contract terms.

The previous section established that money funds and hedge funds participate in cleared repo via

Figure 4: Pairwise Gross Positions of Types in the Tri-Party Segment (H2 2025)

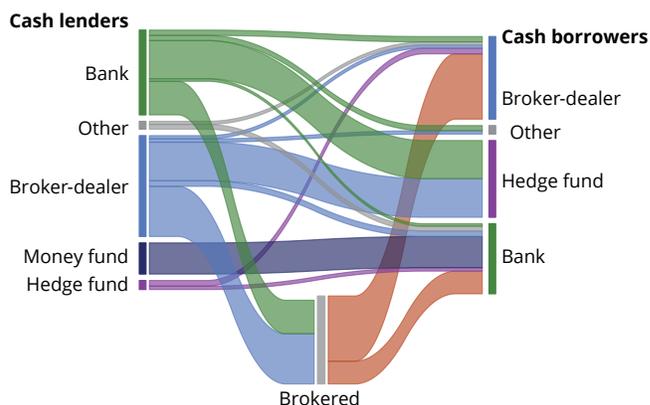


Note: Cash lenders lend cash and borrow securities (reverse repo). Cash borrowers borrow cash and lend securities (repo). Wider bands represent larger outstanding positions between counterparties.

Sources: Bank of New York, Author's analysis.

sponsored segments, and this section adds detail on their counterparties. Hedge funds borrow mostly from banks and broker dealers, and they lend a small amount as well. Banks lend a substantial amount to hedge funds and borrow a substantial amount from money funds, suggesting that banks may be

Figure 5: Pairwise Gross Positions of Types in Cleared Segments (H2 2025)

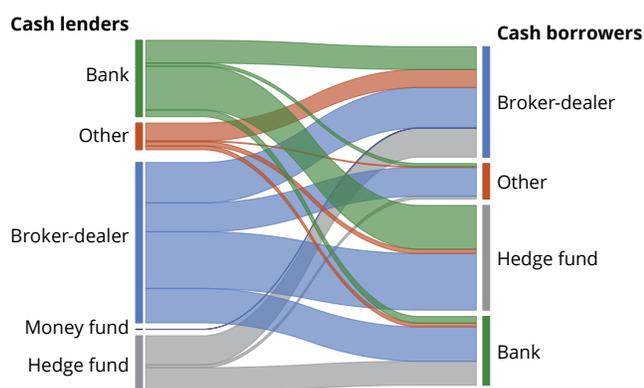


Note: Cash lenders lend cash and borrow securities (reverse repo). Cash borrowers borrow cash and lend securities (repo). Wider bands represent larger outstanding positions between counterparties.

Sources: Office of Financial Research, Author's analysis.

playing an intermediation role in the sponsored cleared segments. Activity in the sponsored cleared segments has grown substantially over the last five years and may increase with the introduction of mandatory central clearing in 2027.¹² GSEs, mutual funds, and other investment funds like private equity funds included in the “other” category lend about an equal amount to banks and broker-dealers in cleared segments. Pension funds and real estate investment companies, also included in the “other” category, borrow mostly from broker-dealers in cleared segments.

Figure 6: Pairwise Gross Positions of Types in the NCCBR Segment (H2 2025)



Note : Cash lenders lend cash and borrow securities (reverse repo). Cash borrowers borrow cash and lend securities (repo). Wider bands represent larger outstanding positions between counterparties.

Sources : Office of Financial Research, Author’s analysis.

NCCBR features active participation on both sides of the repo market segment by multiple entity types (**Figure 5**). Banks have large gross positions, transacting mostly with broker-dealers but also with hedge funds and other banks. However, banks have a small net position suggesting that they are not using NCCBR simply for cash borrowing or cash lending but possibly to manage liquidity needs over time. Broker-dealers are also active participants and transact with all other entity types. Hedge funds borrow from both banks and broker-dealers, slightly more from the latter; they also lend to both banks and broker-dealers, but less than they borrow, meaning

they receive net funding from both. Other entities, which in NCCBR would include governments, pension funds, real estate investment companies, and asset managers, borrow mostly from broker-dealers.

Conclusion

This brief presents statistics about participants in the U.S. repo market. Certain financial institutions prefer segments of the repo market owing to features of each segment that align with the operational or strategic needs of the institution. For example, money funds and investment funds that want safe, liquid investments and typically have no preferences as to the posted collateral lend mainly through BNY’s Triparty platform, which provides services that facilitate GC repo. Hedge funds and other entities that use the repo market to pursue leveraged strategies care less about segment but look for flexible margin requirements, cheaper borrowing costs, and a wide range of accepted collateral. These participants typically operate in either the NCCBR segment, where repo terms are generally more flexible, or in sponsored cleared segments, where they can access favorable terms from dealer and bank counterparties who prefer central clearing.

Broker-dealers intermediate cash and collateral between these entities and across all segments of the repo market. Interestingly, banks also intermediate between nonbank financial institutions by borrowing from money funds and lending to hedge funds through the sponsored cleared segments, which have grown substantially in size over the last five years.¹³ This new behavior may have implications for financial stability, consistent with other recent evidence on the interconnectedness of banks and nonbank financial institutions.¹⁴

Hedge funds are the largest net borrowers in the data, but both banks and broker-dealers borrow significant amounts directly from money funds in the tri-party segment that is not offset by lending in other segments. Overall, about \$3.5 trillion in lending enters the repo market from entity types that are predominately cash lenders, and about \$3.5 trillion exits the repo market to hedge funds, banks, and broker-dealers.

Endnotes

- 1 See <https://www.financialresearch.gov/data/collections/cleared-repo-data/> and <https://www.financialresearch.gov/data/collections/non-centrally-cleared-bilateral-repo-data/>.
- 2 Each entity name was assigned a type by finding relevant strings in the name, such as “securities” for broker-dealers and “national association” for banks. In addition, the top 500 accounts by volume (around 85% of volume) were verified by the company name in a regulatory registration associated with the type, such as Form ADV for hedge funds or Form N-MFP for money funds. More than 80% of unique repo entities in the cleared and NCCBR data have LEIs, but LEIs are not available in the tri-party segment.
- 3 OFR Hedge Fund Monitor: <https://www.financialresearch.gov/hedge-fund-monitor/categories/size/chart-3/>
- 4 For more on NCCBR haircuts, see Samuel J. Hempel et al. “Why Is So Much Repo Not Centrally Cleared,” OFR Brief No. 23-01 (Office of Financial Research, May 12, 2023), https://www.financialresearch.gov/briefs/files/OFRBrief_23-01_Why-Is-So-Much-Repo-Not-Centrally-Cleared.pdf; and Ashlyn Cenicola et al., “Are Zero Haircuts As Common As Advertised?,” OFR Blog, August 12, 2025, <https://www.financialresearch.gov/the-ofr-blog/2025/08/12/are-zero-haircut-repos-as-common-as-advertised/>.
- 5 Primary dealers are typically subsidiaries of G-SIBs, and many (but not all) non-primary broker-dealers are also subsidiaries of G-SIBs or other large domestic or foreign banks. Affiliated banks and broker-dealers sometimes share clients and are subject to overlapping regulatory constraints but typically maintain separate repo trading desks.
- 6 Previous OFR research has described the dealer strategies that are used in this market. For more information, see Hempel et al., “Repo Market Intermediation,” OFR Brief No. 24-07 (Office of Financial Research, November 14 2024), <https://www.financialresearch.gov/briefs/files/OFRBrief-24-07-repo-market-intermediation.pdf>.
- 7 The subsegments described in this section apply to H2 2025. FICC also offers an Agent Clearing Service (ACS), but usage was low in H2 2025.
- 8 For more information on the GCF segment, see Adam Copeland et al., “A Primer on the GCF Repo Service,” Federal Reserve Bank of New York Economic Policy Review, December 2015, https://www.newyorkfed.org/medialibrary/media/research/epr/2015/EPR_2015_vol21no2.pdf.
- 9 Repo segments that are not managed on BNY’s Triparty platform are usually referred to as specific-collateral segments. Repo agreements in these segments commonly specify the securities collateralizing the transaction but sometimes allow for any security within a bucket to be used, similar to how repo agreements in the BNY managed subsegments are structured.
- 10 Matthew McCormick et al., “The Dynamics of the U.S. Overnight Triparty Repo Market,” OFR Brief No. 21-02 (Office of Financial Research, July 22, 2021), https://www.financialresearch.gov/briefs/files/OFRBr_21-02_Dynamics_Overnight_Triparty_Repo_Market.pdf; Samuel J. Hempel et al. “Why Is So Much Repo Not Centrally Cleared,” OFR Brief No. 23-01 (Office of Financial Research, May 12, 2023), https://www.financialresearch.gov/briefs/files/OFRBrief_23-01_Why-Is-So-Much-Repo-Not-Centrally-Cleared.pdf; and Samuel J. Hempel et al., “Repo Market Intermediation: Dealer Cash and Collateral Flow Management across the U.S. Repo Market,” OFR Brief No. 24-07 (Office of Financial Research, November 14, 2024), <https://www.financialresearch.gov/briefs/files/OFRBrief-24-07-repo-market-intermediation.pdf>.
- 11 In Figure 3, “Money fund,” “Hedge fund” and “Bank” are defined as in Figure 2. “Broker-dealer” includes broker-dealers and principal trading firms. “Other” includes all other categories. Some type-segment categories include fewer than five distinct counterparties; these are not included in the figure. Note that because netting is within-segment, totals may not line up with Figure 2.
- 12 Figure 4 of “Who Participates in Cleared Repo?” (Kahn and Olson 2021), which depicts the average daily transaction flow between participant types in DVP during 2020, illustrates that banks’ intermediation role in the cleared segment predated this growth. See R. Jay Kahn and Luke M. Olson, “Who Participates in Cleared Repo?,” OFR Brief No. 21-01 (Office of Financial Research, July 8, 2021), https://www.financialresearch.gov/briefs/files/OFRBr_21-01_Repo.pdf.
- 13 Adam Copeland and R. Jay Kahn, “The Rise of Sponsored Service for Clearing Repo,” Federal Reserve Bank of New York *Liberty Street Economics*, October 8, 2025, <https://doi.org/10.59576/lse.20251008>.
- 14 Viral V. Acharya et al., “Banks and Nonbanks Are Not Separate, but Interwoven,” Federal Reserve Bank of New York *Liberty Street Economics*, June 18, 2024, <https://libertystreeteconomics.newyorkfed.org/2024/06/banks-and-nonbanks-are-not-separate-but-interwoven/>.