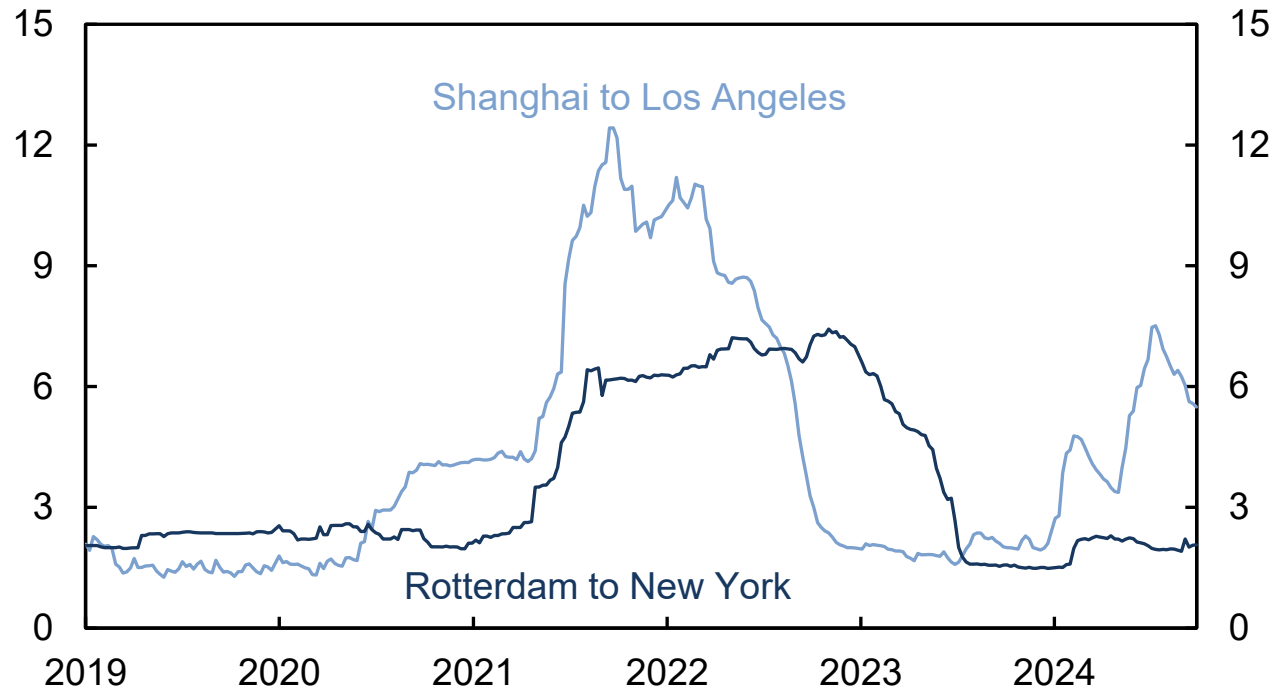


A.1 Container Spot Prices

Thousands of US\$

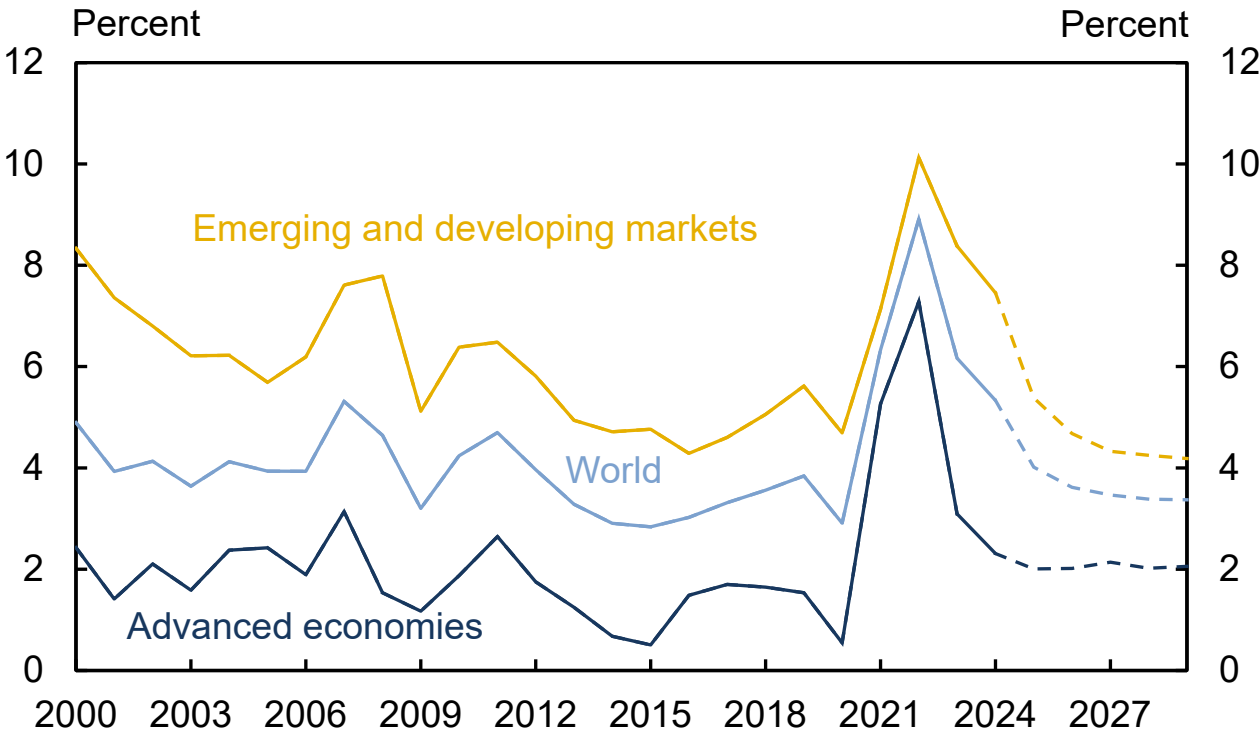
Thousands of US\$



Note: Data as of September 30, 2024.

Source: Drewry Shipping Consultants (Bloomberg).

A.2 Global Inflation Rates

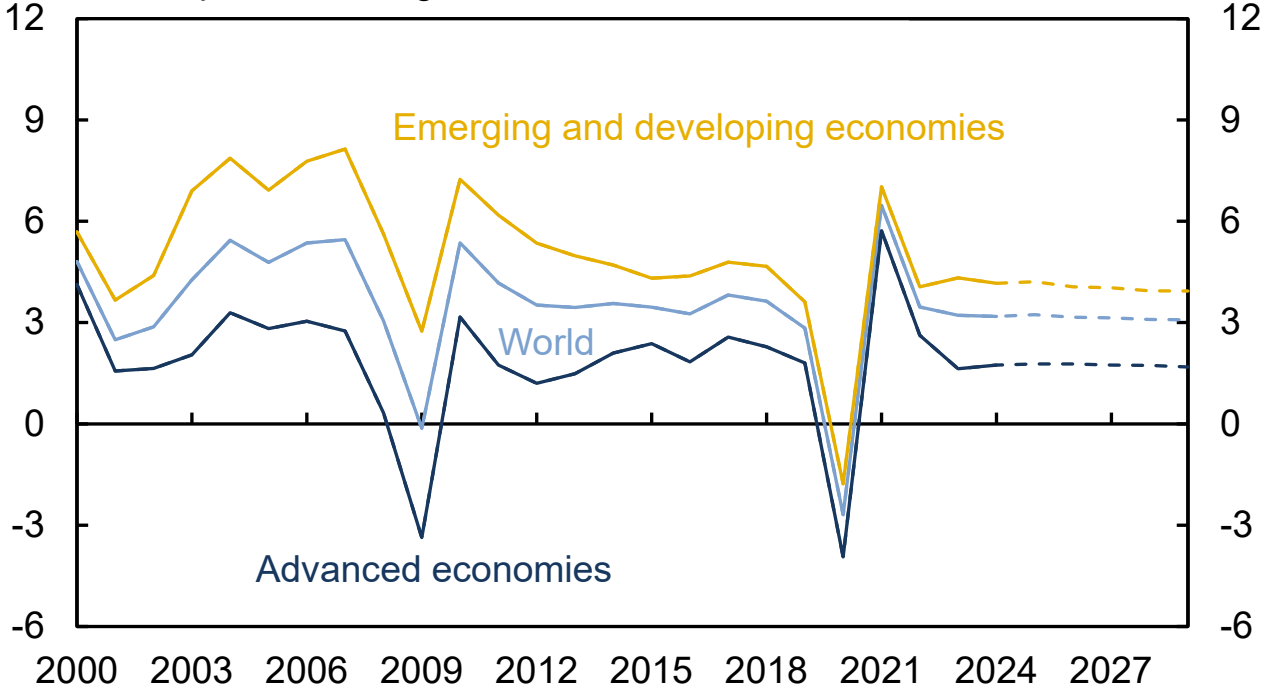


Notes: Data as of September 2024. Dashed lines signify IMF forecasts.
Source: IMF World Economic Outlook (Haver Analytics).

A.3 Growth in Real Global GDP

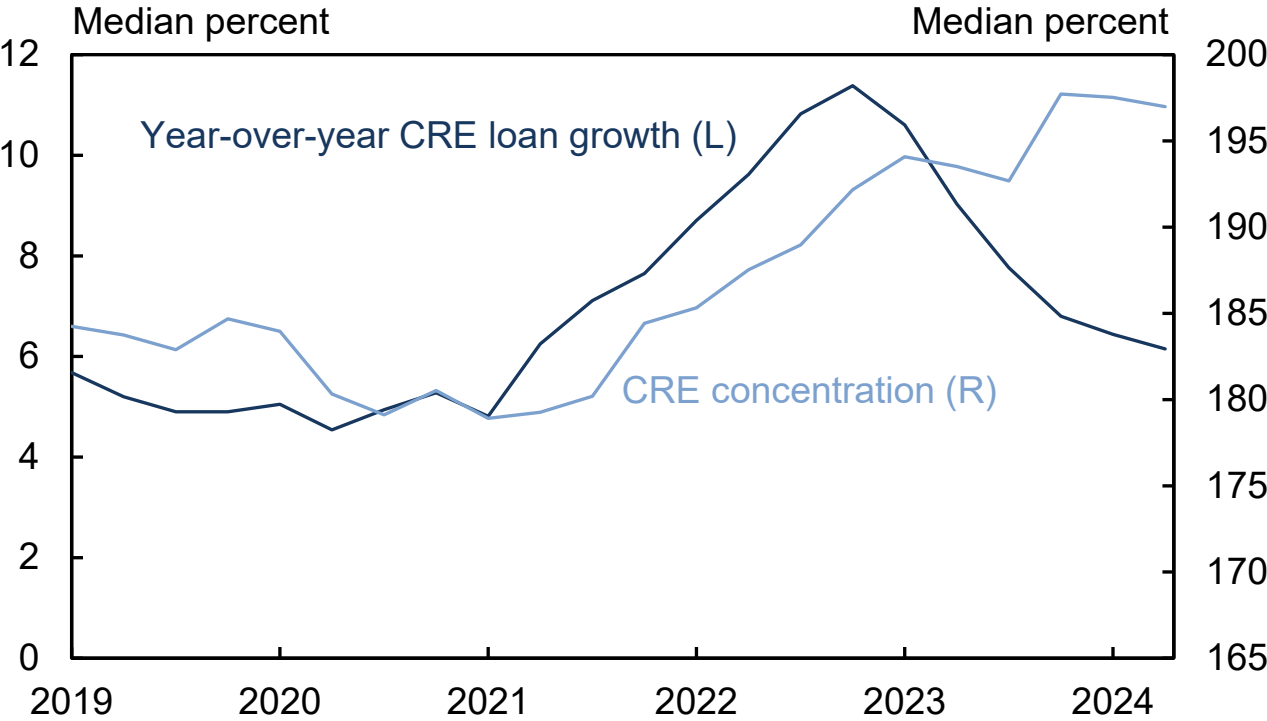
Annual percent change

Annual percent change



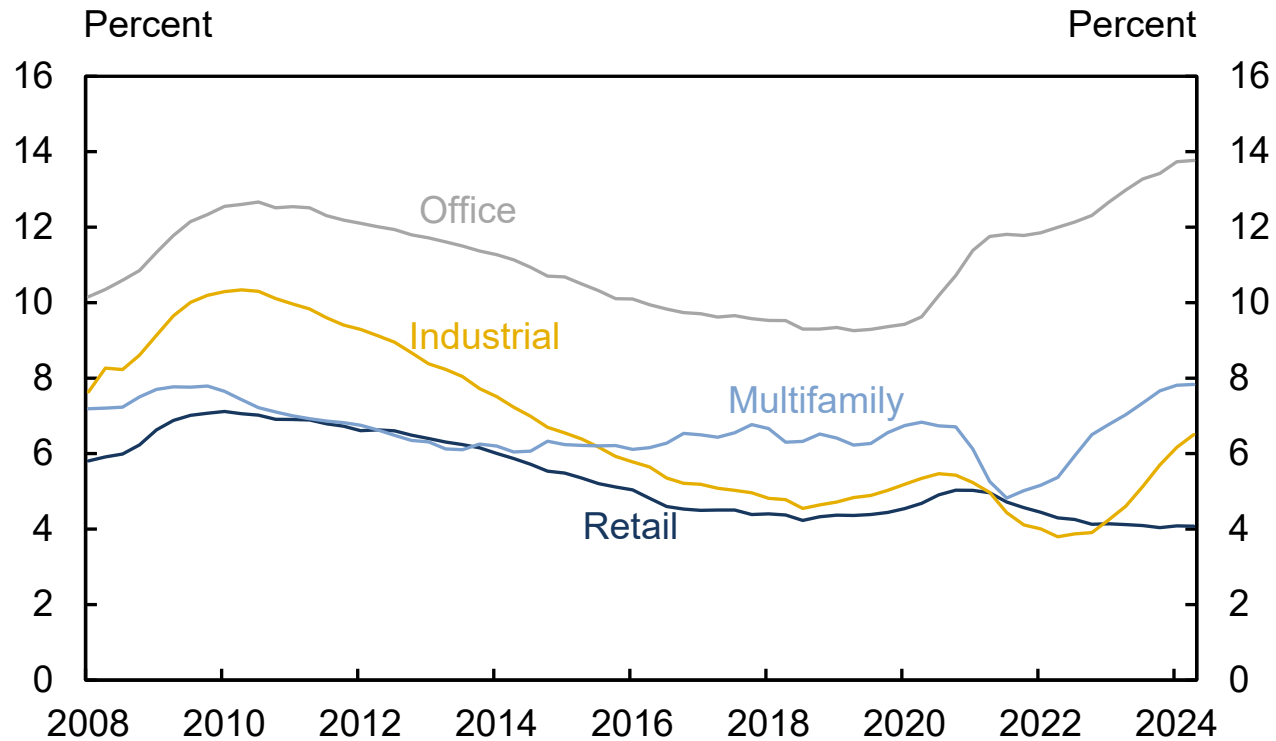
Notes: Data as of September 2024. Dashed lines signify IMF forecasts.
Source: IMF World Economic Outlook (Haver Analytics).

3.1.1.1 CRE Loan Growth and Concentration among FDIC-Insured Institutions



Notes: Data as of 2024:Q2. Commercial mortgage loan growth includes multifamily and nonfarm nonresidential loans but excludes construction loans. CRE concentration is total CRE loans, including construction loans, as a percentage of total capital and the allowance for credit loss. Source: FDIC.

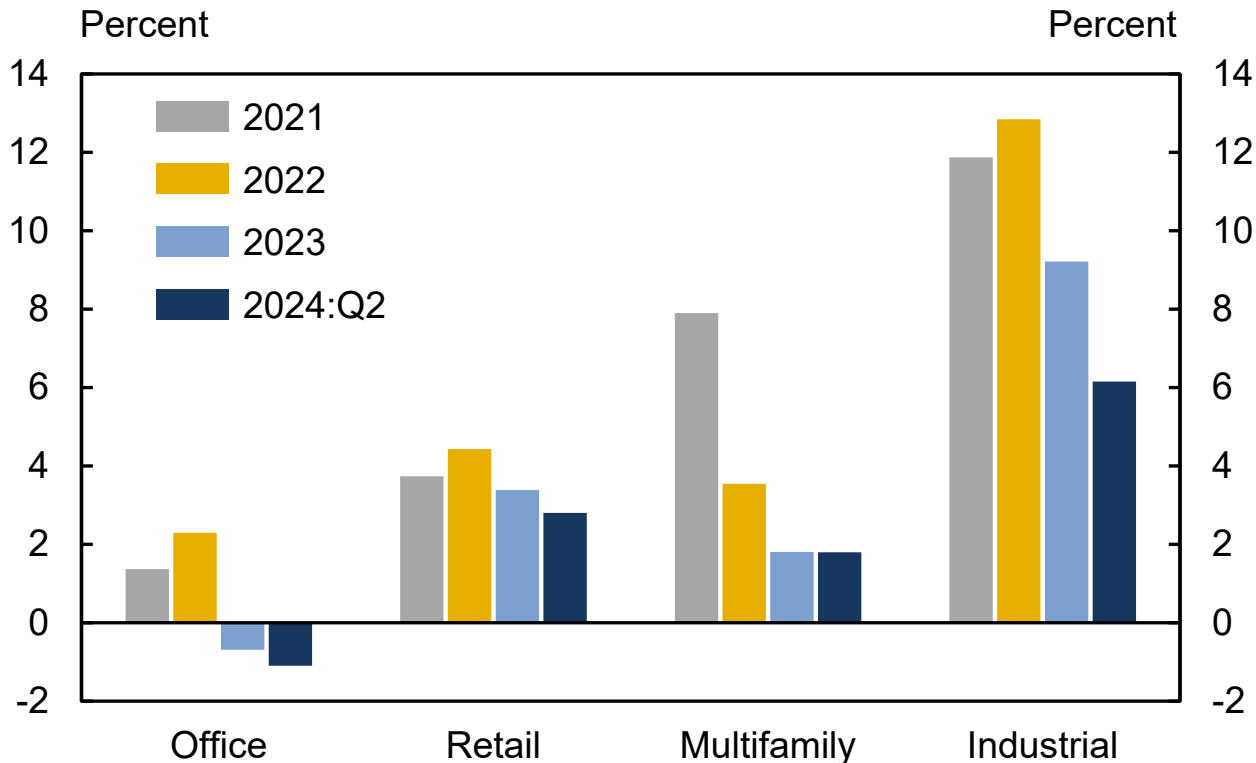
3.1.1.2 Vacancy Rates by Property Type



Note: Data as of 2024:Q2.

Source: CoStar.

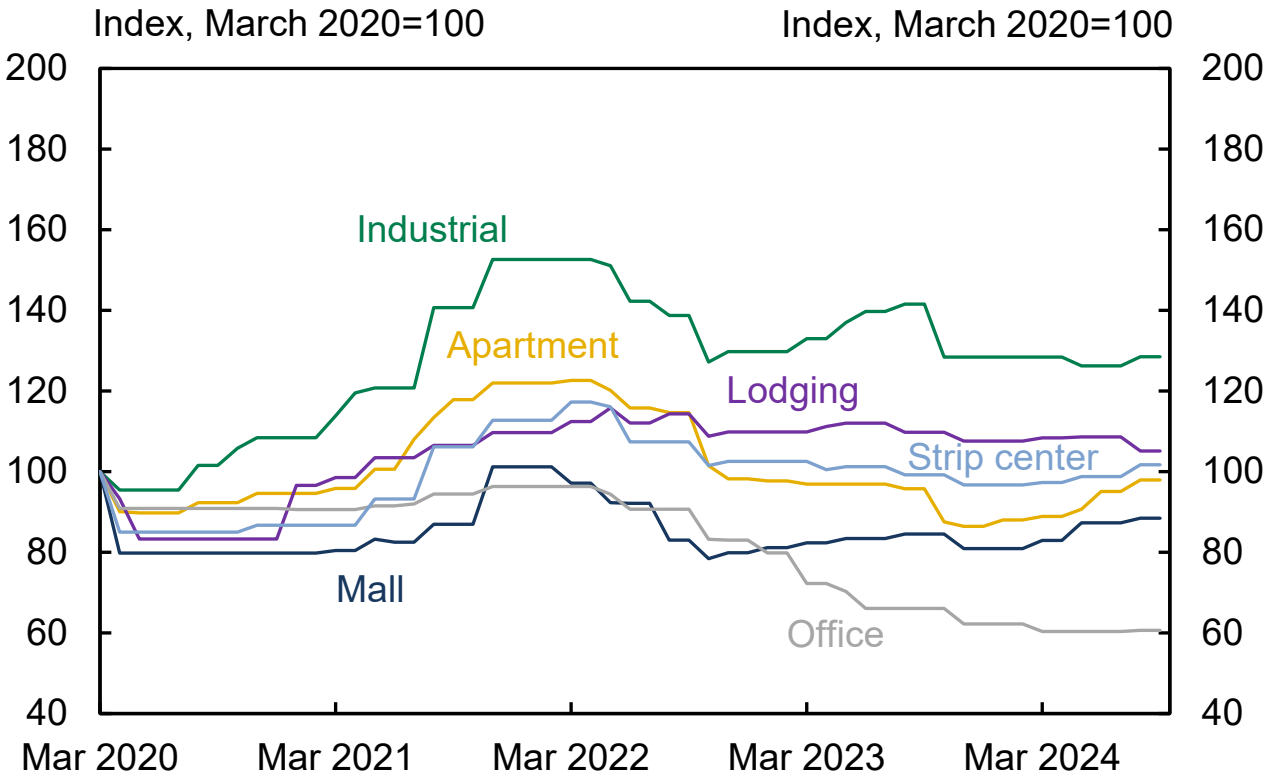
3.1.1.3 Year-Over-Year Change in Net Operating Income by Property Type



Note: Data as of 2024:Q2.

Source: CoStar.

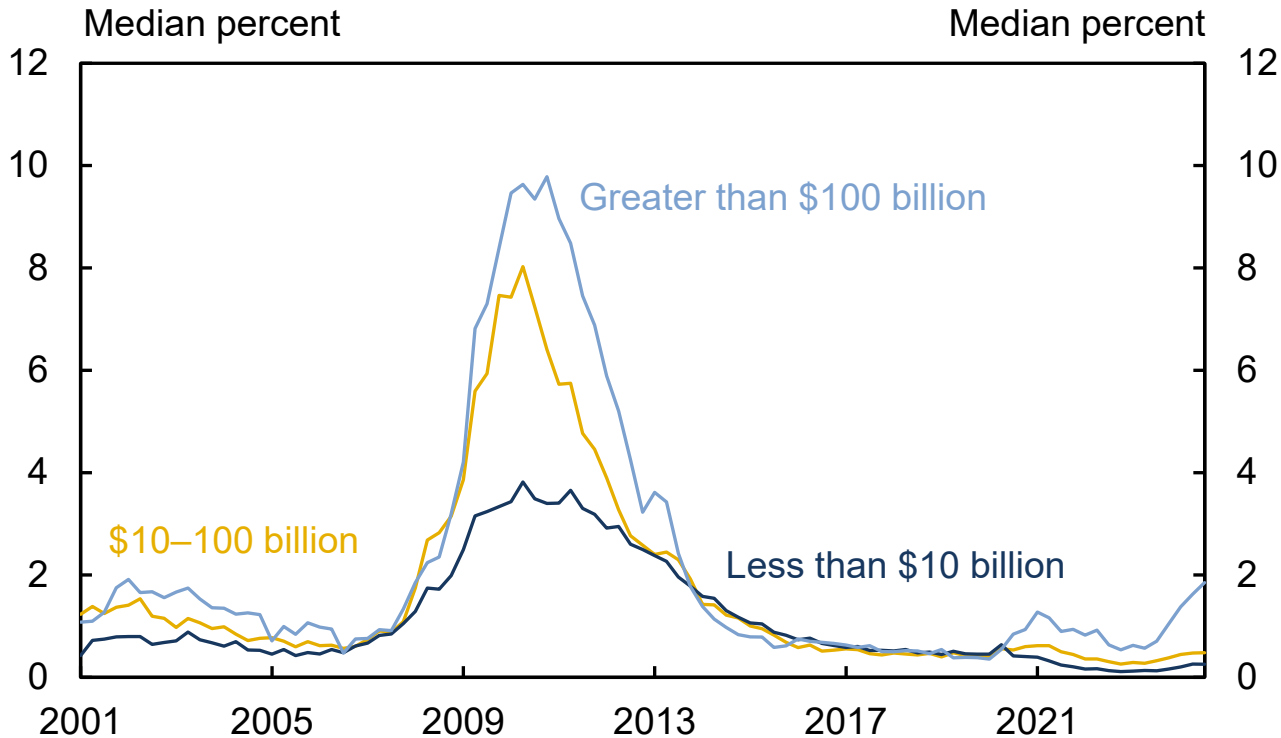
3.1.1.4 Commercial Property Price Indexes by Property Type



Note: Data as of September 2024.

Source: Green Street's Commercial Property Price Index.

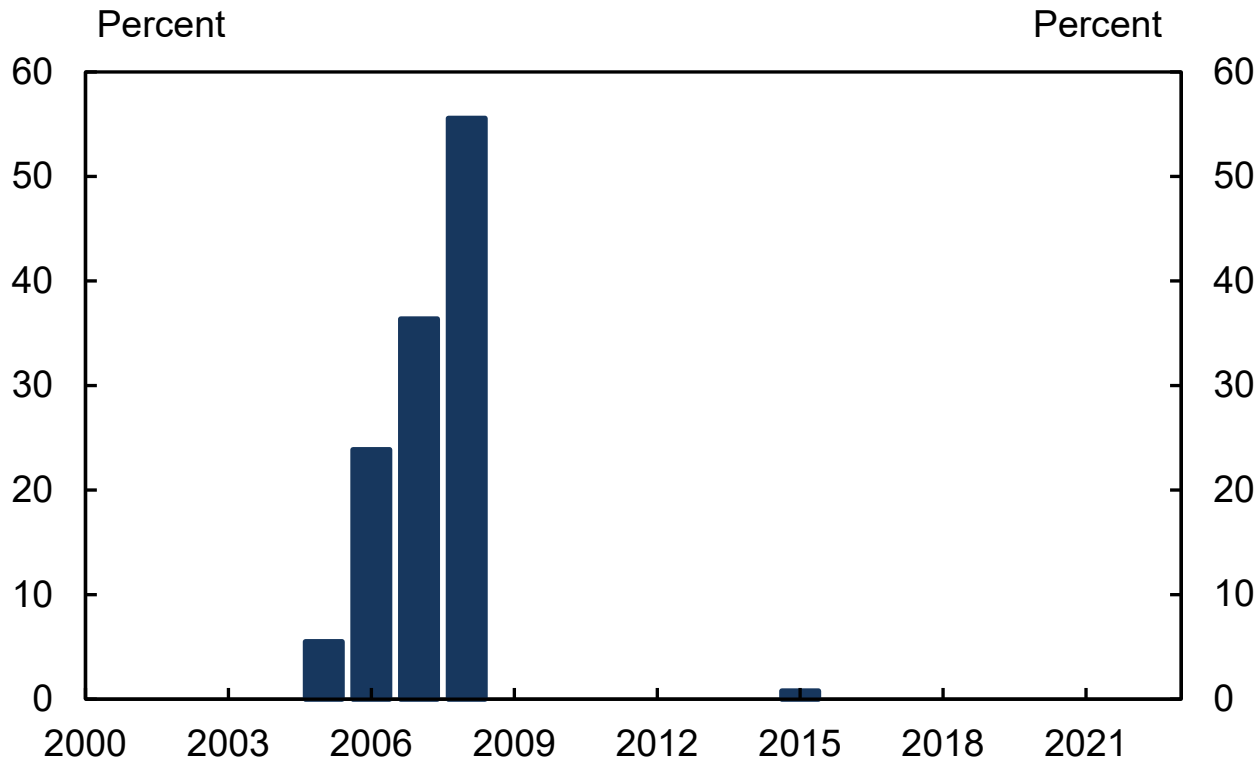
3.1.1.5 Bank CRE Delinquency Rates by Asset Size



Notes: Data as of 2024:Q2. Delinquencies include all loans 30+ days past due or on nonaccrual.

Source: FDIC.

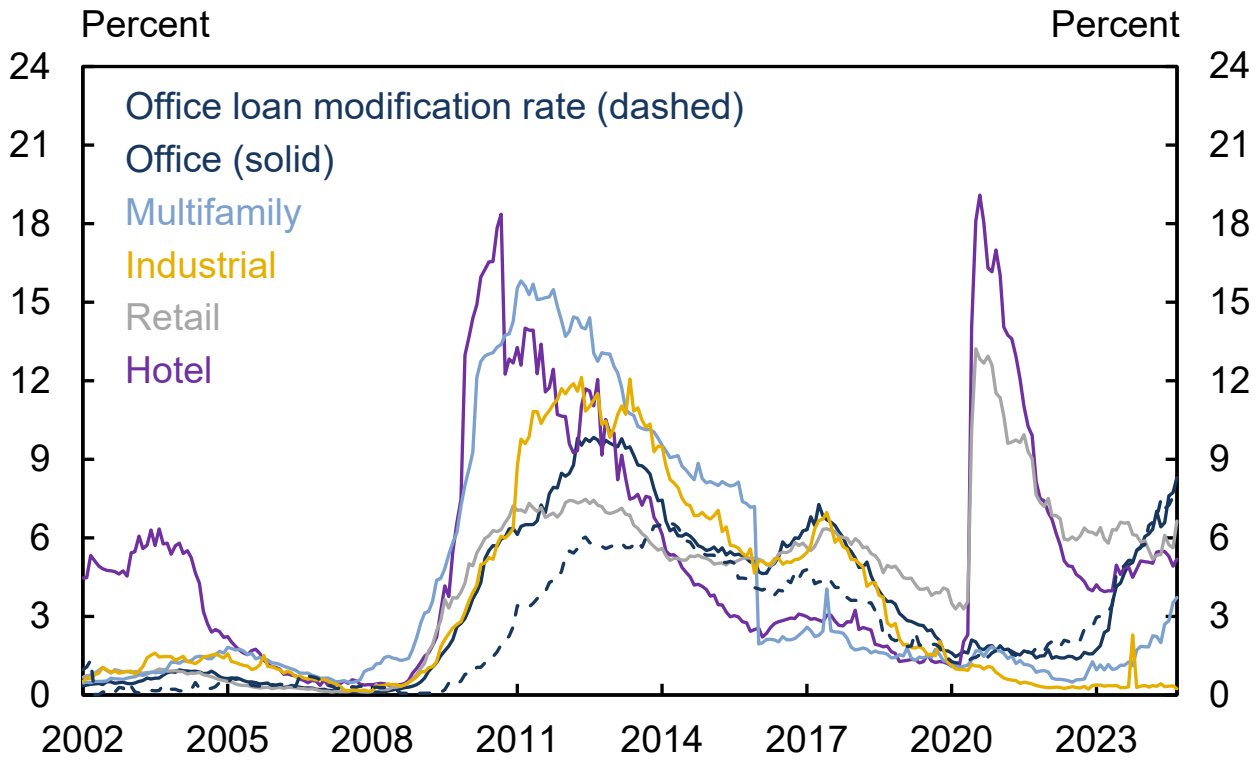
B.1 CMBS Losses by Vintage for Bonds with Original AAA Rating



Note: Data as of July 2024.

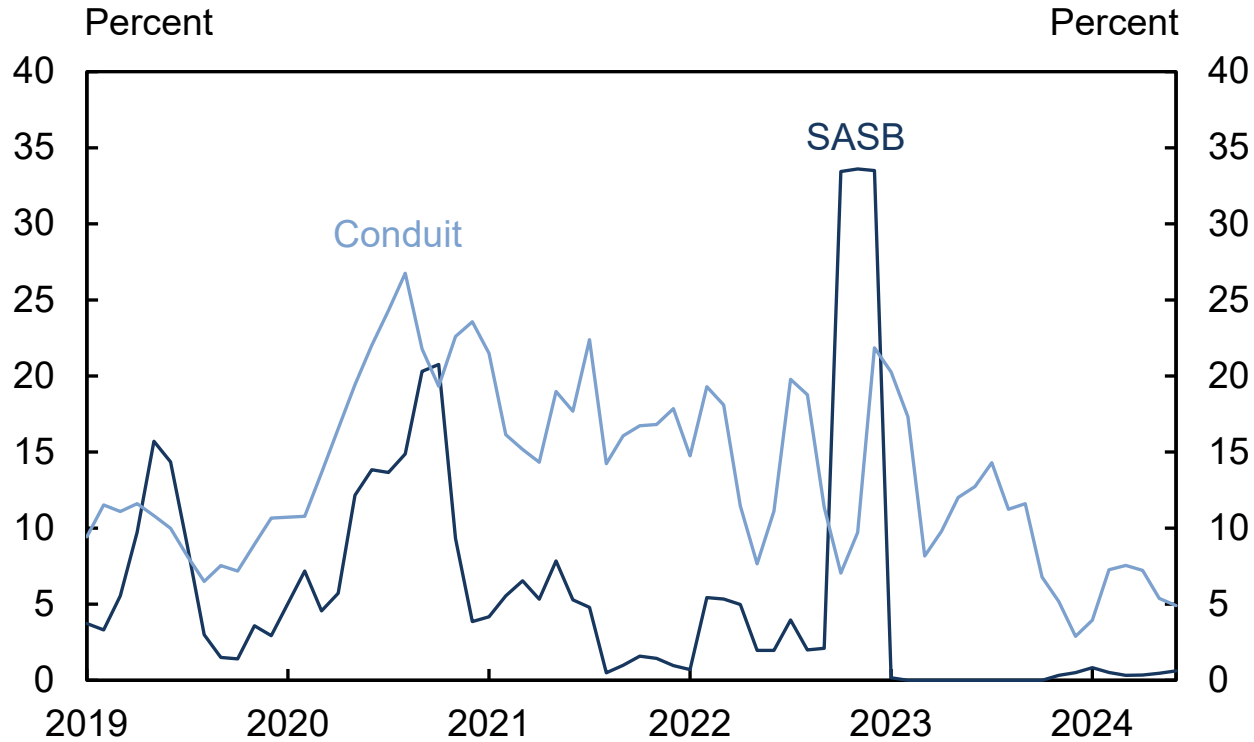
Source: Trepp.

B.2 Private Label CMBS 60+ Day Delinquency Rates and Office Loan Modification Rate



Note: Data as of September 2024.
Sources: J.P. Morgan and Trepp.

B.3 Office Percent of CMBS Issuance

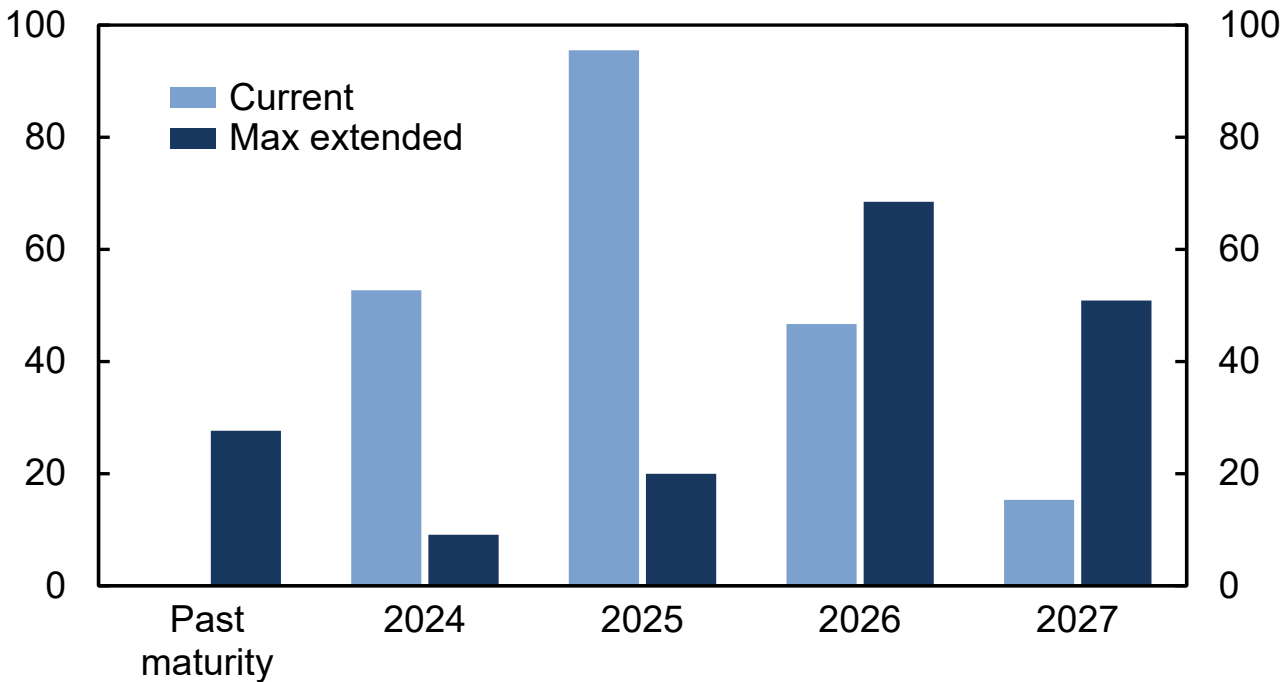


Notes: Data as of September 2024. Reported as three-month moving average.
Source: CMA (Deutsche Bank).

B.4 SASB Maturities: Current and Max Extended

Billions of US\$

Billions of US\$



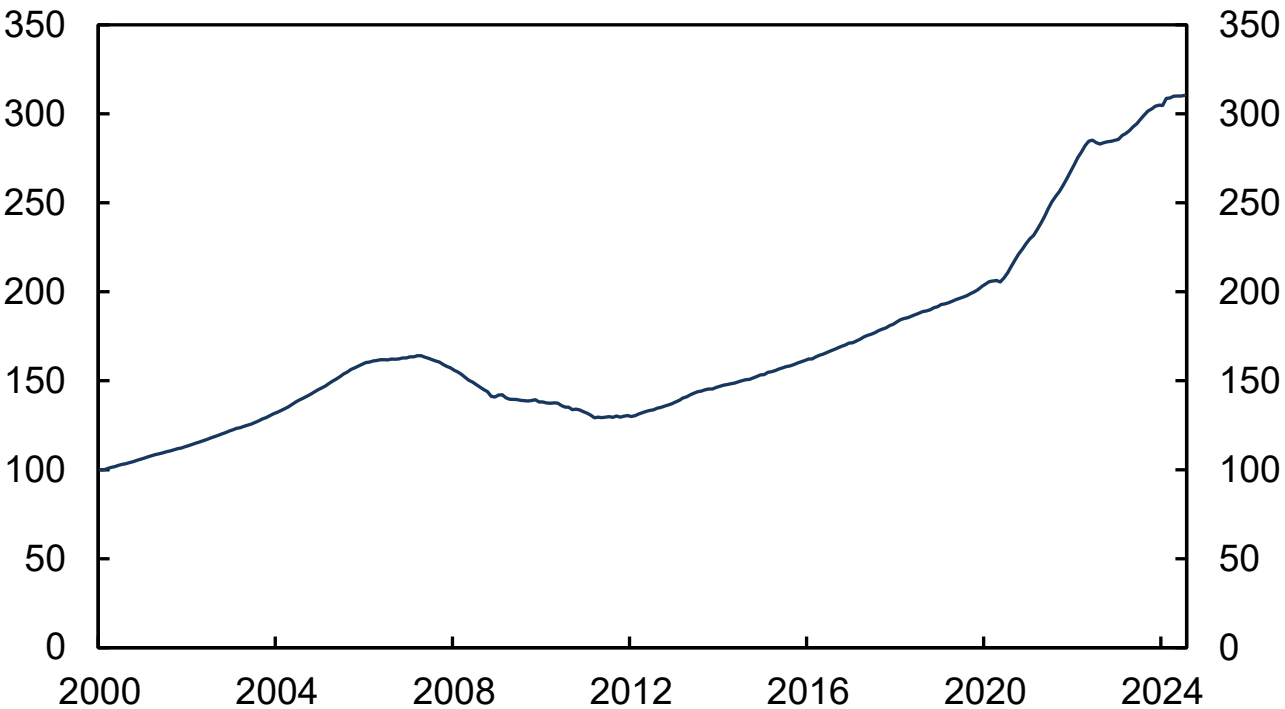
Note: Data as of September 2024.

Source: Intex (Deutsche Bank).

3.1.2.1 House Price Index

Index, Jan 2000=100

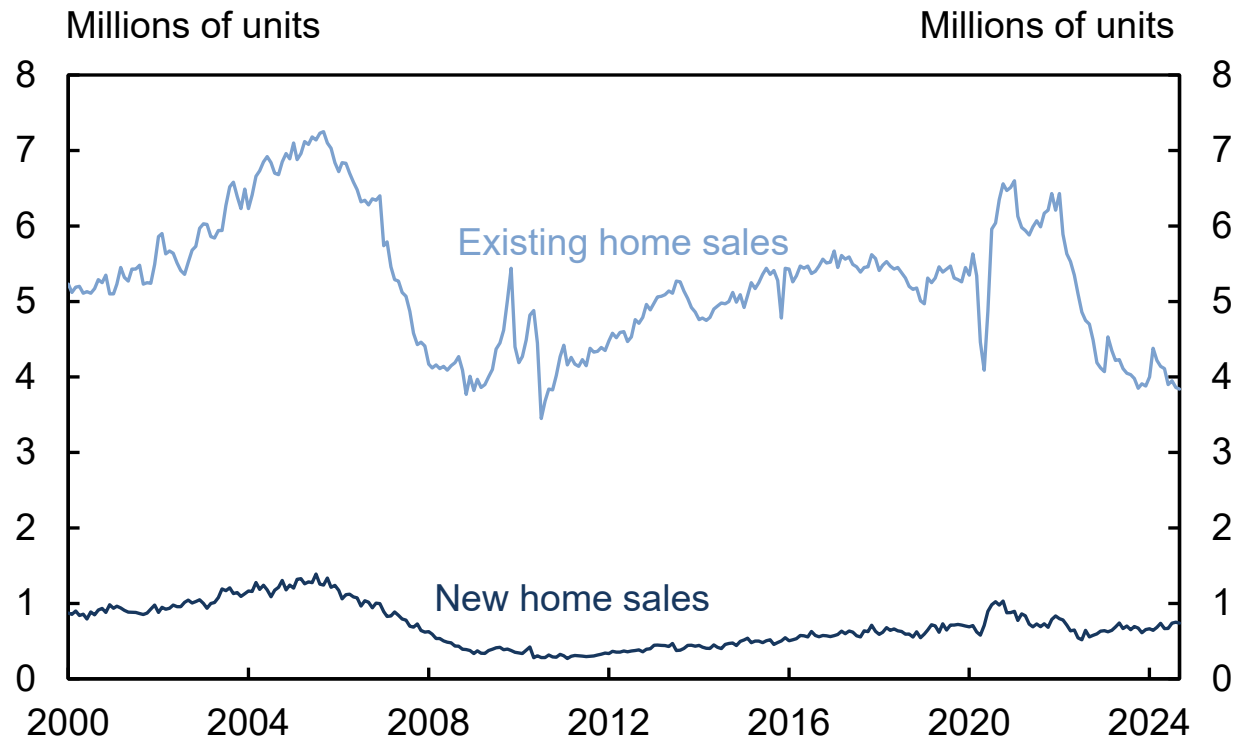
Index, Jan 2000=100



Note: Data as of July 2024.

Source: Federal Housing Finance Agency (FRED).

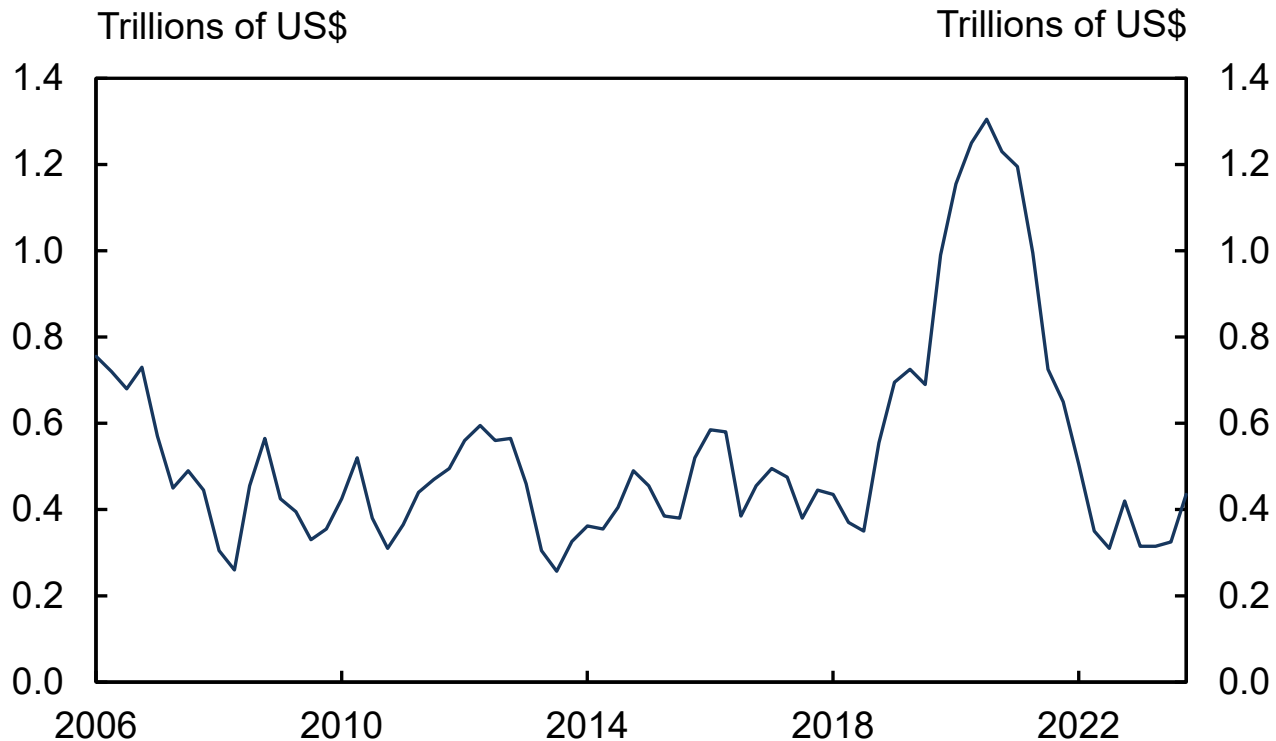
3.1.2.2 New and Existing Monthly Home Sales



Note: Data as of September 2024.

Source: National Association of Realtors (Bloomberg).

3.1.2.3 Mortgage Originations



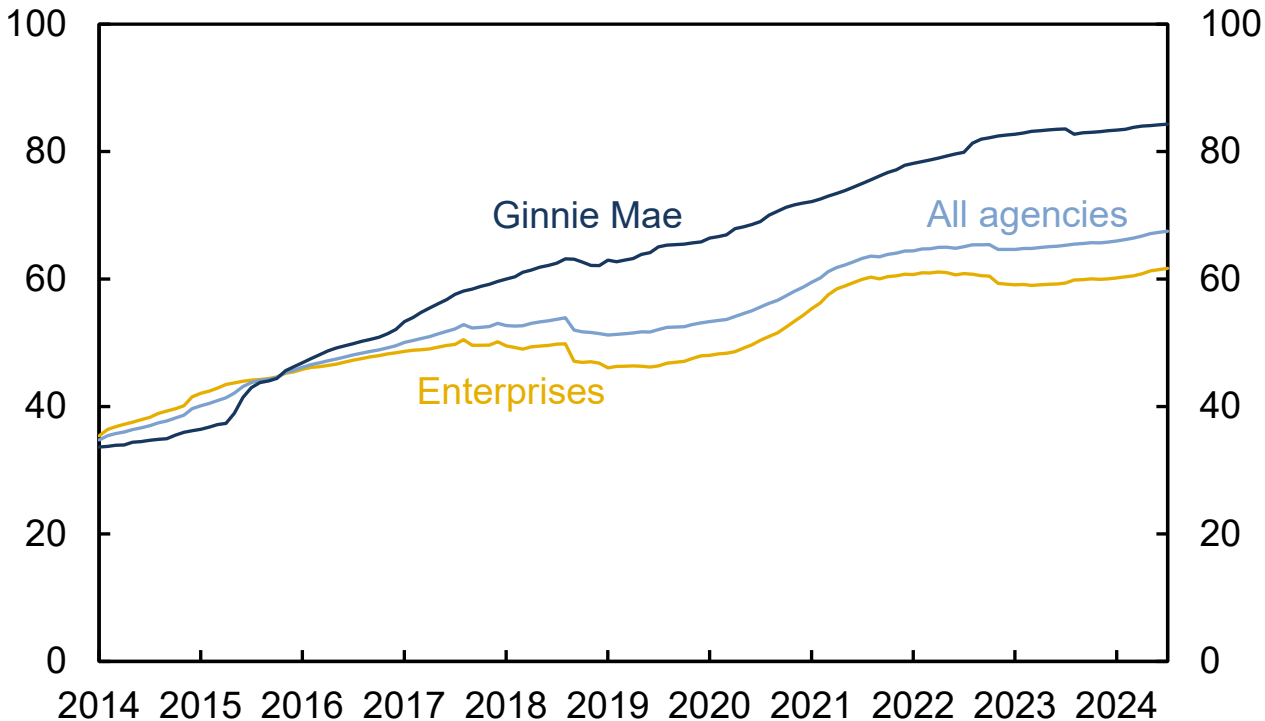
Note: Data as of 2024:Q2.

Source: Bloomberg.

C.1 NMC Share of Agency Servicing

Percent

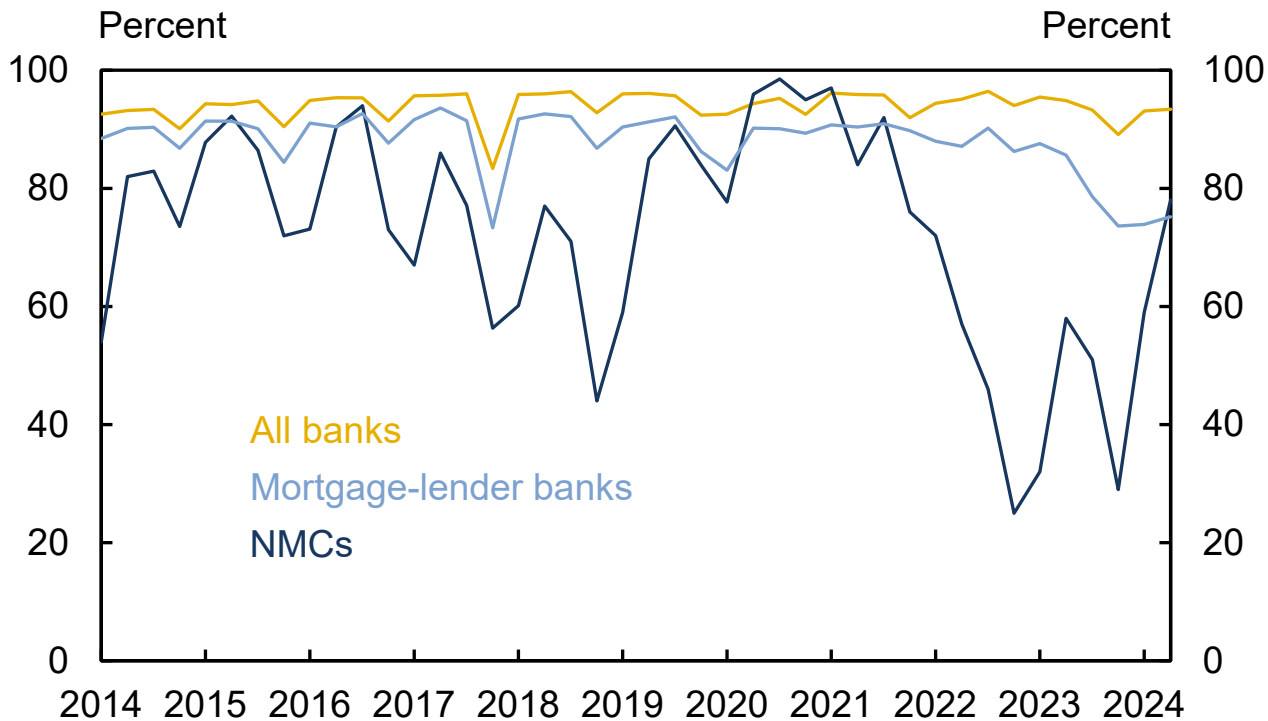
Percent



Note: Data as of July 2024.

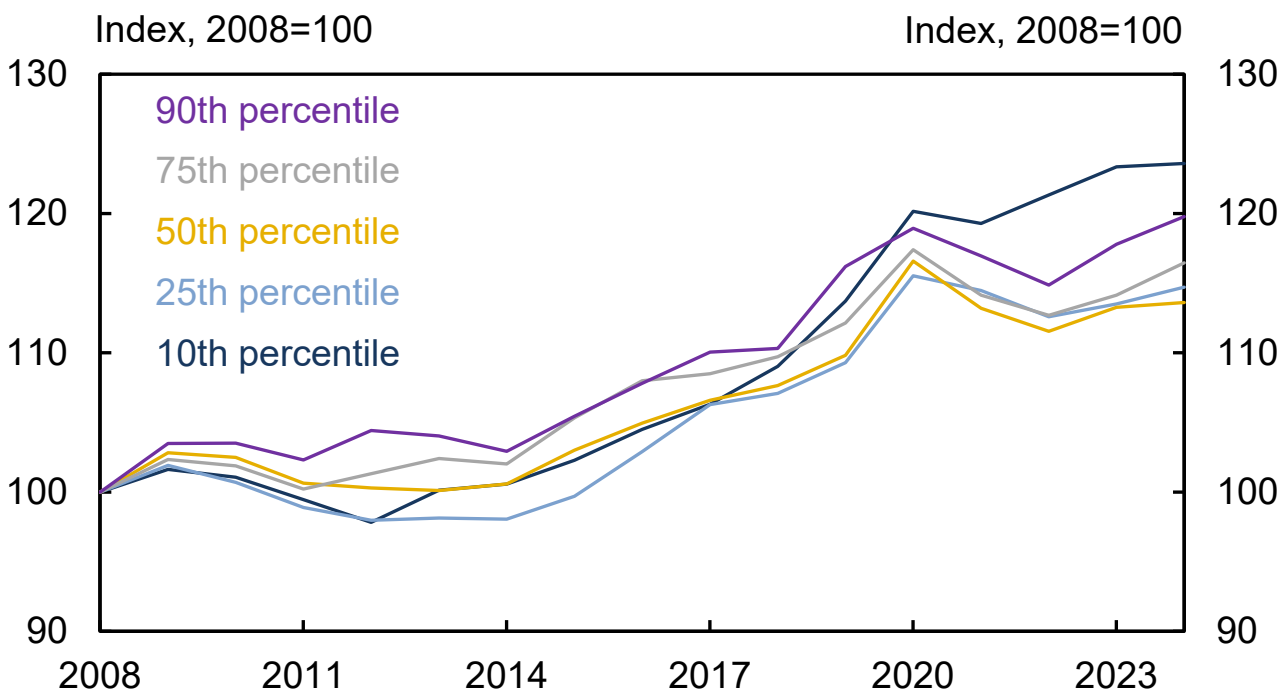
Source: ICE eMBS.

C.2 Bank and NMC Profitability Over Time



Notes: Data as of 2024:Q2. Profitability is defined as positive pre-tax income in a given quarter for NMCs and positive after-tax income for banks. A mortgage-lender bank is a bank with residential mortgage loans and MBS in excess of 50 percent of total assets.
Sources: FDIC and Mortgage Bankers Association.

D.1 Real Weekly Earnings by Percentile

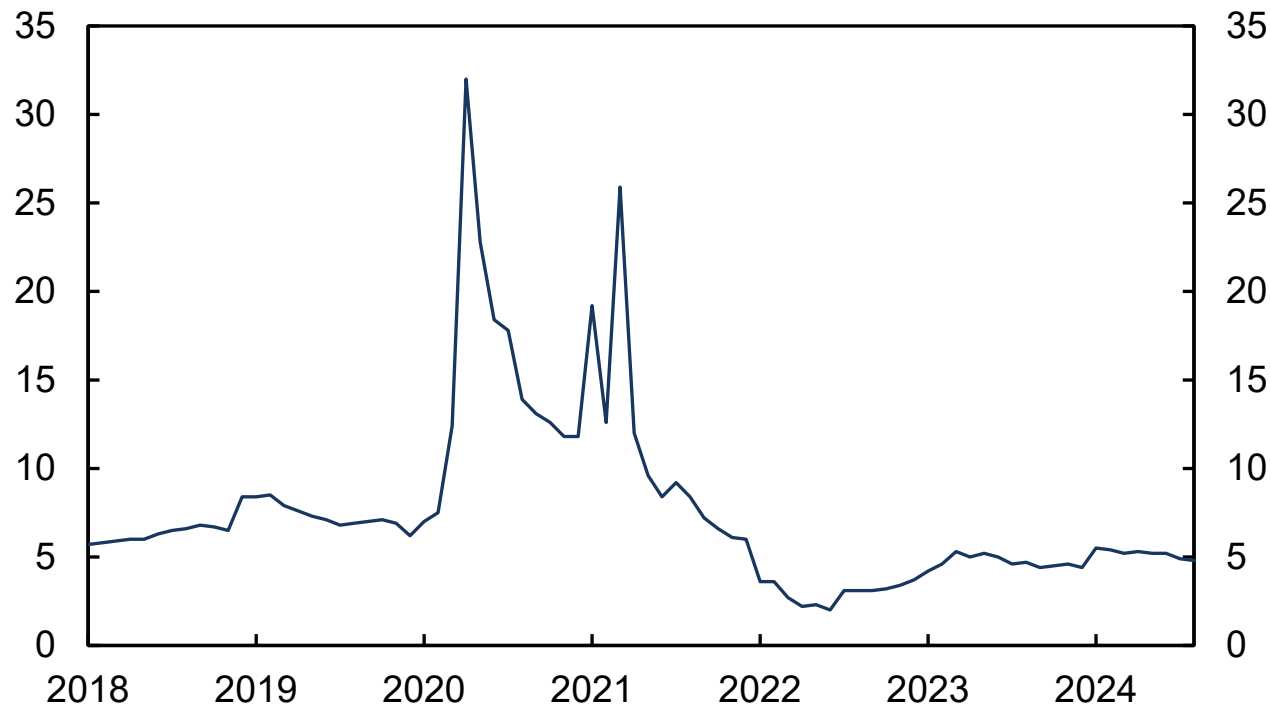


Notes: Data as of 2024:Q3. Chart shows quartiles and selected deciles of usual weekly earnings of full-time wage and salary workers by selected characteristics. Data are not seasonally adjusted, expressed as constant dollars, and inflation-adjusted using chain-weighted CPI. Value for 2024 calculated as an annual average using only three quarters of data.
Source: U.S. Bureau of Labor Statistics.

D.2 Personal Saving Rate

Percent

Percent



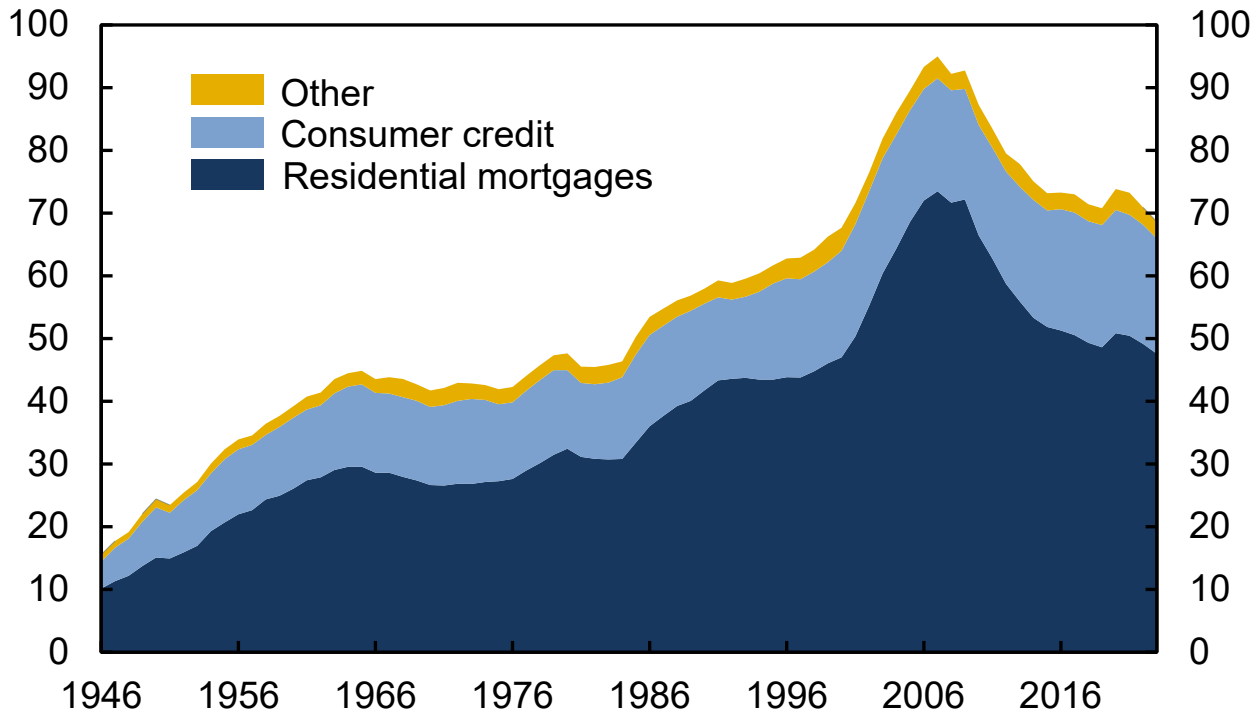
Note: Data as of August 2024.

Source: U.S. Bureau of Economic Analysis (FRED).

D.3 Household Debt to GDP by Major Categories

Percent of GDP

Percent of GDP



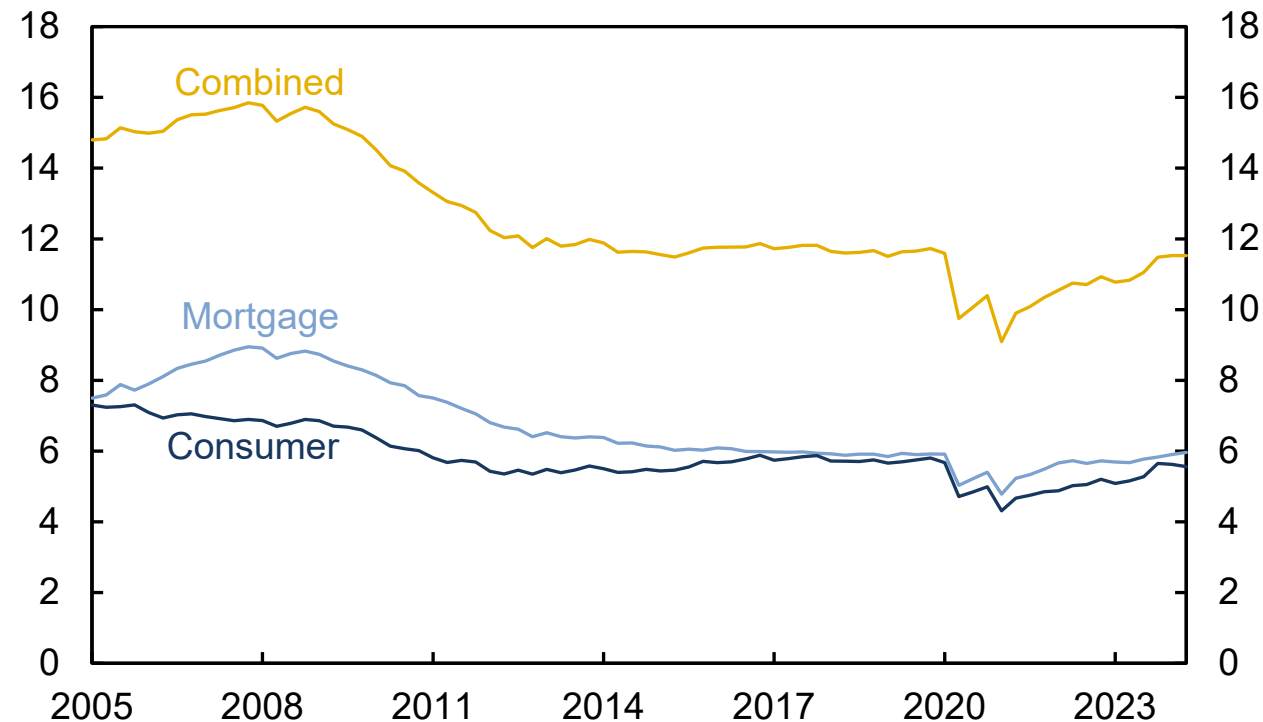
Note: Data as of 2023.

Source: Federal Reserve Board.

D.4 Debt Service to Disposable Personal Income by Category

Percent

Percent



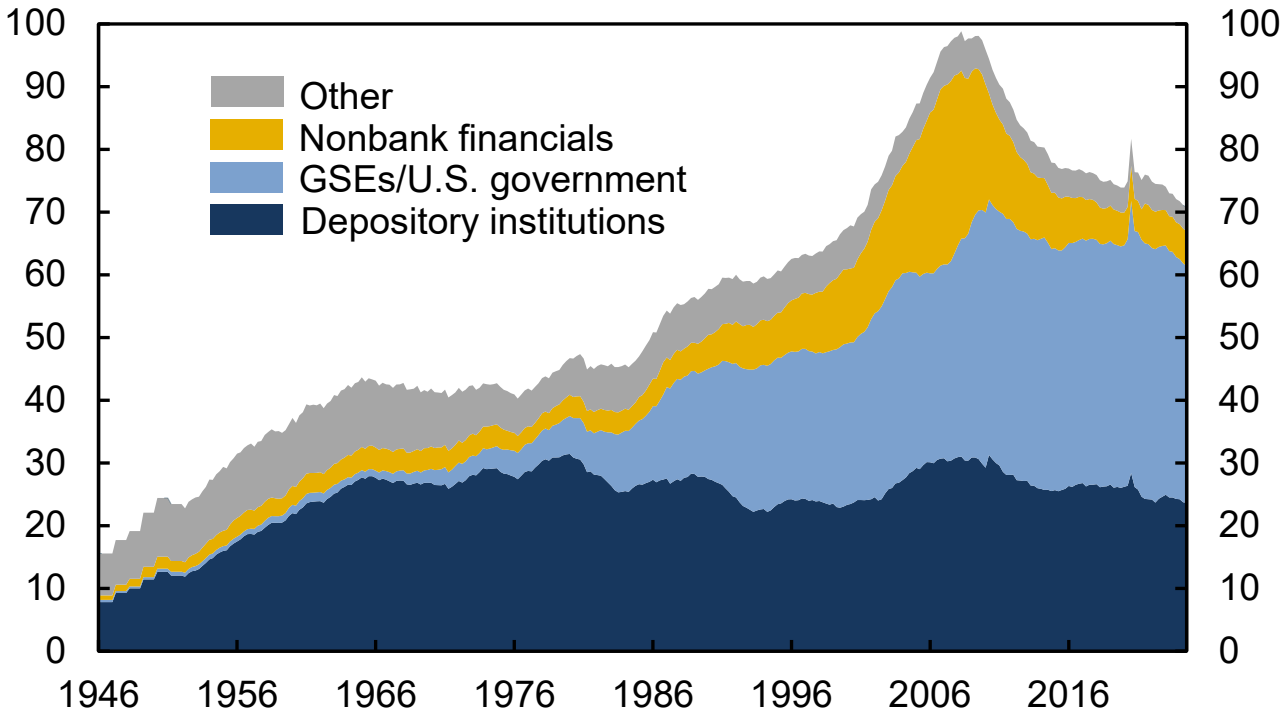
Note: Data as of 2024:Q2.

Source: Federal Reserve Board.

D.5 Household Debt to GDP by Major Holders

Percent of GDP

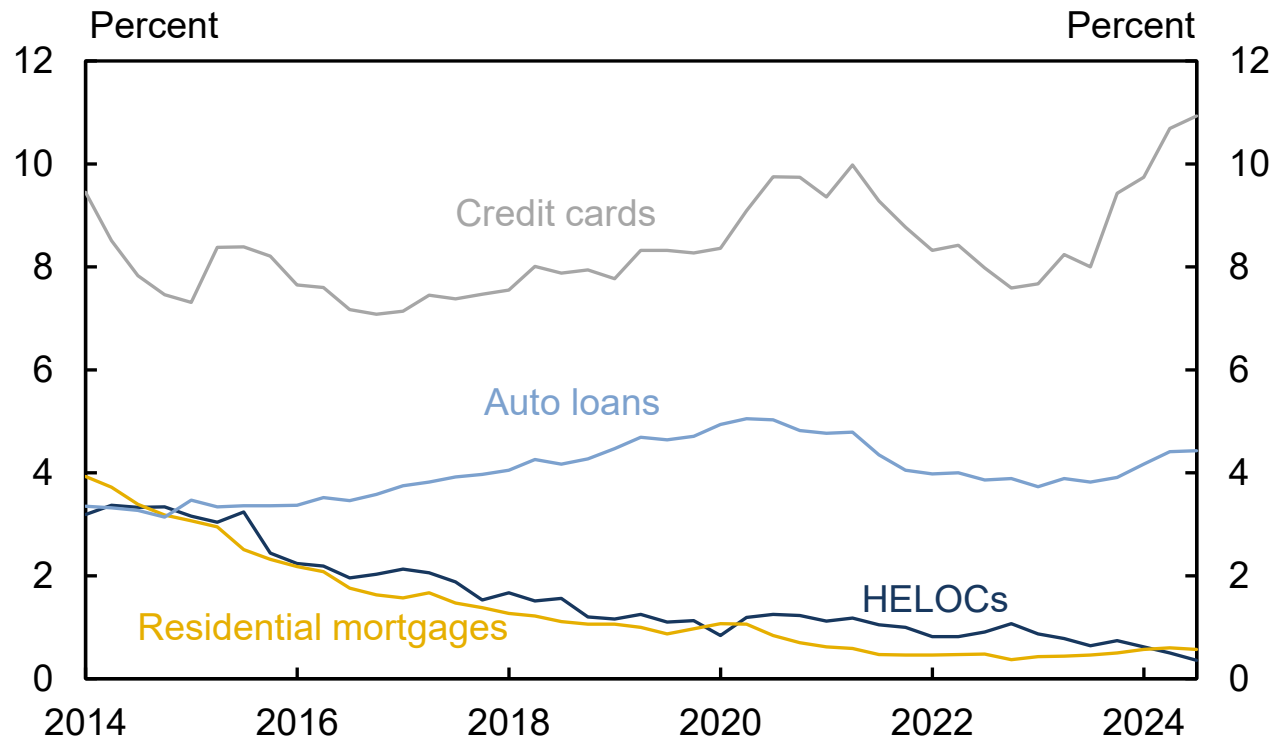
Percent of GDP



Note: Data as of 2024:Q2.

Source: Federal Reserve Board.

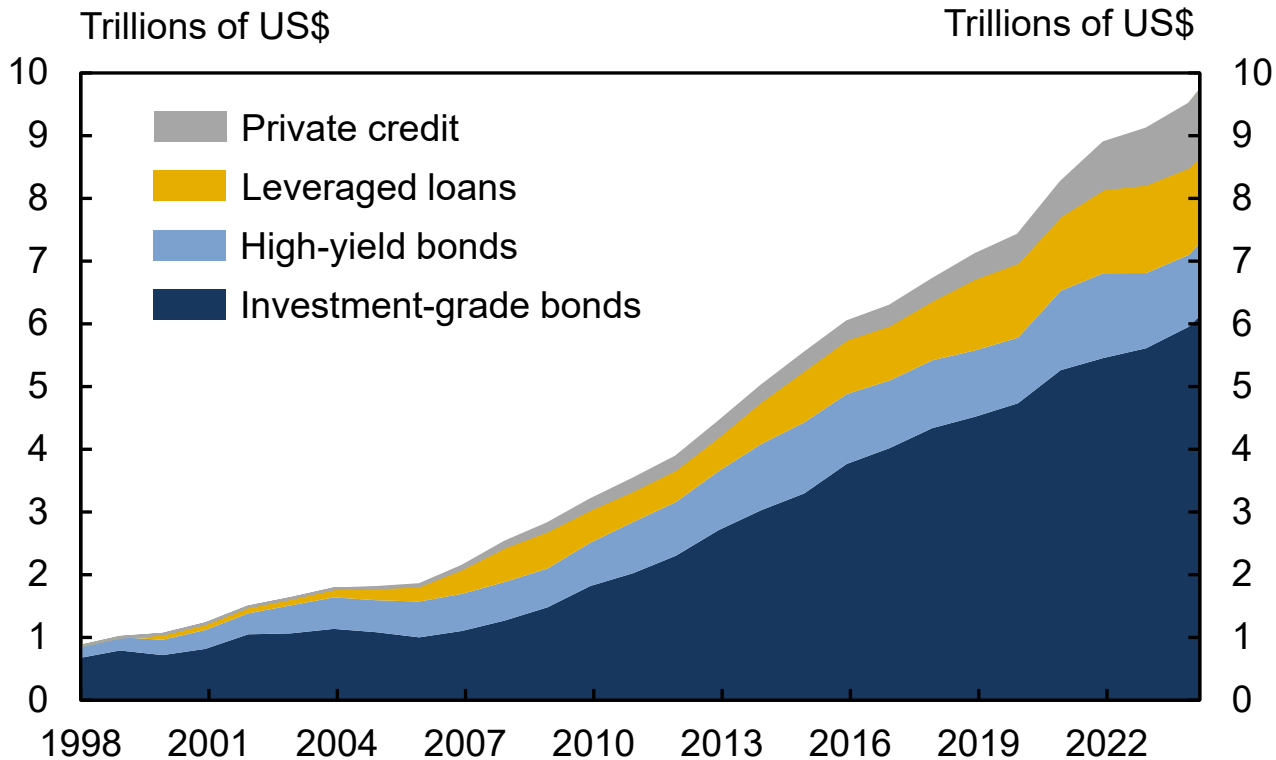
D.6 Share of Balances 90+ Day Delinquent by Loan Type



Note: Data as of 2024:Q2.

Source: Federal Reserve Bank of New York Consumer Credit Panel/Equifax Data.

3.1.3.1 U.S. Corporate Credit Market Size



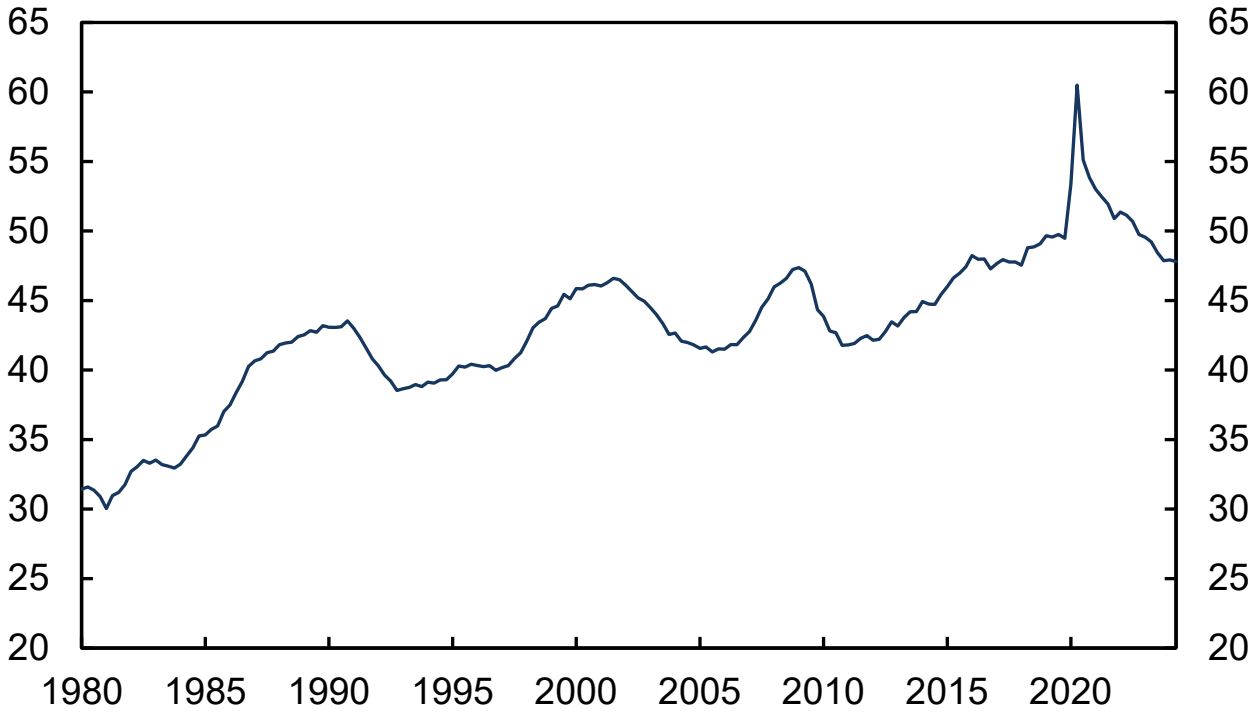
Note: Data as of March 31, 2024.

Sources: ICE Data Indices, Pitchbook LCD, LSEG, and Preqin.

3.1.3.2 Nonfinancial Corporate Debt as a Percentage of GDP

Percent

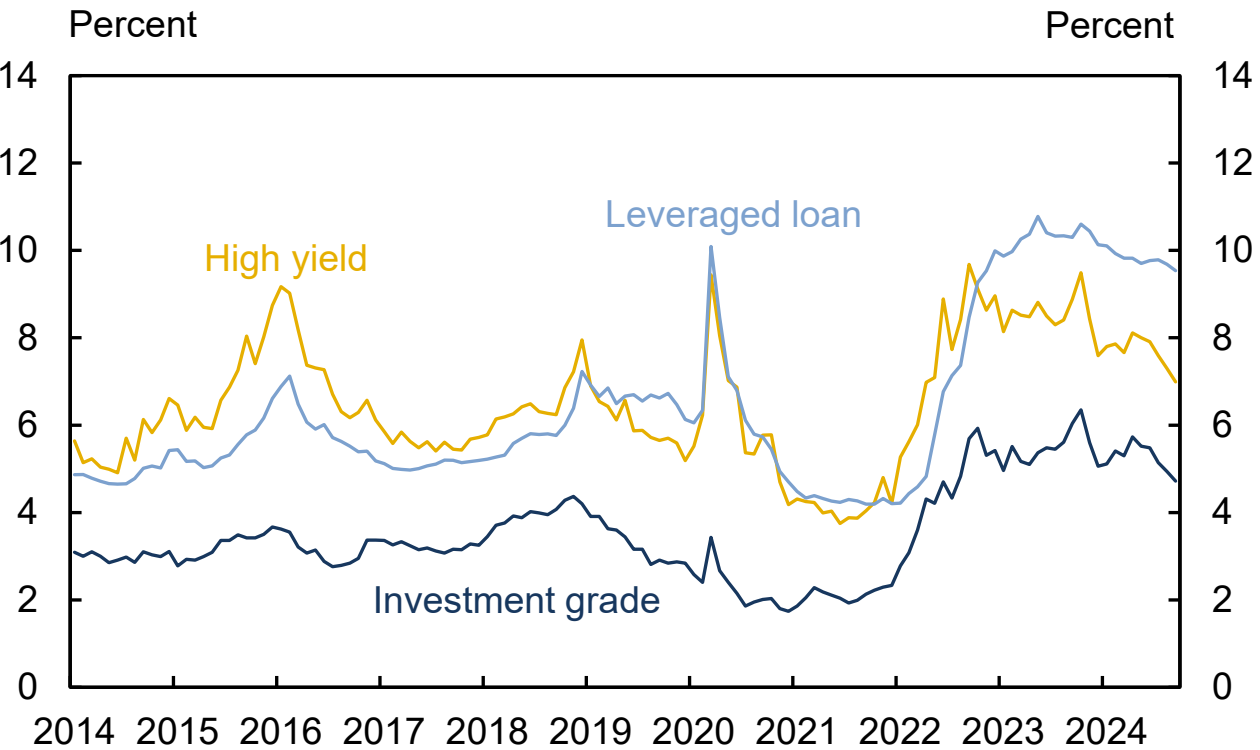
Percent



Note: Data as of 2024:Q2.

Sources: Federal Reserve Board (FRED) and U.S. Bureau of Economic Analysis (Bloomberg).

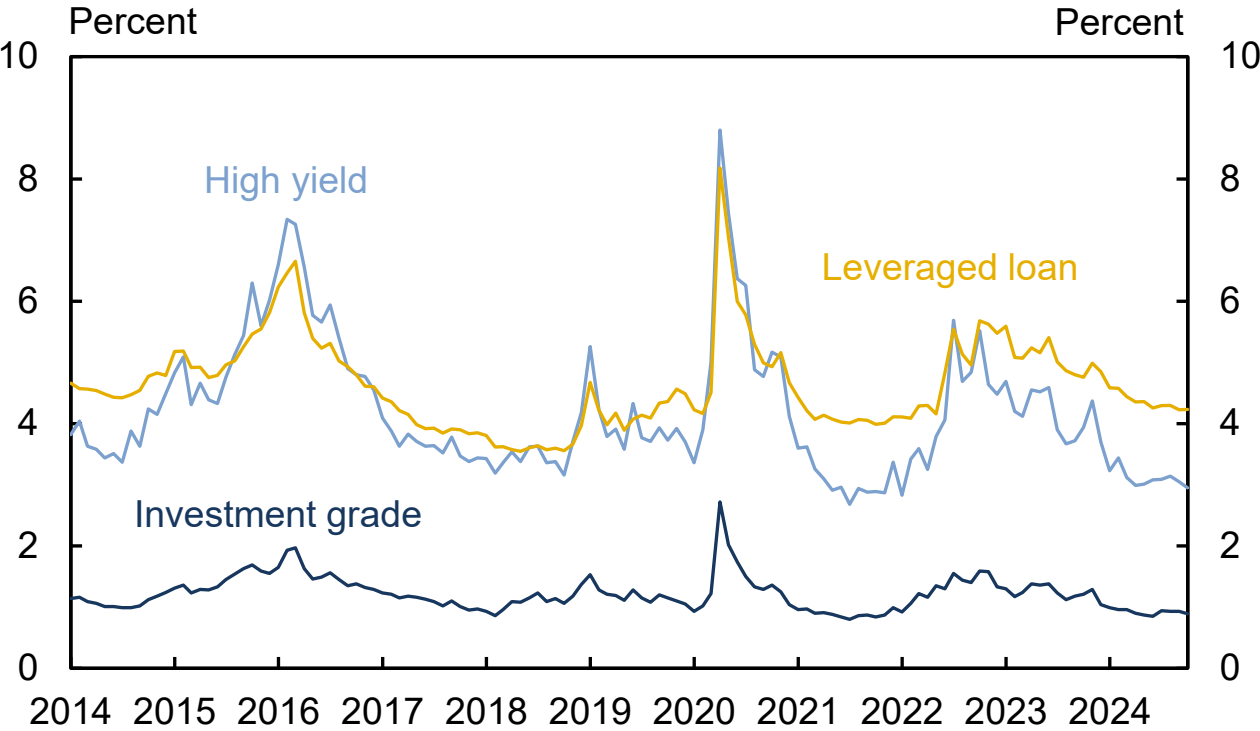
3.1.3.3 Corporate Bond and Leveraged Loan Yields



Note: Data as of September 2024.

Sources: Bloomberg and Pitchbook LCD.

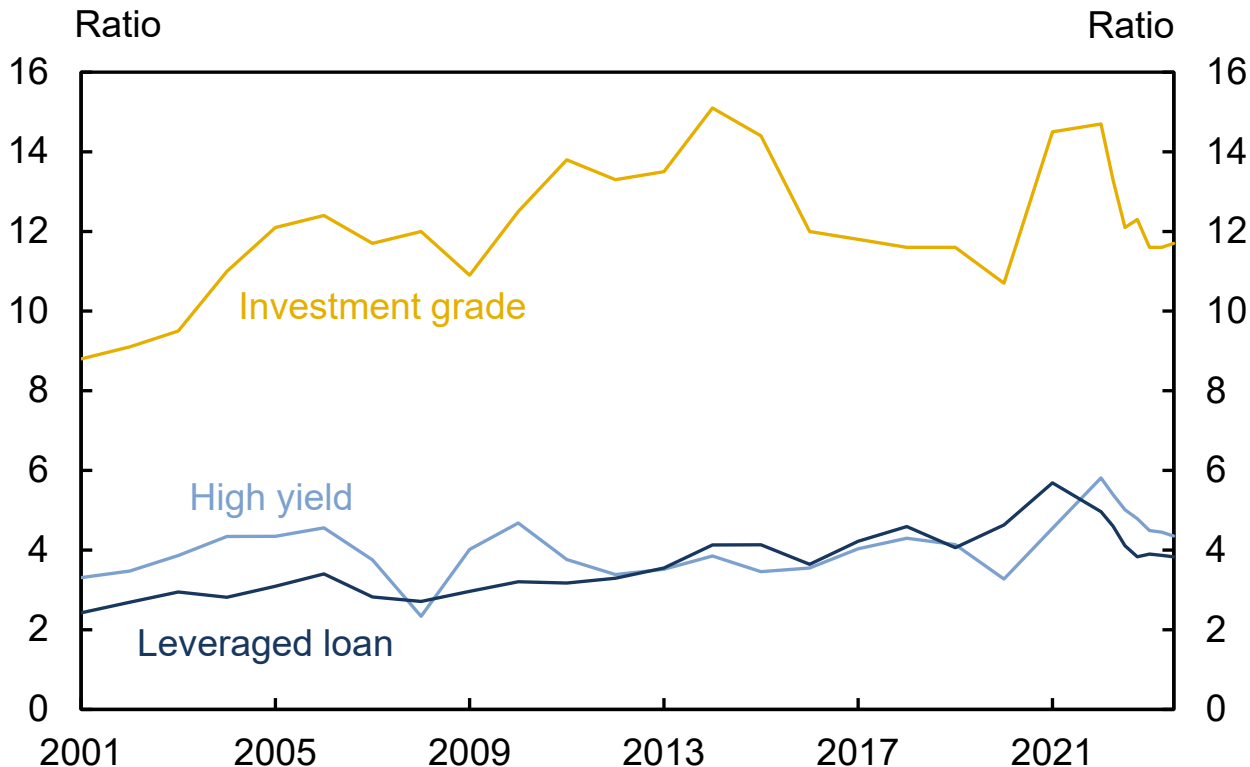
3.1.3.4 Corporate Bond and Leveraged Loan Spreads



Note: Data as of September 2024.

Sources: Bloomberg and Pitchbook LCD.

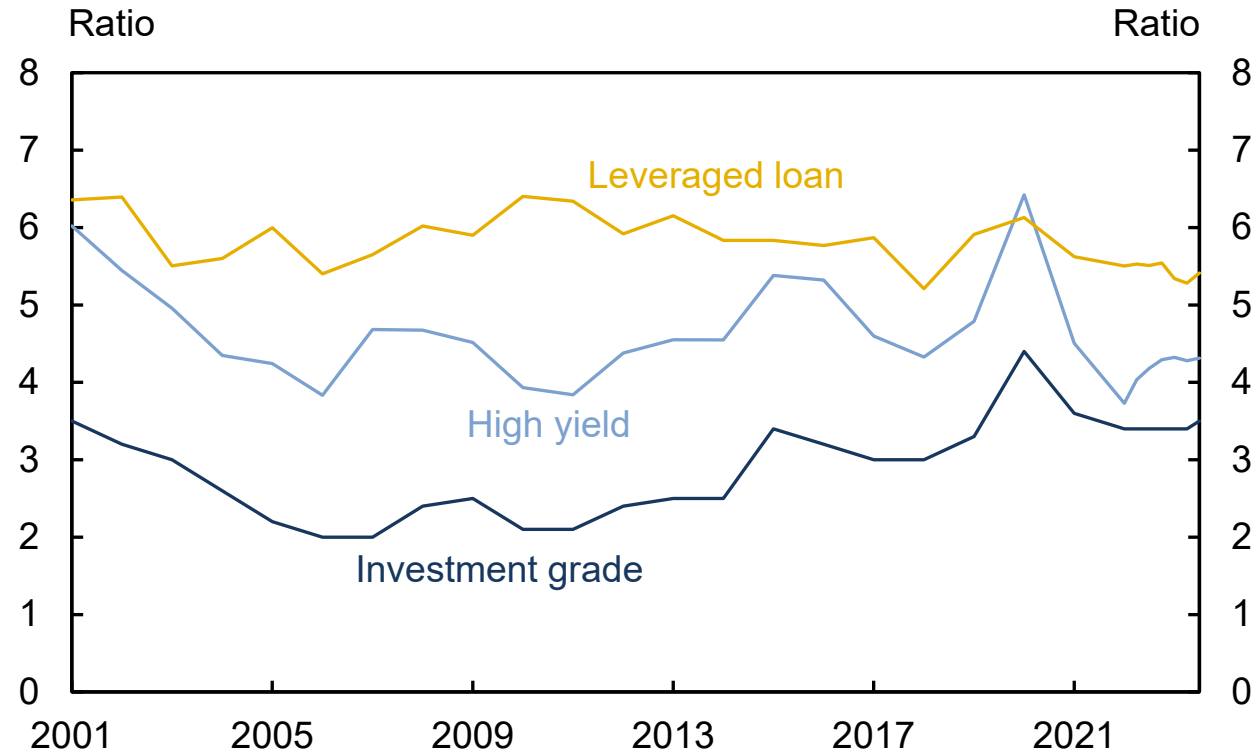
3.1.3.5 Interest Coverage Ratios



Notes: Data as of 2024:Q2. Chart shows earnings before adjustments associated with interest, tax, depreciation, and amortization (EBITDA) over interest expense in the past 12 months.

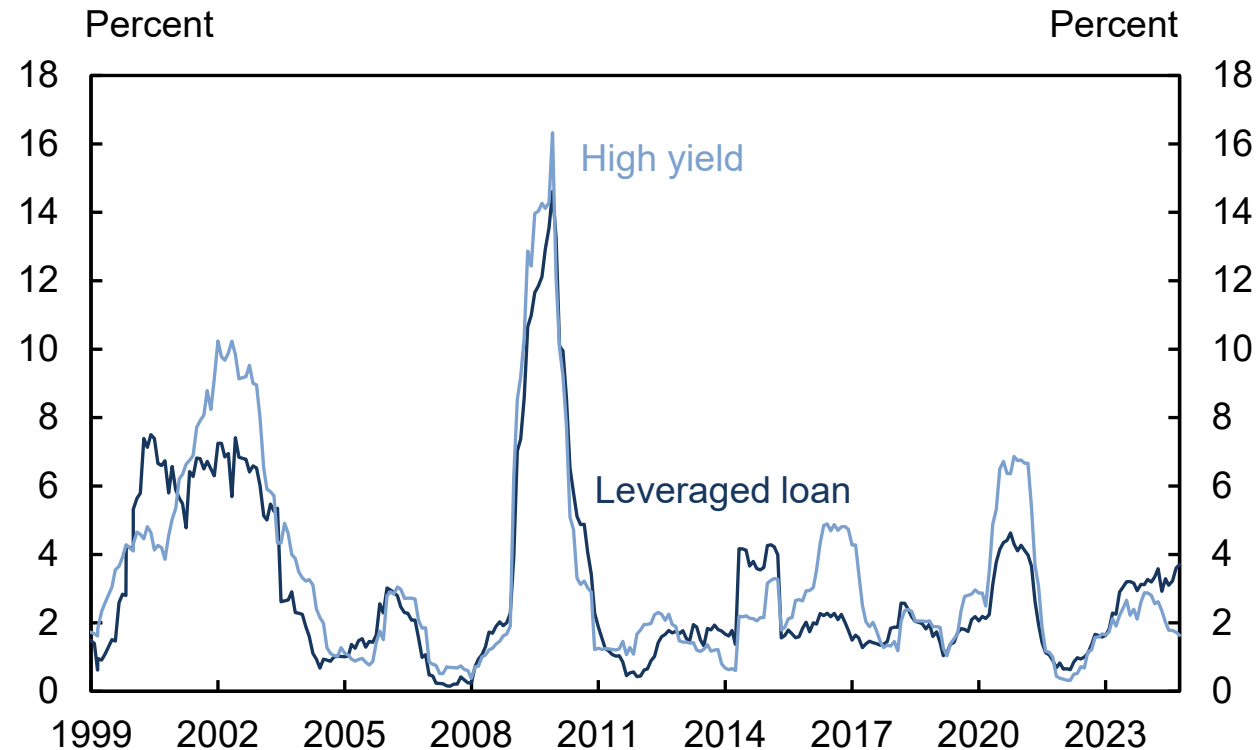
Sources: Barclays, Bank of America, and LCD Pitchbook.

3.1.3.6 Leverage Ratios



Notes: Data as of 2024:Q2. Chart shows total debt over all earnings before adjustments associated with interest, tax, depreciation, and amortization (EBITDA) in the past 12 months. Sources: Barclays, Bank of America, and LCD Pitchbook.

3.1.3.7 Par-Weighted Default Rates



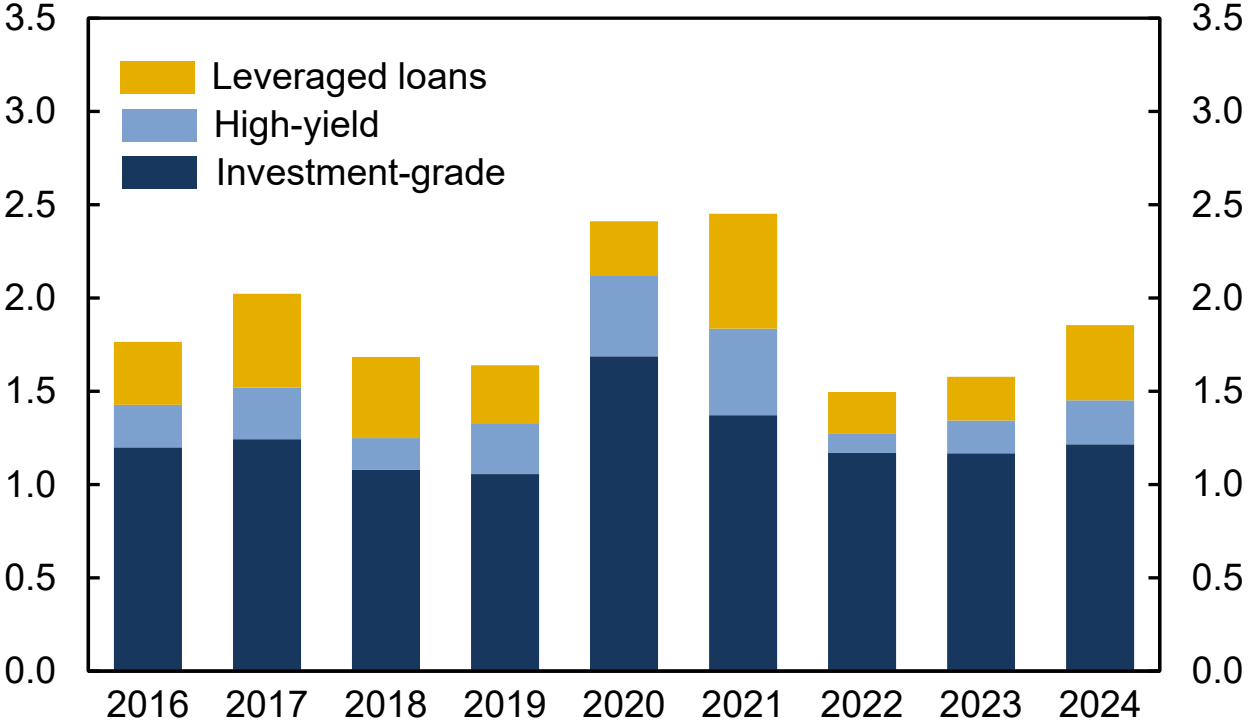
Notes: Data as of September 2024. Includes distressed exchanges.

Source: J.P. Morgan.

3.1.3.8 Year-to-Date Gross Issuance

Trillions of US\$

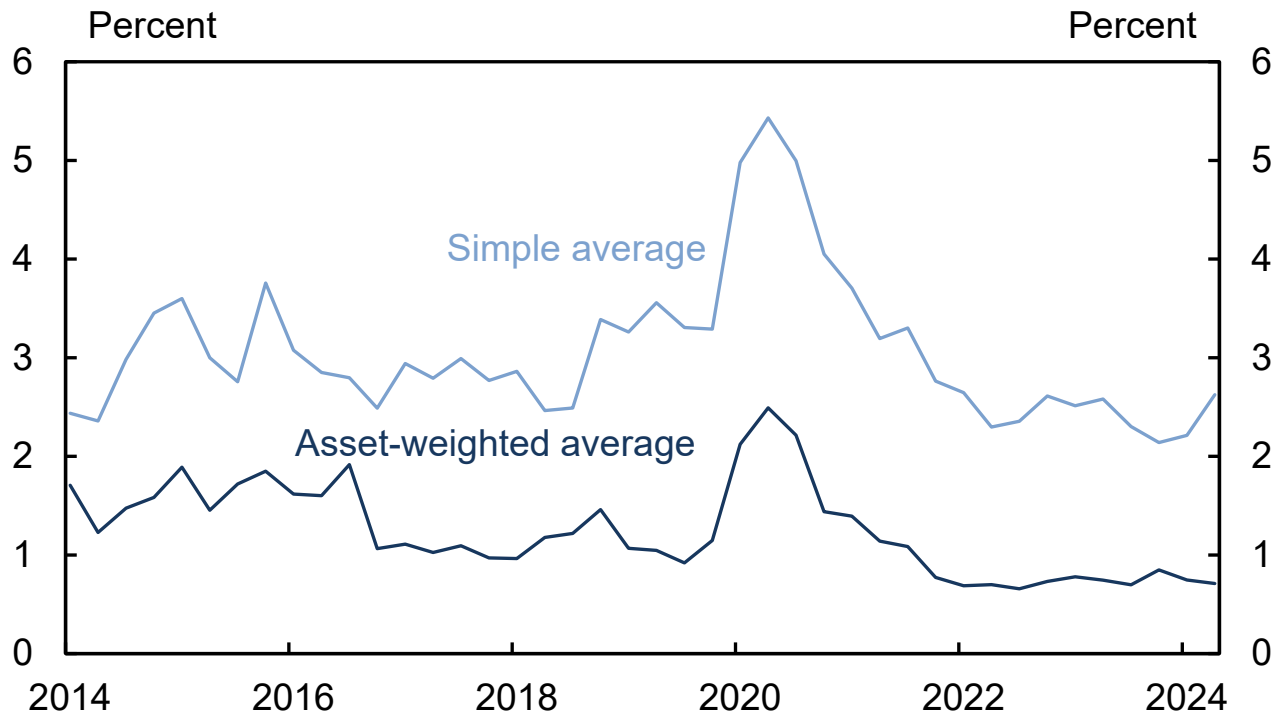
Trillions of US\$



Note: Data as of September 2024.

Source: Pitchbook LCD.

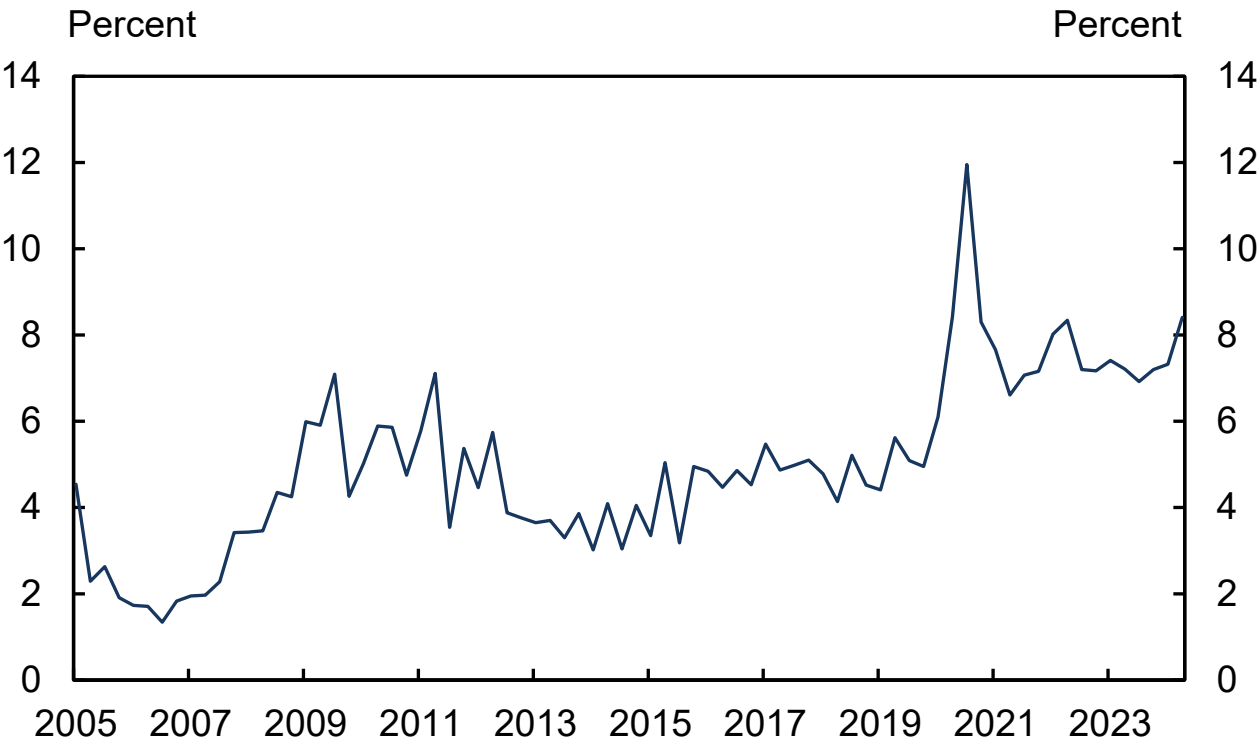
E.1 BDC Nonaccrual Rate (Share of Cost)



Note: Data as of 2024:Q2.

Source: LSEG BDC Collateral.

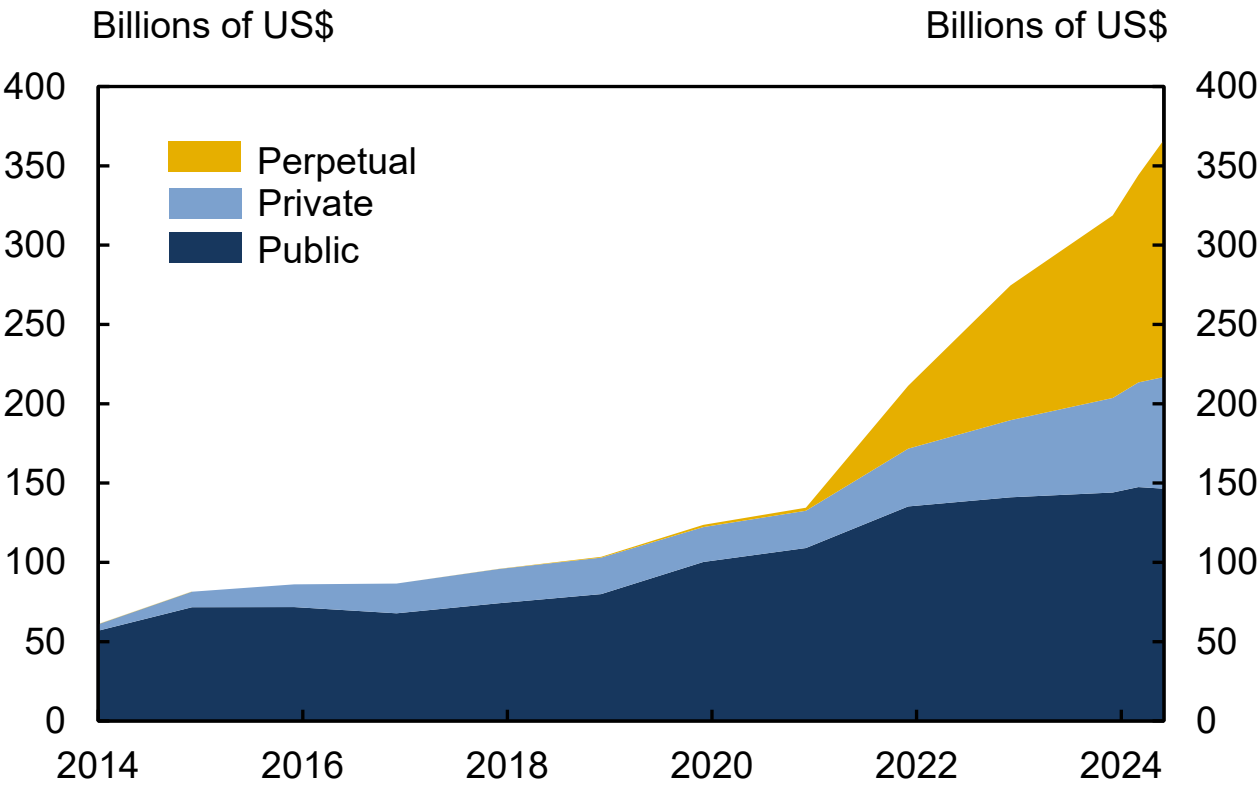
E.2 PIK Income as a Share of Total BDC Income



Note: Data as of 2024:Q2.

Source: Cliffwater Direct Lending Index.

E.3 Total Assets of BDCs by Type

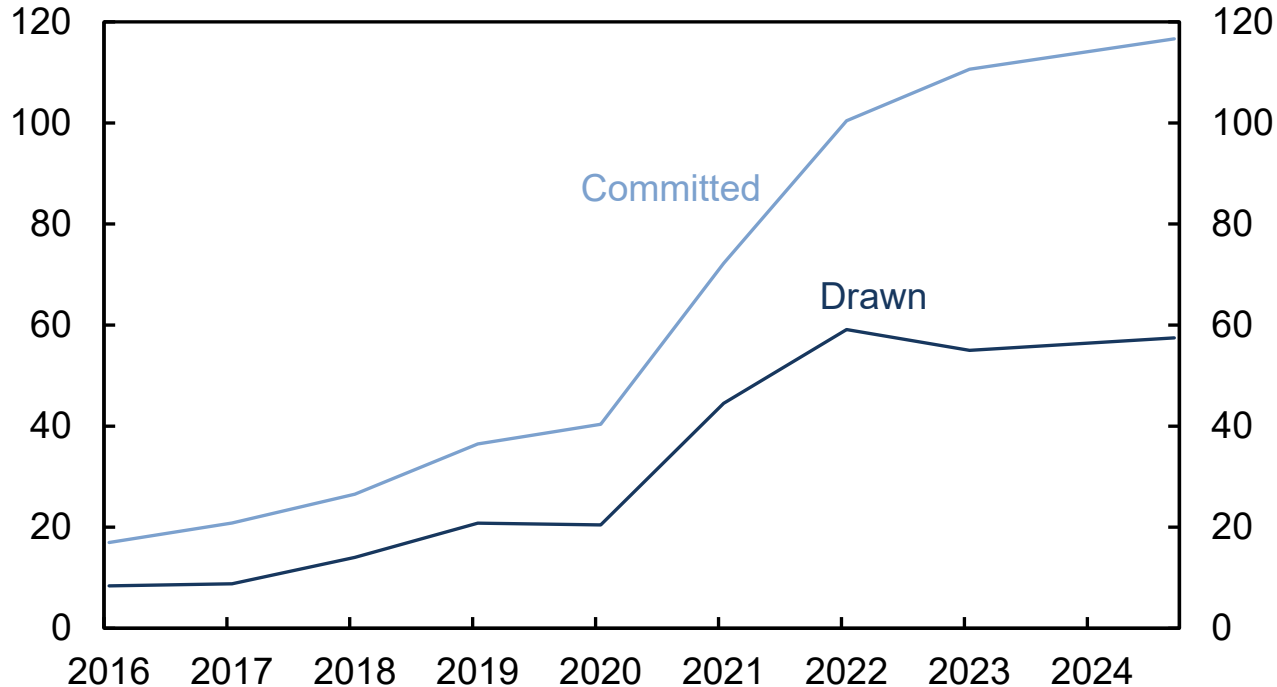


Note: Data as of 2024:Q2.
Source: LSEG BDC Collateral.

E.4 Revolving Credit Facilities to BDCs

Billions of US\$

Billions of US\$



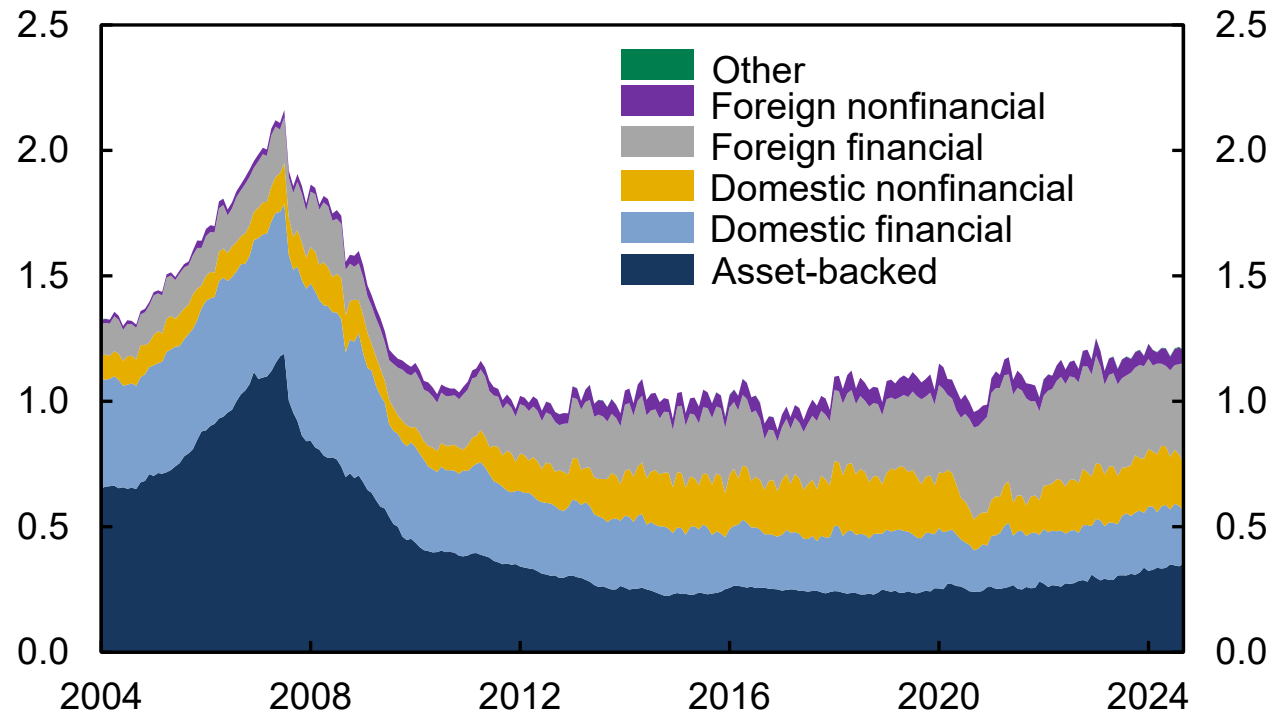
Note: Data as of 2024:Q3.

Source: S&P Capital IQ.

3.1.4.1 Commercial Paper Outstanding by Issuer Type

Trillions of US\$

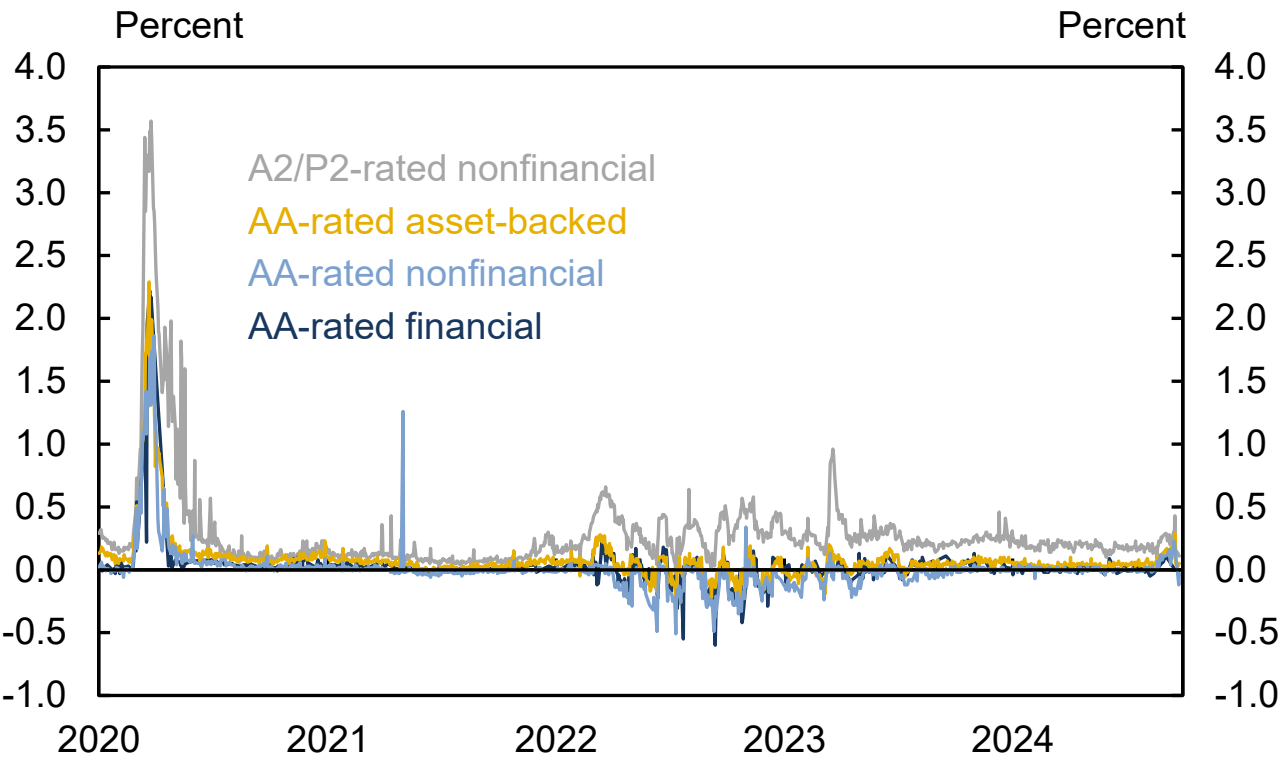
Trillions of US\$



Notes: Data as of September 2024. Not seasonally adjusted. "Domestic" includes commercial paper issued in the United States by entities with foreign parents.

Source: Federal Reserve Board (Haver Analytics).

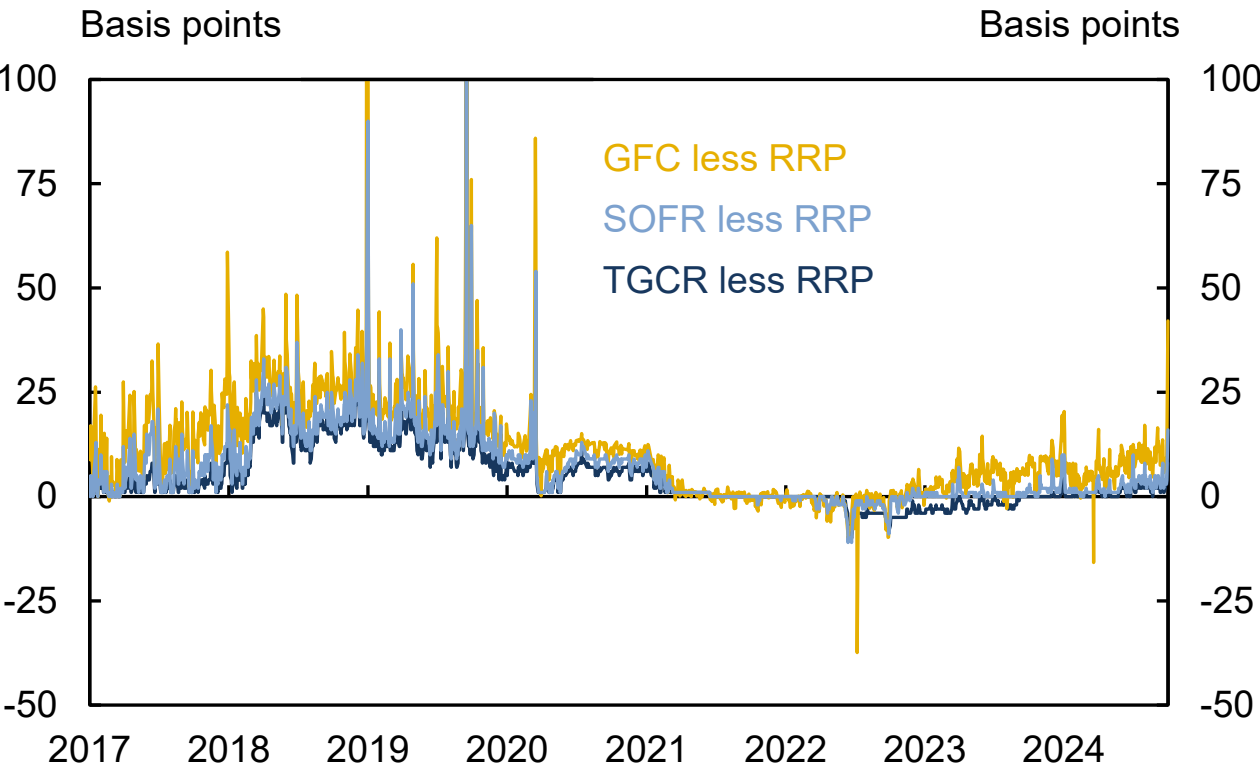
3.1.4.2 One-Month Commercial Paper Interest Rate Spreads



Notes: Data as of September 30, 2024. Spread to one-month overnight index swap (OIS) rate.

Source: Federal Reserve Board (Haver Analytics).

3.1.4.3 Overnight Repo Spreads



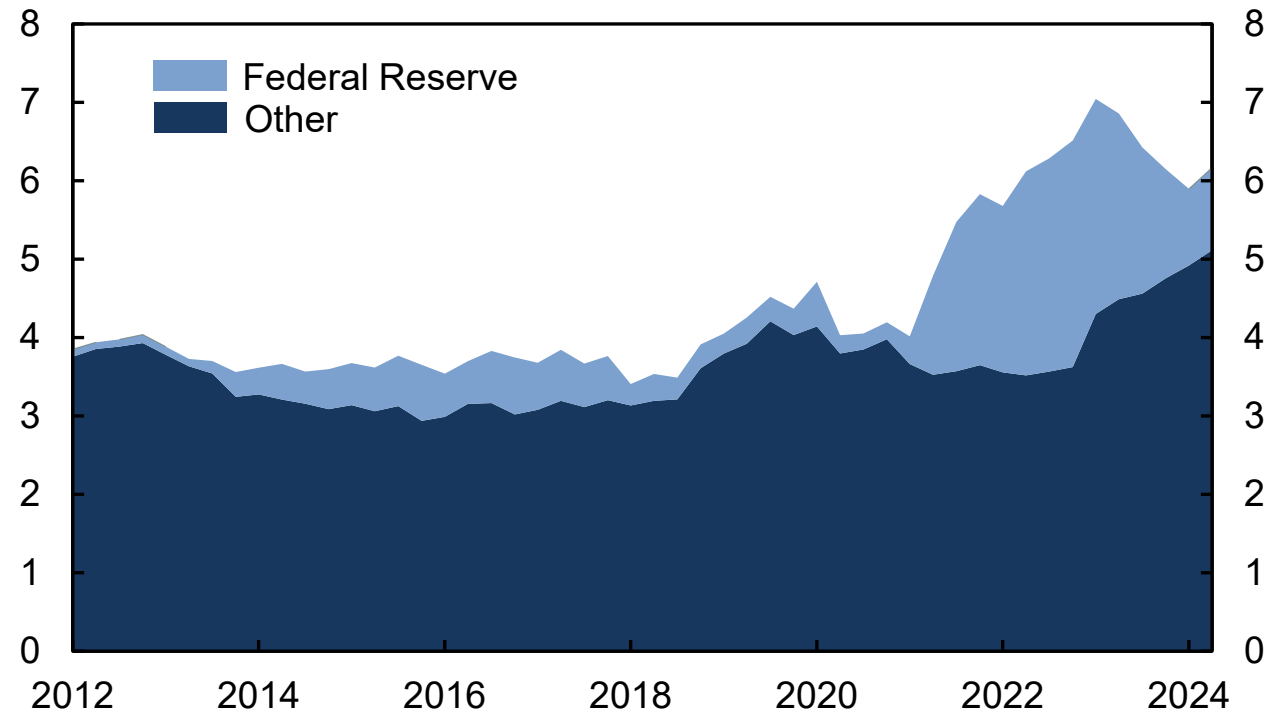
Note: Data as of September 30, 2024.

Sources: Federal Reserve Bank of New York and Wall Street Journal. All sources accessed through Haver Analytics.

3.1.4.4 Repo Borrowing Outstanding

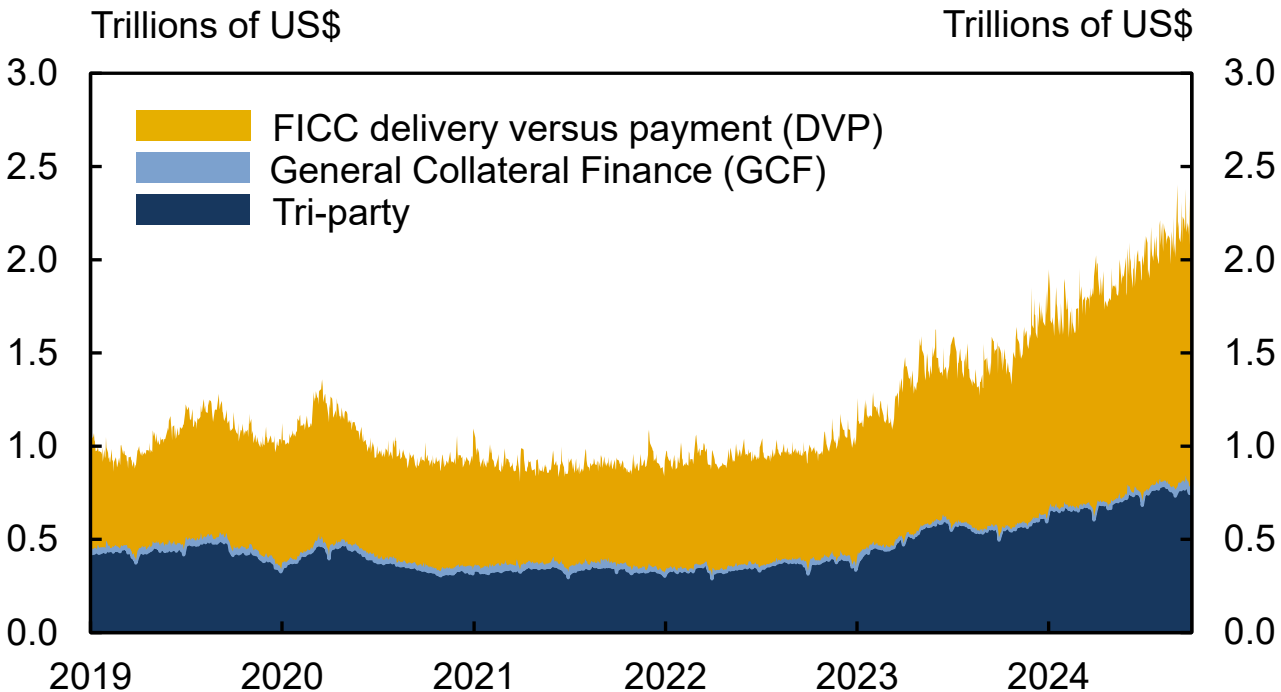
Trillions of US\$

Trillions of US\$



Notes: Data as of 2024:Q2. Federal Reserve repo borrowing primarily consists of ON RRP facility.
Source: Federal Reserve Board (Haver Analytics).

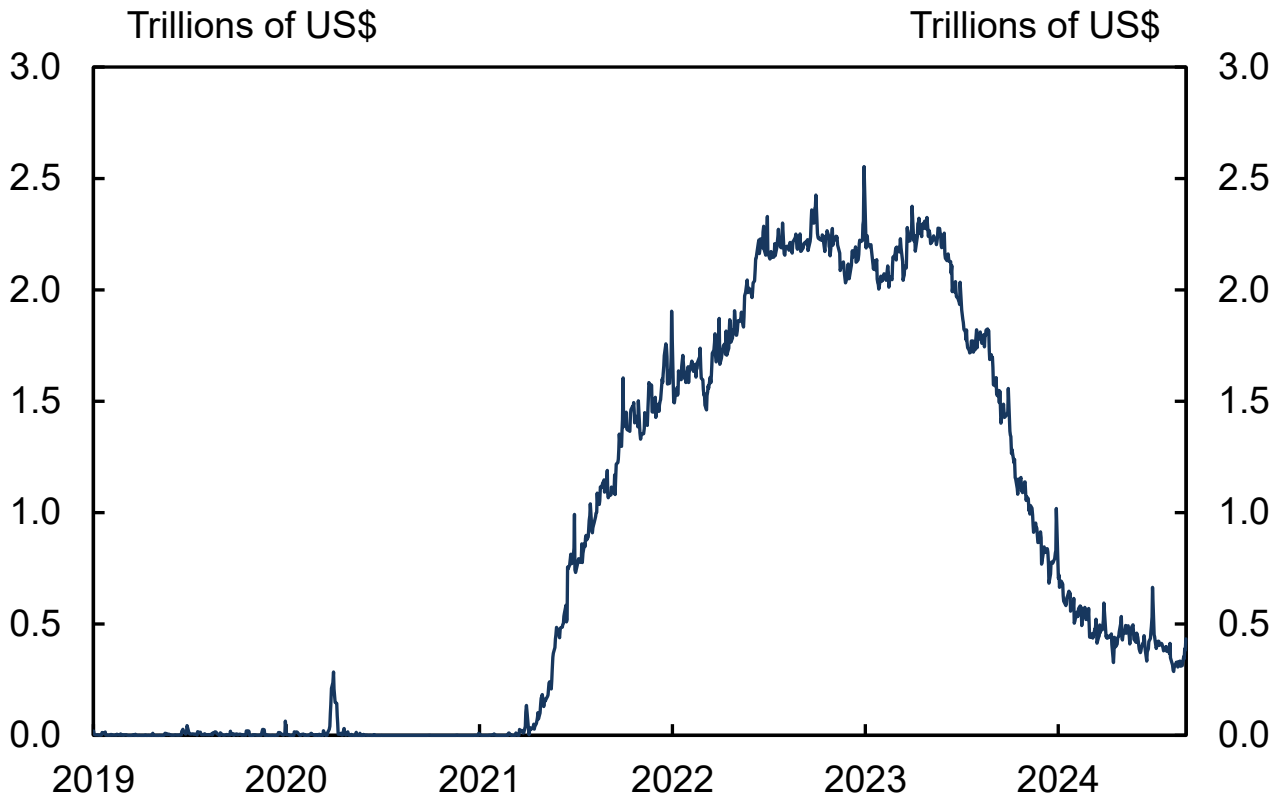
3.1.4.5 Treasury Repo Volumes



Notes: Data as of September 30, 2024. Includes Treasury repo transactions that are included in the SOFR rate. SOFR transactions include BGCR transactions (Tri-Party General Collateral and GCF Repo transactions) plus bilateral Treasury repo transactions cleared through the FICC's DVP service, which is filtered to remove "specials."

Source: Federal Reserve Bank of New York (Haver Analytics).

3.1.4.6 ON RRP Balance



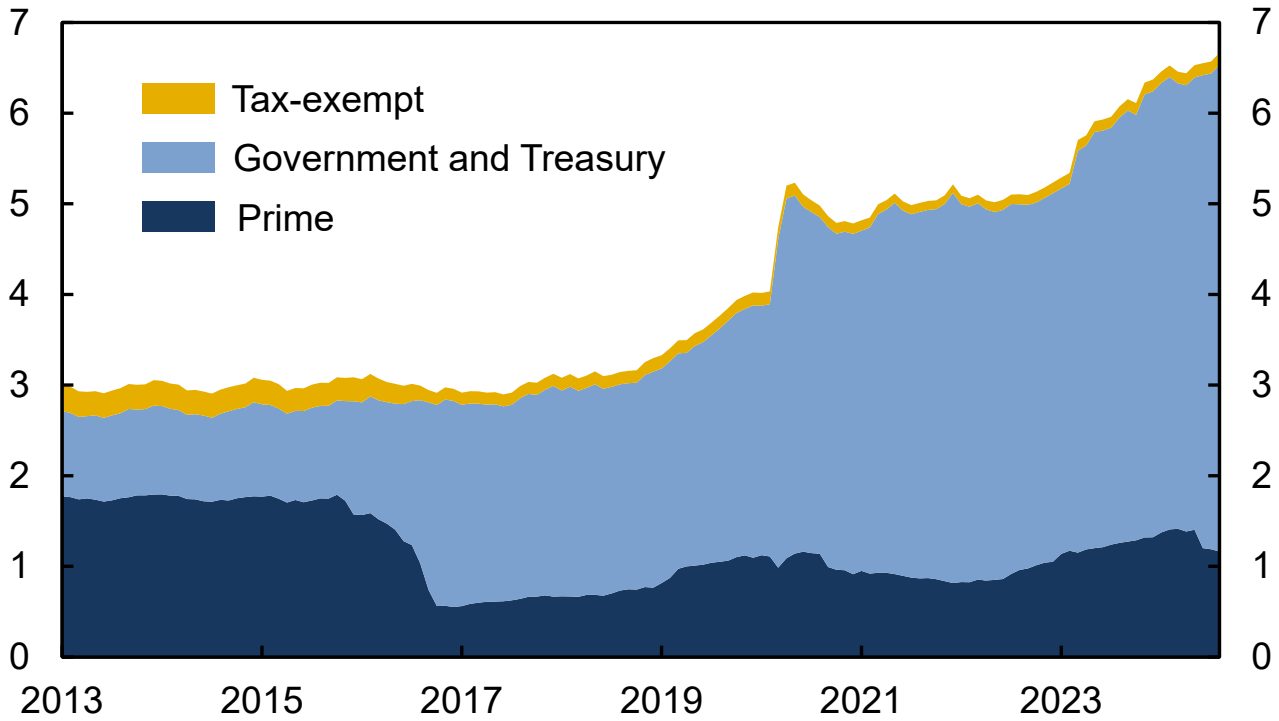
Note: Data as of August 30, 2024.

Source: Federal Reserve Bank of New York (Haver Analytics).

3.1.4.7 MMF Total Net Assets by Type

Trillions of US\$

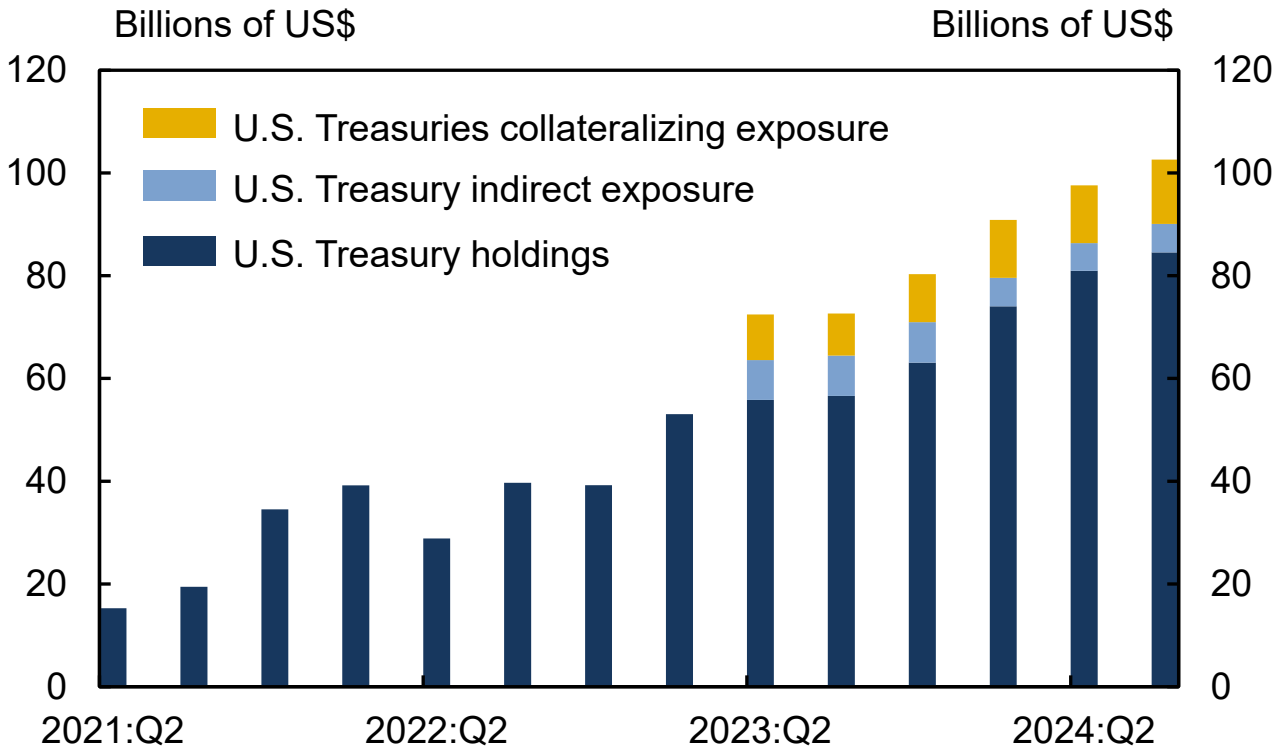
Trillions of US\$



Note: Data as of August 2024.

Sources: SEC and OFR.

3.1.5.1 Tether U.S. Treasury Holdings



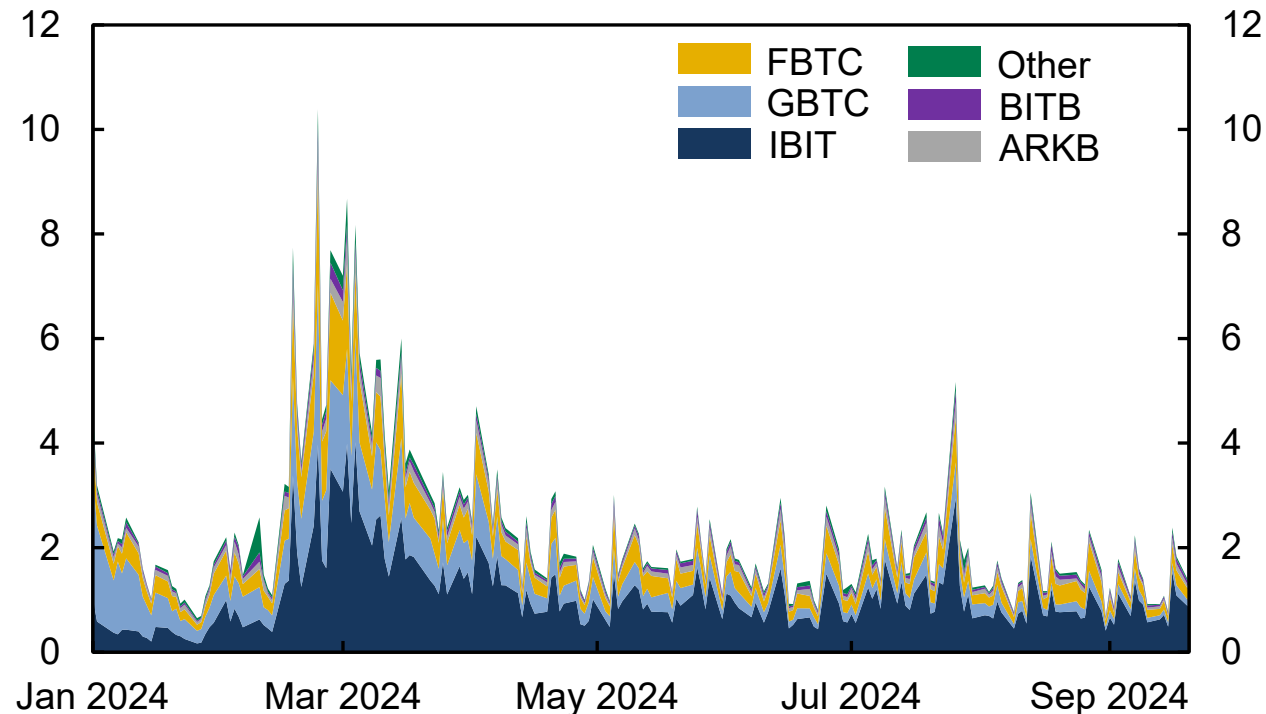
Notes: Data as of 2024:Q3. Chart reflects the fair value of U.S. Treasuries provided as collateral for ON RRP activity and the value of U.S. Treasuries in which Tether's MMFs are invested.

Source: Tether.

3.1.5.2 Spot Bitcoin ETP Daily Volume

Traded volume (billions of US\$)

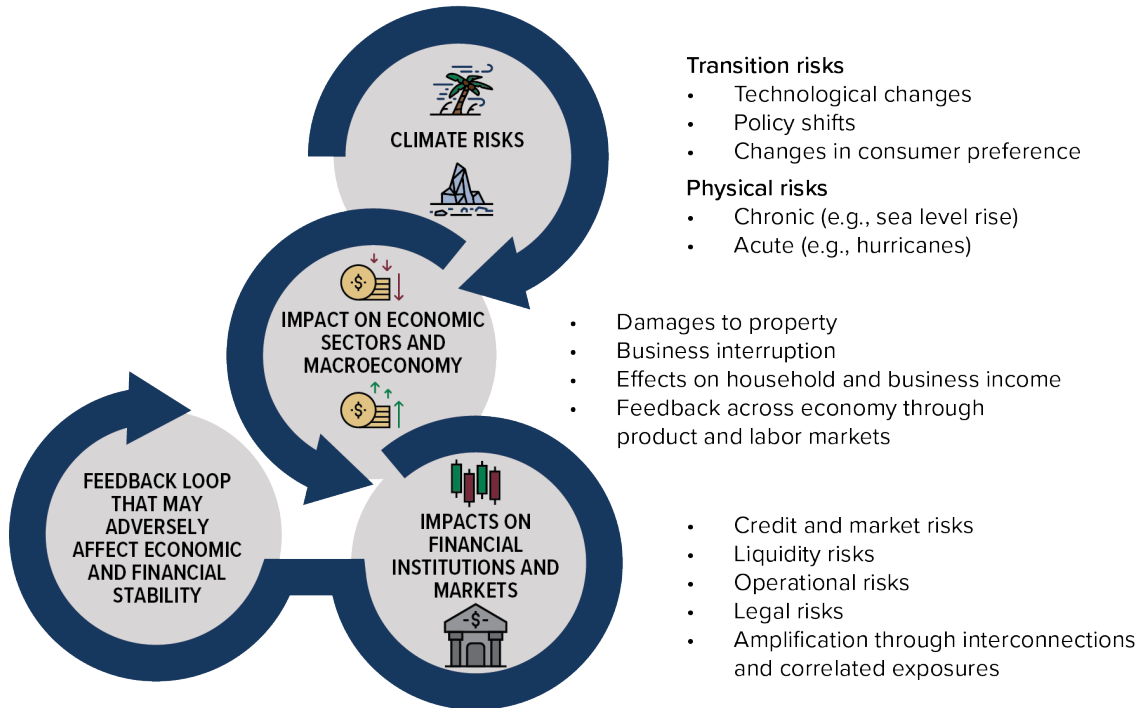
Traded volume (billions of US\$)



Note: Data as of September 30, 2024.

Source: Bloomberg.

3.1.6.1 Transmission Channels Linking Climate Risks to Financial Stability

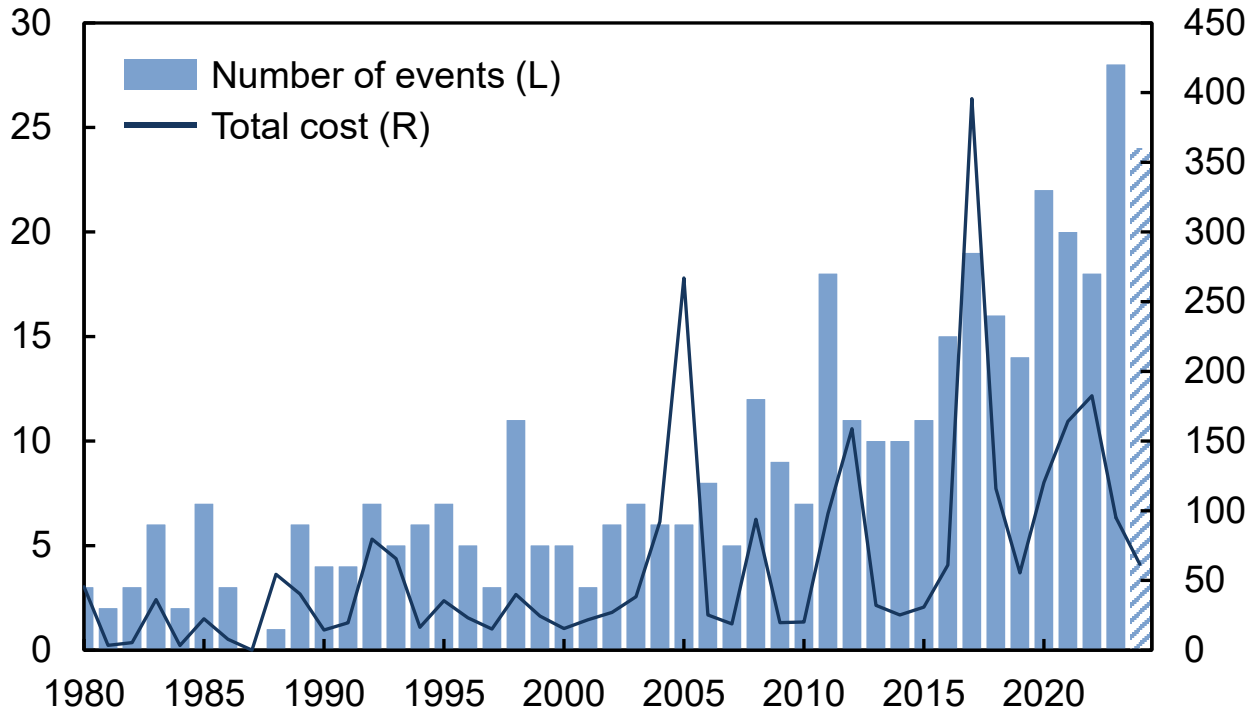


Source: Figure created by FSOC.

3.1.6.2 Billion-Dollar Weather and Climate Events

Number of events

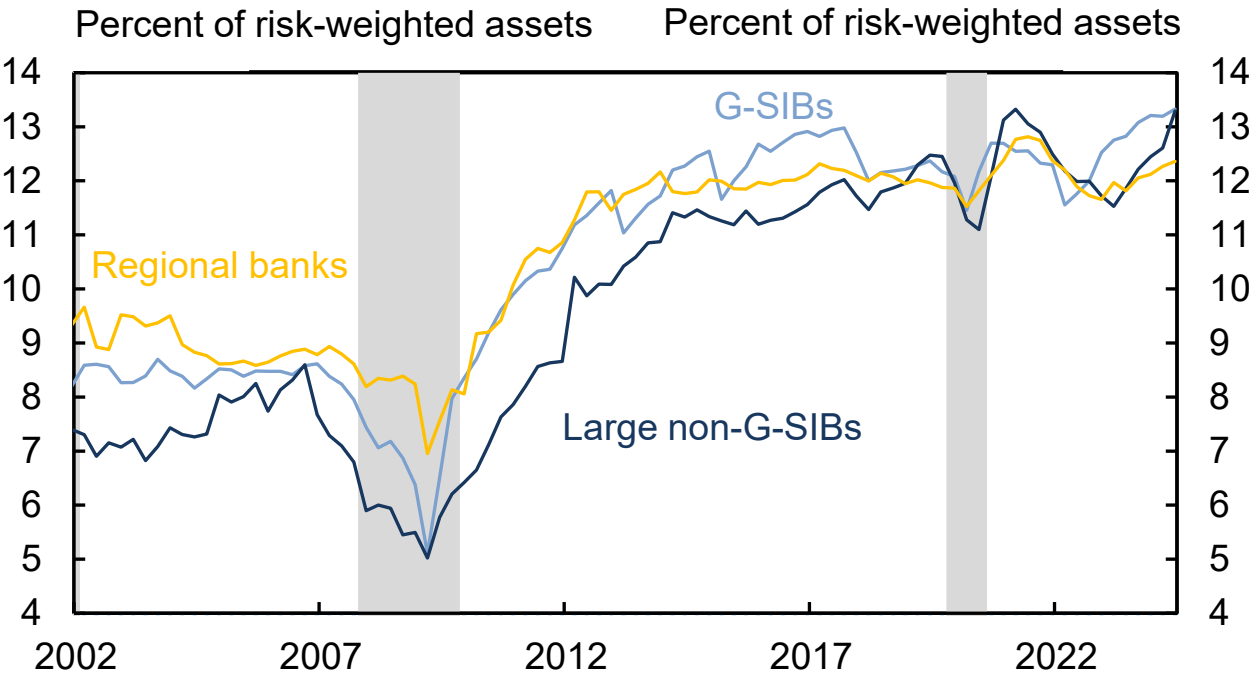
Billions of US\$ (inflation-adjusted)



Notes: Data as of November 1, 2024. Data does not reflect damage from Hurricanes Helene and Milton. Dashed bar indicates YTD.

Source: NOAA National Centers for Environmental Information (NCEI).

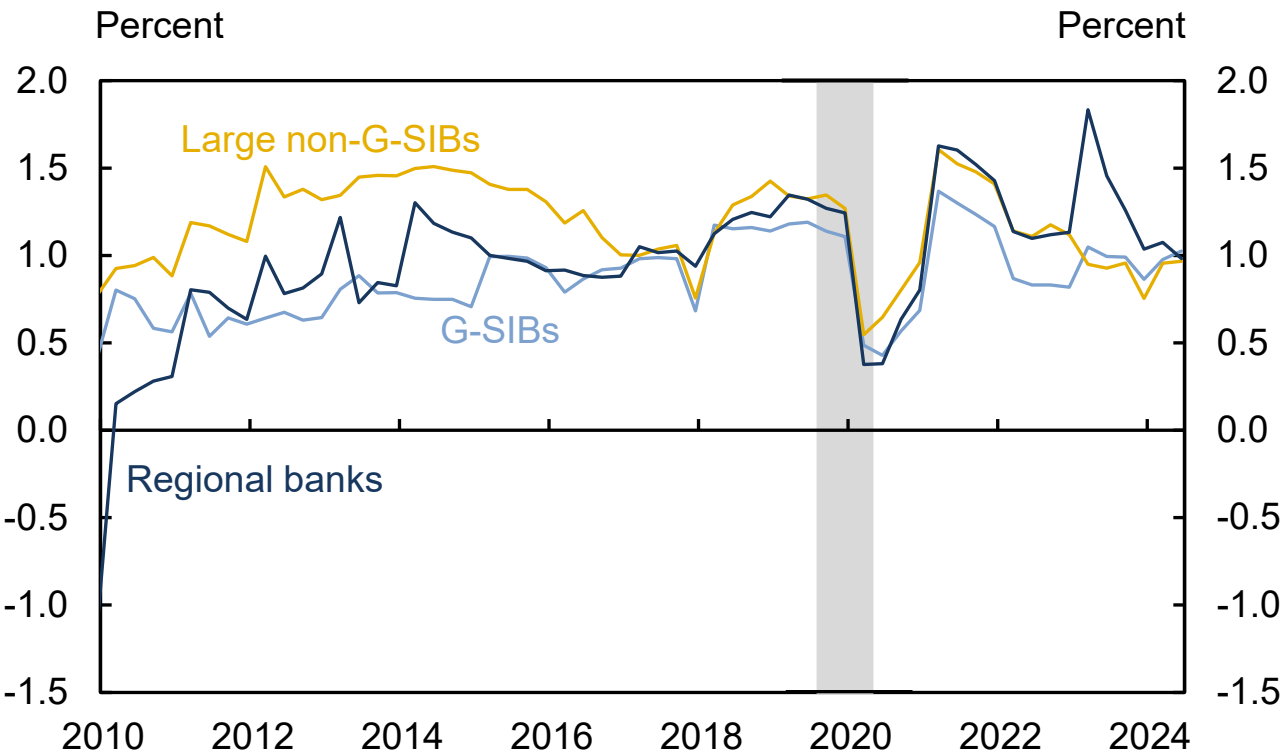
3.2.1.1 Common Equity Tier 1 Ratios



Notes: Data as of 2024:Q2. Tier 1 common capital is used as the numerator of the CET1 ratio prior to 2014:Q1 for G-SIBs and large complex BHCs and prior to 2015:Q1 for large noncomplex and other BHCs. Gray bars signify National Bureau of Economic Research-defined recessions.

Sources: Federal Reserve Bank of New York and National Bureau of Economic Research (NBER).

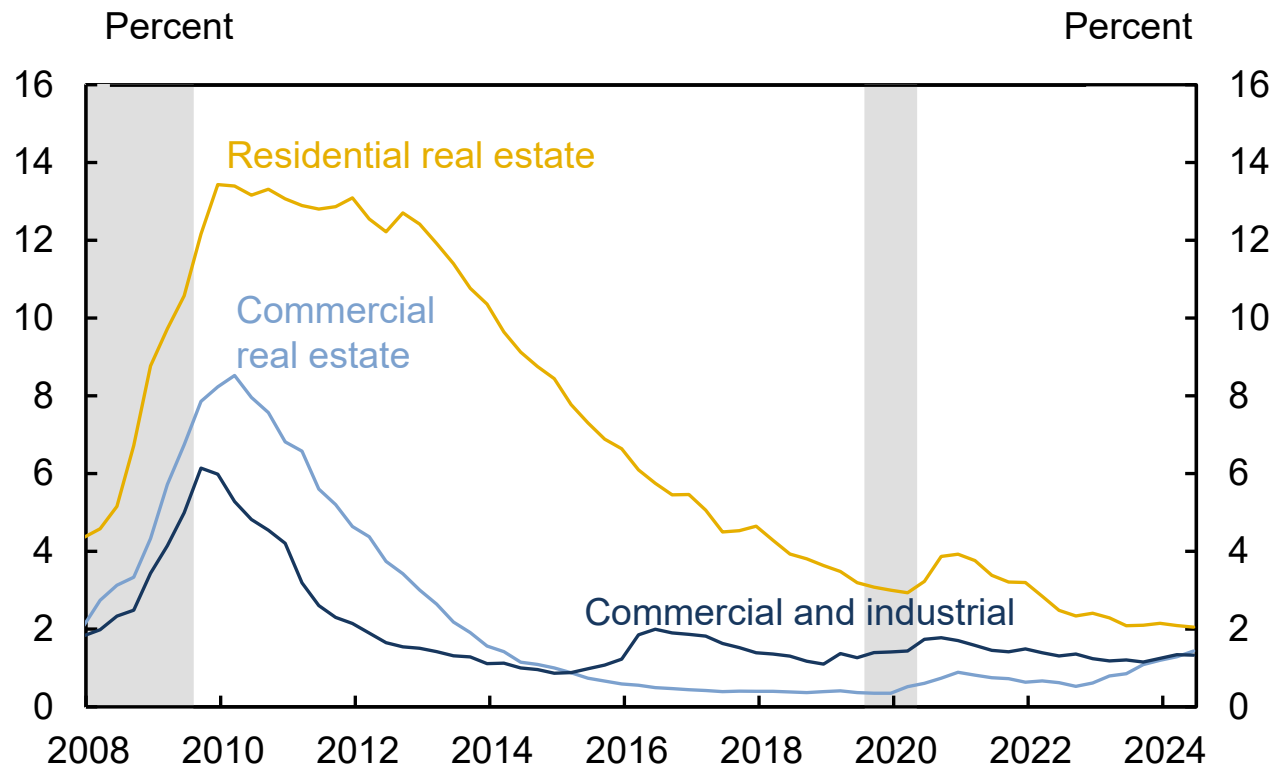
3.2.1.2 Return on Assets



Notes: Data as of 2024:Q2. Gray bar signifies NBER recession.

Sources: Federal Reserve Bank of New York and NBER. All sources accessed through Office of Financial Research.

3.2.1.3 Delinquency Rates by Portfolio



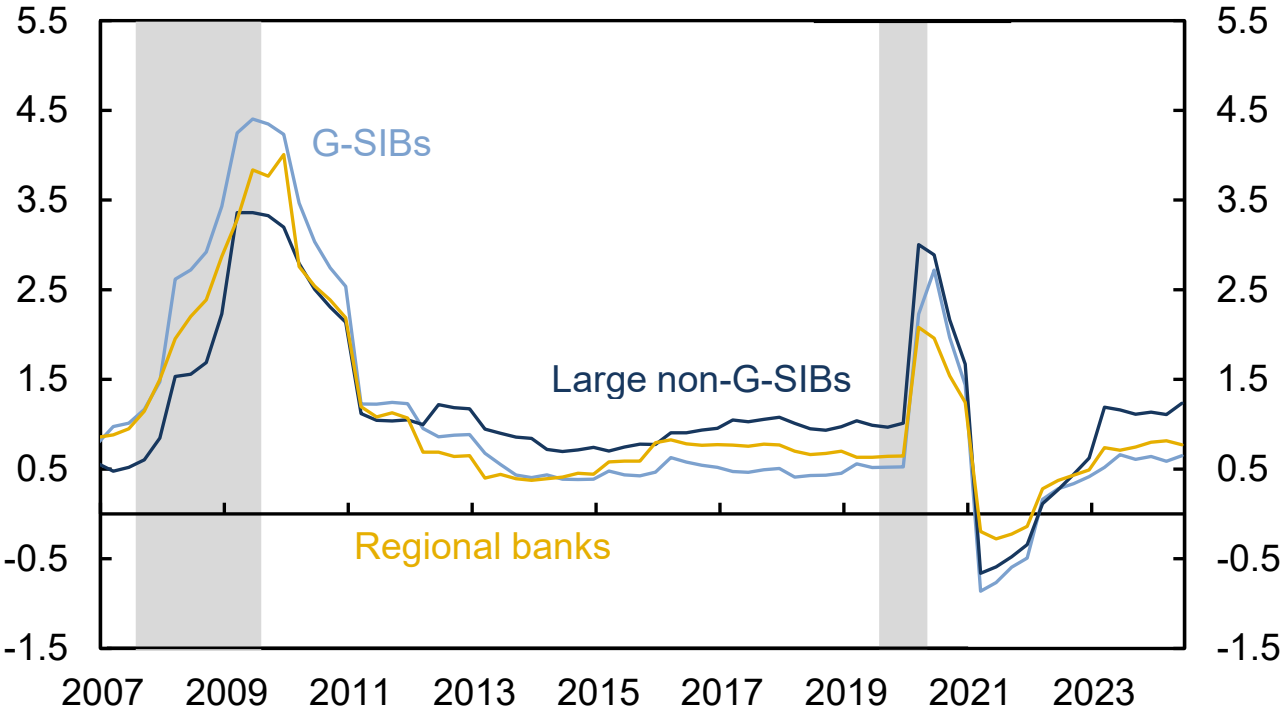
Notes: Data as of 2024:Q2. Gray bars signify NBER recessions.

Sources: FFIEC and NBER. All data accessed through Office of Financial Research.

3.2.1.4 Ratios of Allowance for Credit Losses

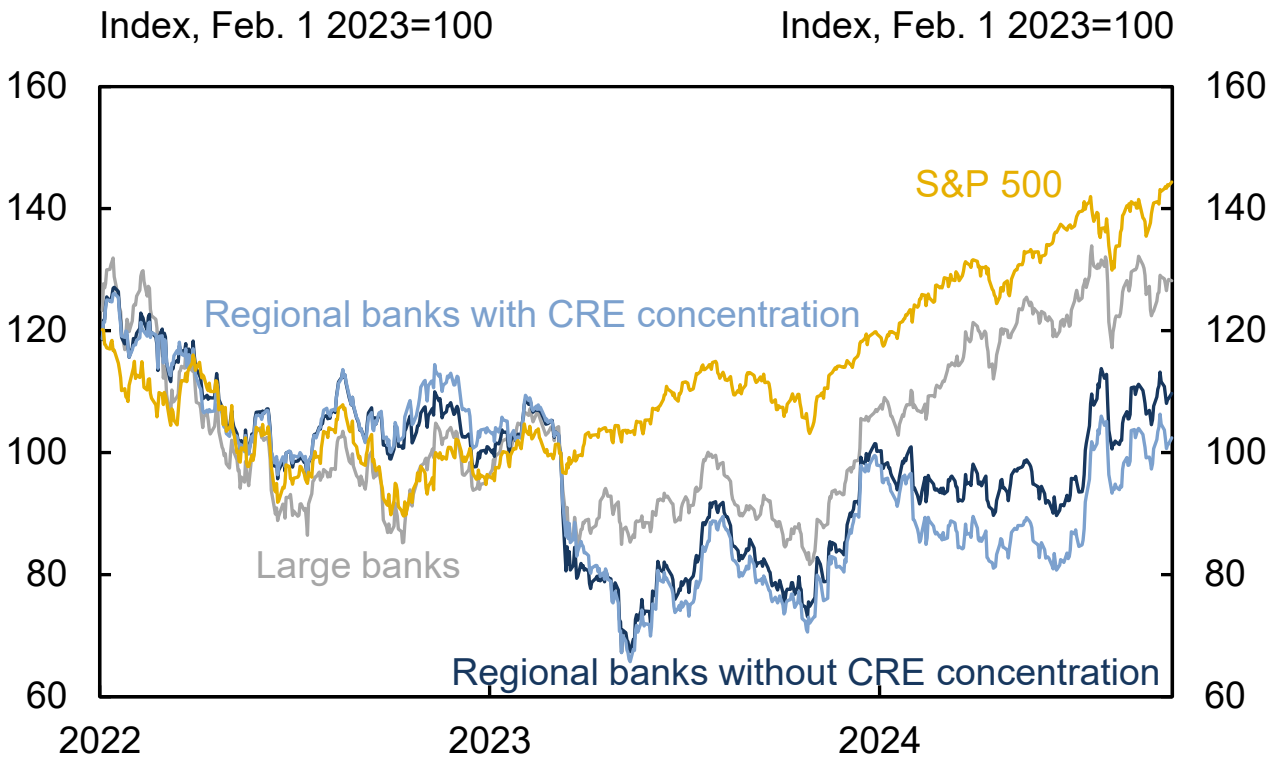
Percent

Percent



Notes: Data as of 2024:Q2. Ratios are annualized. Gray bars signify NBER recessions. Sources: Federal Reserve Bank of New York and NBER.

3.2.1.5 Bank Stock Price Performance

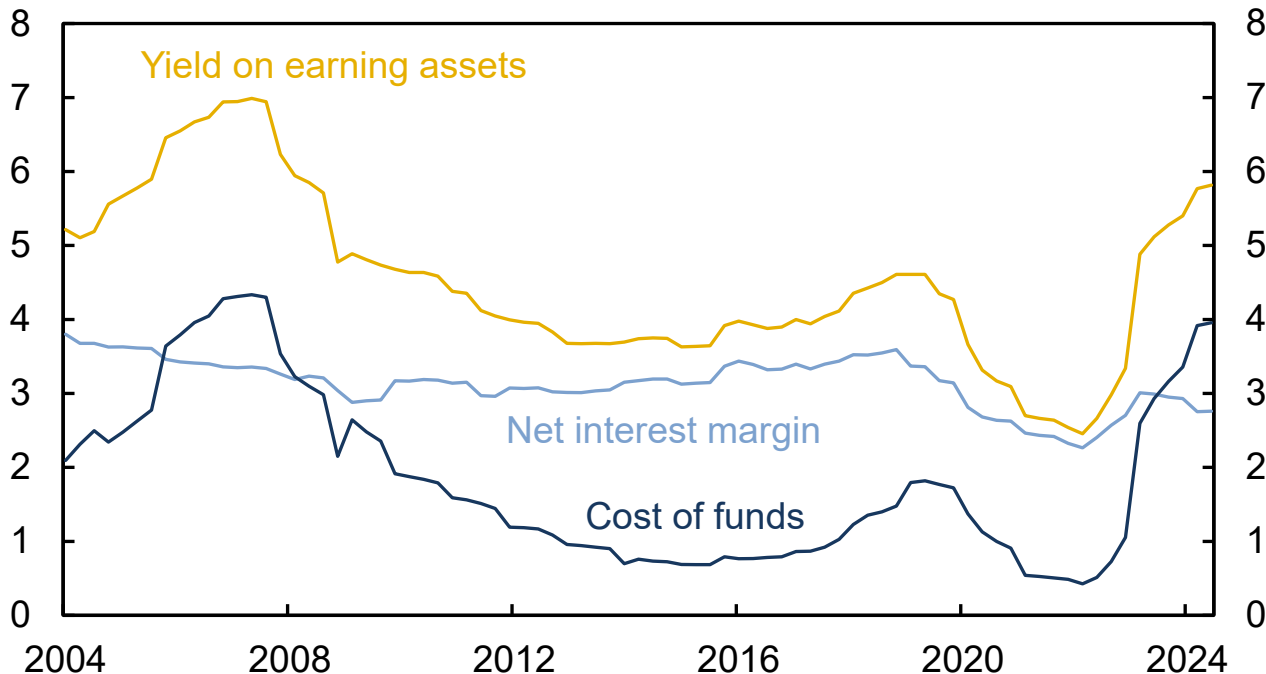


Notes: Data as of September 30, 2024. Data are daily weighted averages.
Source: Bloomberg.

3.2.1.6 Net Interest Margin

Percent

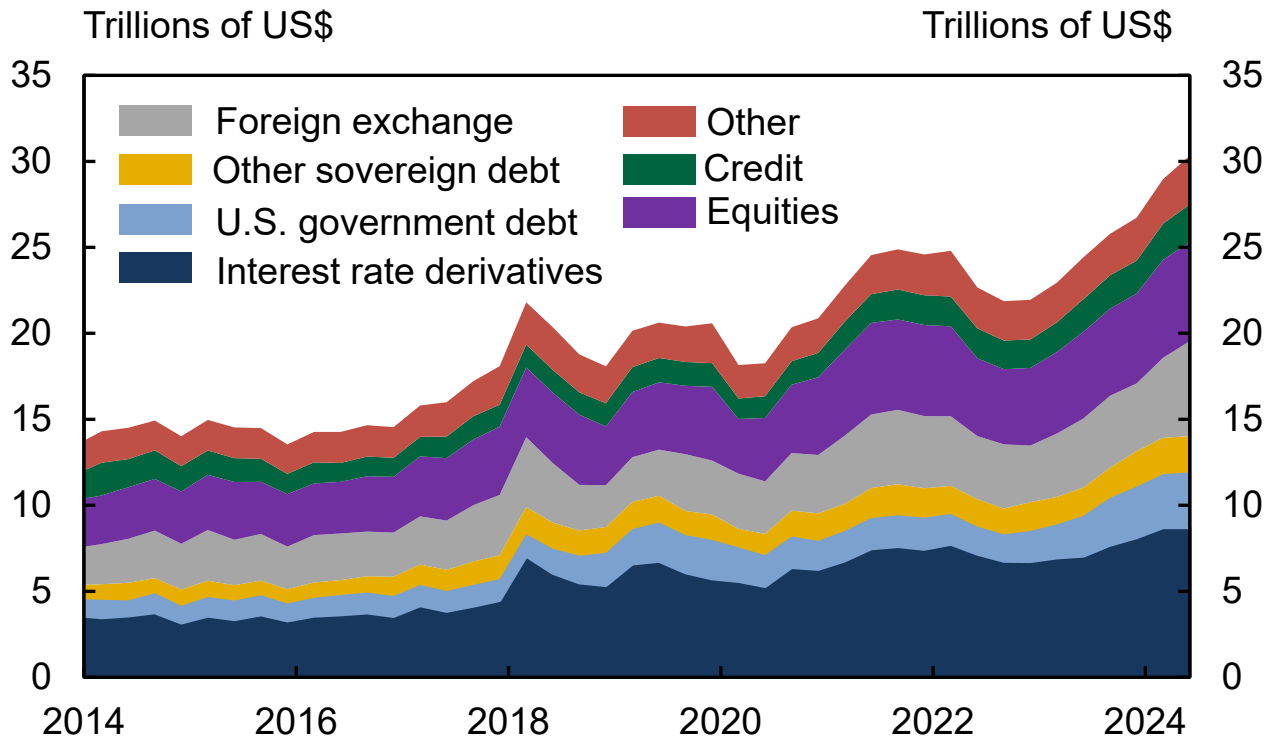
Percent



Note: Data as of 2024:Q2.

Source: Federal Reserve Board.

3.2.2.1 Hedge Fund Gross Notional Exposures by Asset Class



Notes: Data as of 2024:Q2. Gross notional exposure is the sum of the absolute value of long and short exposures, including those on and off the balance sheet, and is based on SEC Form PF.
Sources: OFR and SEC.

3.2.2.2 Leverage Ratios by Strategy

| | Macro | Relative value | Multi-strategy | Credit | Equity | Event-driven | Other |
|------------------------------|-------|----------------|----------------|--------|--------|--------------|-------|
| Gross assets / net assets | 6.7x | 6.4x | 4.2x | 1.7x | 1.6x | 1.2x | 1.4x |
| Gross exposures / net assets | 43.6x | 21.0x | 15.9x | 2.6x | 2.9x | 1.5x | 3.0x |
| Borrowing / net assets | 4.4x | 4.4x | 3.1x | 0.4x | 0.9x | 0.2x | 0.3x |
| Net assets (\$ billions) | 171 | 164 | 669 | 334 | 1,180 | 242 | 1,364 |

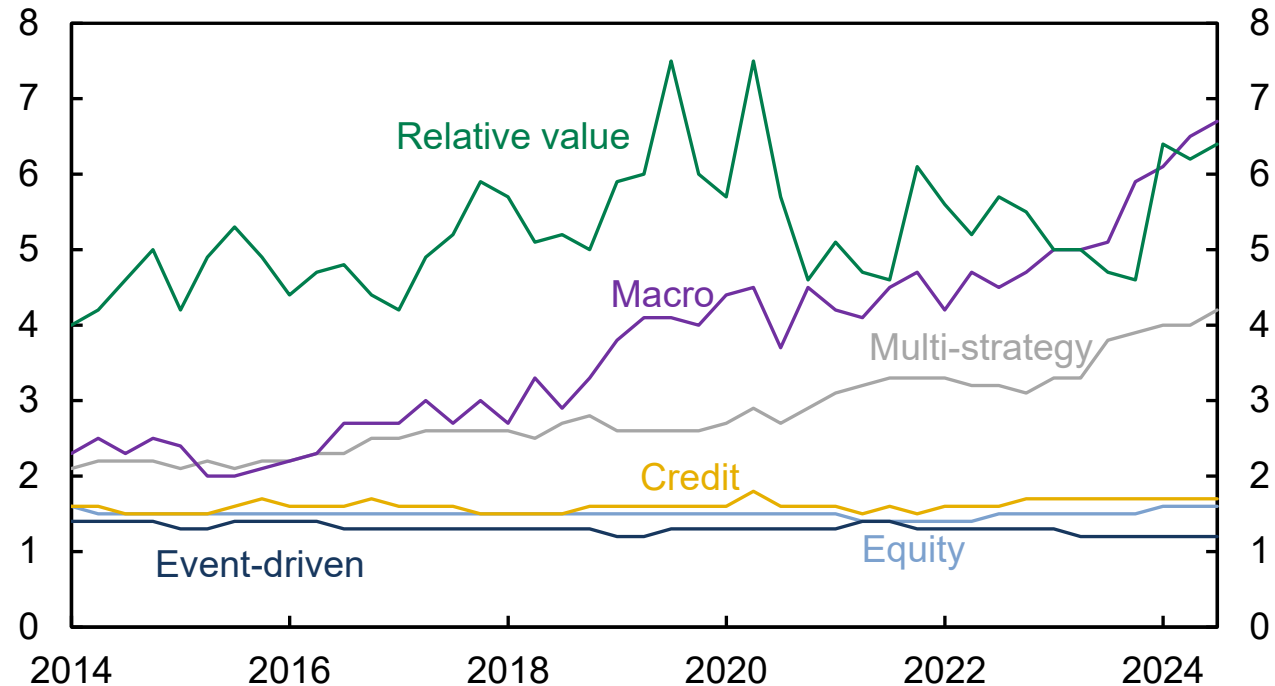
Notes: Data as of 2024:Q2. Net asset-weighted. "Other" includes managed futures, fund of funds, and other strategies. "Gross assets / net assets" reflects on-balance-sheet leverage. "Gross exposures / net assets" also includes off-balance-sheet exposures.

Sources: OFR and SEC.

3.2.2.3 Hedge Fund Leverage by Strategy

Ratio, gross to net asset value

Ratio, gross to net asset value



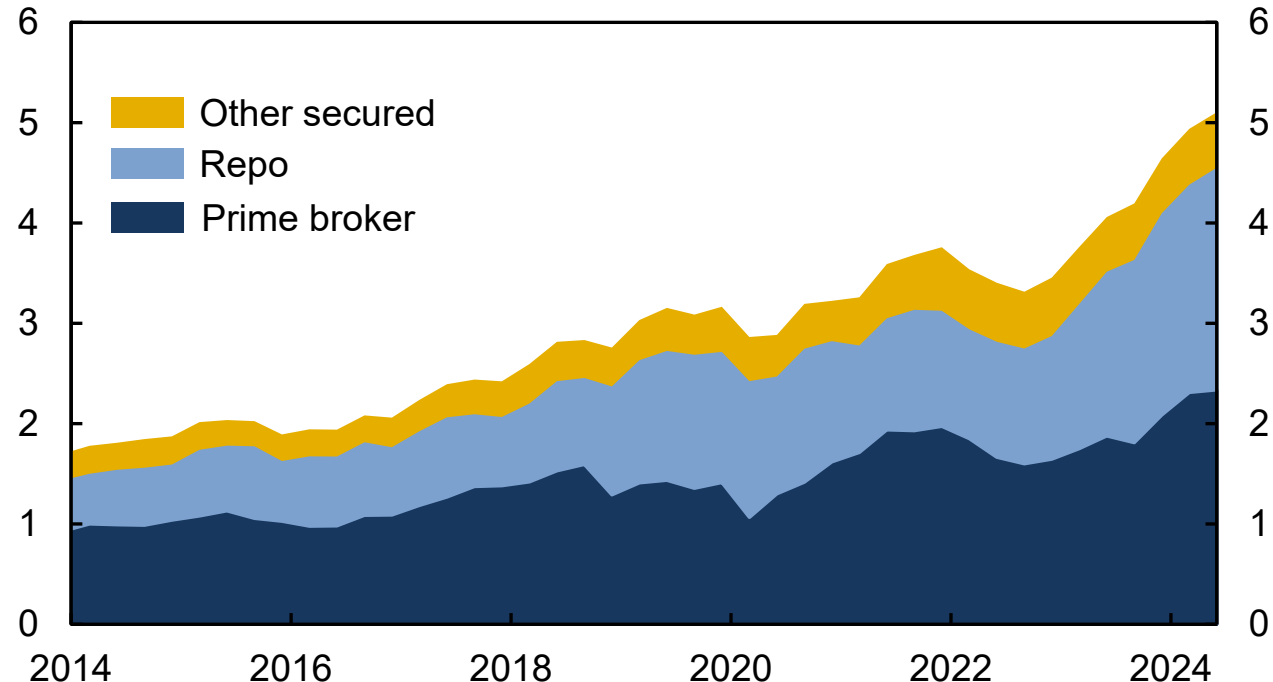
Note: Data as of 2024:Q2.

Sources: OFR and SEC.

3.2.2.4 Hedge Fund Borrowing

Trillions of US\$

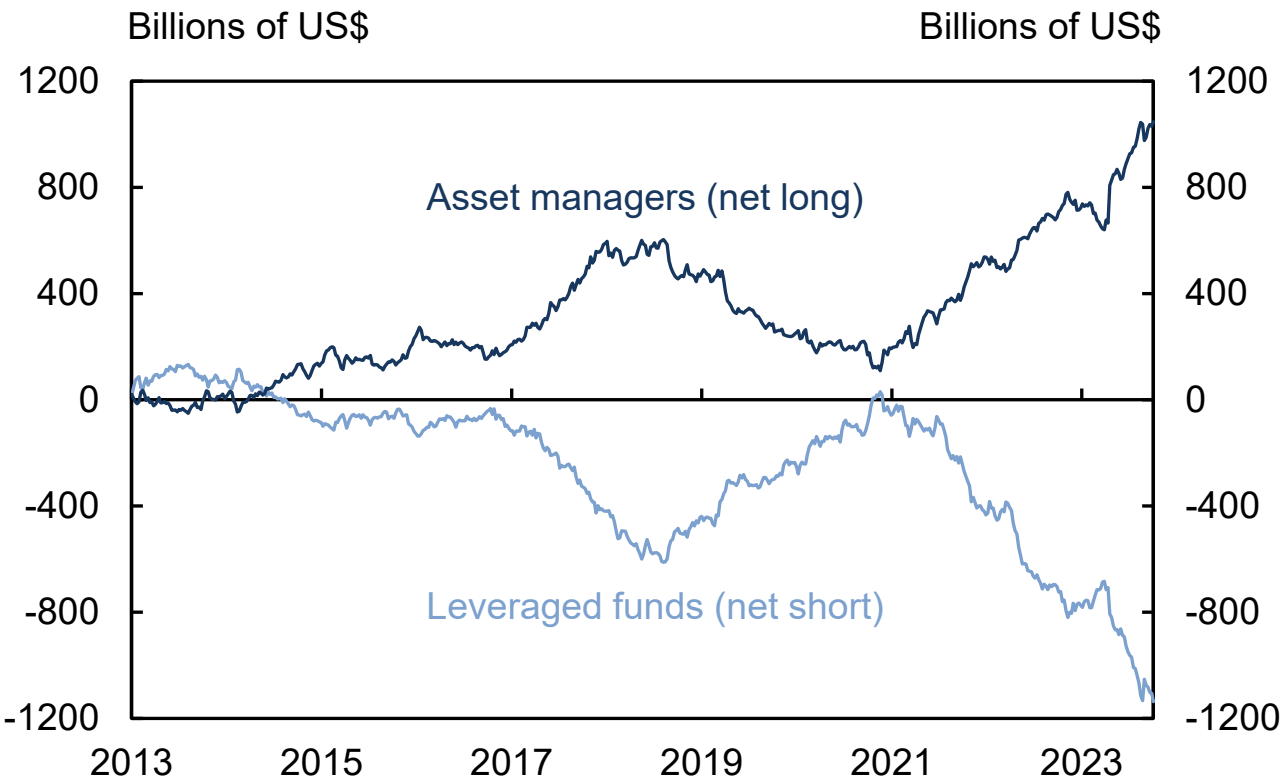
Trillions of US\$



Notes: Data as of June 2024. Data from SEC Form PF excludes unsecured borrowing, which is less than 1 percent of overall borrowing.

Sources: OFR and SEC.

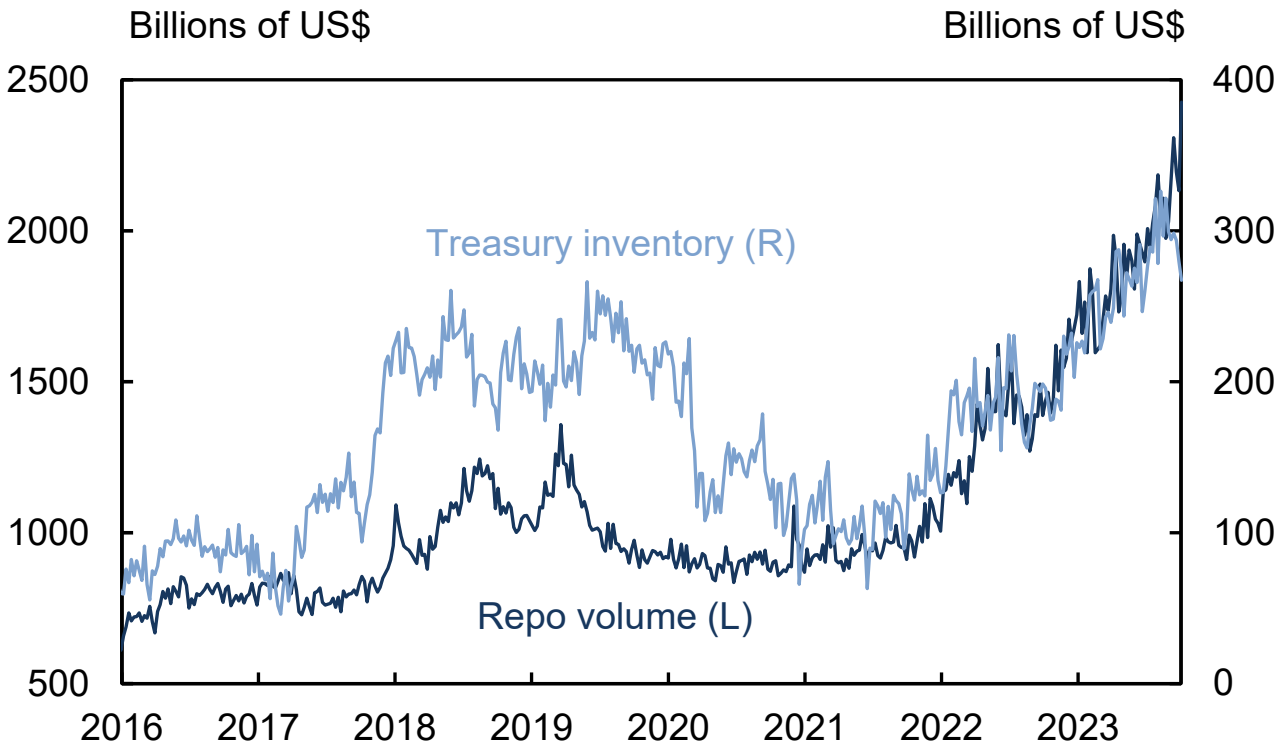
3.2.2.5 Treasury Futures Positioning



Note: Data as of September 30, 2024.

Source: CFTC (Haver Analytics).

3.2.2.6 Repo Volumes and Primary Dealer Treasury Inventory

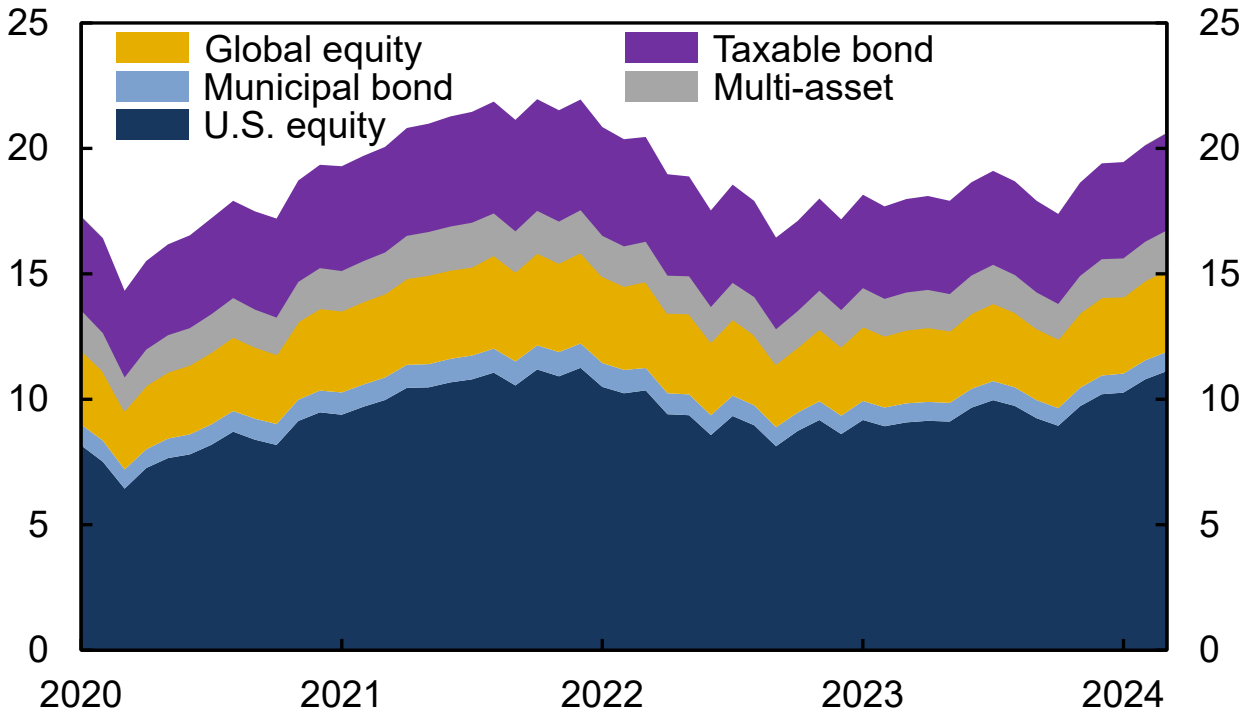


Notes: Data as of September 30, 2024. Overnight Treasury repo volume includes published volumes for SOFR; Treasury inventory excludes FRNs and TIPs.
Source: Federal Reserve Bank of New York (Haver Analytics).

3.2.2.7 Mutual Fund AUM

Trillions of US\$

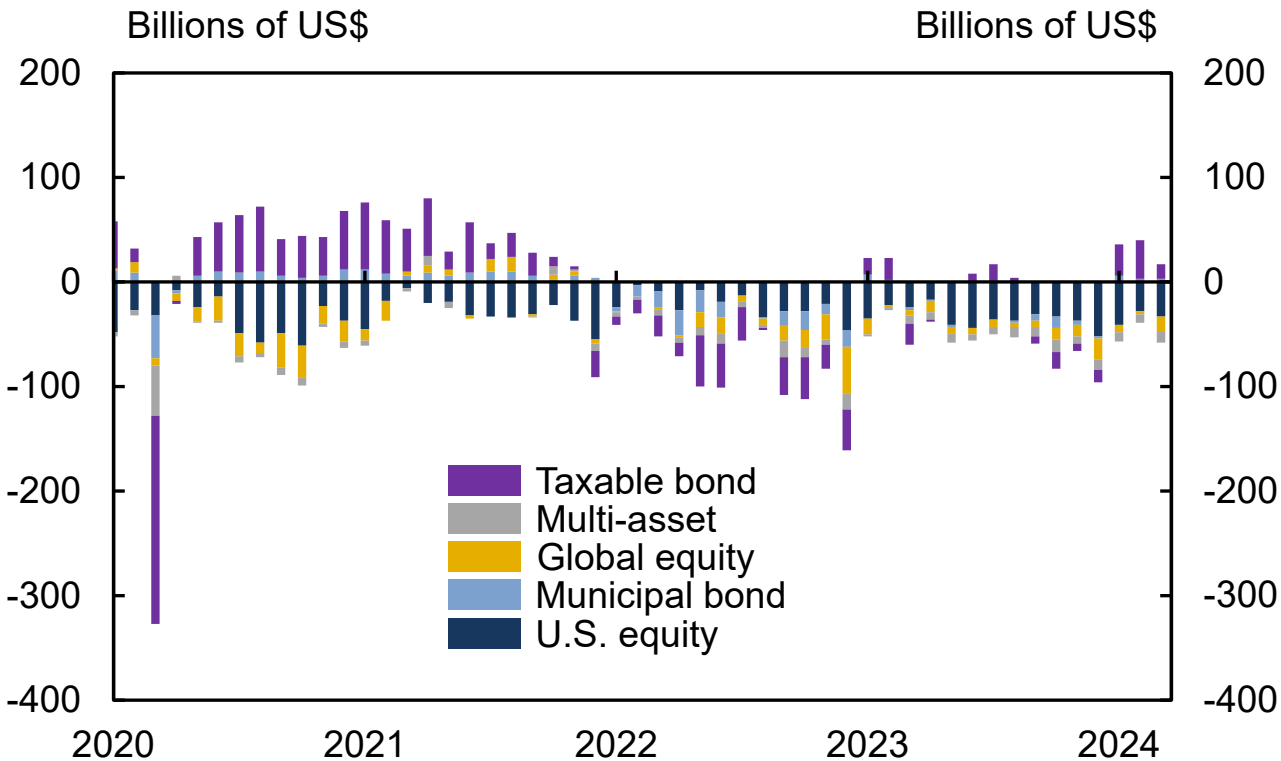
Trillions of US\$



Note: Data as of March 2024.

Source: SEC.

3.2.2.8 Mutual Fund Net Flows



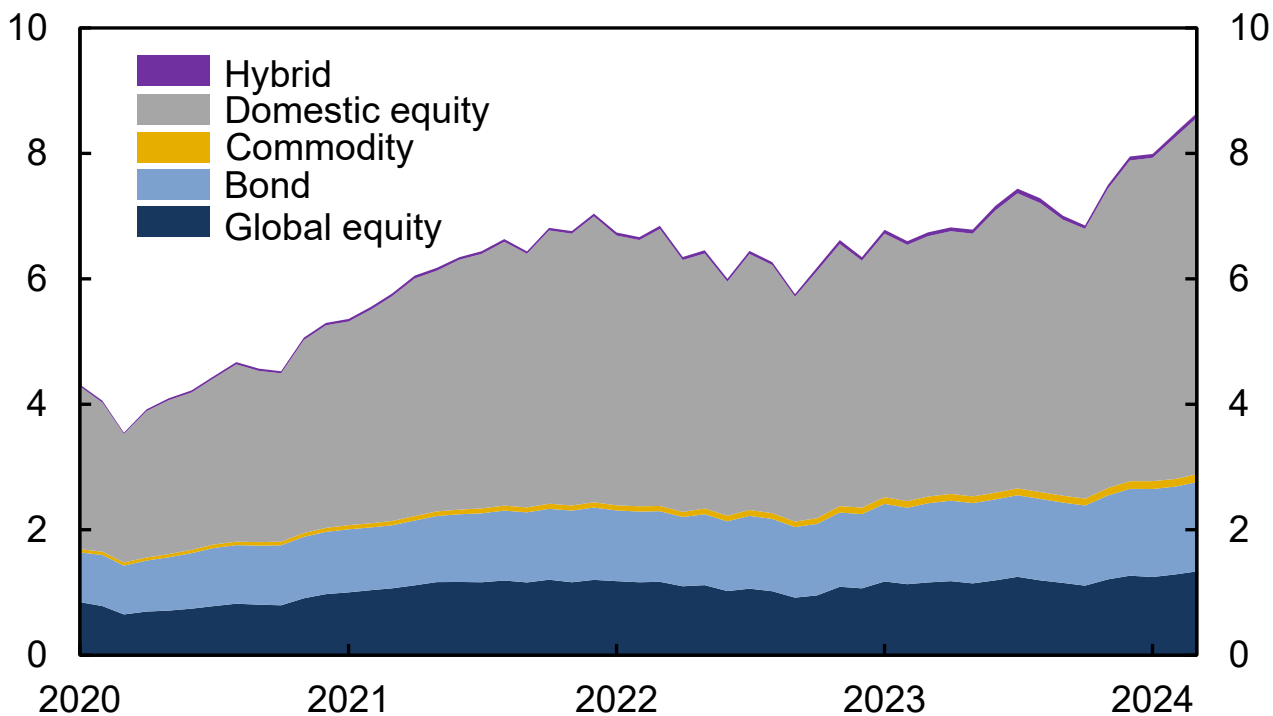
Note: Data as of March 2024.

Source: SEC.

3.2.2.9 ETF AUM

Trillions of US\$

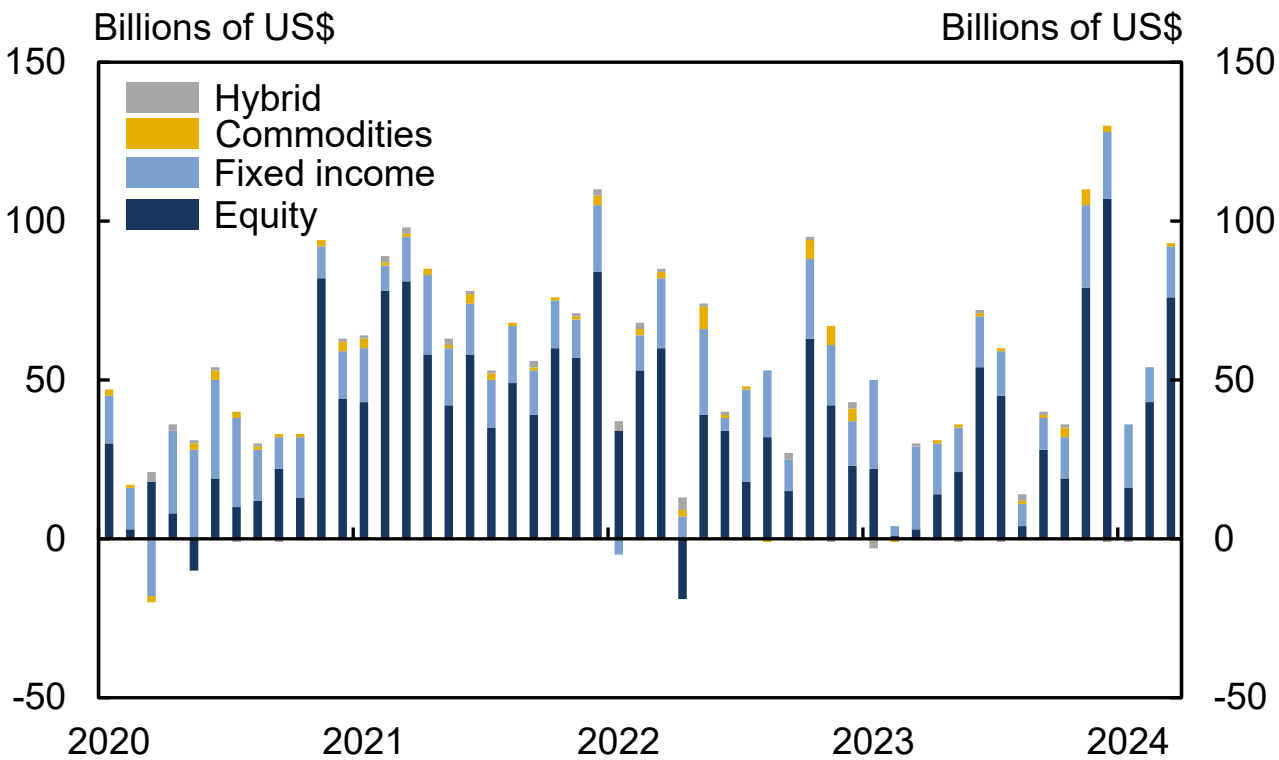
Trillions of US\$



Note: Data as of March 2024.

Source: SEC.

3.2.2.10 ETF Net Flows



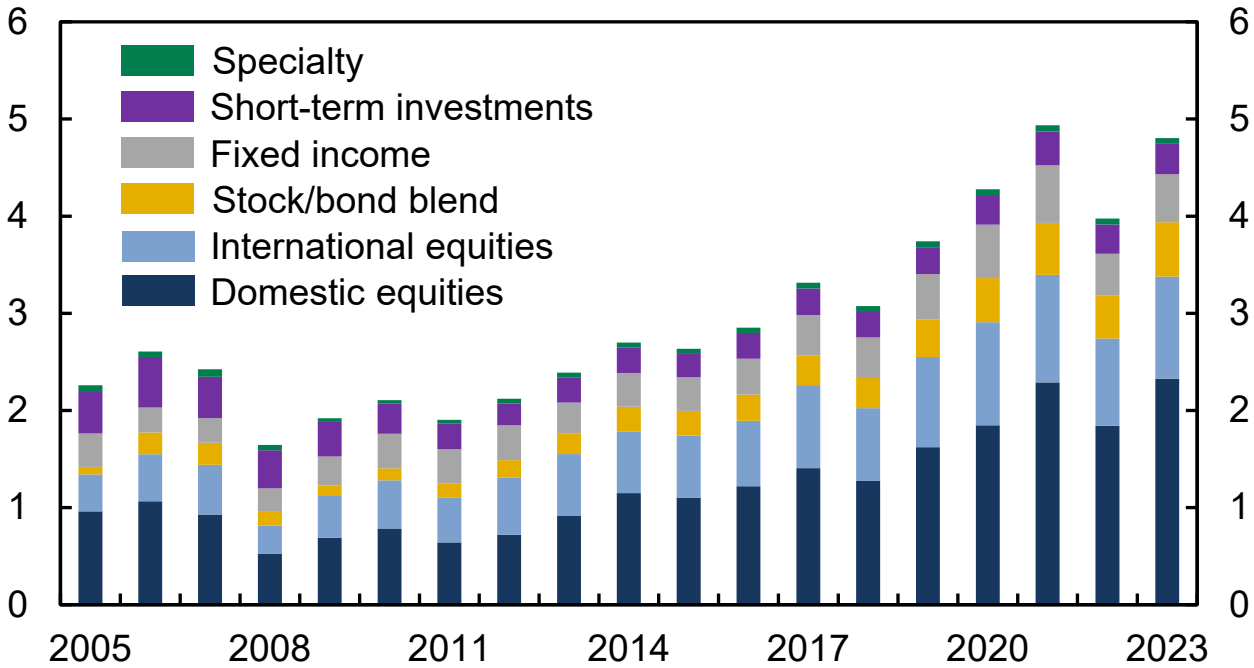
Note: Data as of March 2024.

Source: SEC.

3.2.2.11 Collective Investment Funds AUM by Sector

Trillions of US\$

Trillions of US\$



Notes: Data as of 2023. Chart shows only funds managed by institutions reporting CIF and CIT assets on Call Report Form RC-T.

Source: FFIEC.

3.2.3.1 The Eight DFMUs

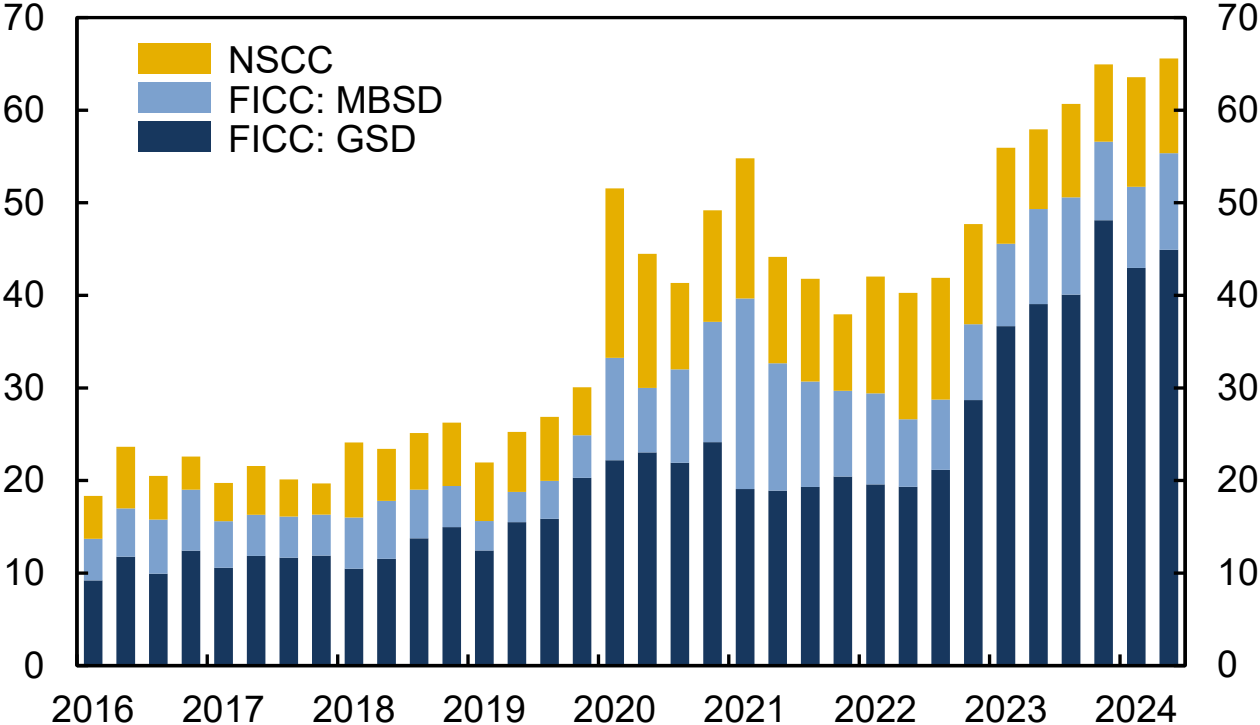
| Primary supervisor | FMU | Type of FMU | Primary financial transactions processed |
|--------------------|--|---|--|
| FRB | Clearing House Interbank Payments System | Payment system | Large value payments |
| | CLS Bank International | Payment system | FX settlement |
| SEC | The Depository Trust Company | Central securities depository and settlement system | Equities, corporate, and municipal debt |
| | National Securities Clearing Corporation | Central counterparty | Equities, corporate, and municipal debt |
| | Fixed Income Clearing Corporation | Central counterparty | U.S. Treasuries and mortgage-backed securities |
| | The Options Clearing Corporation | Central counterparty | Options, futures, and options on futures |
| CFTC | Chicago Mercantile Exchange, Inc. | Central counterparty | Futures, options on futures, and swaps |
| | ICE Clear Credit L.L.C. | Central counterparty | Credit default swaps |

Source: Federal Reserve Board.

3.2.3.2 DTCC Clearing Fund Requirements

Billions of US\$

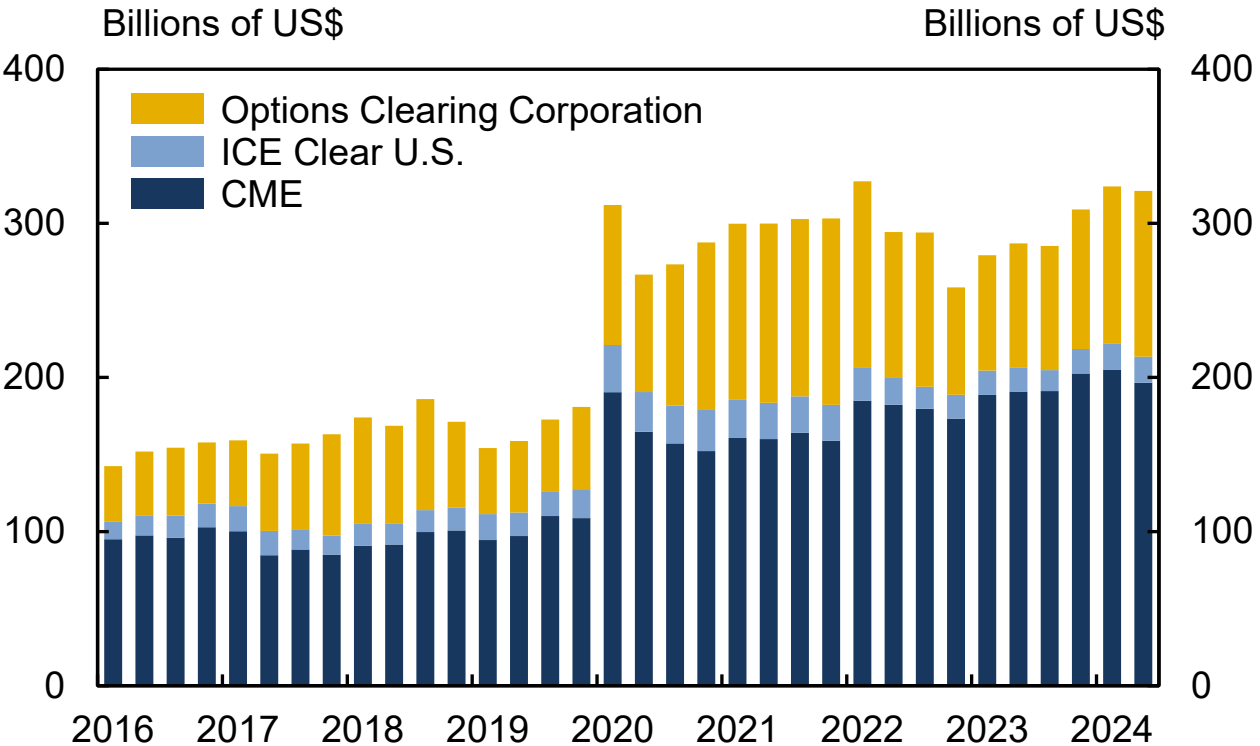
Billions of US\$



Note: Data as of 2024:Q2.

Source: PFMI Quantitative Disclosures (Clarus Financial Technology, 4.1.4).

3.2.3.3 Initial Margin: U.S. Exchange-Traded Derivatives



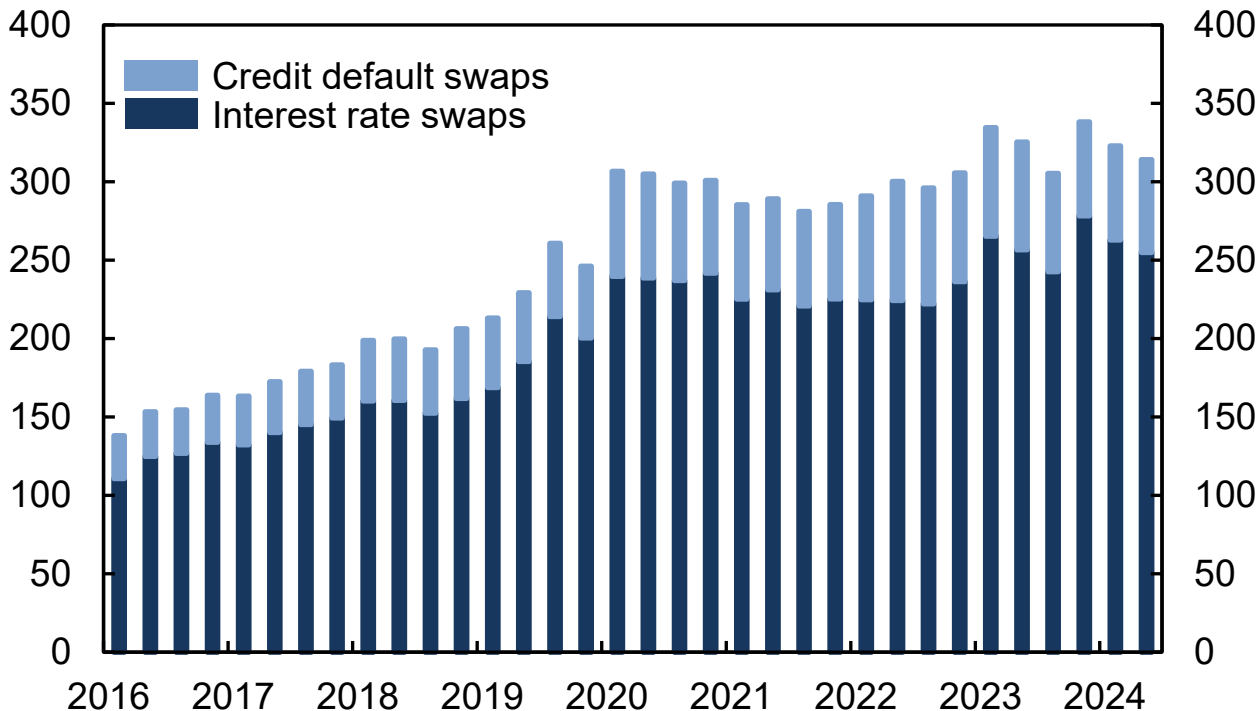
Notes: Data as of 2024:Q2. Initial margin required as reported in quantitative disclosures; includes house and client accounts.

Source: PFMI Quantitative Disclosures (Clarus Financial Technology, 6.1.1).

3.2.3.4 Initial Margin: Centrally Cleared OTC Derivatives

Billions of US\$

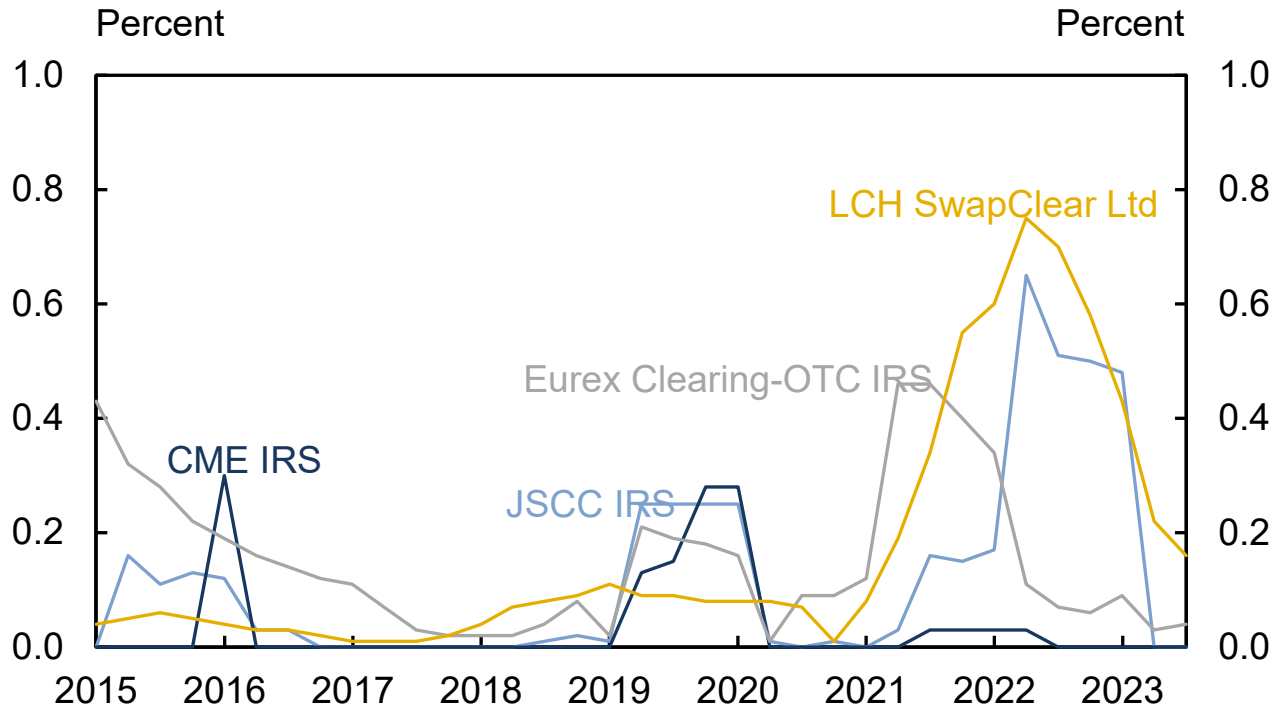
Billions of US\$



Notes: Data as of 2024:Q2. Bars show initial margin required as reported in quantitative disclosures, including house and client accounts. Interest rate swaps margin includes LCH Ltd. and CME. Credit default swaps margin includes ICE Clear Credit (ICC), ICE Clear Europe (ICEU), and LCH SA. ICEU ceased clearing CDS in October 2023.

Source: PFMI Quantitative Disclosures (Clarus Financial Technology, 6.1.1).

3.2.3.5 Daily Breach Rate at Interest-Rate Swap CCPs



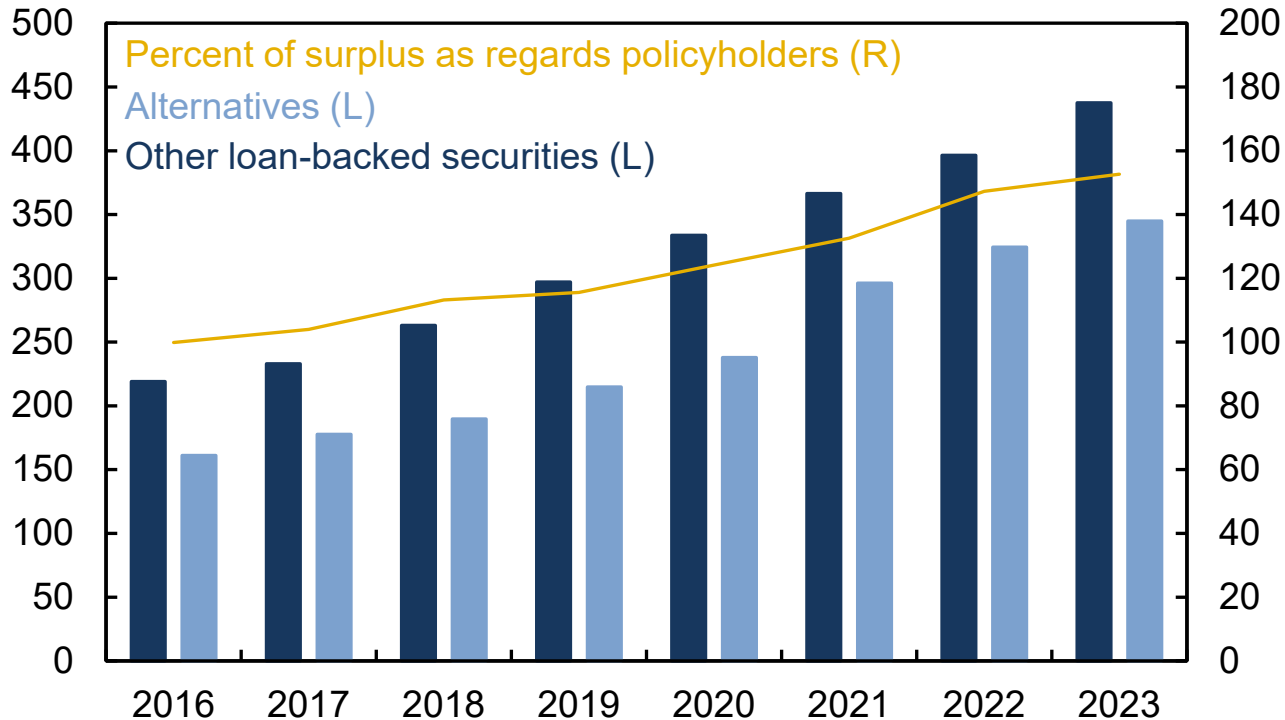
Notes: Data as of 2024:Q2. Breach indicates the required variation margin on an account is greater than the initial margin held against the account.

Source: PFMI Quantitative Disclosures (Clarus Financial Technology, 6.5.3).

3.2.4.1 Life Insurers' Changing Investment Portfolios

Billions of US\$

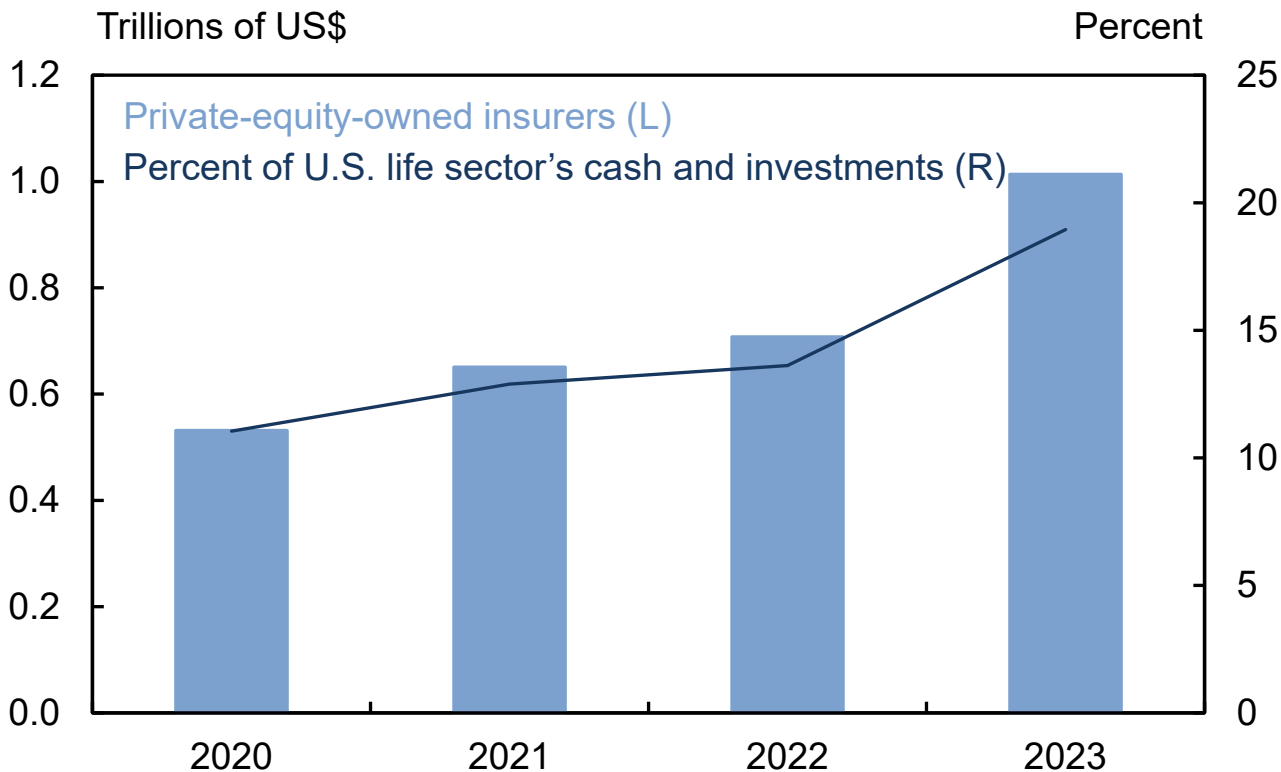
Percent



Note: Data as of 2023.

Source: S&P Global Market Intelligence.

3.2.4.2 Private-Equity-Owned Insurers' Total Cash and Investments



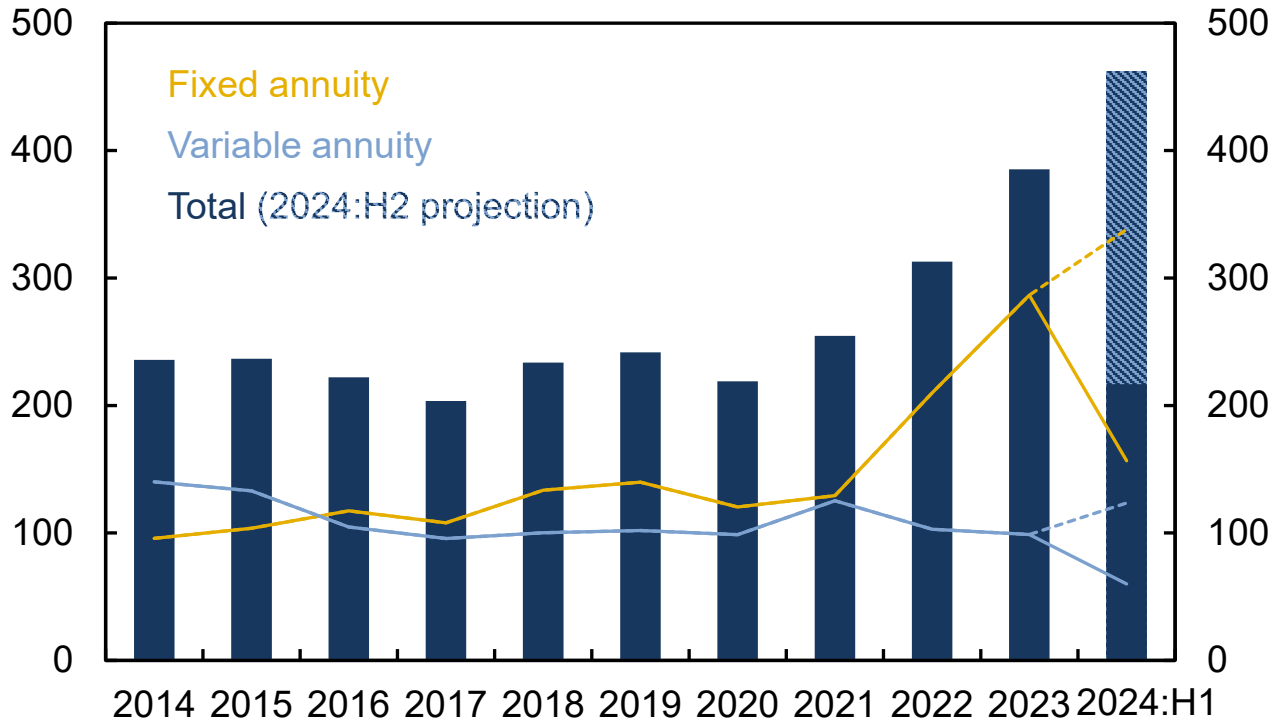
Note: Data as of 2023.

Source: S&P Capital IQ.

3.2.4.3 Trends in Annuity Sales

Billions of US\$

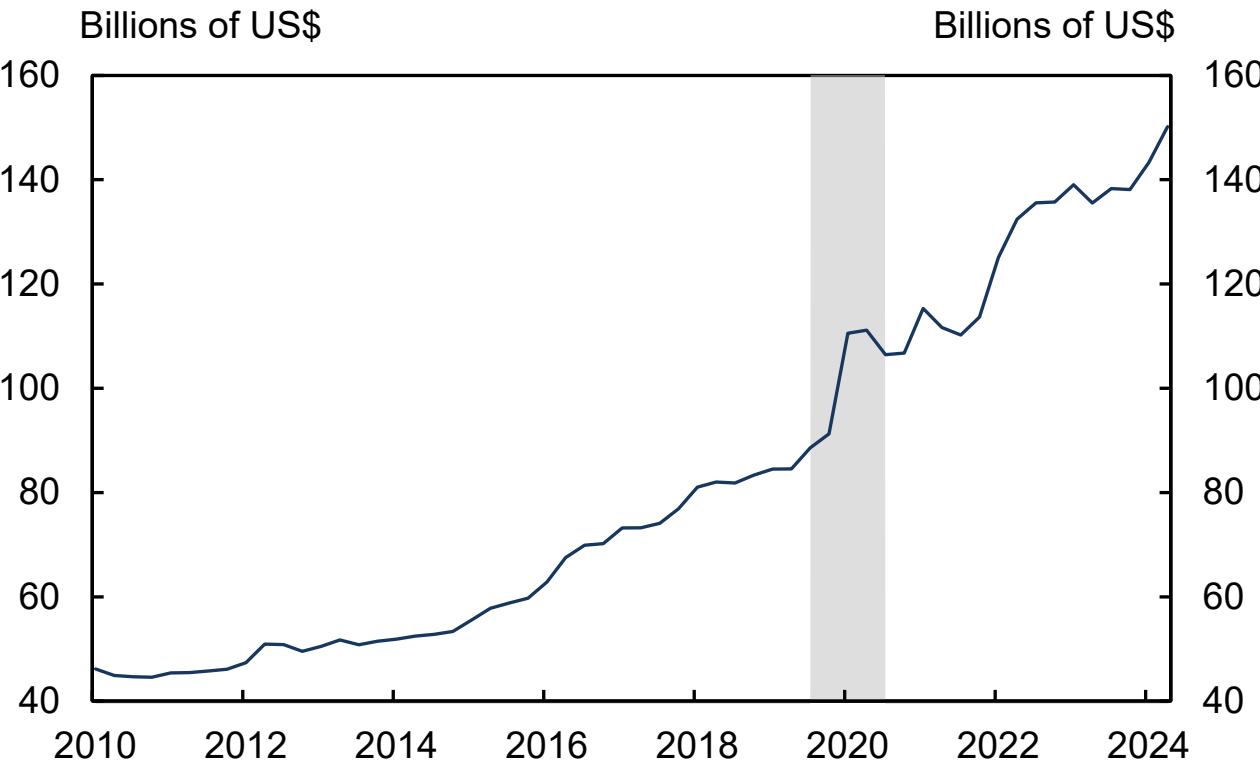
Billions of US\$



Notes: Data as of 2024:H1. Dashed lines include projected values for 2024:H2.

Source: LIMRA.

3.2.4.4 FHLB Advances to Life Insurers



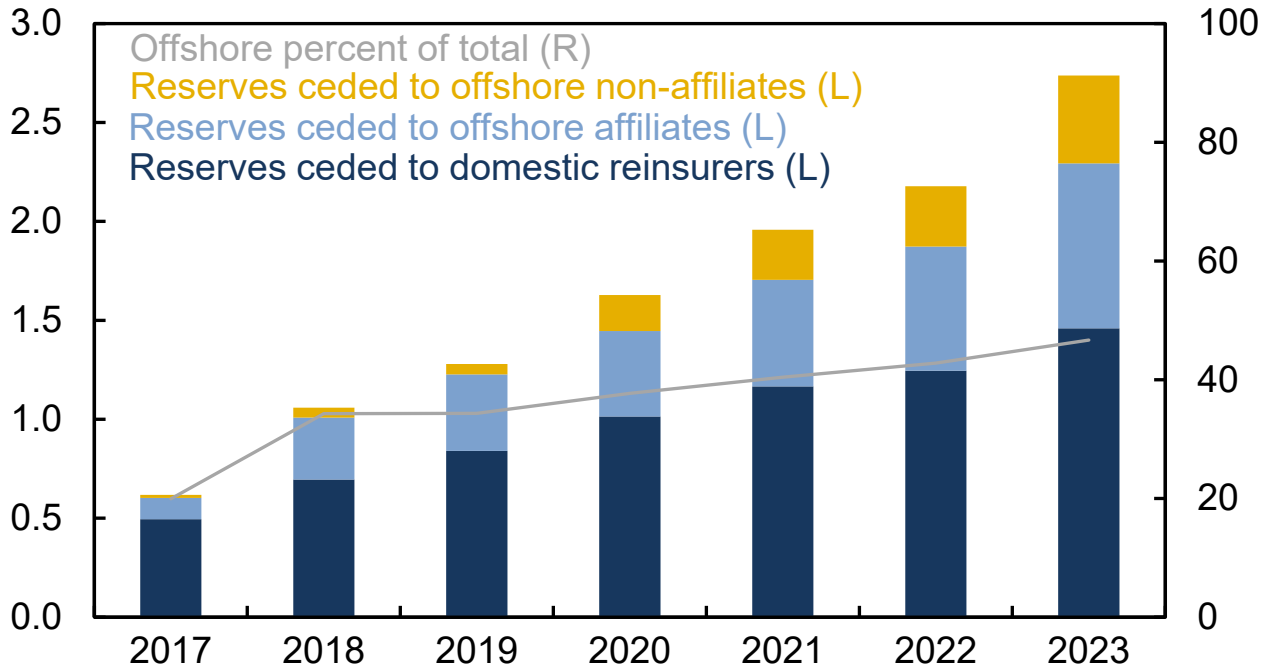
Notes: Data as of 2024:Q2. Gray bar signifies NBER recession.

Sources: FRED and NBER.

3.2.4.5 More Life Insurance Reserves Are Moving Offshore

Trillions of US\$

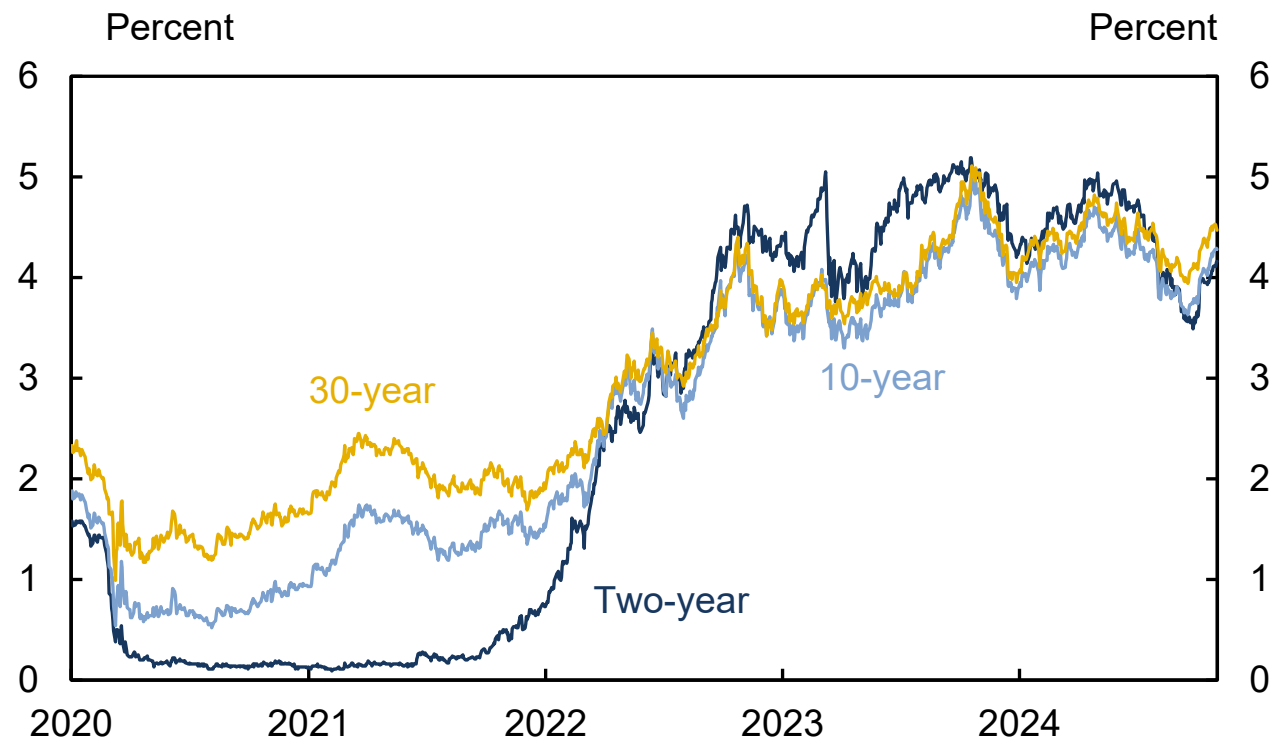
Percent



Notes: Data as of 2023. Reserves ceded to domestic reinsurers includes U.S. affiliated and unaffiliated.

Source: S&P Capital IQ.

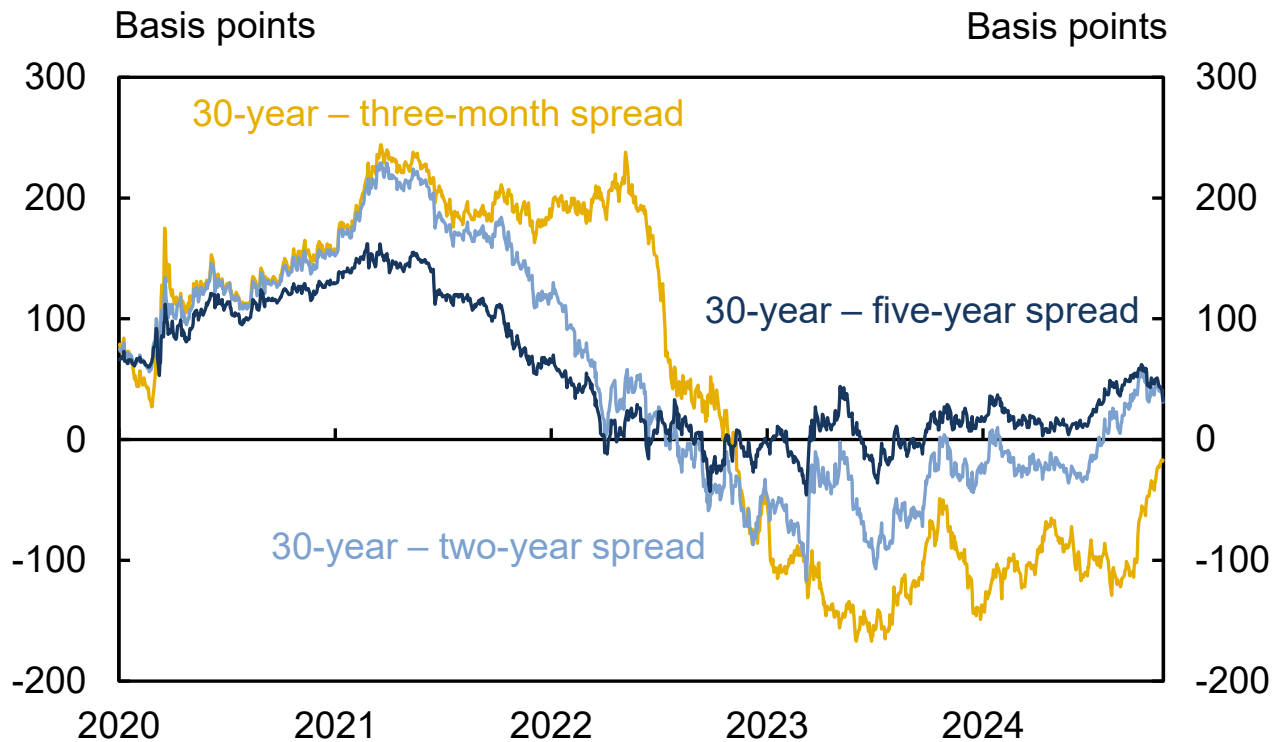
3.3.1.1 U.S. Treasury Yields



Note: Data as of October 31, 2024.

Source: U.S. Department of the Treasury.

3.3.1.2 U.S. Treasury Yield Spreads



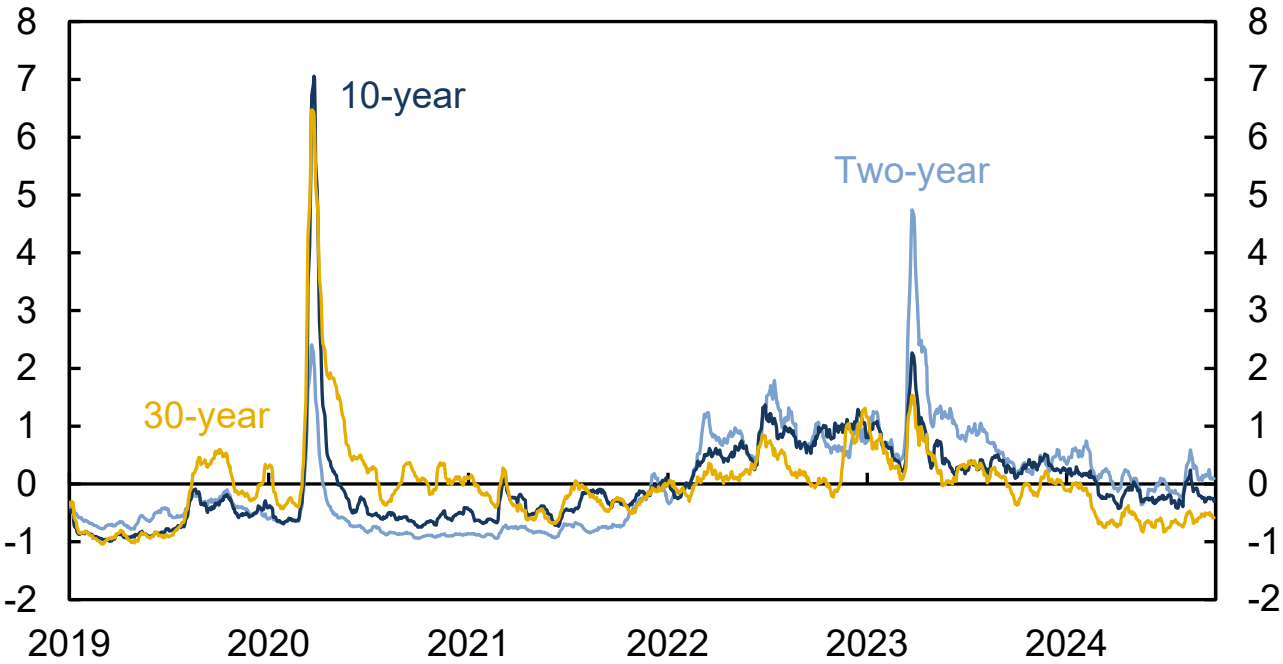
Note: Data as of October 31, 2024.

Source: U.S. Department of the Treasury.

3.3.1.3 U.S. Treasury Market Liquidity Indexes

Z-scores (10-day moving average)

Z-scores (10-day moving average)



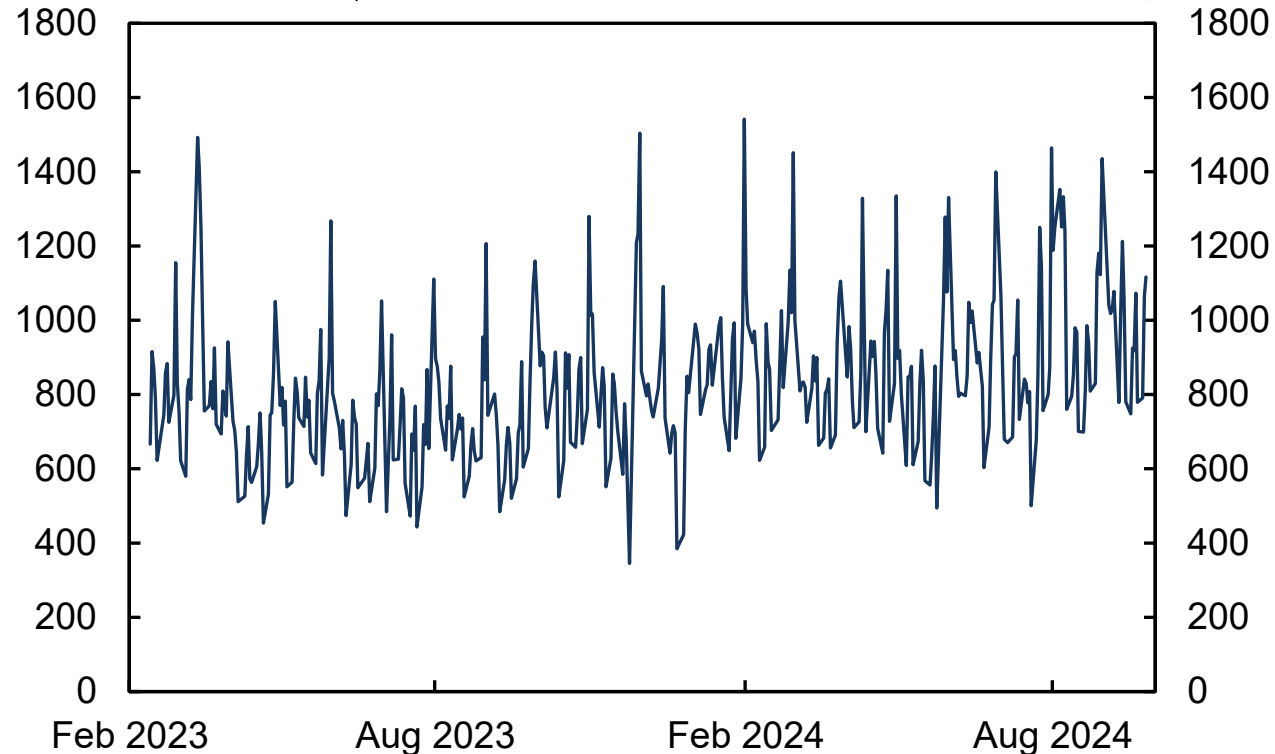
Notes: Data as of September 30, 2024. Index inputs are bid-ask, inverted depth, and price impact calculated for each security as the simple average of z-scores for each input. The two-year bid-ask/depth is reduced by half to account for the reductions in the minimum price increment.

Source: U.S. Department of the Treasury.

3.3.1.4 Total TRACE U.S. Treasury Daily Volume

Billions of US\$

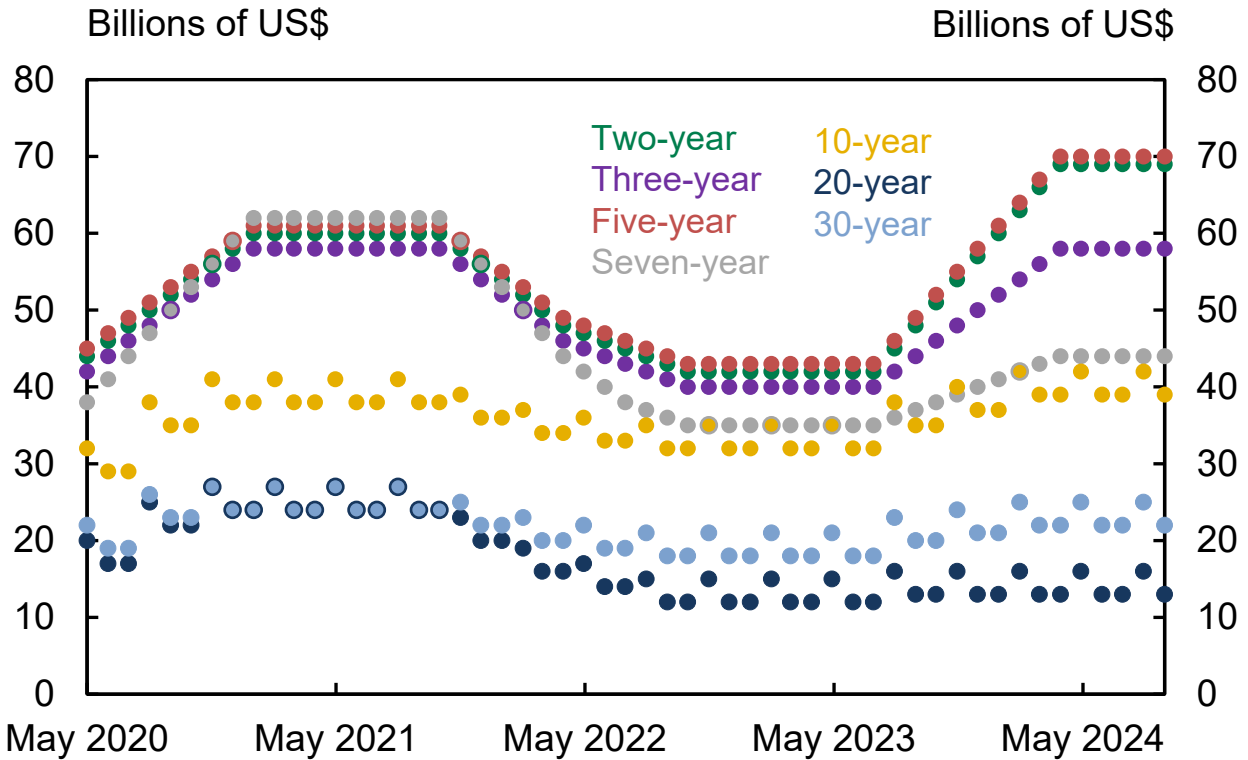
Billions of US\$



Note: Data as of September 30, 2024.

Source: Bloomberg.

3.3.1.5 U.S. Treasury Nominal Coupon Auction Sizes by Month



Note: Data as of September 2024.

Source: U.S. Department of the Treasury (FINRA).