

Quarterly Report: US Fixed Income, 1Q24

Issuance & Trading Statistics for US Treasuries, Mortgage-Backed Securities, Corporate Bonds, Municipal Bonds, Agency Securities, & Asset-Backed Securities

April 2024

Key Takeaways for 1Q24

Fixed income issuance posted a strong quarter at \$2.5T, an increase of 26.1% Q/Q. Four out of six asset classes covered posted positive Q/Q trends, ranging from +7.3% to +135.8%. The star of the quarter was corporate bonds. Issuance was \$627.6B, +135.8% Q/Q. To put this performance in context, 1Q24 represented 43.4% of last year's total issuance (\$1.4T) and was 1.7x last year's average quarterly issuance. Looking at our full data time series – which goes back to 1980 – this quarter was the second highest on record, behind only the \$867.6B in 2Q20. Quarterly corporate bond issuance has only been over \$500B eight times and only over \$600B three times (the third being 1Q21). Not to be ignored, UST issuance (long term only) continued in large numbers, \$992.3B. This was 1.1x last year's average quarterly issuance. While "only" +7.3% Q/Q, this is off a large base. UST issuance is down from the \$1T+ quarters seen from 3Q20-2Q22, but still posted numbers over \$900B in four of the last seven quarters.

Average daily trading volumes also increased this quarter. ADV was \$1.3T, an increase of 11.7% Q/Q. The asset class posting the largest quarterly increase was corporate bonds with \$55.5B ADV, a 29.0% increase Q/Q. UST ADV was \$889.0B, +12.1% Q/Q.

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Executive Summary

Quarter & Annual Highlights

In this report, we utilize SIFMA Research's comprehensive fixed income and securitized products databases (www.sifma.org/statistics) to analyze total U.S. fixed income markets, U.S. Treasuries (UST), mortgage-backed securities (MBS), corporate bonds (corporates), municipal securities (munis), federal agency securities (agency), and asset-backed securities (ABS). We also analyze trends in Environmental, Social, and Governance (ESG) issuance and recap various rate moves in the quarter.

We highlight the following for quarterly and annual metrics:

	1Q24	4Q23	1Q23	Q/Q	Y/Y	YTD 2024	YTD 2023	Y/Y
Issuance (\$B) - LT								
Total Market	1,460.4	1,019.9	1,374.6	43.2%	6.2%	1,460.4	1,374.6	6.2%
UST	992.3	925.2	986.2	7.3%	0.6%	992.3	986.2	0.6%
MBS	310.4	318.1	273.8	-2.4%	13.4%	310.4	273.8	13.4%
Corporates	627.6	266.2	454.8	135.8%	38.0%	627.6	454.8	38.0%
Agency	318.2	274.6	497.3	15.9%	-36.0%	318.2	497.3	-36.0%
Munis	100.2	103.7	80.1	-3.3%	25.2%	100.2	80.1	25.2%
ABS	104.1	57.4	68.6	81.4%	51.6%	104.1	68.6	51.6%
Trading (ADV, \$B)								
Total Market	1,257.1	1,125.0	1,124.0	11.7%	11.8%	1,257.1	1,124.0	11.8%
UST	889.0	793.1	804.1	12.1%	10.5%	889.0	804.1	10.5%
MBS - Agency	292.9	267.4	251.3	9.5%	16.6%	292.9	251.3	16.6%
MBS - Non Agency	1.6	1.4	1.7	20.3%	-5.8%	1.6	1.7	- 5.8%
Corporates	55.5	43.1	48.3	29.0%	15.0%	55.5	48.3	15.0%
Agency	3.5	3.4	3.8	4.3%	-7.8%	3.5	3.8	- 7.8%
Munis	12.4	14.9	12.9	-16.8%	-3.6%	12.4	12.9	-3.6%
ABS	2.2	1.7	1.8	23.4%	18.8%	2.2	1.8	18.8%

Source: Bloomberg, Federal Reserve Bank of New York, FINRA, Municipal Securities Rulemaking Board, Refinitiv, US Agencies, US Treasury, SIFMA estimates

Note: Issuance = Long-term securities only, UST = U.S. Treasury securities, MBS = mortgage-backed securities, Corporates = corporate bonds, Agency = federal agency securities, Munis = municipal bonds, ABS = asset-backed securities

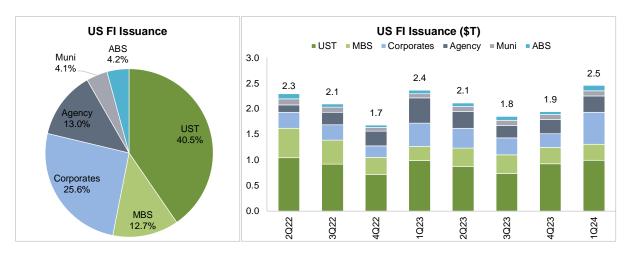
	1Q24	4Q23	1Q23	Q/Q	Y/Y	YTD 2024	YTD 2023	Y/Y
ESG Issuance (\$B)								
Global	256.5	129.4	225.9	98.2%	13.5%	256.5	225.9	13.5%
Green	160.1	90.2	148.1	77.5%	8.1%	160.1	148.1	8.1%
Social	41.4	15.4	36.5	169.6%	13.5%	41.4	36.5	13.5%
Sustainability	55.0	23.9	41.3	130.5%	33.2%	55.0	41.3	33.2%
US	36.5	27.0	30.5	35.0%	19.8%	36.5	30.5	19.8%
Green	13.9	11.0	13.9	26.5%	0.1%	13.9	13.9	0.1%
Social	1.4	4.4	0.8	-67.9%	72.1%	1.4	0.8	72.1%
Sustainability	21.2	11.6	15.8	82.0%	34.3%	21.2	15.8	34.3%

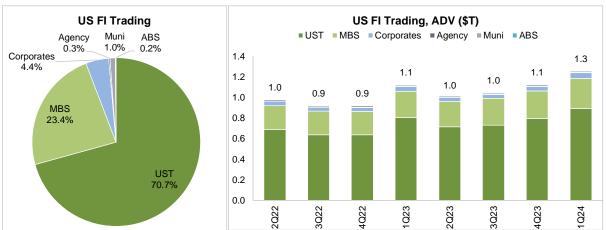
Source: Dealogic, SIFMA estimates

Total US Fixed Income

Total US Fixed Income: Review of Quarterly Statistics

- Issuance \$2.5T; +26.1% Q/Q, +3.9% Y/Y
- ADV \$1.3T; +11.7% Q/Q, +11.8% Y/Y





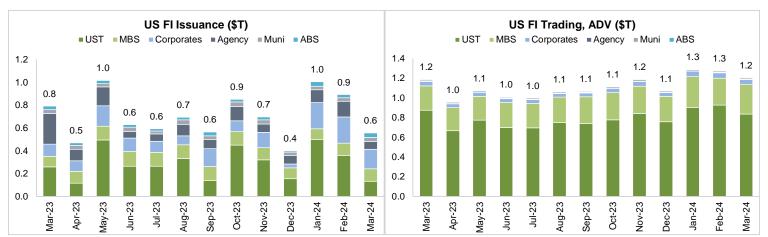
Source: Bloomberg, Federal Reserve Bank of New York, FINRA, Municipal Securities Rulemaking Board, Refinitiv, US Agencies, US Treasury, SIFMA estimates

Note: Issuance = Long-term securities only, UST = U.S. Treasury securities, MBS = mortgage-backed securities, Corporates = corporate bonds, Agency = federal agency securities, Munis = municipal bonds, ABS = asset-backed securities

Total US Fixed Income: Monthly Trends

Issuance: \$0.6T; -37.7% M/M, -29.5% Y/Y

• ADV: \$1.2T; -5.4% M/M, +1.6% Y/Y

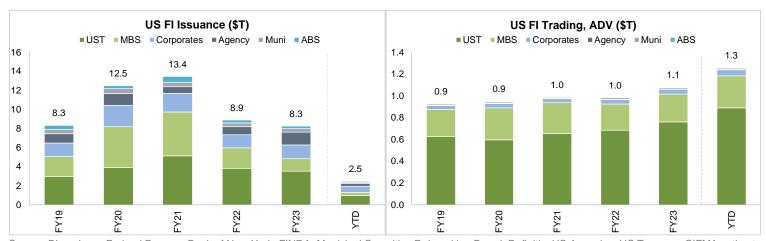


Source: Bloomberg, Federal Reserve Bank of New York, FINRA, Municipal Securities Rulemaking Board, Refinitiv, US Agencies, US Treasury, SIFMA estimates Note: Issuance = Long-term securities only, UST = U.S. Treasury securities, MBS = mortgage-backed securities, Corporates = corporate bonds, Agency = federal agency securities, Munis = municipal bonds, ABS = asset-backed securities

Total US Fixed Income: YTD Statistics Update

Issuance: \$2.5T; +3.9% Y/Y

ADV: \$1.3T; +11.8% Y/Y

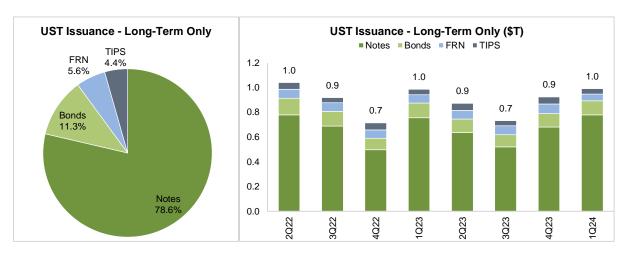


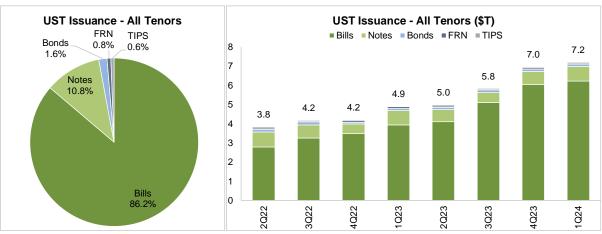
Source: Bloomberg, Federal Reserve Bank of New York, FINRA, Municipal Securities Rulemaking Board, Refinitiv, US Agencies, US Treasury, SIFMA estimates Note: Issuance = Long-term securities only, UST = U.S. Treasury securities, MBS = mortgage-backed securities, Corporates = corporate bonds, Agency = federal agency securities, Munis = municipal bonds, ABS = asset-backed securities

US Treasury Securities (UST)

UST: Review of Quarterly Statistics

- Issuance
 - Long Term: \$1.0T; +7.3% Q/Q, +0.6% Y/Y
 - o All: \$7.2T; +3.5% Q/Q, +46.3% Y/Y

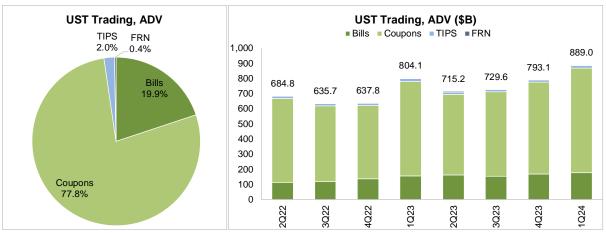




Source: US Treasury, SIFMA estimates

Note: FRN = floating rate note, TIPS = Treasury inflation-protected securities

• ADV \$889.0B; +12.1% Q/Q, +10.5% Y/Y



Source: FINRA, SIFMA estimates

Note: FRN = floating rate note, TIPS = Treasury inflation-protected securities

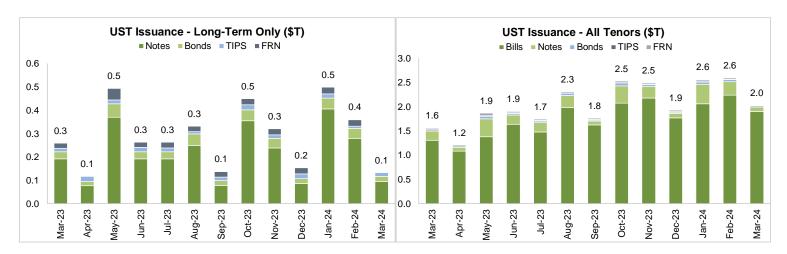
UST: Monthly Trends

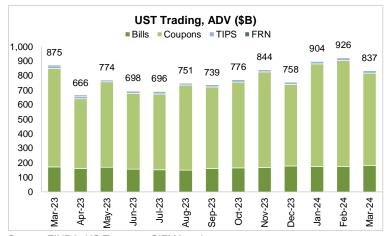
Issuance

o Long Term: \$0.1T; -63.1% M/M, -48.6% Y/Y

All: \$2.0T; -21.6% M/M, +30.0% Y/Y

ADV \$836.6B; -9.6% M/M, -4.4% Y/Y





Source: FINRA, US Treasury, SIFMA estimates

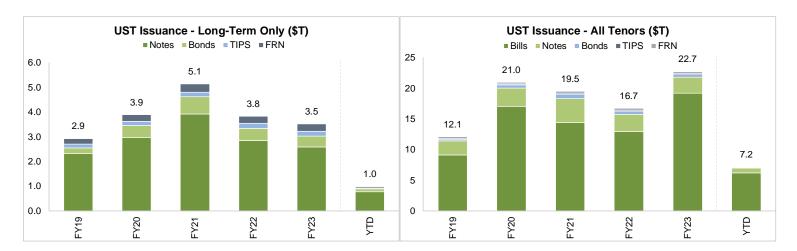
Note: FRN = floating rate note, TIPS = Treasury inflation-protected securities

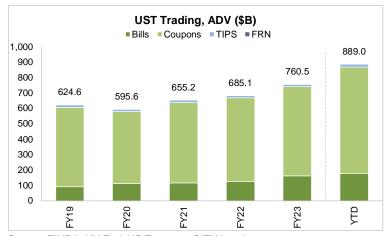
UST: Annual Statistics Update

Issuance

Long Term: \$1.0T; +0.6% Y/Y
 All: \$7.2T; +46.3% Y/Y

ADV \$889.0B; +10.5% Y/Y





Source: FINRA, NY Fed, US Treasury, SIFMA estimates

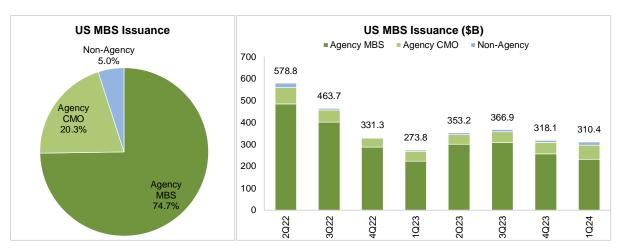
Note: FRN = floating rate note, TIPS = Treasury inflation-protected securities,

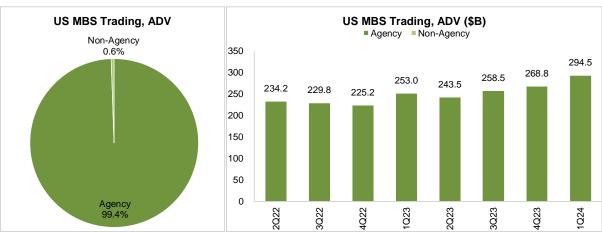
Mortgage-Backed Securities (MBS)

MBS: Review of Quarterly Statistics

Issuance: \$310.4B; -2.4% Q/Q, +13.4% Y/Y

ADV: \$294.5B; +9.6% Q/Q, +16.4% Y/Y





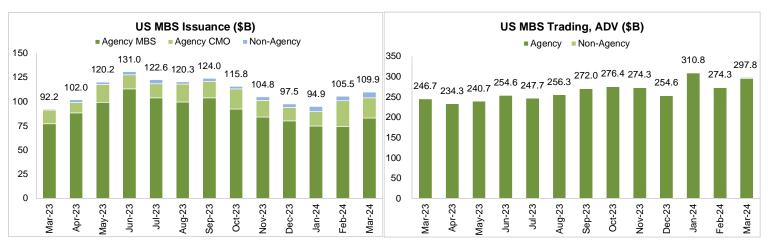
Source: Bloomberg, US Agencies, FINRA, SIFMA estimates

Note: CMO = collateralized mortgage obligation

MBS: Monthly Trends

Issuance: \$109.9B; +4.2% M/M, +19.2% Y/Y

ADV: \$297.8B; +8.6% M/M, +20.7% Y/Y

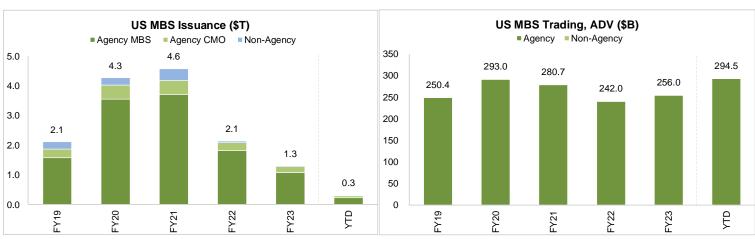


Source: Bloomberg, US Agencies, FINRA, SIFMA estimates

Note: CMO = collateralized mortgage obligation

MBS: Annual Statistics Update

Issuance: \$0.3T; +13.4% Y/YADV: \$294.5B; +16.4% Y/Y



Source: Bloomberg, US Agencies, FINRA, SIFMA estimates

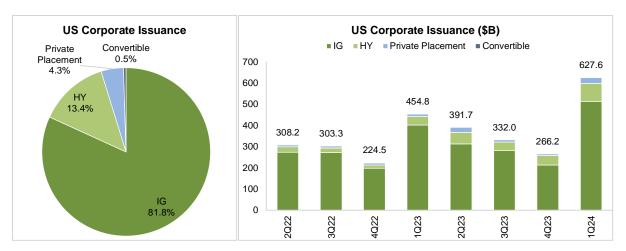
Note: CMO = collateralized mortgage obligation

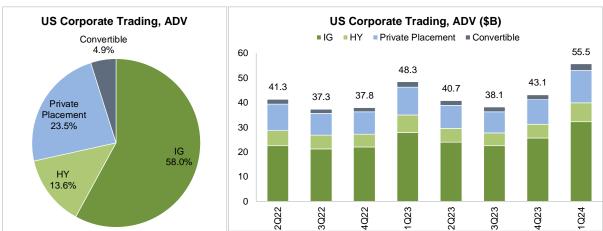
Corporate Bonds (Corporates)

Corporates: Review of Quarterly Statistics

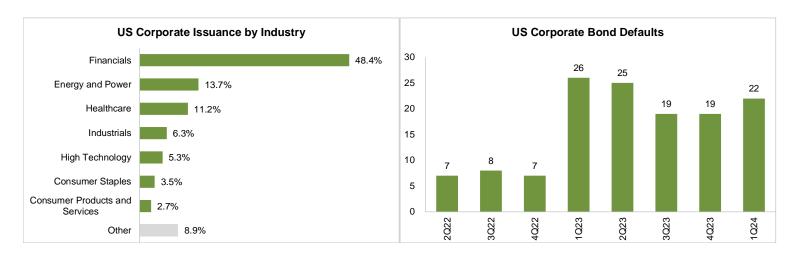
• Issuance: \$627.6B; +135.8% Q/Q, +38.0% Y/Y

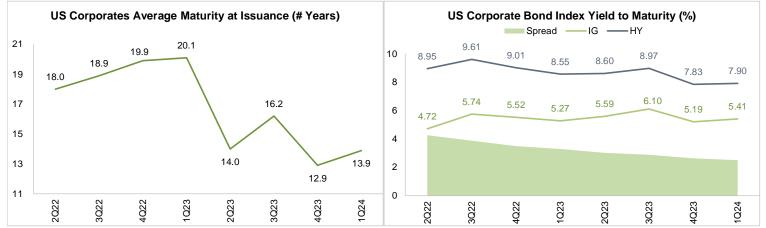
• ADV: \$55.5B; +29.0% Q/Q, +15.0% Y/Y





Source: Refinitiv, FINRA, SIFMA estimates Note: IG = investment grade, HY = high yield





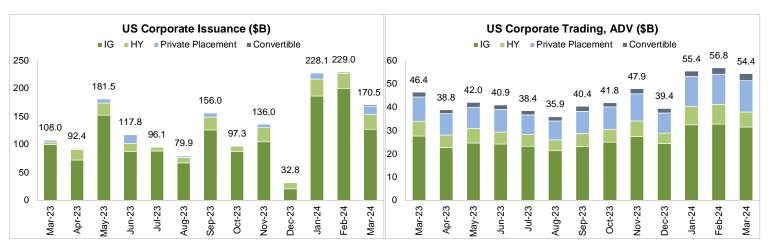
Source: ICE Data Indices, Refinitiv, S&P Global Ratings, SIFMA estimates

Note: IG = investment grade, HY = high yield

Corporates: Monthly Trends

Issuance: \$170.5B; -25.5% M/M, +57.8% Y/Y

• ADV: \$54.4B; -4.4% M/M, +17.2% Y/Y

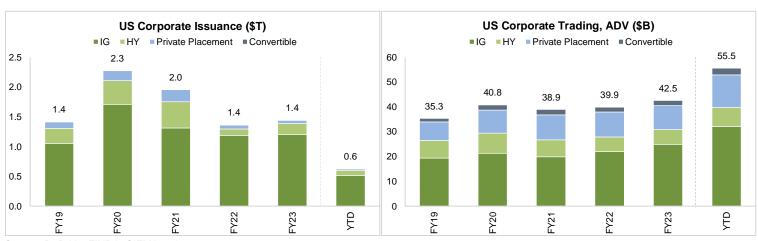


Source: Refinitiv, FINRA, SIFMA estimates Note: IG = investment grade, HY = high yield

Corporates: Annual Statistics Update

Issuance: \$0.6T; +38.0% Y/Y

ADV: \$55.5B; +15.0% Y/Y



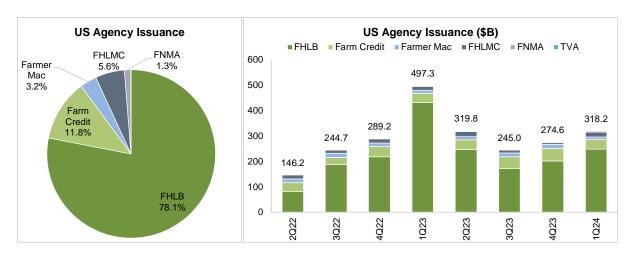
Source: Refinitiv, FINRA, SIFMA estimates Note: IG = investment grade, HY = high yield

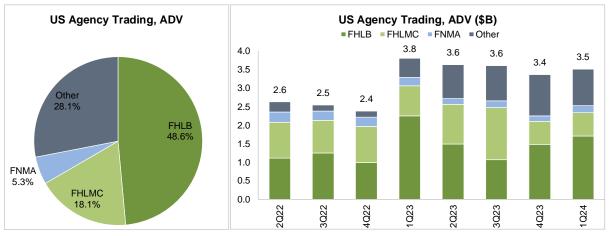
Federal Agency Securities (Agency)

Agency: Review of Quarterly Statistics

• Issuance: \$318.2B; +15.9% Q/Q, -36.0% Y/Y

ADV: \$3.5B; +4.3% Q/Q, -7.8% Y/Y





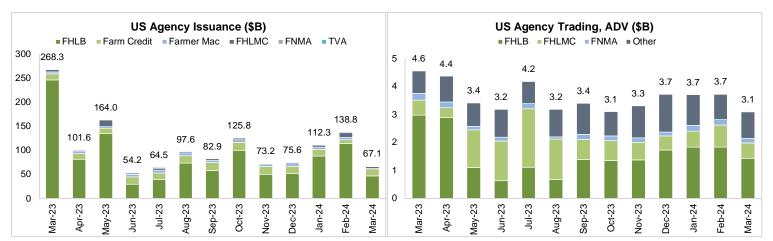
Source: FINRA, US Agencies, SIFMA estimates

Note: FHLB = The Federal Home Loan Banks, FHLMC = The Federal Home Loan Mortgage Corporation (Freddie Mac), FNMA = The Federal National Mortgage Association (Fannie Mae), TVA = The Tennessee Valley Authority

Agency: Monthly Trends

Issuance: \$67.1B; -51.6% M/M, -75.0% Y/Y

ADV: \$3.1B; -17.1% M/M, +-32.2% Y/Y



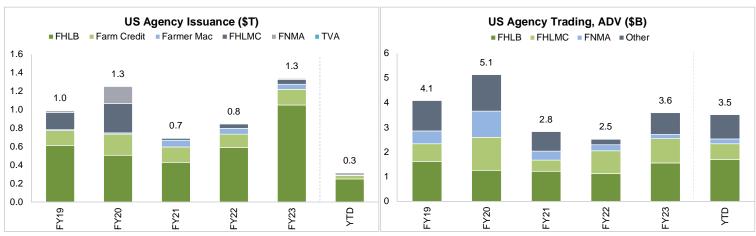
Source: FINRA, US Agencies, SIFMA estimates

Note: FHLB = The Federal Home Loan Banks, FHLMC = The Federal Home Loan Mortgage Corporation (Freddie Mac), FNMA = The Federal National Mortgage Association (Fannie Mae), TVA = The Tennessee Valley Authority

Agency: Annual Statistics Update

Issuance: \$0.3T; -36.0% Y/Y

ADV: \$3.5B; -7.8% Y/Y



Source: FINRA, US Agencies, SIFMA estimates

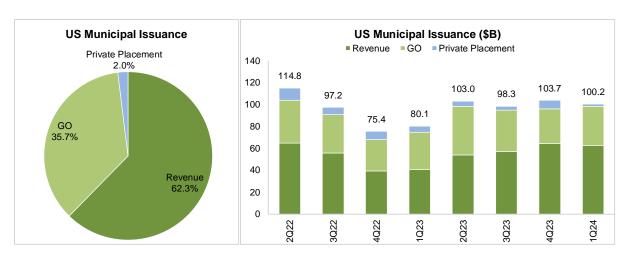
Note: FHLB = The Federal Home Loan Banks, FHLMC = The Federal Home Loan Mortgage Corporation (Freddie Mac), FNMA = The Federal National Mortgage Association (Fannie Mae), TVA = The Tennessee Valley Authority

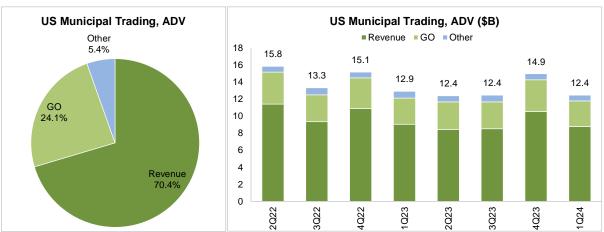
Municipal Bonds (Munis)

Munis: Review of Quarterly Statistics

Issuance: \$100.2B; -3.3% Q/Q, +25.2% Y/Y

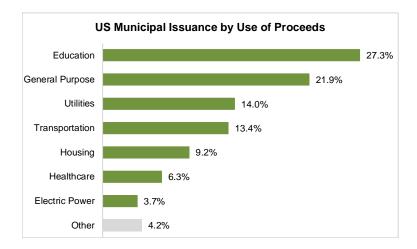
• ADV: \$12.4B; -16.8% Q/Q, -3.6% Y/Y

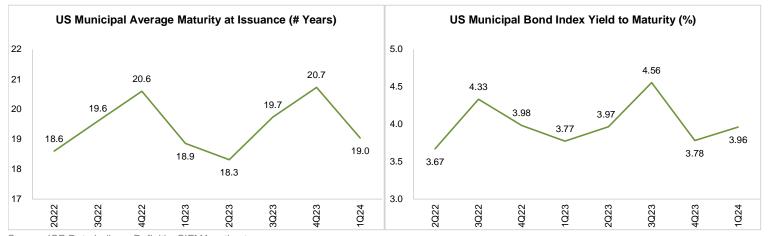




Source: Municipal Securities Rulemaking Board, Refinitiv, SIFMA estimates

Note: GO = general obligation





Source: ICE Data Indices, Refinitiv, SIFMA estimates

Munis: Monthly Trends

Issuance: \$36.4B; +13.1% M/M, +7.0% Y/Y

ADV: \$12.2B; -3.0% M/M, -5.9% Y/Y



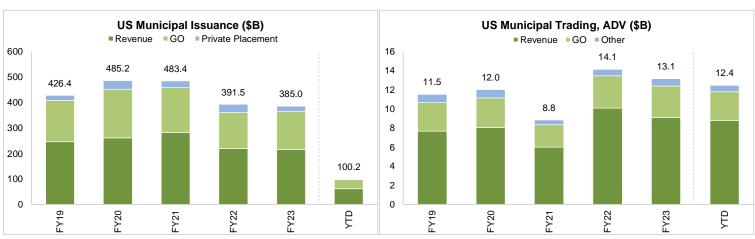
Source: Municipal Securities Rulemaking Board, SIFMA estimates

Note: GO = general obligation

Munis: Annual Statistics Update

• Issuance: \$100.2B; +25.2% Y/Y

ADV: \$12.4B; -3.6% Y/Y



Source: Municipal Securities Rulemaking Board, SIFMA estimates

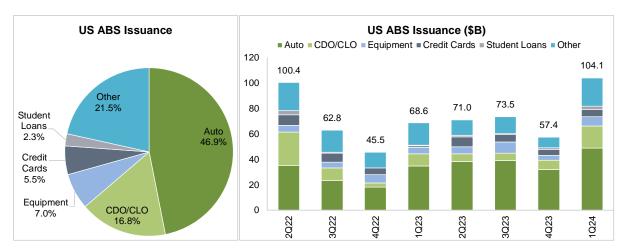
Note: GO = general obligation

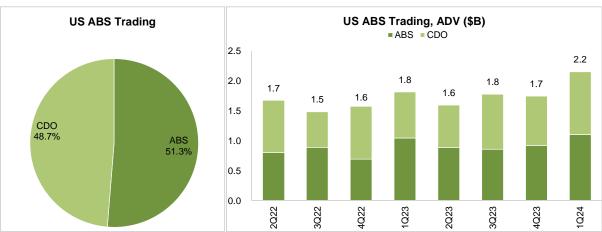
Asset-Backed Securities (ABS)

ABS: Review of Quarterly Statistics

Issuance: \$104.1B; +81.4% Q/Q, +51.6% Y/Y

• ADV: \$2.2B; +23.4% Q/Q, +18.8% Y/Y





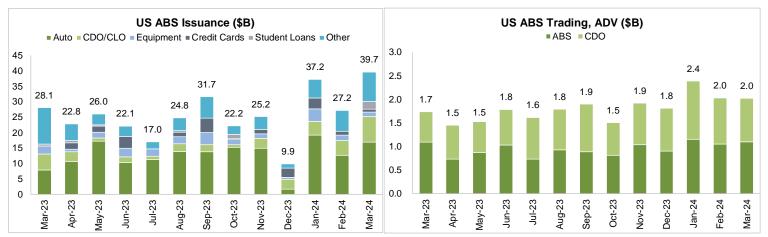
Source: Bloomberg, FINRA, Refinitiv, SIFMA estimates

Note: CDO = collateralized debt obligation, CLO = collateralized loan obligation

ABS: Monthly Trends

Issuance: \$39.7B; +45.9% M/M, +41.3% Y/Y

ADV: \$2.0B; -0.6% M/M, +16.1% Y/Y



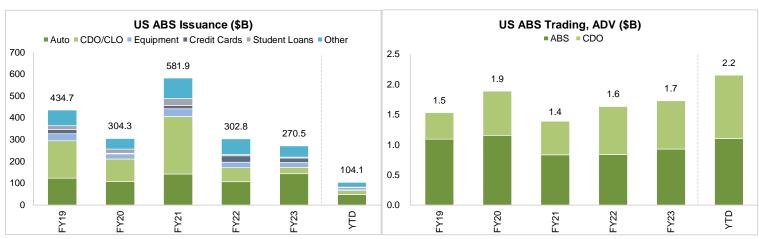
Source: Bloomberg, FINRA, Refinitiv, SIFMA estimates

Note: CDO = collateralized debt obligation, CLO = collateralized loan obligation

ABS: Annual Statistics Update

Issuance: \$104.1B; +51.6% Y/Y

ADV: \$2.2B; +18.8% Y/Y



Source: Bloomberg, FINRA, Refinitiv, SIFMA estimates

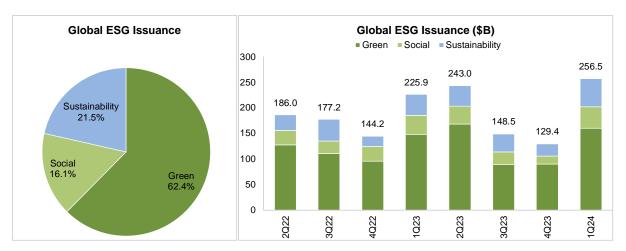
Note: CDO = collateralized debt obligation, CLO = collateralized loan obligation

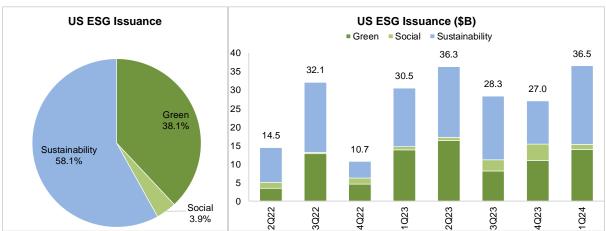
Environmental, Social, & Governance (ESG)

ESG: Review of Quarterly Issuance Statistics

Global: \$256.5B; +98.2% Q/Q, +13.5% Y/Y

• US: \$36.5B; +35.0% Q/Q, +19.8% Y/Y



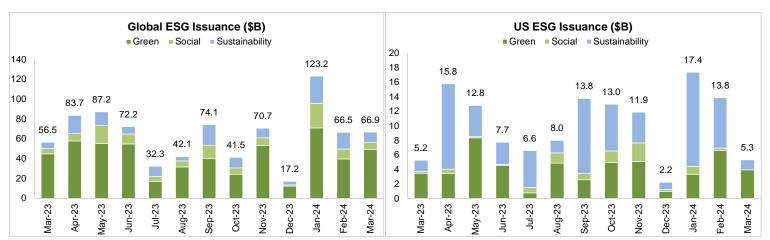


Source: Dealogic, SIFMA estimates

ESG: Monthly Issuance Trends

Global: \$66.9B; +0.6% M/M, +18.4% Y/Y

• US: \$5.3B; -61.8% M/M, +0.9% Y/Y

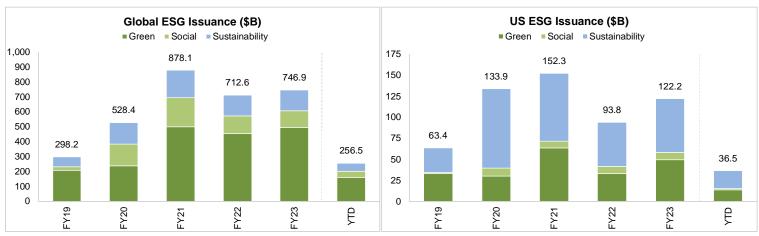


Source: Dealogic, SIFMA estimates

ESG: YTD Issuance Update

• Global: \$256.5B; +13.5% Y/Y

• US: \$36.5B; +19.8% Y/Y



Source: Dealogic, SIFMA estimates

Quarterly Rates Review

Volatility (MOVE Index)

• Quarter end: 86.38

Quarter average: 106.51

Quarter peak: 127.02 on 1/2/24Total peak: 198.71 on 3/15/23

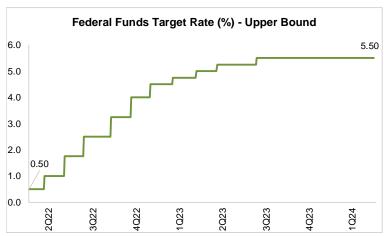


UST Rates

Federal Funds Rate (Fed Funds)

• Current: 5.25% (Lower Bound) - 5.50% (Upper Bound, shown in the chart)

Next FOMC meeting¹: April 30 – May 1, 2024



Source: Bloomberg, SIFMA estimates

UST by Tenor

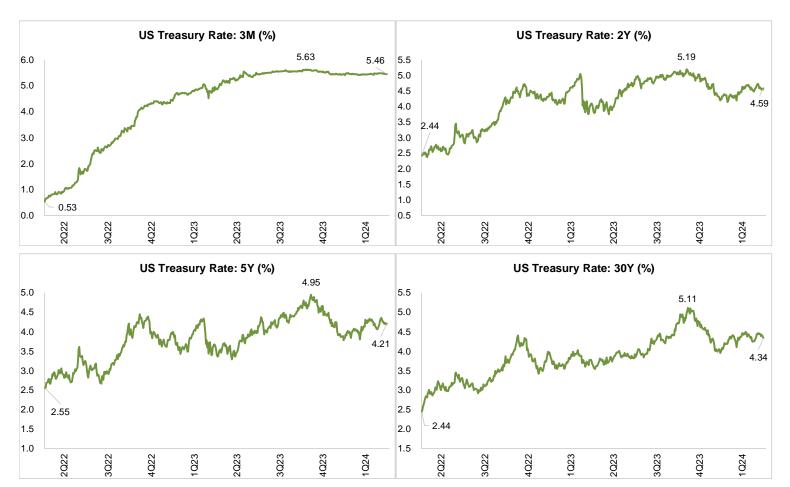
• 10 Year Benchmark

Quarter end: 4.20%Quarter average: 4.33%

o Quarter peak: 4.49% on 2/21/24



¹ FOMC 2024 meeting schedule: January 30-31, March 19-20, April 30-May 1, June 11-12, July 30-31, September 17-18, November 6-7, and December 17-18 Quarterly Report: US Fixed Income Markets – Issuance & Trading



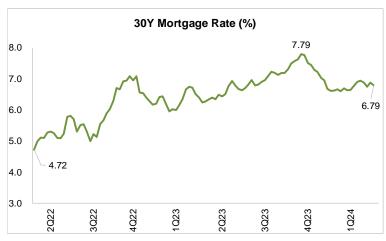
Other Rates

30-Year Mortgage Rate

Quarter end: 6.79%

Quarter average: 6.75%

Quarter peak: 6.94% week of 2/29/24

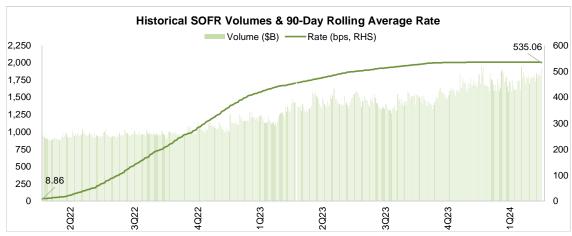


Source: Bloomberg, SIFMA estimates

Secured Overnight Financing Rate (SOFR)

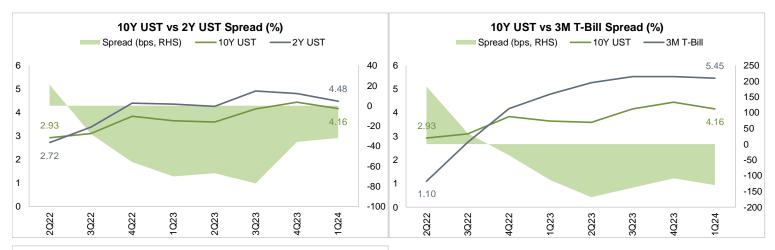
• Quarter end (90 day rolling average): 535.53 bps

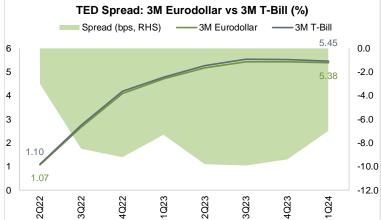
Quarter end Fed Volumes: \$1,702.0B

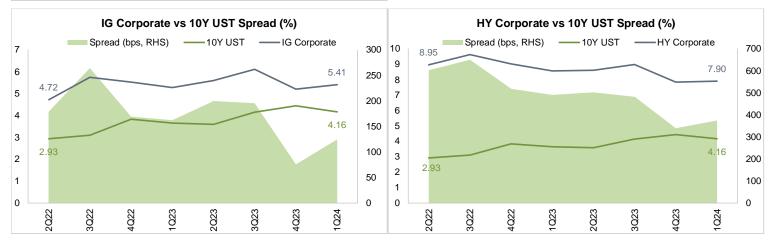


Source: Federal Reserve Bank of New York, SIFMA estimates

Curves & Spreads

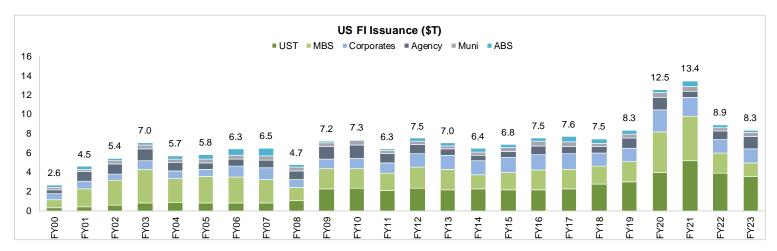


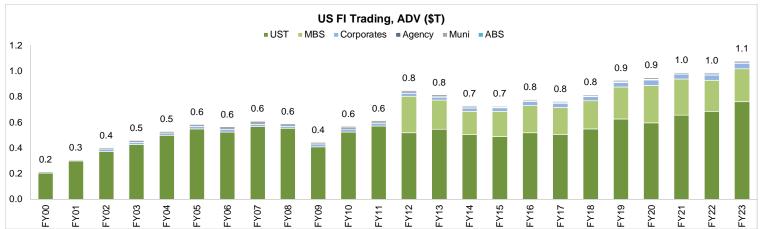




Appendix: Historical Trends

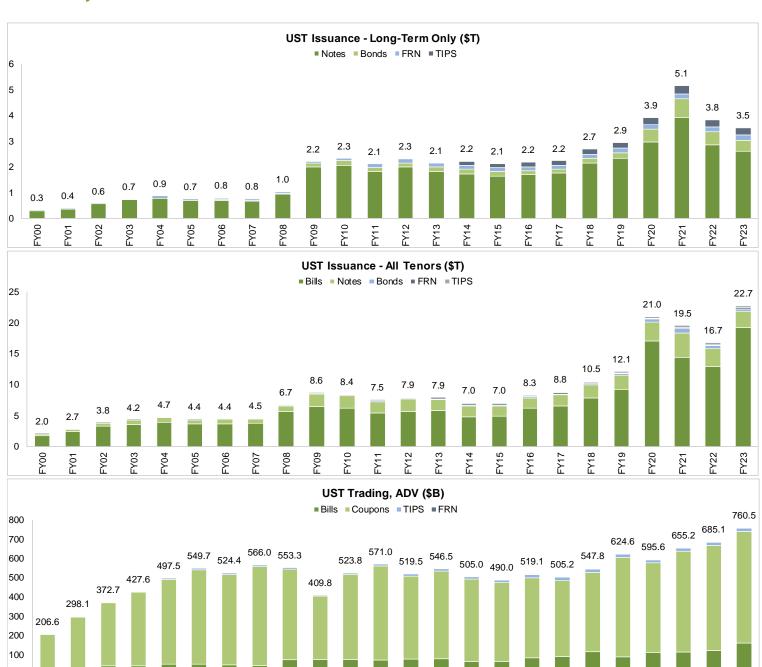
Total Fixed Income Securities





Source: Bloomberg, Federal Reserve Bank of New York, FINRA, Municipal Securities Rulemaking Board, Refinitiv, US Agencies, US Treasury, SIFMA estimates Note: Issuance = Long-term securities only, UST = U.S. Treasury securities, MBS = mortgage-backed securities, Corporates = corporate bonds, Agency = federal agency securities, Munis = municipal bonds, ABS = asset-backed securities

US Treasury Securities



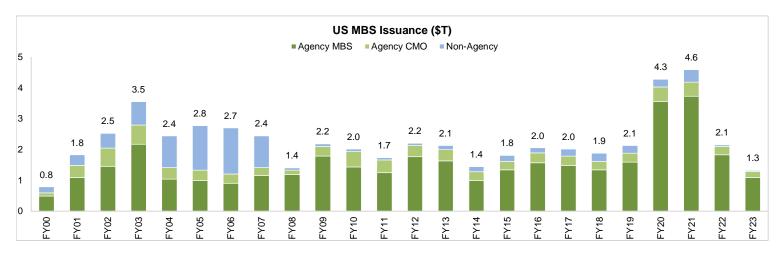
Source: FINRA, NY Fed, US Treasury, SIFMA estimates

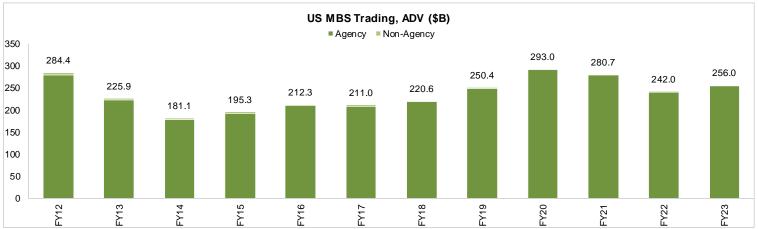
FY00

Note: FRN = floating rate note, TIPS = Treasury inflation-protected securities, UST Trading data pre-FY19 sourced from NY Fed (primary dealer reporting), data for FY19 and on sourced from FINRA

FY16

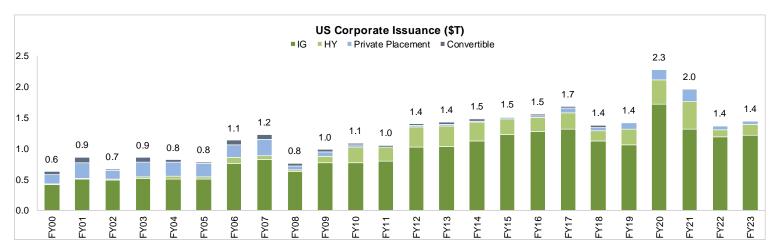
Mortgage-Backed Securities

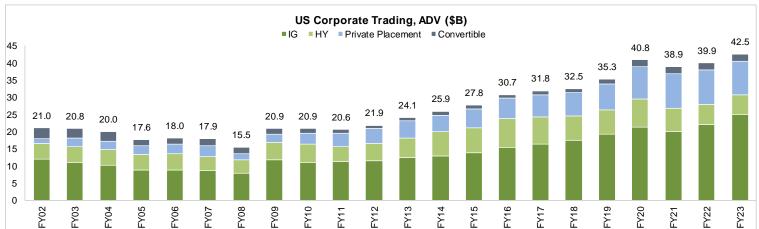




Source: Bloomberg, FINRA, Refinitiv, SIFMA estimates Note: CMO = collateralized mortgage obligation

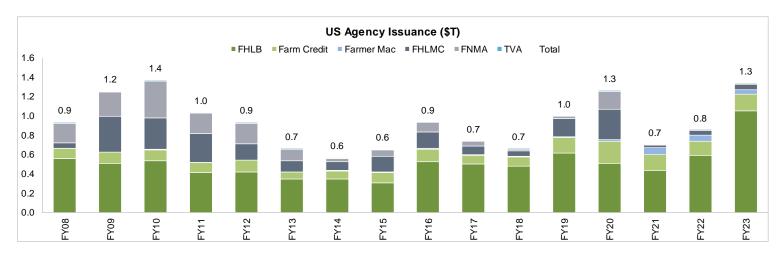
Corporate Bonds

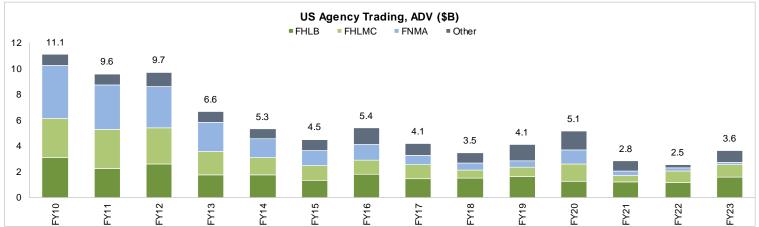




Source: Refinitiv, FINRA, SIFMA estimates Note: IG = investment grade, HY = high yield

Federal Agency Securities

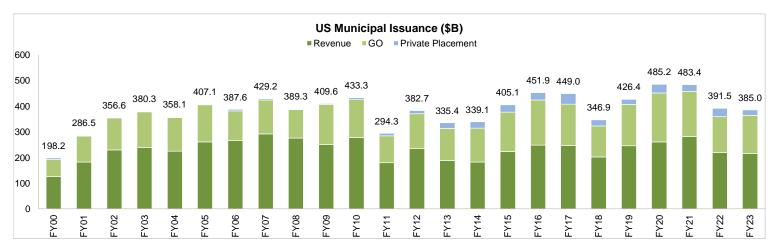




Source: FINRA, US Agencies, SIFMA estimates

Note: FHLB = The Federal Home Loan Banks, FHLMC = The Federal Home Loan Mortgage Corporation (Freddie Mac), FNMA = The Federal National Mortgage Association (Fannie Mae), TVA = The Tennessee Valley Authority

Municipal Bonds

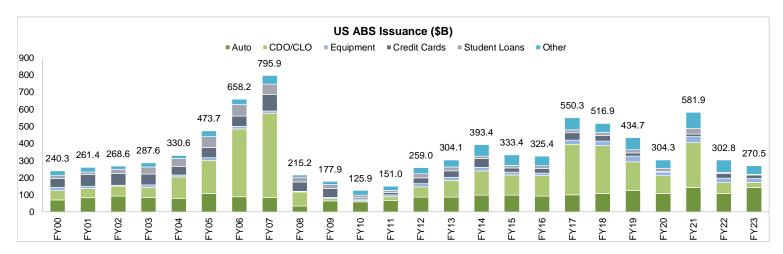




Source: Municipal Securities Rulemaking Board, Refinitiv, SIFMA estimates

Note: GO = general obligation

Asset-Backed Securities

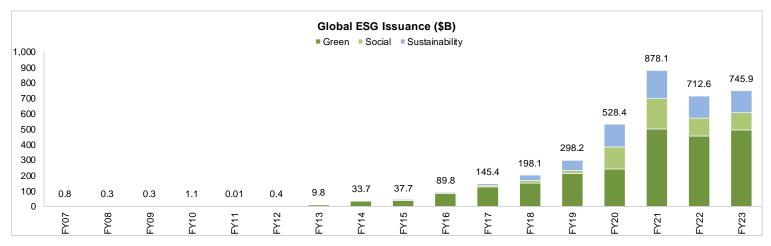


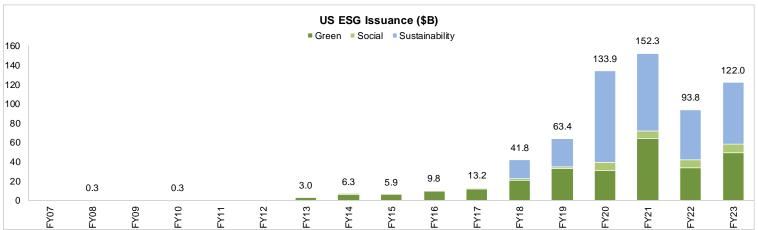


Source: Bloomberg, FINRA, Refinitiv, SIFMA estimates

Note: CDO = collateralized debt obligation, CLO = collateralized loan obligation

Environmental, Social, and Governance (ESG)





Source: Dealogic, SIFMA estimates

Appendix: Definitions & Purpose

In general, fixed income securities are borrowed capital for the issuer to fund government operations, public projects, or corporate investments, thereby fueling economic growth. The diversity of fixed income products both increases the amount of funds available to borrow and spreads credit risk across multiple market participants.

- U.S. Treasury Securities (UST) UST are debt obligations of the federal government used to fund its operations. Since UST are backed by the full faith and credit of the U.S. government, these securities are considered by market participants as the benchmark credit. As such, UST show a diversity of holders, in both institutional type and foreign holders.
- Mortgage-Backed Securities (MBS) Since mortgages a debt instrument collateralized by a specified real
 estate property –are less liquid than other investment vehicles, they can be securitized into MBS, whether in passthroughs or collateralized mortgage obligations (CMOs).
- Corporate Bonds (Corporates) Corporates are debt securities issued by public and private corporations. They are issued to raise money to fund investments or expansion plans. Corporates are considered riskier than UST, and receive ratings by credit ratings agencies to determine creditworthiness, i.e. probability of repayment of debt in a timely manner.
- Municipal Bonds (Munis) Munis are debt securities issued by state/local governments or government agencies
 and public entities (utilities, school districts) to fund public projects, predominantly infrastructure related. Efficient
 muni markets enable states and municipalities to borrow at low rates and finance capital expenditures over a
 longer time period.
- Federal Agency Securities (Agency) Agency securities are issued by quasi-governmental agencies (federal government, government sponsored enterprises) to fund operations. Unlike UST or munis, these securities are not always fully guaranteed by the U.S. or a municipal government. As such, they can hold credit and default risk.
- Asset-Backed Securities (ABS) ABS are financial securities collateralized by a pool of typically illiquid assets such as auto loans, student loans, credit cards, etc. Pooling these assets creates a more liquid investment vehicle, with a valuation based on the cash flows of the underlying and the structure of the transaction.
- **Money Markets (MM)** MMs involve highly liquid, short maturity typically overnight to less than one year financial instruments (certificates of deposit/CDs, bankers' acceptances, commercial paper/CP, etc.), used by investors to borrow and lend in the short term. Transactions in the money markets are wholesale, taking place only between institutional investors not individual investors and for large denominations.

- Repurchase Agreements (Repos) Repos are financial transactions in which one party sells an asset to another party with a promise to repurchase the asset at a pre-specified later date (a reverse repo is the same transaction seen from the perspective of the security buyer). Repos can be overnight (duration one day) or term (duration up to one year, albeit some are up to two years and the majority are three months or less). The repo market enables market participants to provide collateralized loans to one another, and financial institutions predominantly use repos to manage short-term fluctuations in cash holdings, rather than general balance sheet funding. Repos aid secondary market liquidity for the cash markets (ex: UST), allowing dealers to act as market makers in a very efficient manner.
- Secured Overnight Financing Rate (SOFR) As the world transitioned away from the London Interbank Offered Rate (LIBOR), SOFR was chosen by the U.S. as its chosen alternative reference rate. Publication of the SOFR rate began in April 2018. Trading and clearing of SOFR based swaps and futures began in May 2018.
- Environmental, Social, and Governance (ESG) Dealogic classifies ESG bonds by:
 - Green Any type of bond instrument where the proceeds will be exclusively applied to finance or refinance, in part or in full, new and/or existing eligible Green Projects and which are aligned with the four core components of the Green Bond Principles (GBP)
 - Social Any type of bond instrument where the proceeds will be exclusively applied to finance or refinance in part or in full new and/or existing eligible Social Projects and which are aligned with the four core components of the Social Bond Principles (<u>SBP</u>)
 - Sustainability Bonds where the proceeds are exclusively applied to finance or refinance a combination of both Green and Social Projects
 - Region Deal nationality is a calculated nationality that looks at the business nationality of the issuing entity with the exception of securitizations that are categorized using the nationality of business of the originator or if undisclosed the nationality of risk

Appendix: Terms to Know

O/Q Quarter-over-Quarter YTD Year-to-Date BPS Basis Points PPS Percentage Points CAGR Compound Annual Growth Rate CUSIP Committee on Uniform Securities Identification Procedures CFTC Commodity Futures Trading Commission SEC Securities and Exchange Commission Fed Federal Reserve System FRB Federal Reserve Bank NY Fed Federal Reserve Bank of New York ARRC Alternative Reference Rates Committee ADV Average Daily Trading Volume Algo Algorithm (algorithmic trading) AT Automated Trading ATS Alternative Trading System AUM Assets Under Management Best Ex Best Execution CLOB Central Limit Order Book D2C Dealer-to-Client D2D Dealer-to-Dealer ECN Electronic Communications Network ETP Electronic Trading Platforms ETD Exchange Traded Derivative FI Fixed Income FICC Fixed Income FICC Fixed Income, Currencies and Commodities GGF General Collateral Financing IDB Inter-Dealer Broker IIV Intraday Indicative Value IOI Indication of Interest MM Market Maker OI Open Interest OTC Over-the-Counter VWAP Volume Weighted Average Price IBOR Interbank Offered Rate LIBOR Interbank Offered Rate RFR Risk Free Rate SOFR Secured Overnight Financing Rate DV01 Dollar Value of Basis Point DVP Delivery-versus-Payment EFFR Effective Fed Funds Rate PAI Price Alignment Interest Repo Repurchase Agreement	Y/Y	Year-over-Year
YTD Year-to-Date BPS Basis Points PPS Percentage Points CAGR Compound Annual Growth Rate CUSIP Committee on Uniform Securities Identification Procedures CFTC Commodity Futures Trading Commission SEC Securities and Exchange Commission Fed Federal Reserve System FRB Federal Reserve Bank NY Fed Federal Reserve Bank of New York ARRC Alternative Reference Rates Committee ADV Average Daily Trading Volume Algo Algorithm (algorithmic trading) AT Automated Trading System AUM Assets Under Management Best Ex Best Execution CLOB Central Limit Order Book D2C Dealer-to-Client D2D Dealer-to-Dealer ECN Electronic Communications Network ETP Electronic Trading Platforms ETD Exchange Traded Derivative FI Fixed Income FICC Fixed Income, Currencies and Commodities GCF General Collateral Financing IDB Inter-Dealer Broker IIV Intraday Indicative Value IOI Indication of Interest MM Market Maker OI Open Interest OTC Over-the-Counter VWAP Volume Weighted Average Price IBOR Interbank Offered Rate LIBOR London Inter-bank Offered Rate RFR Risk Free Rate SOFR Secured Overnight Financing Rate DV01 Dollar Value of Basis Point DVP Delivery-versus-Payment EFFR Effective Fed Funds Rate PAI Price Alignment Interest		
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FI Fixed Income FICC Fixed Income, Currencies and Commodities GCF General Collateral Financing IDB Inter-Dealer Broker IIV Intraday Indicative Value IOI Indication of Interest MM Market Maker OI Open Interest OTC Over-the-Counter VWAP Volume Weighted Average Price IBOR Interbank Offered Rate LIBOR London Inter-bank Offered Rate RFR Risk Free Rate SOFR Secured Overnight Financing Rate DV01 Dollar Value of Basis Point DVP Delivery-versus-Payment EFFR Effective Fed Funds Rate PAI Price Alignment Interest	ETP	Electronic Trading Platforms
FICC Fixed Income, Currencies and Commodities GCF General Collateral Financing IDB Inter-Dealer Broker IIV Intraday Indicative Value IOI Indication of Interest MM Market Maker OI Open Interest OTC Over-the-Counter VWAP Volume Weighted Average Price IBOR Interbank Offered Rate LIBOR London Inter-bank Offered Rate RFR Risk Free Rate SOFR Secured Overnight Financing Rate DV01 Dollar Value of Basis Point DVP Delivery-versus-Payment EFFR Effective Fed Funds Rate PAI Price Alignment Interest	ETD	Exchange Traded Derivative
GCF General Collateral Financing IDB Inter-Dealer Broker IIV Intraday Indicative Value IOI Indication of Interest MM Market Maker OI Open Interest OTC Over-the-Counter VWAP Volume Weighted Average Price IBOR Interbank Offered Rate LIBOR London Inter-bank Offered Rate RFR Risk Free Rate SOFR Secured Overnight Financing Rate DV01 Dollar Value of Basis Point DVP Delivery-versus-Payment EFFR Effective Fed Funds Rate PAI Price Alignment Interest	FI	Fixed Income
IDB Inter-Dealer Broker IIV Intraday Indicative Value IOI Indication of Interest MM Market Maker OI Open Interest OTC Over-the-Counter VWAP Volume Weighted Average Price IBOR Interbank Offered Rate LIBOR London Inter-bank Offered Rate RFR Risk Free Rate SOFR Secured Overnight Financing Rate DV01 Dollar Value of Basis Point DVP Delivery-versus-Payment EFFR Effective Fed Funds Rate PAI Price Alignment Interest	FICC	Fixed Income, Currencies and Commodities
IIV Intraday Indicative Value IOI Indication of Interest MM Market Maker OI Open Interest OTC Over-the-Counter VWAP Volume Weighted Average Price IBOR Interbank Offered Rate LIBOR London Inter-bank Offered Rate RFR Risk Free Rate SOFR Secured Overnight Financing Rate DV01 Dollar Value of Basis Point DVP Delivery-versus-Payment EFFR Effective Fed Funds Rate PAI Price Alignment Interest	GCF	General Collateral Financing
IOI Indication of Interest MM Market Maker OI Open Interest OTC Over-the-Counter VWAP Volume Weighted Average Price IBOR Interbank Offered Rate LIBOR London Inter-bank Offered Rate RFR Risk Free Rate SOFR Secured Overnight Financing Rate DV01 Dollar Value of Basis Point DVP Delivery-versus-Payment EFFR Effective Fed Funds Rate PAI Price Alignment Interest	IDB	Inter-Dealer Broker
MM Market Maker OI Open Interest OTC Over-the-Counter VWAP Volume Weighted Average Price IBOR Interbank Offered Rate LIBOR London Inter-bank Offered Rate RFR Risk Free Rate SOFR Secured Overnight Financing Rate DV01 Dollar Value of Basis Point DVP Delivery-versus-Payment EFFR Effective Fed Funds Rate PAI Price Alignment Interest	IIV	Intraday Indicative Value
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OTC Over-the-Counter VWAP Volume Weighted Average Price IBOR Interbank Offered Rate LIBOR London Inter-bank Offered Rate RFR Risk Free Rate SOFR Secured Overnight Financing Rate DV01 Dollar Value of Basis Point DVP Delivery-versus-Payment EFFR Effective Fed Funds Rate PAI Price Alignment Interest	MM	Market Maker
VWAP Volume Weighted Average Price IBOR Interbank Offered Rate LIBOR London Inter-bank Offered Rate RFR Risk Free Rate SOFR Secured Overnight Financing Rate DV01 Dollar Value of Basis Point DVP Delivery-versus-Payment EFFR Effective Fed Funds Rate PAI Price Alignment Interest	OI	Open Interest
IBOR Interbank Offered Rate LIBOR London Inter-bank Offered Rate RFR Risk Free Rate SOFR Secured Overnight Financing Rate DV01 Dollar Value of Basis Point DVP Delivery-versus-Payment EFFR Effective Fed Funds Rate PAI Price Alignment Interest	OTC	Over-the-Counter
LIBOR London Inter-bank Offered Rate RFR Risk Free Rate SOFR Secured Overnight Financing Rate DV01 Dollar Value of Basis Point DVP Delivery-versus-Payment EFFR Effective Fed Funds Rate PAI Price Alignment Interest	VWAP	Volume Weighted Average Price
LIBOR London Inter-bank Offered Rate RFR Risk Free Rate SOFR Secured Overnight Financing Rate DV01 Dollar Value of Basis Point DVP Delivery-versus-Payment EFFR Effective Fed Funds Rate PAI Price Alignment Interest		
RFR Risk Free Rate SOFR Secured Overnight Financing Rate DV01 Dollar Value of Basis Point DVP Delivery-versus-Payment EFFR Effective Fed Funds Rate PAI Price Alignment Interest		
SOFR Secured Overnight Financing Rate DV01 Dollar Value of Basis Point DVP Delivery-versus-Payment EFFR Effective Fed Funds Rate PAI Price Alignment Interest	LIBOR	London Inter-bank Offered Rate
DV01 Dollar Value of Basis Point DVP Delivery-versus-Payment EFFR Effective Fed Funds Rate PAI Price Alignment Interest		Risk Free Rate
DVP Delivery-versus-Payment EFFR Effective Fed Funds Rate PAI Price Alignment Interest		
EFFR Effective Fed Funds Rate PAI Price Alignment Interest		Dollar Value of Basis Point
PAI Price Alignment Interest		<u> </u>
Repo Repurchase Agreement	PAI	Price Alignment Interest
·	Repo	Repurchase Agreement

UST	U.S. Treasury Securities
MBS	Mortgage-Backed Security
Corporates	Corporate Bonds
Munis	Municipal Securities
Agency	Federal Agency Securities
ABS	Asset-Backed Securities
MM	Money Markets
FRN	Floating Rate Note
FRA	Forward Rate Agreement
T-Bill	U.S. Treasury Bill
T-Note	U.S. Treasury Note
T-Bond	U.S. Treasury Bond
TIPS	Treasury Inflation Protected Securities
ABS	Asset-Backed Security
CMO	Collateralized Mortgage Obligation
MBS	Mortgage-Backed Security
CMBS	Commercial MBS
RMBS	Residential MBS
HY	High Yield Bond
IG	Investment Grade Bond
GO	General Obligation Bond
Revenue	Revenue Bond
CD	Certificate of Deposit
CDO	Collateralized Debt Obligation
CLO	Collateralized Loan Obligation
CP	Commercial Paper
ABCP	Asset-Backed Commercial Paper
MMF	Money Market Mutual Funds
FAMC	Farmer Mac/Federal Agricultural Mortgage Corporation
FCS	Farm Credit System
FHLB	Federal Home Loan Banks
FHLMC	Freddie Mac/Federal Home Loan Mortgage Corporation
FNMA	Fannie Mae/Federal National Mortgage Association
GNMA	Ginnie Mae/Government National Mortgage Association
TVA	Tennessee Valley Authority
IR	Interest Rate
IRS	Interest Rate Swap
OIS	Overnight Index Swap
TRS	Total Return Swap
STIR	Short-Term Interest Rate

Appendix: SIFMA Research Reports

SIFMA Research: www.sifma.org/research

Quarterly Reports

- Equity and related: capital formation (IPOs, other issuance statistics); market performance (index prices);
 volatility (VIX); cash equites, ETFs, and multi-listed options volumes; exchange market shares and
 landscapes; equity market cap and number of listed companies
- Fixed Income Issuance & Trading: issuance and trading metrics for U.S. Treasuries, mortgage-backed securities, corporate bonds, municipal securities, federal agency securities, asset-backed securities, and secured overnight financing rate (SOFR), as well as statistics on fixed income ESG issuance for green, social, and sustainability bonds
- Fixed Income Outstanding: outstanding balances for U.S. Treasuries, mortgage-backed securities, corporate bonds, municipal securities, federal agency securities, asset-backed securities, money markets, repurchase agreements, and secured overnight financing rate (SOFR)
- Financial Institutions: financial (income statement and balance sheet metrics) and regulatory (ratios such as capital levels) data for CCAR firms, essentially a proxy for the financial services industry
- Capital Markets Fact Book: a comprehensive look at capital markets, including
 - Global equity and fixed income markets (outstanding, issuance, volumes); investment banking landscape; international securities transactions
 - U.S. equity, fixed income, derivatives and private placement markets (outstanding, issuance, volumes, index prices); investment banking landscape; mutual fund and ETF statistics
 - U.S. investor participation showing household liquid financial asset breakout; household equity ownership; and holders of equities
 - U.S. savings & investment metrics on retirement asset breakout and mix across asset classes; savings rates and other economic indicators; and federal balance sheet overview
 - U.S. securities industry statistics on number of broker-dealers, registered representatives, registered investment advisors, and branch offices; industry financial overview; and state maps showing number firms/reps

Authors

SIFMA Research

Katie Kolchin, CFA, Managing Director, Head of Research Justyna Romulus research@sifma.org

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