

An hourglass with blue sand is centered in the frame against a solid blue background. The sand is flowing from the top bulb to the bottom bulb. The hourglass is made of clear glass, and the sand is a vibrant blue color. The lighting is soft, creating a slight shadow on the right side of the hourglass.

This webinar will begin shortly.

FIA



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Trends in ETD Trading Q1 2024



7 May 2024



Presenters

Presenter:

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Agenda

Overview

- Another Record in Quarterly Volume
- India's Booming Market for Equity Index Options

Equities

- APAC – Not Just India
- Americas – Surge in Zero Day Options

Rates

- Bonds – Levelling Off in the US, Surge of Trading in EU
- STIRS – US, EU and Brazil

FX

- CME – Gradual Rise in Open Interest
- SGX – Strength in CNH and INR

Commodities


- Energy – TTF Recovers from Ukraine Shock
- Base Metals – Copper, Nickel and Lithium
- Agriculture – Cocoa

Appendix

- Exchange Rankings

Methodology

- FIA collects data on volume and open interest from 90 exchanges and clearinghouses around the world.
- Two exchanges added in 2023: Guangzhou Futures Exchange and Uruguay Futures Exchange
- Volume is measured in terms of the number of futures and options contracts traded and/or cleared per month
- Open interest is measured in terms of the number of contracts outstanding at the end of the month
- FIA publishes a monthly summary on its website and distributes the summary to FIA members
- For more information, contact data@fia.org



December 2023 Highlights

*This month's data on futures and options trading is accessible in two formats: a spreadsheet accessible through the link below and a set of interactive visualizations called the **FIA ETD Tracker**. The ETD Tracker consists of interactive visualizations on the FIA website that allow users to view data on volume and open interest, with filters based on year and month, region and jurisdiction, asset group and type of product. The ETD Tracker also includes visualizations that rank exchanges by total volume in the latest month and year to date as well as open interest in the latest month. Click here to access the **ETD Tracker**.*

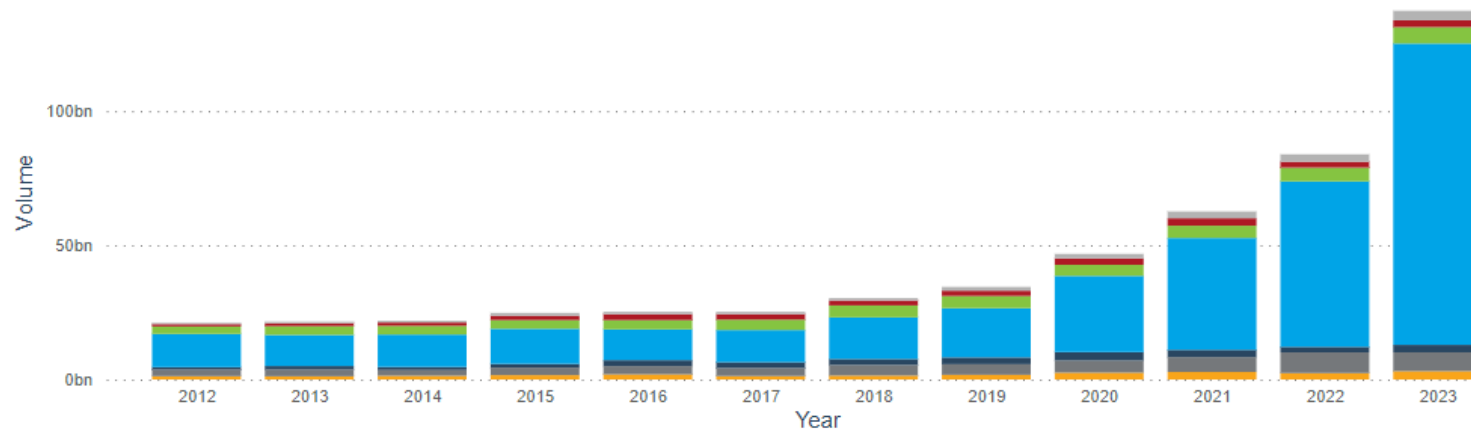
Worldwide volume of exchange-traded derivatives reached 15.17 billion contracts in December, the highest level ever recorded. This was up 8.4% from November 2023 and up 79.7% from December 2022.

Options continue to gain in popularity. Global trading of options reached 12.92 billion contracts in December, up by more than 114% from last year, with most of that trading taking place in the Asia-Pacific region. Global trading of futures reached 2.24 billion contracts in December, down 7.2% from the same month last year.

ETD Tracker – FIA’s Data Visualization Tool

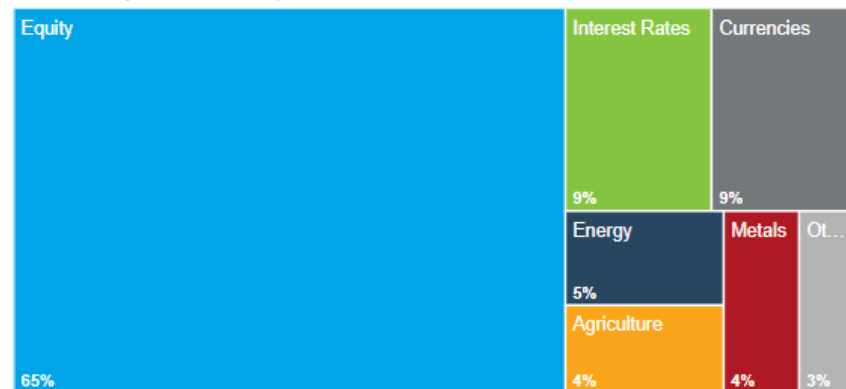
Volume by Year

Asset Group ● Agriculture ● Currencies ● Energy ● Equity ● Interest Rates ● Metals ● Other



The ETD Tracker consists of interactive visualizations on FIA's website that allow users to view monthly data on volume and open interest in the global futures and options markets, with filters based on year and month, region and jurisdiction, asset group and type of product. The ETD Tracker also includes visualizations that rank exchanges by total volume in the latest month and year to date as well as open interest in the latest month. The visualizations are powered by FIA Tech, an independent vendor of technology solutions for the exchange-traded derivatives industry.

Volume by Asset Group



Asset Group	Subcategory	Volume
Equity	Equity Index Products	230,783,278,301
Equity	Individual Security Products	89,267,614,754
Equity	Exchange Traded Products (ETP/ETF/ETN)	29,264,767,719
Currencies	USD vs Asia Pacific	28,633,476,471
Interest Rates	STIRS	24,959,386,914
Interest Rates	Medium Term (2-10 years)	17,845,938,887
Currencies	USD vs Europe, Middle East & Africa	10,643,932,660
Metals	Steel	7,205,369,123
Energy	Brent	6,699,479,573
Currencies	USD vs Americas	6,364,637,935
Energy	Natural Gas	4,672,143,456
Interest Rates	Long Term (>10 years)	4,516,121,872
Agriculture	Soy Meal	4,113,227,473
Totals		535,394,682,499

[ETD Tracker | FIA](https://www.fia.org/fia/etd-tracker)

<https://www.fia.org/fia/etd-tracker>



Overview – Global Volume and Open Interest in 2023

Type	Jan-Mar 2024 Volume	Change vs. Last Year	Mar 2024 Open Interest	Change vs. Last Year
Options	41,111,146,417	102.3%	965,622,924	9.5%
Futures	6,795,458,925	-5.8%	328,404,537	14.4%
Total	47,906,605,342	74.0%	1,294,027,461	10.7%

Region	Jan-Mar 2024 Volume	Change vs. Last Year	Mar 2024 Open Interest	Change vs. Last Year
Asia-Pacific	39,102,406,823	108.7%	127,519,638	5.8%
North America	4,707,979,541	0.0%	619,665,491	2.7%
Latin America	2,102,706,689	-7.2%	217,329,579	29.5%
Europe	1,440,329,692	14.8%	291,247,102	21.8%
Other	553,182,597	-4.2%	38,265,651	0.8%
Total	47,906,605,342	74.0%	1,294,027,461	10.7%

Note: Other consists of Greece, Israel, South Africa and Turkey

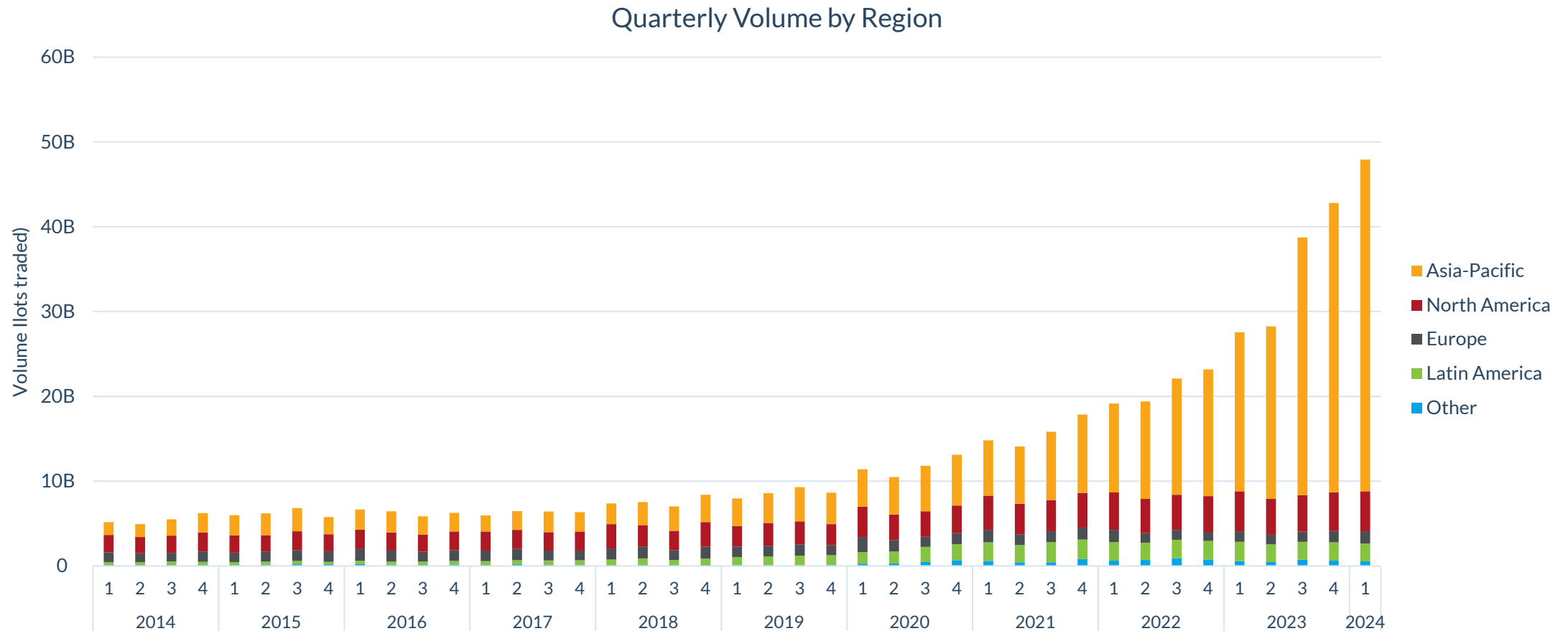
Overview – Global Volume and Open Interest in 2023

Category	Jan-Mar 2024 Volume	Change vs. Last Year	Mar 2024 Open Interest	Change vs. Last Year
Equity	42,075,040,680	97.8%	845,862,811	7.5%
Interest Rates	1,705,696,362	-4.2%	228,937,062	23.1%
Currencies	1,517,634,106	-24.8%	53,472,205	13.4%
Energy	853,565,922	38.8%	84,441,051	18.4%
Agriculture	637,940,350	11.0%	29,957,676	6.6%
Other	567,689,895	-20.1%	27,447,342	-8.2%
Metals	549,038,027	-4.6%	23,909,314	23.3%
Total	47,906,605,342	74.0%	1,294,027,461	10.7%

Note: Other includes futures and options based on chemicals, plastics, cryptocurrencies, emissions, freight, volatility, weather

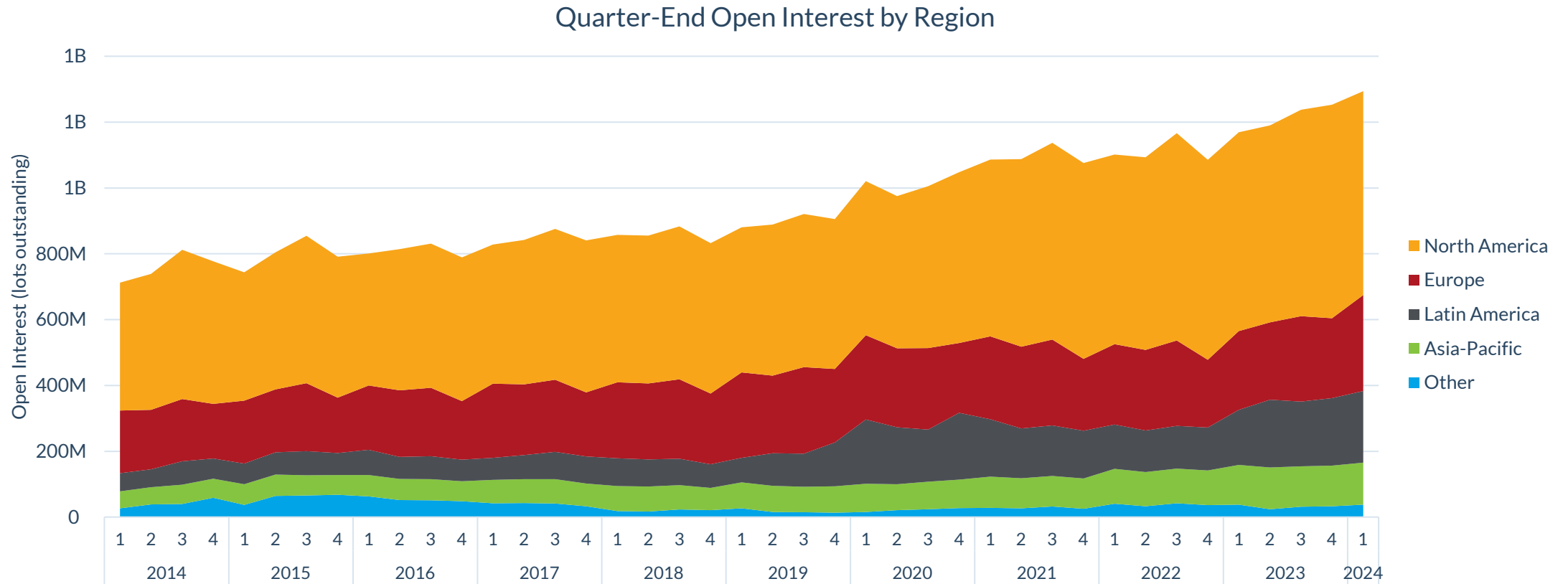
Overview – Another Quarter of Record Volume

Global volume in Q1 2024 was 47.9 billion contracts, up 74% from the same quarter a year ago



Open Interest Rises to Another Record

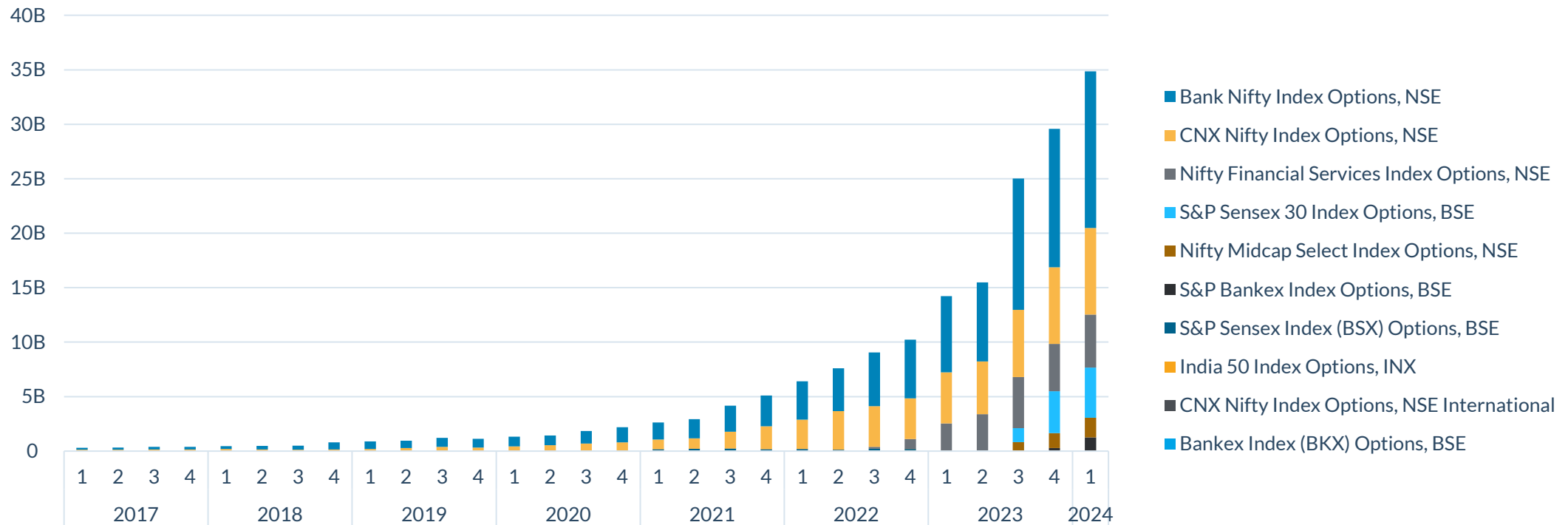
Global open interest at end of Q1 2024 was 1.29 billion futures and options, up 11% from the same quarter a year ago



What Is Driving the Growth in Trading Volume?

In the first quarter of 2024, more than 34.8 equity index options traded on India's NSE and BSE. That was more than twice the total traded in Q1 2023, and more than 73% of all futures and options traded on all exchanges worldwide.

Top 10 Equity Index Options in India – Quarterly Volume



How Large Is the Options Market on NSE India?

Buyers of options listed on NSE India, India's largest derivatives exchange, paid premiums worth 12.5 trillion rupees in March, equivalent to \$150 billion in USD. Almost 90% of that amount was related to trading in index options.

Table 45: Total turnover across segments in the last six months (Oct'23–Mar'24)

Segment (Rs crore)	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24
Cash market	13,43,519	14,82,906	20,79,594	24,91,181	24,57,671	18,57,039
Equity Futures	23,98,283	24,04,714	31,88,631	37,89,859	38,09,270	33,71,081
Stock Futures	18,94,018	19,27,121	25,24,107	29,41,231	29,69,909	26,45,364
Index Futures	5,04,265	4,77,593	6,64,524	8,48,629	8,39,361	7,25,717
Equity Options (Premium)	10,64,060	9,78,201	14,16,841	16,77,880	16,77,660	12,54,348
Stock Options	84,111	92,658	1,80,315	1,77,503	1,72,161	1,26,669
Index Options	9,79,949	8,85,543	12,36,526	15,00,376	15,05,499	11,27,679
Currency derivatives						
Currency Futures	5,72,990	5,73,571	6,10,933	6,12,806	4,64,005	5,94,814
Currency Options (Premium)	1,736	1,702	1,957	2,265	1,698	2,153
Interest rate derivatives	3,367	2,706	2,169	1,978	1,808	1,518
Commodity derivatives						
Commodity Futures	258	99	33	32	19	20
Commodity Options (Premium)	18	15	58	113	161	137

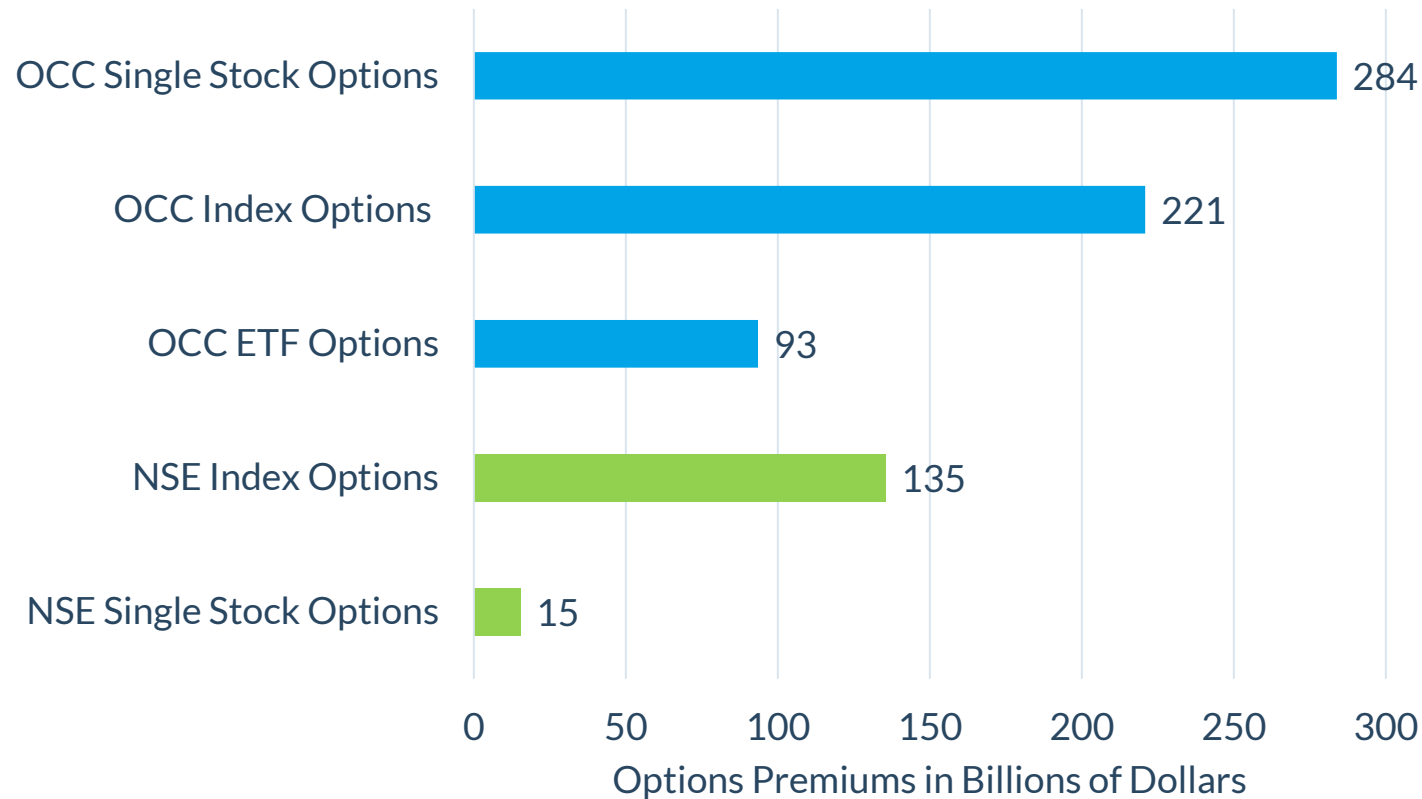
Source: NSE EPR.

Source: NSE Market Pulse
April 2024.

Conversion to USD based
on 1 crore INR = \$120,000
USD

Comparing Equity Options Turnover – NSE vs OCC

Equity Options Turnover – March 2024



Based on premiums paid, the turnover in index options on NSE India is equivalent to 61% of the turnover in index options on CBOE, Nasdaq and other US options exchanges.

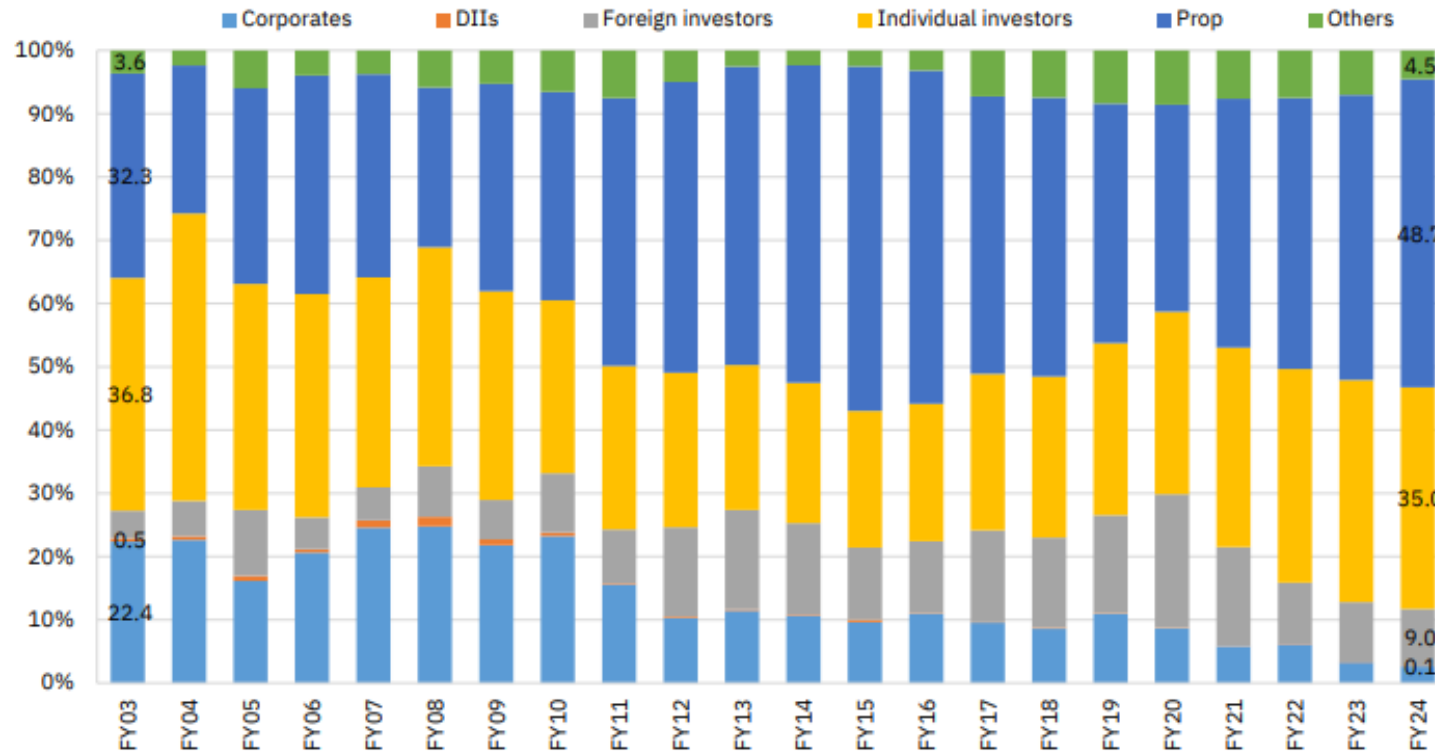
If ETF options are included, the NSE India turnover is equivalent to 43% of the comparable contracts in the US.

Note: OCC provides central clearing for 17 securities exchanges in the US. The turnover calculations do not include options listed on India's BSE or options on futures listed on CME Group.

Source: NSE, OCC

Market Composition – Prop and Retail Make Up Most of the Volume in NSE’s Index Options Market

Figure 220: Trends in share of client participation in Index Options (premium turnover) at NSE (%)



Source: NSE EPR.

Notes: 1. DIIs: Domestic Institutional Investors include Banks, Mutual Funds, Insurance Companies, NBFCs, Domestic VC Funds, AIFs, PMS clients etc., Foreign investors: Foreign Institutional Investors include FPIs, FDIs, Foreign VC Funds, OCB and Foreign Nationals etc., Prop traders: Proprietary Traders, Individual investors: individual domestic investors, NRIs, sole proprietorship firms and HUFs, Others: Partnership Firms/LLP, Trust / Society, Depository Receipts and Statutory Bodies, etc. Client categories are based on the information provided by trading members in UCC database.

2. Above data represents share in gross premium turnover i.e., buy-side premium turnover + sell-side premium turnover.

NSE Market Pulse:

- One third of the turnover in index options comes from individuals.
- One half comes from proprietary traders.
- Foreign investors account for 9% of the turnover

Source: NSE Market Pulse April 2024.

Note: fiscal year starts in March.

Equity Index – Top Contracts by Volume – APAC

Rank	Contract and Exchange	Jan-Mar 2024 Volume	Change vs. Yr Ago	Mar 2024 Open Interest	Change vs. Yr Ago
1	Bank Nifty Index Options, NSE India	14,387,677,582	105.8%	4,457,300	56.4%
2	CNX Nifty Index Options, NSE India	7,941,348,484	69.1%	3,825,322	-25.9%
3	Nifty Financial Services Index Options, NSE India	4,872,210,798	94.5%	416,572	-60.7%
4	S&P Sensex 30 Index Options, BSE ¹	4,610,129,333	n/a	22,758	n/a
5	Nifty Midcap Select Index Options, NSE India ²	1,804,065,657	5111291.6%	513,448	n/a
6	S&P Bankex Index Options, BSE ¹	1,247,923,242	n/a	92,801	n/a
7	Kospi 200 Options, Korea Exchange	100,144,317	-13.0%	1,843,226	-26.4%
8	Nikkei 225 Mini Futures, Osaka Exchange	63,770,754	8.1%	407,679	-25.4%
9	Kospi 200 Weekly Options, Korea Exchange	51,316,413	-18.8%	21,766	-80.0%
10	Taiex (TXO) Options, Taiwan Futures Exchange	45,963,473	21.3%	426,655	8.4%
11	Kospi 200 Monday Weekly Options, Korea Exchange ³	42,190,727	n/a	170,398	n/a
12	FTSE China A50 Index Futures, Singapore Exchange	24,221,422	7.4%	874,599	-8.3%
13	Nikkei 225 Micro Futures, Osaka Exchange ¹	16,985,291	n/a	51,593	n/a
14	Kospi 200 Futures, Korea Exchange	16,435,254	-4.9%	293,070	-24.2%
15	Bank Nifty Index Futures, NSE India	14,978,324	23.5%	333,576	65.7%

Equity Index – Top Contracts by Volume – Americas

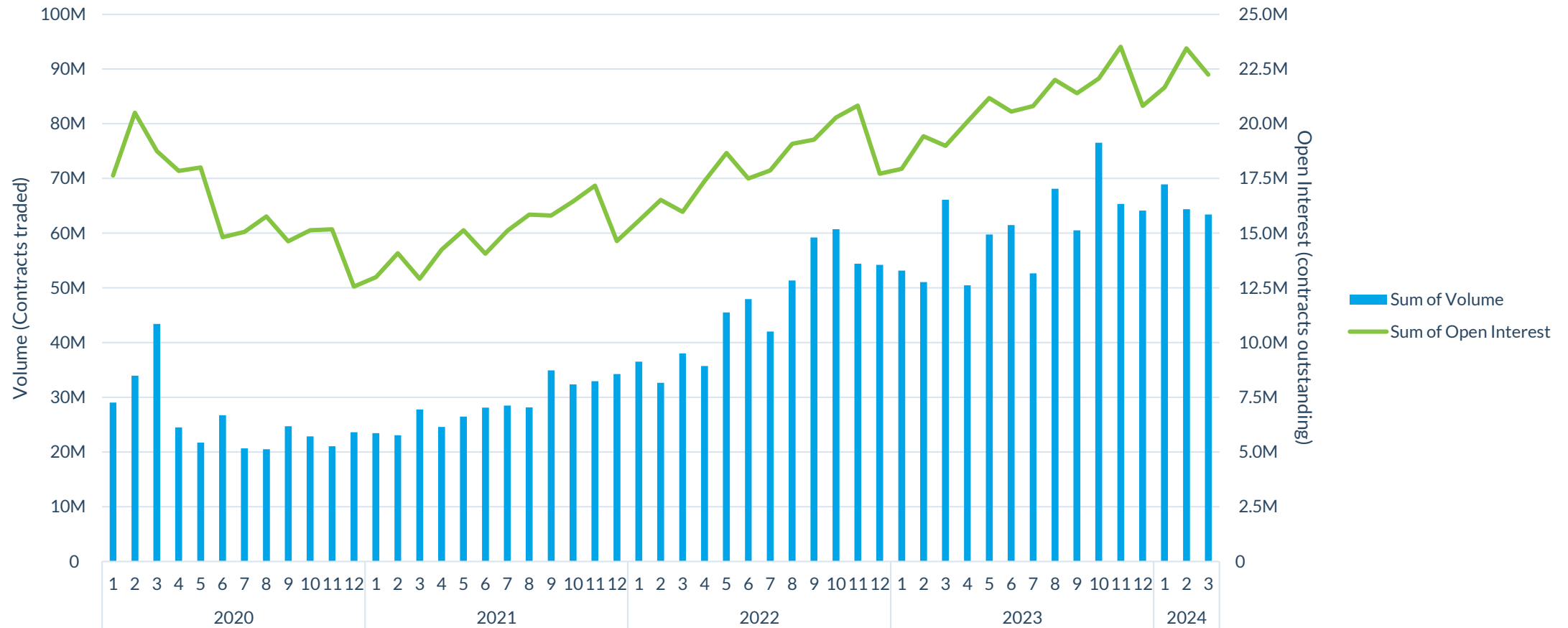
Rank	Contract and Exchange	Jan-Mar 2024 Volume	Change vs. Yr Ago	Mar 2024 Open Interest	Change vs. Yr Ago
1	Mini Ibovespa (WIN) Futures, B3	914,291,776	-6.0%	1,022,603	-13.0%
2	SPDR S&P 500 ETF Options *	515,417,876	-11.0%	23,384,278	1.5%
3	Powershares QQQ ETF Options *	228,423,447	20.5%	10,778,661	-17.5%
4	S&P 500 Index (SPX) Options, Cboe Options Exchange	196,700,221	15.5%	22,248,703	17.1%
5	E-mini S&P 500 Futures, Chicago Mercantile Exchange	101,170,801	-19.9%	2,125,227	-4.2%
6	iShares Russell 2000 ETF Options *	79,390,970	30.8%	12,058,993	23.0%
7	Micro E-mini Nasdaq 100 Futures, Chicago Mercantile Exch.	76,997,861	7.4%	67,419	-11.5%
8	E-mini S&P 500 Options, Chicago Mercantile Exchange	68,098,376	46.5%	2,989,687	9.7%
9	Micro E-mini S&P 500 Futures, Chicago Mercantile Exchange	49,188,531	-38.5%	199,158	46.6%
10	E-mini Nasdaq 100 Futures, Chicago Mercantile Exchange	41,888,417	-1.6%	260,824	9.9%
11	iShares China Large-Cap ETF Options *	14,417,030	12.6%	3,435,981	26.1%
12	iShares MSCI Emerging Markets ETF Options *	14,234,087	-33.4%	9,036,410	28.8%
13	E-mini Russell 2000 Futures, Chicago Mercantile Exchange	14,137,939	-4.2%	491,243	-0.5%
14	EOW3 E-mini S&P 500 Options, Chicago Mercantile Exchange	11,714,659	57.2%	1,592,884	-7.6%
15	Financial Select Sector SPDR ETF Options *	10,220,594	-32.5%	6,269,479	38.8%

Equity Index – Top Contracts by Volume – EMEA

Rank	Contract and Exchange	Jan-Mar 2024 Volume	Change vs. Yr Ago	Mar 2024 Open Interest	Change vs. Yr Ago
1	Euro Stoxx 50 Index (OESX) Options, Eurex	60,719,503	-6.2%	30,830,495	-4.9%
2	Euro Stoxx 50 Index (FESX) Futures, Eurex	53,887,822	-28.4%	2,548,383	-27.6%
3	Euro Stoxx Banks Futures, Eurex	14,502,571	-47.1%	1,318,576	-18.7%
4	Euro Stoxx Banks Options, Eurex	12,620,701	-45.3%	8,929,507	-32.6%
5	BIST 30 Index Futures, Borsa Istanbul	12,155,873	-32.1%	279,041	-5.6%
6	OMX (Index) Futures, Nasdaq Exchanges Nordic Markets	8,304,528	-15.6%	450,204	2.7%
7	FTSE 100 Index Futures, ICE Futures Europe	7,421,595	-19.1%	537,999	-10.5%
8	TA-35 Index Options, Tel-Aviv Stock Exchange ¹	6,335,579	-10.1%	128,149	14.2%
9	Stoxx Europe 600 Futures, Eurex	5,844,867	0.9%	497,218	6.0%
10	Kospi 200 Options, Eurex	4,935,758	-31.0%	0	n/a
11	CAC 40 (€10) Futures, Euronext Derivatives Market	4,501,281	-27.6%	189,952	-16.4%
12	DAX (ODAX) Options, Eurex	3,798,012	-16.4%	1,130,038	-18.7%
13	DAX (FDAX) Futures, Eurex	3,331,107	-31.2%	64,515	2.2%
14	AEX Index Options, Euronext Derivatives Market	2,360,232	-11.4%	215,510	-17.6%
15	WIG20 Index Futures, Warsaw Stock Exchange	2,319,285	1.7%	74,011	82.9%

SPX Options – Bellwether of the US Options Market

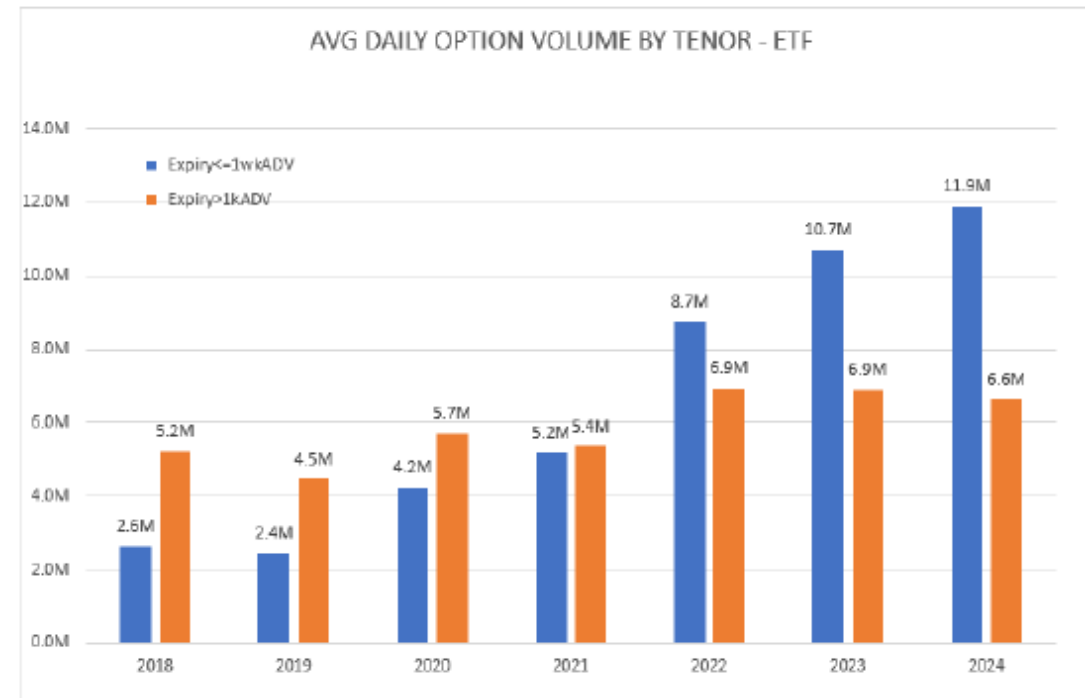
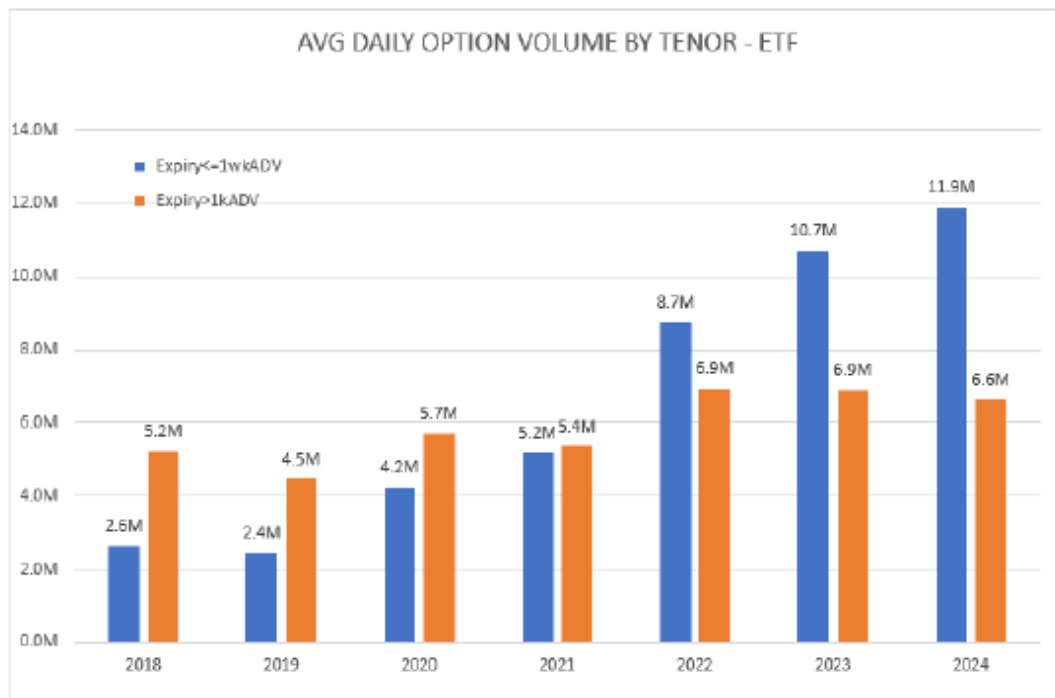
SPX options have surpassed the pre-pandemic peak in terms of both volume and open interest. CBOE estimates that SPX makes up roughly a third of total US options turnover measured by premium. Roughly half of current SPX volume is zero days to expiration.



US Options Trading: It's Not Just Zero DTE – Market-Wide Shift to Shorter Time Horizons

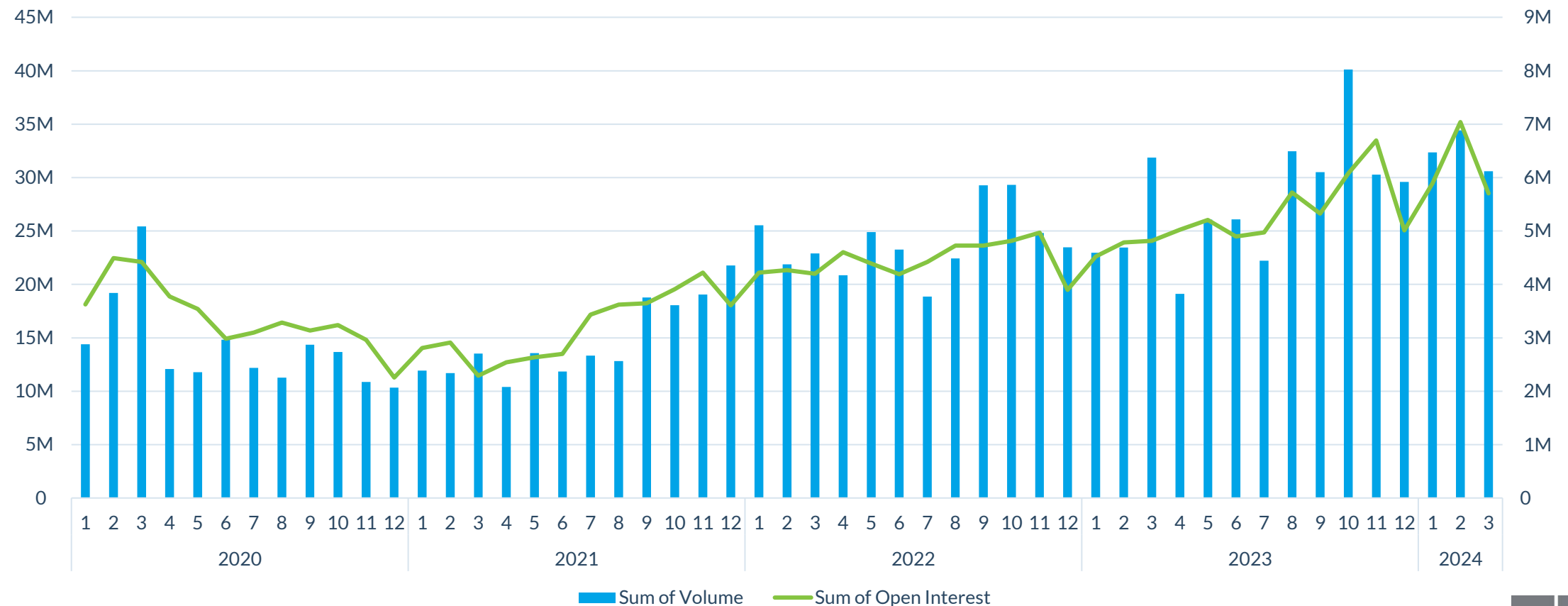
Accord to CBOE, 64% of ETF options traded in Q1 expired within a week or less, vs 35% in 2019 ...

... and 61% of index options traded in Q1 expired within a week or less, compared to 28% in 2019.



Options on Futures – Steady Growth in CME E-mini S&P Options over the Last Four Years

Volume averaged 34 million contracts per month in the first quarter, up 24% from the first quarter of 2023 and 65% from the first quarter of 2020. Open interest also is rising, up 18% and 29% over March 2023 and March 2020, respectively.



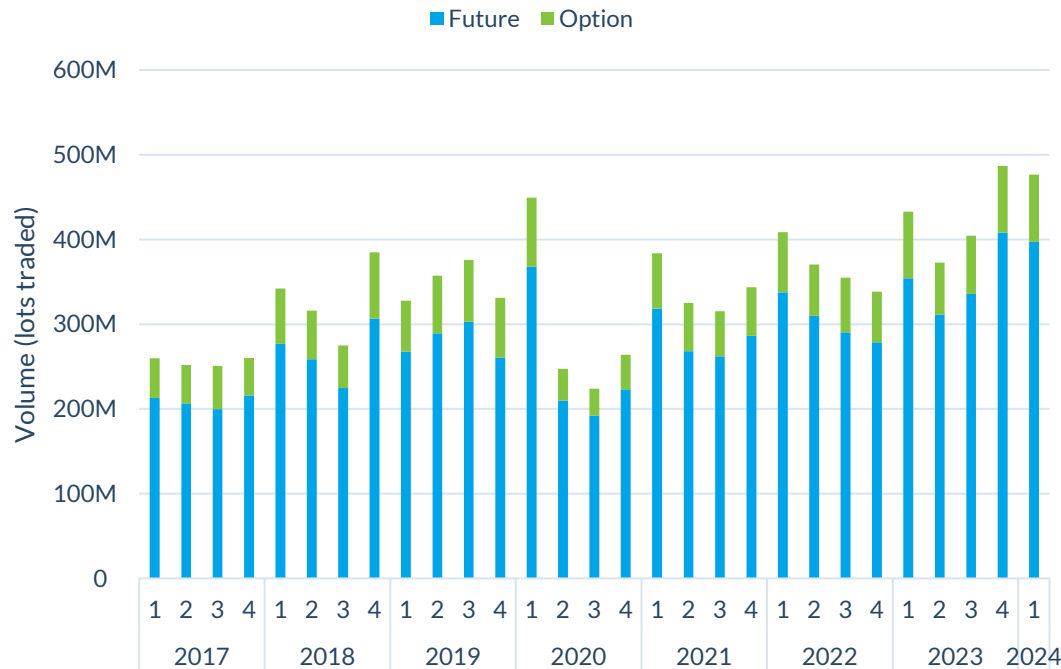
Interest Rates – Top Bond Contracts by Volume

Rank	Contract and Exchange	Jan-Mar 2024 Volume	Change vs. Yr Ago	Mar 2024 Open Interest	Change vs. Yr Ago
1	10 Year Treasury Note Futures, Chicago Board of Trade	139,801,700	5.8%	4,350,564	2.4%
2	5 Year Treasury Note Futures, Chicago Board of Trade	103,339,103	6.3%	5,983,841	35.5%
3	Euro-Bund (FGBL) Futures, Eurex	67,743,514	11.1%	1,107,861	5.0%
4	2 Year Treasury Note Futures, Chicago Board of Trade	57,145,311	13.9%	3,756,330	58.3%
5	Euro-Bobl (FGBM) Futures, Eurex	55,713,199	12.6%	1,129,389	-13.9%
6	10 Year Treasury Note Options, Chicago Board of Trade	51,812,719	5.7%	2,750,189	6.8%
7	Euro-Schatz (FGBS) Futures, Eurex	46,604,976	3.6%	2,127,567	36.0%
8	Ultra 10 Year Treasury Note Futures, Chicago Board of Trade	40,354,894	35.1%	2,036,185	29.4%
9	30 Year Treasury Bond Futures, Chicago Board of Trade	31,150,960	16.6%	1,514,046	27.0%
10	Ultra Treasury Bond Futures, Chicago Board of Trade	24,509,893	39.4%	1,588,589	13.0%
11	iShares Barclays 20+ Year Treasury Bond ETF Options *	20,237,664	63.8%	3,961,436	54.0%
12	Iboxx High Yield Corporate Bond ETF Options *	18,915,481	-38.0%	5,940,025	-11.7%
13	Long Gilt Futures, ICE Futures Europe	16,666,865	14.0%	630,477	61.4%
14	Euro-BTP (FBTP) Futures, Eurex	16,228,372	28.0%	348,052	-11.8%
15	5 Year Treasury Note Options, Chicago Board of Trade	15,682,966	-22.8%	1,070,762	-31.2%

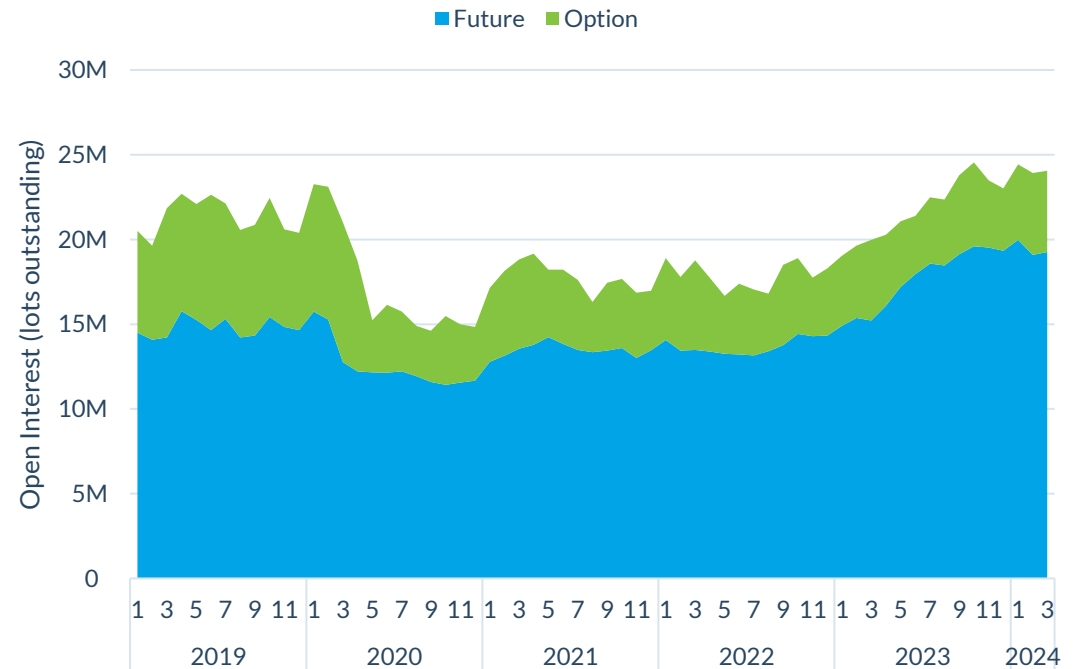
US Treasury Futures – Leveling Off

After hitting a record in the fourth quarter, total volume in Treasury futures dropped slightly to 397 million contracts in the first quarter. Open interest is on a similar path, up from a year ago but roughly level over the past six months.

US Treasury Futures and Options on Futures
Quarterly Volume



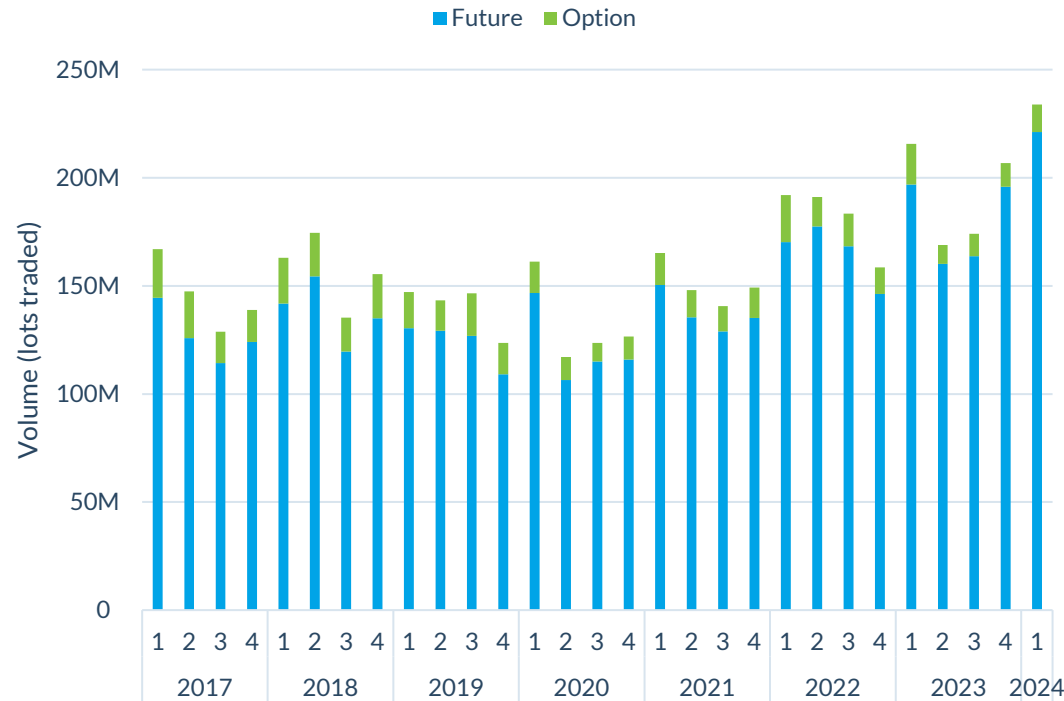
US Treasury Futures and Options on Futures
Month-End Open Interest



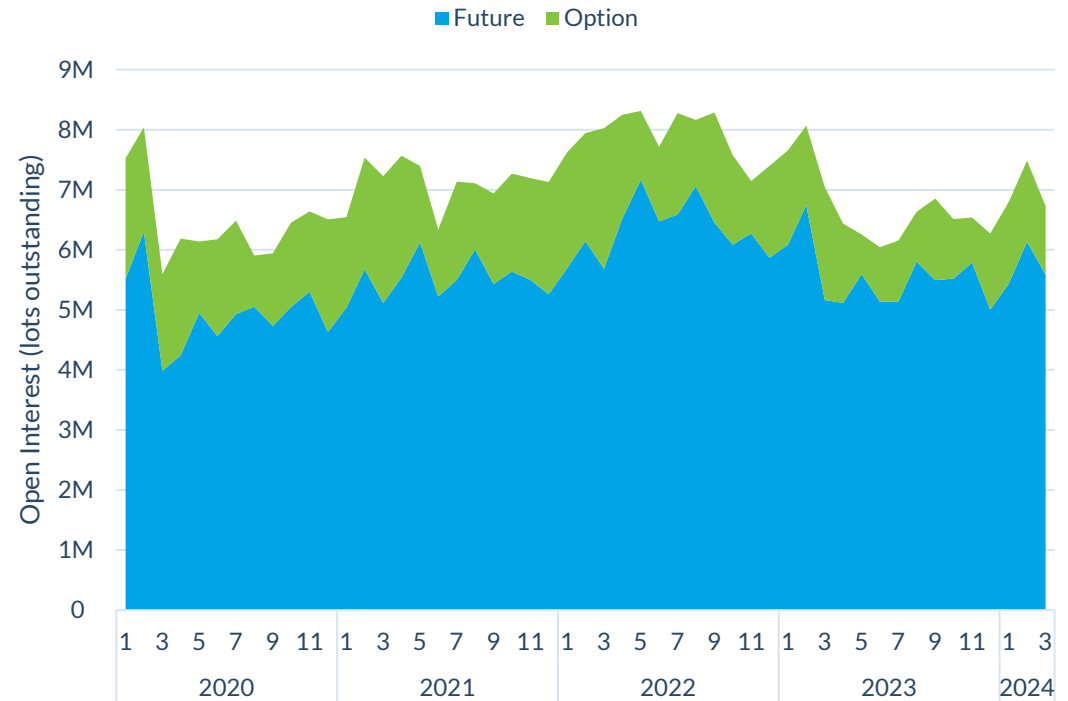
EU Bond Futures – Volume Hits a Record

Trading volume in German, French, Italian and Spanish bond futures and options listed on Eurex reached a record 234 million in the first quarter. Open interest, however, is down by roughly 20% from the peak in 2022.

Eurex Bond Futures and Options
Quarterly Volume



Eurex Bond Futures and Options
Month-End Open Interest 2017 to 2024

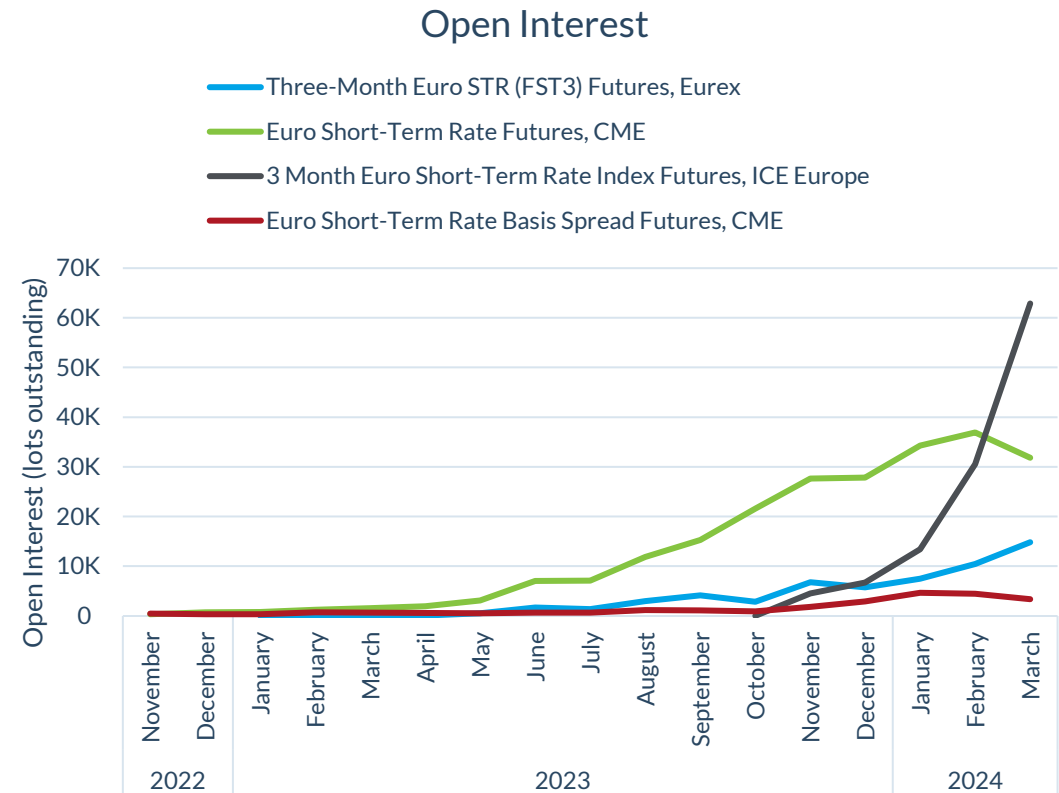
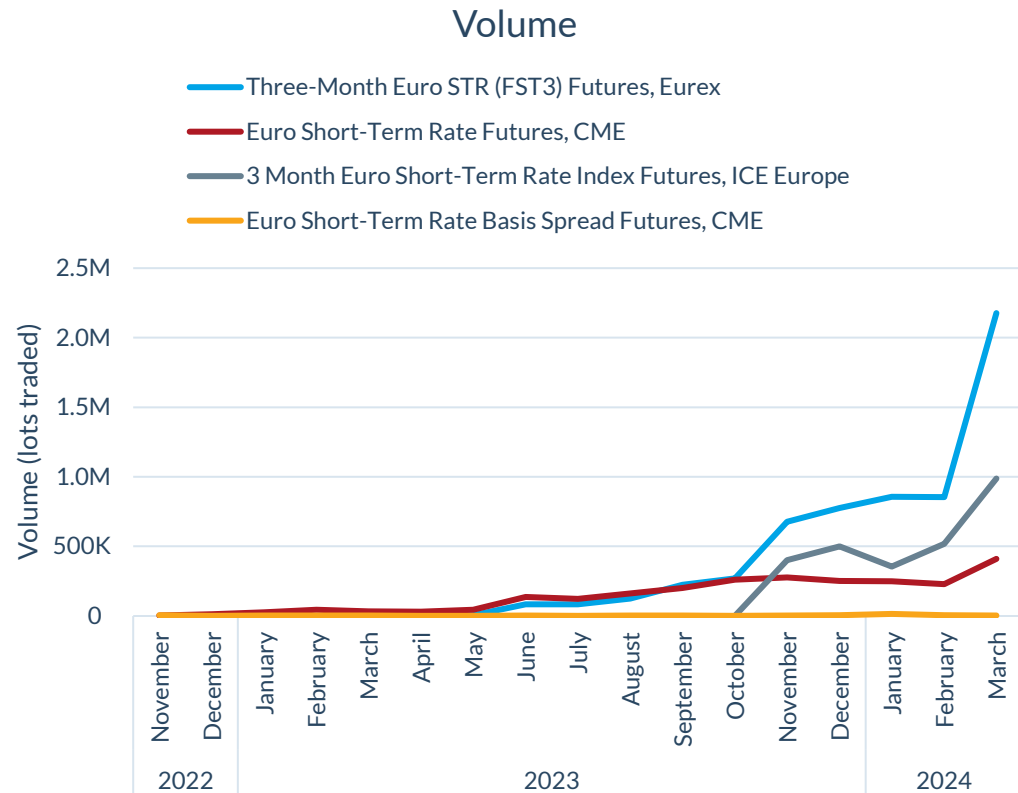


Interest Rates – Top STIR Contracts by Volume

Rank	Contract and Exchange	Notional Size	Jan-Mar Volume	Change vs. Yr Ago	Mar 2024 Open Interest	Change vs. Yr Ago
1	3 Month SOFR Futures, Chicago Mercantile Exchange	USD 1,000,000	208,818,987	-9.5%	9,948,855	5.9%
2	One-Day Interbank Deposit (DI1) Futures, B3	BRL 100,000	178,911,843	-15.4%	36,668,895	34.6%
3	Average One-Day Interbank Deposit Rate Index (IDI) Options, B3	BRL 100,000	138,103,418	67.7%	69,561,496	68.8%
4	3 Month SOFR Options, Chicago Mercantile Exchange	USD 1,000,000	122,226,802	-18.8%	34,619,560	-9.9%
5	3 Month Euribor Futures, ICE Futures Europe	EUR 1,000,000	87,223,888	-7.7%	4,107,217	24.2%
6	3 Month SONIA Futures, ICE Futures Europe	GBP 1,000,000	33,228,191	20.9%	2,090,183	73.4%
7	Federal Funds Futures, Chicago Board of Trade	USD 5,000,000	25,235,953	-32.3%	1,984,922	11.7%
8	3 Month Euribor Options, ICE Futures Europe	EUR 1,000,000	22,450,189	33.3%	9,475,801	-4.7%
9	1 Month SOFR Futures, Chicago Mercantile Exchange	USD 1,000,000	9,996,687	-12.6%	1,118,711	33.5%
10	90 Day Bank Bill Futures, ASX 24	AUD 1,000,000	8,732,883	-9.4%	1,220,277	42.3%
11	3 Month SONIA Options, ICE Futures Europe	GBP 1,000,000	8,343,440	218.6%	4,103,650	326.2%
12	3 Month Euribor Futures, Eurex	EUR 1,000,000	7,634,644	467136.5%	28,954	5761.1%
13	3 Month CORRA (CRA) Futures, Montreal Exchange	CAD 1,000,000	5,776,667	825.4%	728,755	334.5%
14	DI x IPCA Spread (DAP) Futures, B3	BRL 100,000	4,147,487	53.4%	1,801,712	21.4%
15	Three-Month Euro STR (FST3) Futures, Eurex	EUR 1,000,000	3,885,173	12141065.6%	14,800	739900.0%

STIRS: Three-Way Battle for ESTR

CME, Eurex and ICE Futures Europe are competing for a share of the market for futures on the Euro Short Term Rate, the European risk-free rate that is being adopted in cash and swap markets.

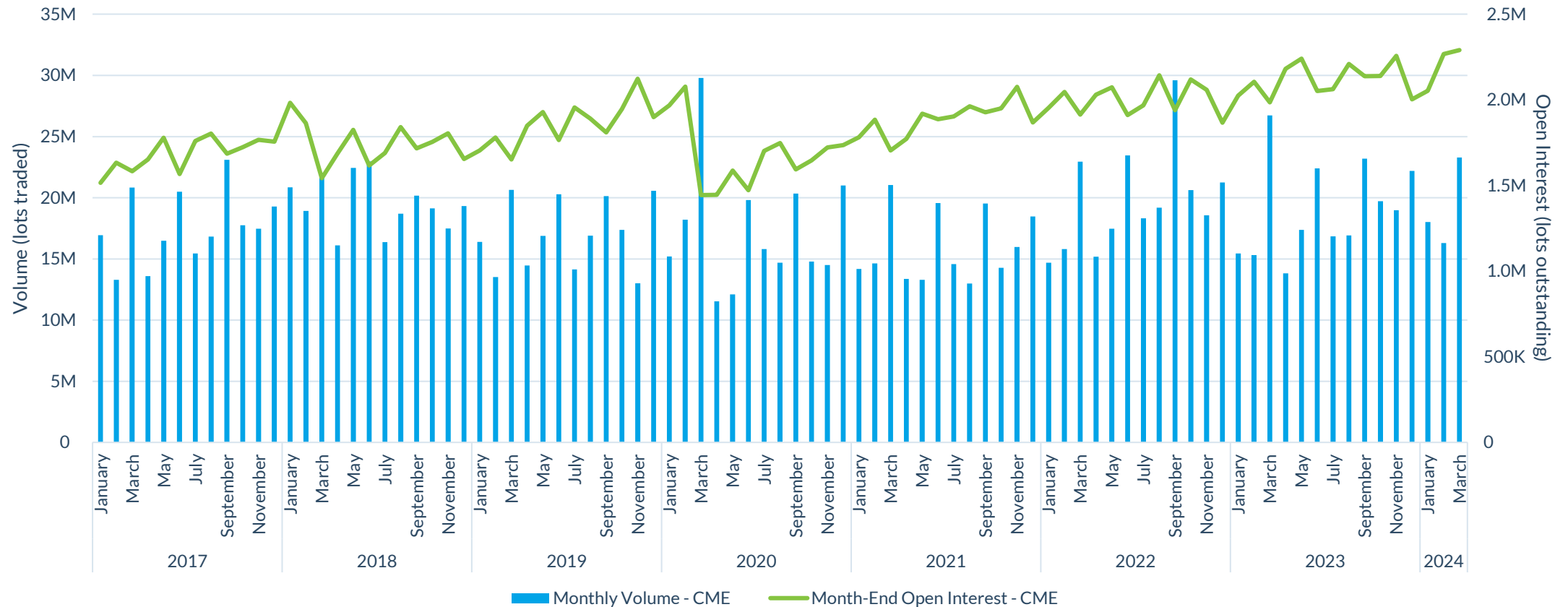


Foreign Exchange – Top Contracts by Volume

Rank	Contract and Exchange	Location	Size	Jan-Mar 2024 Volume	YOY Change	Mar 2024 OI	YOY Change
1	US Dollar/Indian Rupee Options, National Stock Exchange of India	India	1000 USD	808,910,728	-24.1%	8,376,854	76.7%
2	US Dollar/Indian Rupee Futures, National Stock Exchange of India	India	1000 USD	158,321,353	-37.2%	6,690,304	-5.3%
3	Mini US Dollar Spot (WDO) Futures, B3	Brazil	10,000 USD	143,184,694	-27.3%	1,738,922	25.0%
4	US Dollar/Indian Rupee Futures, BSE	India	1000 USD	43,542,024	-66.1%	970,533	-65.2%
5	US Dollar Futures, MATba ROFEX	Argentina	1000 USD	35,036,813	-26.1%	1,801,625	-26.6%
6	US Dollar Futures, Korea Exchange	South Korea	10,000 USD	26,578,125	-9.5%	1,003,055	10.5%
7	British Pound/Indian Rupee Futures, National Stock Exchange of India	India	1000 GBP	19,702,685	3.7%	242,605	-20.3%
8	US Dollar/Brazil Real (DOL) Futures, B3	Brazil	50,000 USD	15,794,435	-3.9%	1,269,404	13.3%
9	Euro FX Futures, Chicago Mercantile Exchange	United States	125,000 EUR	14,675,036	-4.0%	665,700	-10.5%
10	Euro/Indian Rupee Futures, National Stock Exchange of India	India	1000 EUR	12,418,477	-16.8%	155,214	-41.2%
11	US Dollar/Indian Rupee Futures, Metropolitan Stock Exchange of India	India	1000 USD	11,622,229	23.7%	103,178	-57.3%
12	Turkish Lira/US Dollar Futures, Borsa Istanbul	Turkey	1000 USD	10,851,798	-9.7%	2,616,707	-20.8%
13	Japanese Yen Futures, Chicago Mercantile Exchange	United States	12,500,000 JPY	10,646,423	3.7%	304,875	81.8%
14	US Dollar/Chinese Yuan Renminbi Futures, Singapore Exchange	Singapore	100,000 USD	7,212,838	47.4%	181,598	54.5%
15	British Pound Futures, Chicago Mercantile Exchange	United States	62,500 GBP	6,692,911	0.2%	211,611	-0.1%

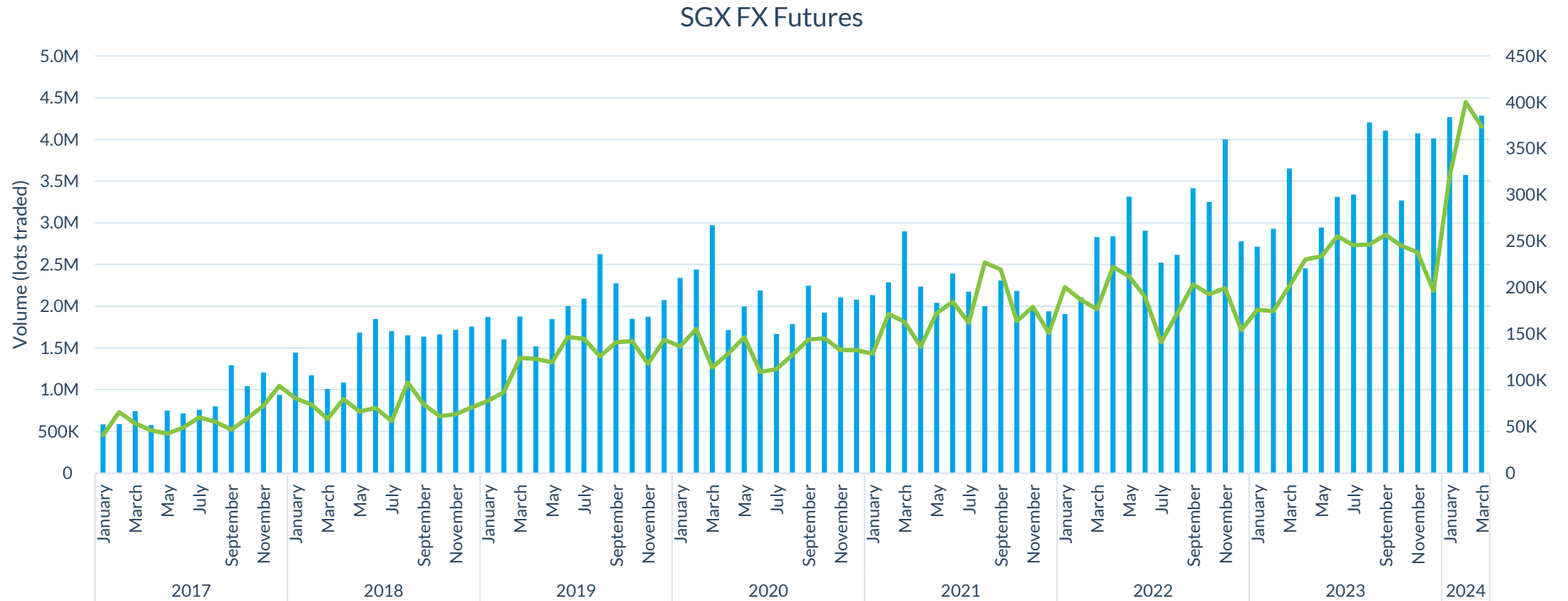
CME FX Futures and Options – Steady Growth in OI

Open interest across all of CME’s FX futures and options reached a record 2.29 million contracts at the end of March, the latest milestone in a slow but steady recovery from a massive selloff at the start of the pandemic.



SGX FX Futures and Options – Leveraging Location

Volume and open interest across the exchange's FX complex have doubled over the last five years.



Energy – Top Contracts by Volume

Rank	Contract and Exchange	Size	Jan-Mar 2024 Volume	Change vs. Yr Ago	Mar 2024 Open Interest	Change vs. Yr Ago
1	Crude Oil Options, Multi Commodity Exchange of India	100 Barrels	86,676,339	134.2%	100,541	90.9%
2	Brent Crude Oil Futures, ICE Futures Europe	1000 Barrels	68,244,368	7.9%	2,360,359	6.8%
3	WTI Light Sweet Crude Oil (CL) Futures, New York Mercantile Exchange	1000 Barrels	50,035,144	-1.0%	1,776,221	-3.4%
4	Fuel Oil Futures, Shanghai Futures Exchange	10 Metric Tons	45,328,612	-28.7%	603,796	6.8%
5	Natural Gas Options, Multi Commodity Exchange of India	1,250 MMBTU	33,090,499	206.5%	86,159	136.7%
6	Henry Hub Natural Gas (NG) Futures, New York Mercantile Exchange	10,000 MMBTU	32,433,749	24.7%	1,587,803	18.6%
7	Gas Oil Futures, ICE Futures Europe	100 Metric Tons	23,631,708	28.2%	844,416	47.5%
8	WTI Light Sweet Crude Oil Futures, ICE Futures Europe	1000 Barrels	18,629,796	55.2%	618,779	31.1%
9	Dutch TTF Gas Futures, ICE Endex	1 MW/Day	18,002,259	47.3%	1,828,753	68.0%
10	Natural Gas (European) (LN) Options, New York Mercantile Exchange	10,000 MMBTU	14,500,111	97.5%	4,049,379	22.4%
11	Medium Sour Crude Oil Futures, Shanghai International Energy Exchange	1000 Barrels	12,076,026	11.0%	57,887	-5.3%
12	Liquefied Petroleum Gas Futures, Dalian Commodity Exchange	20 Metric Tons	11,862,666	43.3%	80,202	-44.1%
13	NY Harbor ULSD (HO) Futures, New York Mercantile Exchange	42,000 Gallons	11,503,079	16.2%	311,612	15.5%
14	RBOB Gasoline Physical (RB) Futures, New York Mercantile Exchange	42,000 Gallons	10,901,263	9.2%	395,077	28.3%
15	Brent Crude Oil Options, ICE Futures Europe	1000 Barrels	10,144,296	4.0%	2,786,738	0.4%

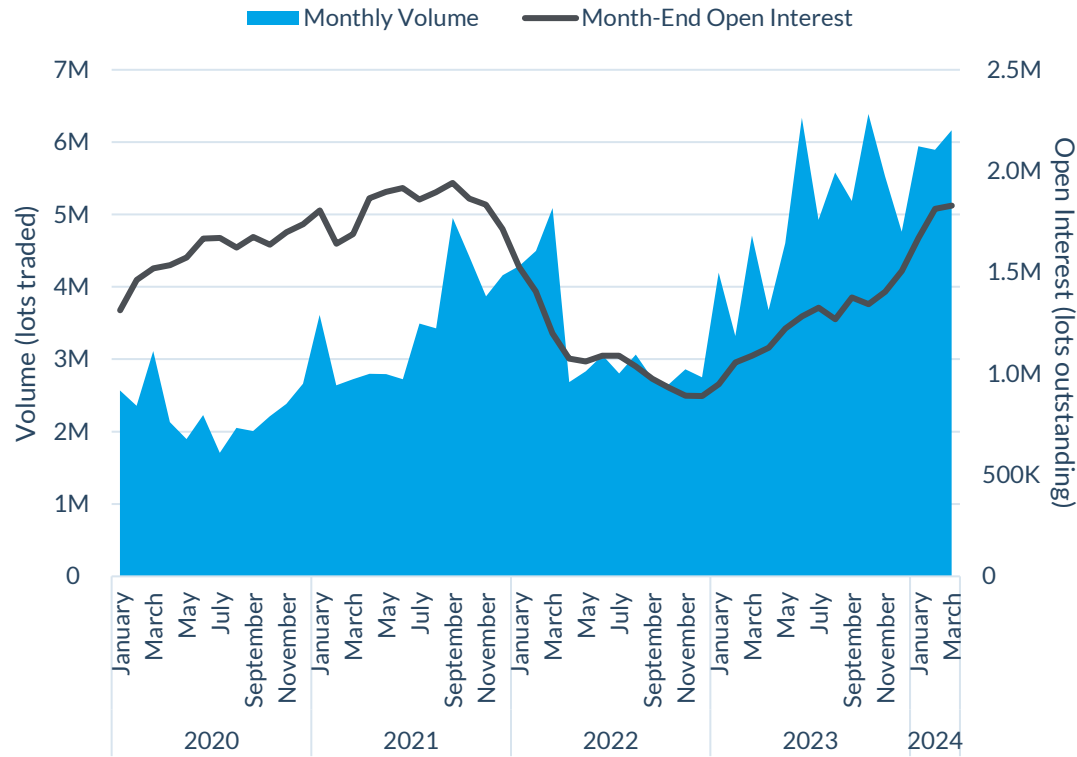
Note: This ranking does not include certain natural gas and other energy contracts traded on ICE Futures US and ICE Futures Europe. The ranking also does not include contracts listed on the Moscow Exchange.

EU Natural Gas: TTF Trading Recovers from Ukraine Shock

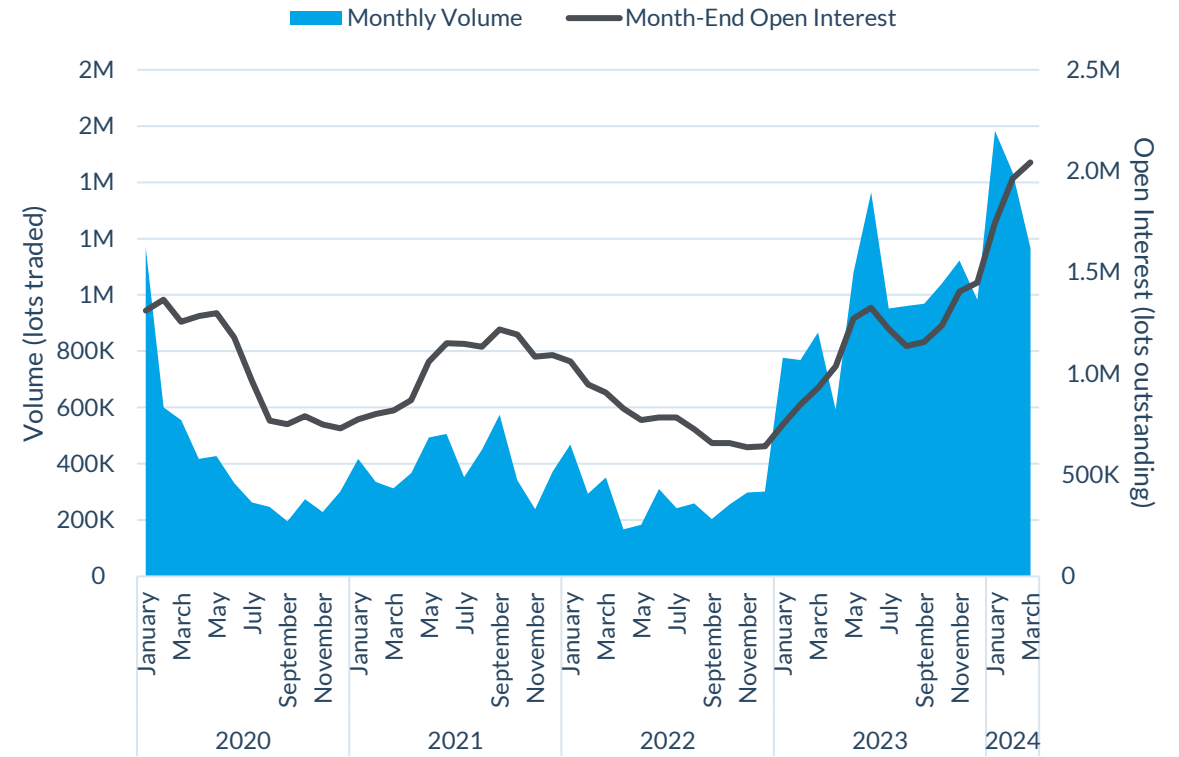
Futures: Open interest back to pre-war level

Options: Volume and open interest set new highs in Q1

Dutch TTF Gas Futures, ICE



Dutch TTF Gas Options, ICE



Industrial Metals – Top Contracts by Volume – Part 1

Rank	Contract and Exchange	Size	2023 Volume	YOY Change	Dec 2023 OI	YOY Change
1	Steel Rebar Futures, Shanghai Futures Exchange	10 Metric Tons	502,039,529	-4.4%	2,475,870	-10.3%
2	Iron Ore Futures, Dalian Commodity Exchange	100 Metric Tons	198,957,516	-10.0%	927,074	-29.4%
3	Hot Rolled Coil Futures, Shanghai Futures Exchange	10 Metric Tons	151,521,192	6.7%	1,254,818	17.9%
4	Iron Ore Options, Dalian Commodity Exchange	100 Metric Tons	97,362,136	133.4%	562,628	37.9%
5	Aluminum Futures, Shanghai Futures Exchange	25 Metric Tons	76,540,221	-23.4%	507,288	47.3%
6	Ferrosilicon (SF) Futures, Zhengzhou Commodity Exchange	5 Metric Tons	68,686,436	-0.3%	513,954	29.8%
7	Nickel Futures, Shanghai Futures Exchange	1 Metric Ton	65,415,198	25.6%	239,375	70.8%
8	Silicon Manganese (SM) Futures, Zhengzhou Commodity Exchange	5 Metric Tons	59,233,330	34.2%	495,872	43.4%
9	Steel Rebar Options, Shanghai Futures Exchange ¹	10 Metric Tons	58,347,337	23649.5%	277,322	325.6%
10	Aluminium Futures, London Metal Exchange	25 Metric Tons	57,691,693	10.8%	800,739	57.0%
11	Zinc Futures, Shanghai Futures Exchange	5 Metric Tons	54,857,681	-19.7%	170,780	3.0%
12	Stainless Steel Futures, Shanghai Futures Exchange	5 Metric Tons	43,178,557	19.6%	218,649	92.3%
13	Tin Futures, Shanghai Futures Exchange	1 Metric Ton	39,444,206	32.8%	58,560	-36.6%
14	Copper Futures, Shanghai Futures Exchange	5 Metric Tons	38,816,257	-16.5%	389,352	-2.0%
15	Iron Ore 62% Futures, Singapore Exchange	100 Metric Tons	36,944,327	47.3%	1,054,742	19.0%

¹ Began trading in December 2022

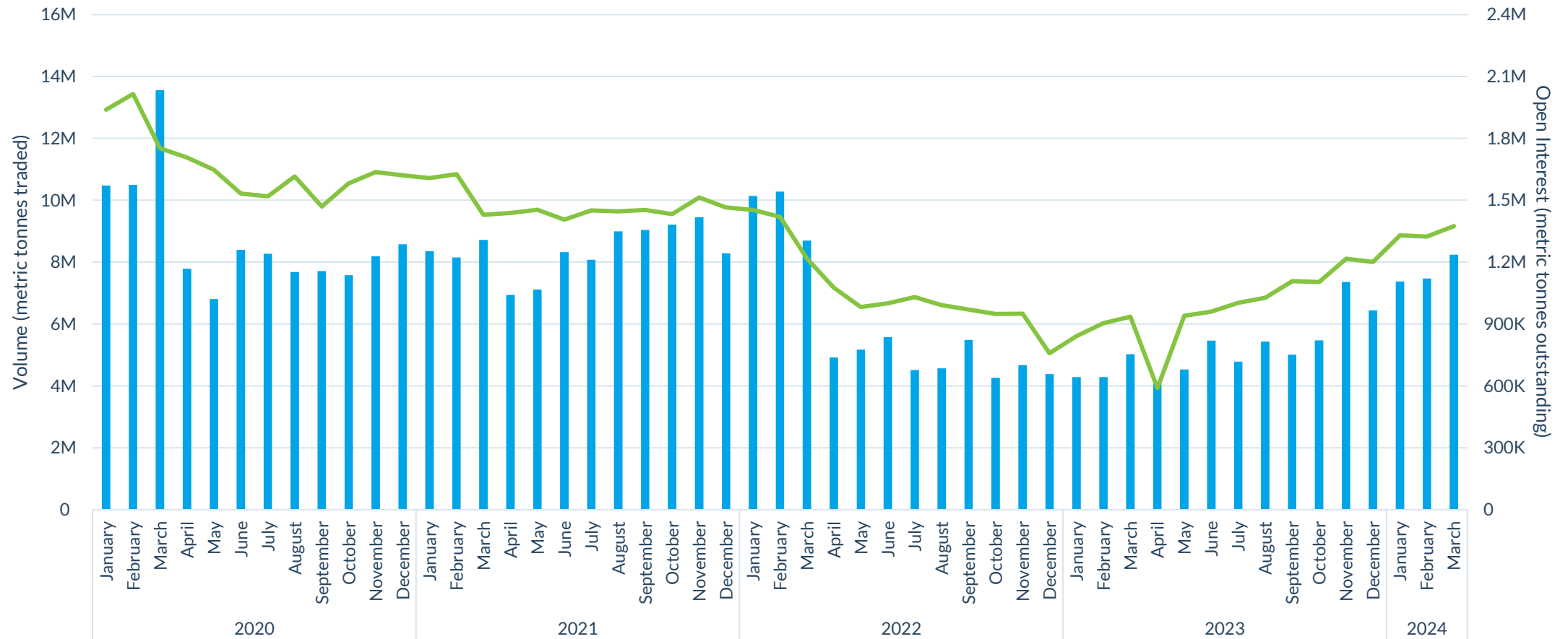
Industrial Metals – Top Contracts by Volume – Part 2

Rank	Contract and Exchange	Size	2023 Volume	YOY Change	Dec 2023 OI	YOY Change
16	Lithium Carbonate Futures, Guangzhou Futures Exchange ²	1 Metric Ton	35,251,492	n/a	275,608	n/a
17	Copper Grade A Futures, London Metal Exchange	25 Metric Tons	33,883,556	15.3%	334,957	67.9%
18	Copper (HG) Futures, Commodity Exchange (COMEX)	25,000 Pounds	25,697,758	19.3%	193,721	19.9%
19	Aluminium Options, Shanghai Futures Exchange	25 Metric Tons	24,908,803	118.6%	92,548	136.9%
20	Special High Grade Zinc Futures, London Metal Exchange	25 Metric Tons	22,919,206	7.4%	244,023	42.2%
21	Zinc Options, Shanghai Futures Exchange	5 Metric Tons	21,725,967	161.3%	32,871	80.8%
22	Industrial Silicon Futures, Guangzhou Futures Exchange ¹	5 Metric Tons	21,576,596	12032.9%	107,464	1023.6%
23	Copper Options, Shanghai Futures Exchange	5 Metric Tons	20,605,099	70.1%	72,290	83.8%
24	Lead Futures, Shanghai Futures Exchange	5 Metric Tons	20,029,393	-0.1%	89,459	-38.8%
25	Standard Lead Futures, London Metal Exchange	25 Metric Tons	15,151,467	47.4%	161,970	70.8%
26	Aluminum Oxide Futures, Shanghai Futures Exchange ³	20 Metric Tons	13,679,753	n/a	121,737	n/a
27	Primary Nickel Futures, London Metal Exchange	6 Metric Tons	10,357,664	-14.4%	200,095	58.3%
28	Iron Ore 62% Options on Futures, Singapore Exchange	100 Metric Tons	6,892,741	30.3%	768,614	19.5%
29	Bonded Copper Futures, Shanghai International Energy Exchange	5 Metric Tons	5,798,963	4.5%	37,088	60.7%
30	Industrial Silicon Options, Guangzhou Futures Exchange ¹	5 Metric Tons	4,158,993	26222.7%	51,005	804.8%

¹ Began trading in December 2022 ² Began trading in July 2023 ³ Began trading in June 2023

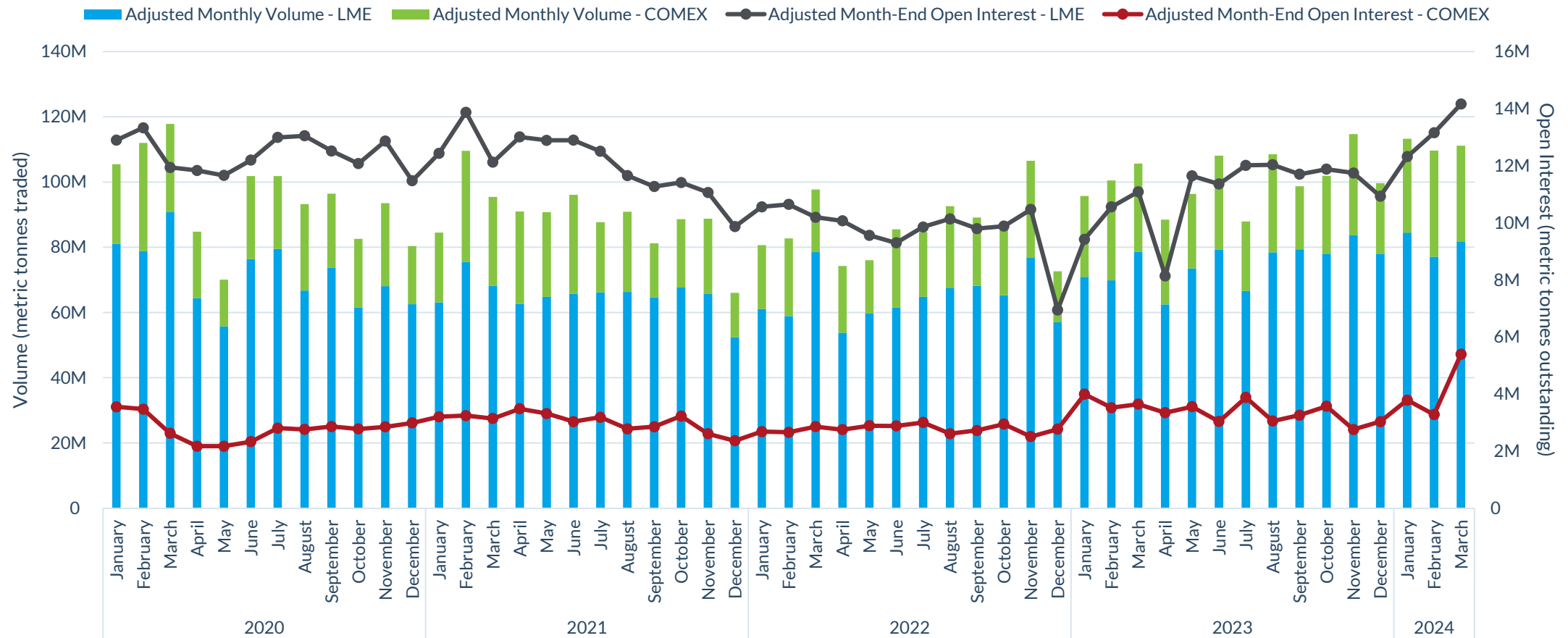
LME Nickel - Partial Recovery

LME Nickel Futures Volume and Open Interest



LME and CME Copper – Spike in Open Interest

Investment fund buying helps drive open interest to record levels on LME and CME

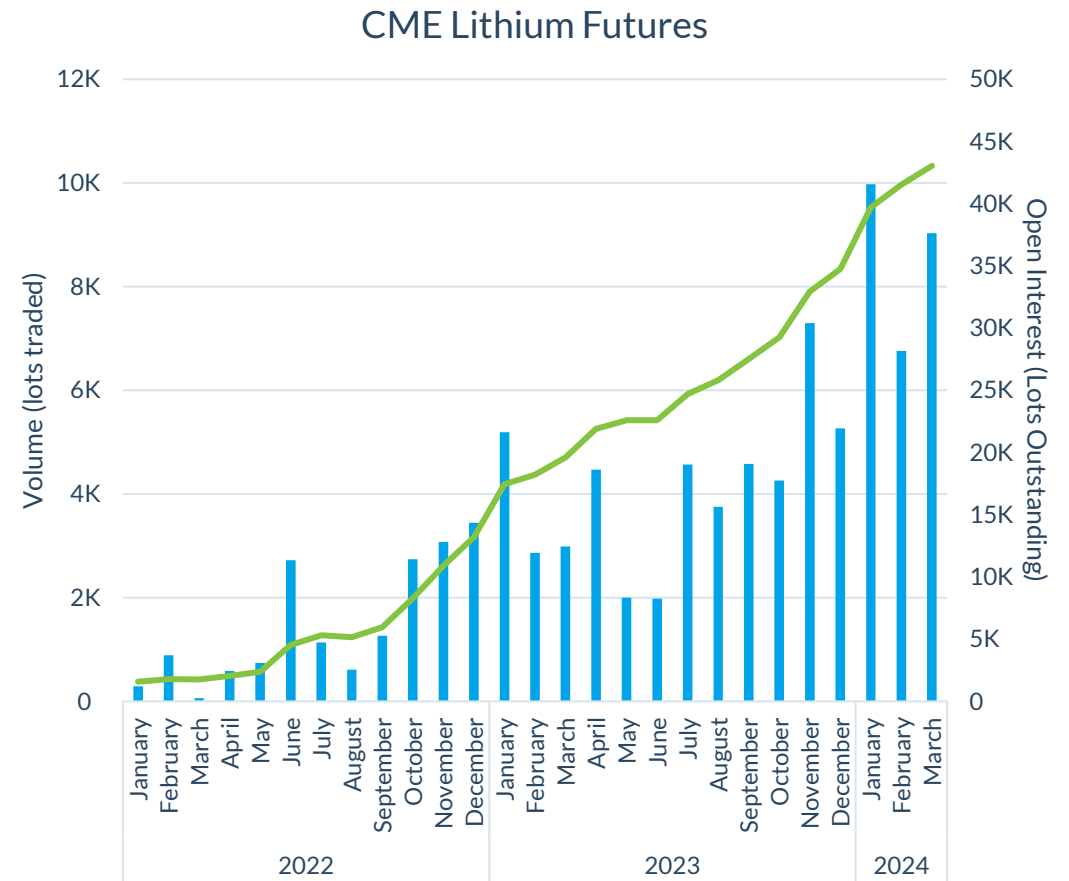
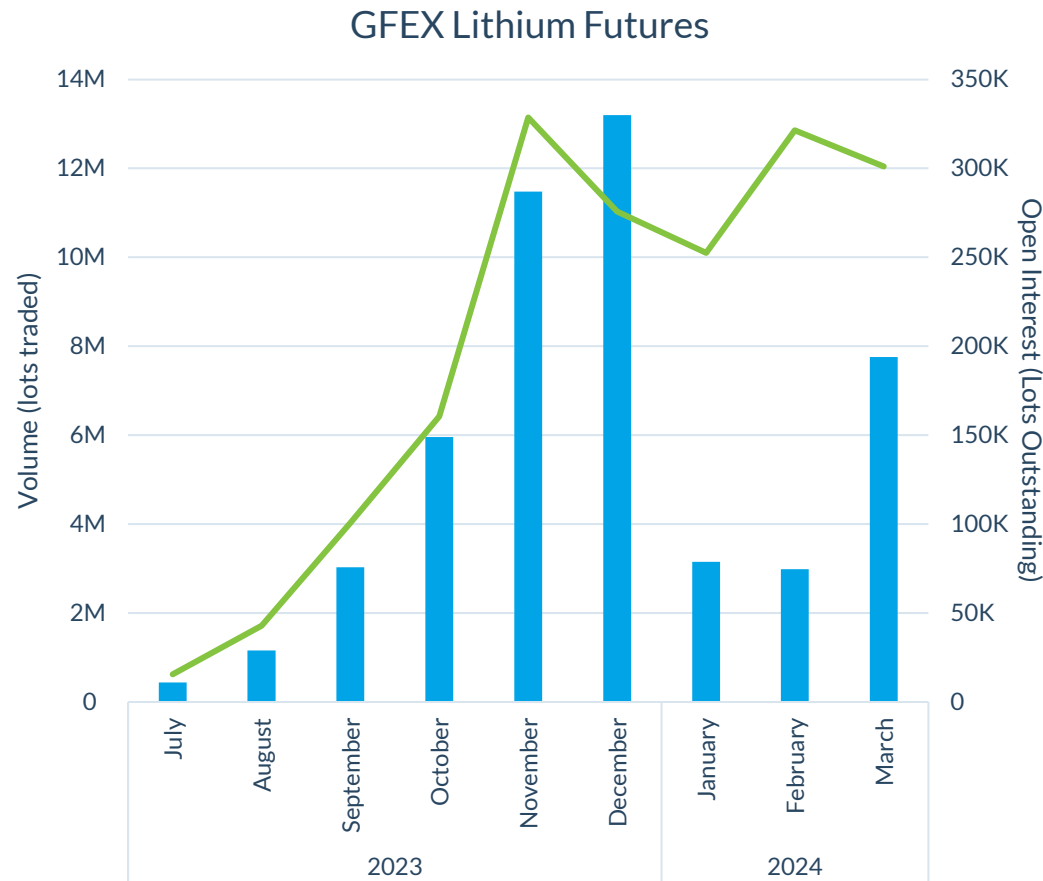


Note: Volume and open interest measured in metric tonnes.

Lithium – Tale of Two Markets

Guangzhou exchange linked to China's EV industry

CME growing rapidly from small base



Top Contracts in Agriculture – China

Rank	Contract and Exchange	Jan-Mar 2024 Volume	YOY Change	Mar 2024 OI	YOY Change
1	Soybean Meal Futures, Dalian Commodity Exchange	90,770,520	62.5%	2,843,830	31.6%
2	Rapeseed Meal (RM) Futures, Zhengzhou Commodity Exchange	56,607,541	55.6%	1,022,720	23.4%
3	RBD Palm Olein Futures, Dalian Commodity Exchange	40,826,224	-12.9%	712,563	-10.9%
4	Corn Futures, Dalian Commodity Exchange	34,071,485	2.8%	1,436,274	-10.1%
5	Soybean Oil Futures, Dalian Commodity Exchange	32,570,298	-6.4%	1,027,401	22.9%
6	Rapeseed Oil (OI) Futures, Zhengzhou Commodity Exchange	27,586,936	-13.0%	393,803	-17.2%
7	Woodpulp Futures, Shanghai Futures Exchange	23,022,929	55.0%	292,209	-19.2%
8	White Sugar (SR) Futures, Zhengzhou Commodity Exchange	22,758,512	-23.2%	559,275	-53.9%
9	Cotton No. 1 (CF) Futures, Zhengzhou Commodity Exchange	20,816,561	-39.4%	714,869	-29.0%
10	Natural Rubber Futures, Shanghai Futures Exchange	20,106,483	3.5%	314,322	-13.7%
11	Soybean Meal Options, Dalian Commodity Exchange	15,519,177	79.6%	927,742	67.4%
12	Egg Futures, Dalian Commodity Exchange	11,602,995	93.5%	388,391	60.0%
13	Corn Starch Futures, Dalian Commodity Exchange	9,267,242	-19.6%	249,941	-38.9%
14	No. 2 Soybean Futures, Dalian Commodity Exchange	8,399,908	98.0%	119,937	80.0%
15	Cotton No. 1 (CF) Options, Zhengzhou Commodity Exchange	8,029,315	8.8%	511,324	60.1%

Top Contracts in Agriculture – US

Rank	Contract and Exchange	Jan-Mar 2024 Volume	YOY Change	Mar 2024 OI	YOY Change
1	Corn Futures, Chicago Board of Trade	22,032,414	8.9%	1,632,013	22.1%
2	Soybean Futures, Chicago Board of Trade	15,644,402	5.4%	811,579	11.8%
3	Soybean Meal Futures, Chicago Board of Trade	9,729,226	23.2%	469,121	9.9%
4	Soybean Oil Futures, Chicago Board of Trade	9,005,136	6.3%	574,725	19.6%
5	Sugar #11 Futures, ICE Futures U.S.	8,585,960	-14.2%	844,898	-14.6%
6	Chicago Soft Red Winter Wheat Futures, Chicago Board of Trade	7,349,237	9.2%	404,561	7.3%
7	Corn Options, Chicago Board of Trade	7,208,416	27.4%	1,355,614	8.2%
8	Soybean Options, Chicago Board of Trade	6,045,980	60.3%	775,364	30.0%
9	Cocoa Futures, ICE Futures U.S.	4,331,675	17.3%	189,105	-52.8%
10	Live Cattle Futures, Chicago Mercantile Exchange	3,968,284	-3.9%	305,623	-5.1%
11	KC Hard Red Winter Wheat Futures, Chicago Board of Trade	3,788,067	37.0%	275,715	61.1%
12	Lean Hog Futures, Chicago Mercantile Exchange	3,534,671	9.9%	276,306	23.3%
13	Cotton #2 Futures, ICE Futures U.S.	3,346,535	35.5%	281,137	42.2%
14	Coffee C Futures, ICE Futures U.S.	3,035,775	-1.5%	241,134	19.2%
15	Canola Futures, ICE Futures U.S.	2,862,188	37.5%	292,516	-0.7%

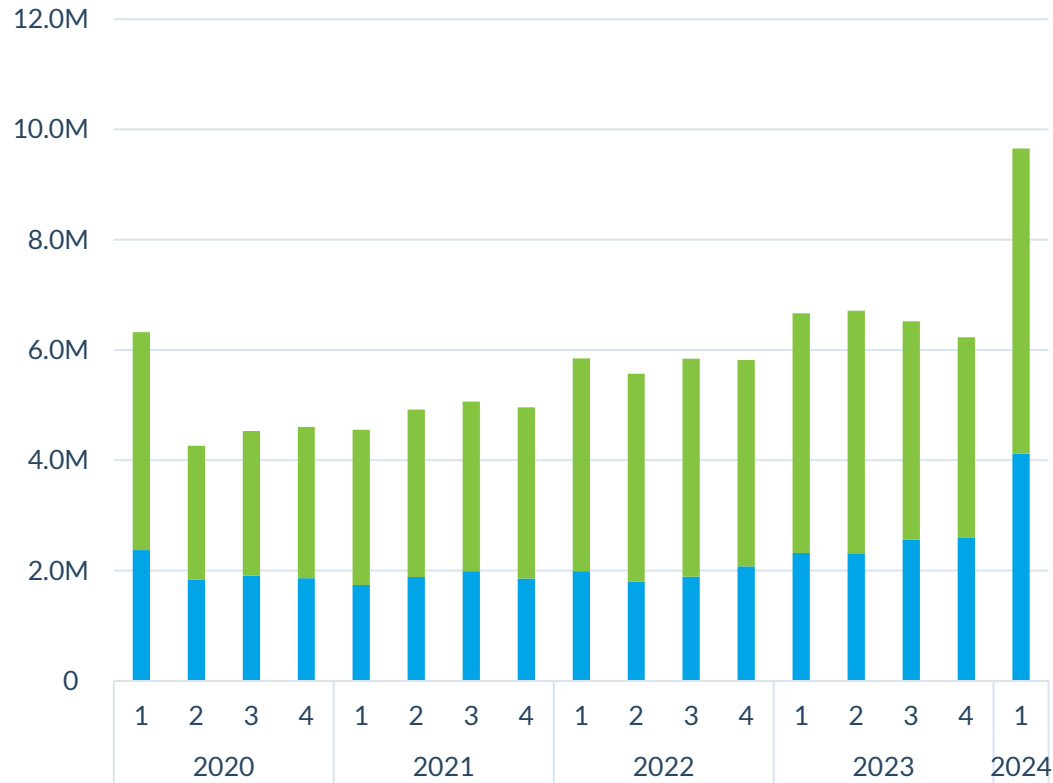
Top Contracts in Agriculture – Rest of World

Rank	Contract and Exchange	Jan-Mar 2024 Volume	YOY Change	Mar 2024 OI	YOY Change
1	Milling Wheat Futures, Euronext Derivatives Market	5,298,322	39.9%	491,686	23.1%
2	Crude Palm Oil (FCPO) Futures, Malaysia Derivatives Exchange	4,119,984	14.9%	284,711	48.6%
3	Cocoa Futures, ICE Futures Europe	2,917,597	50.7%	257,328	-13.2%
4	Rapeseed Futures, Euronext Derivatives Market	1,264,463	41.4%	116,588	-3.7%
5	Robusta Coffee 10 Tonne Futures, ICE Futures Europe	1,258,432	10.4%	101,182	-8.9%
6	Cocoa Options, ICE Futures Europe	1,198,220	213.3%	604,442	152.4%
7	Corn Cash-Settled (CCM) Futures, B3	981,707	48.8%	123,206	22.9%
8	SICOM TSR20 Rubber Futures, Singapore Exchange	879,498	66.3%	80,438	43.6%
9	White Sugar Futures, ICE Futures Europe	864,546	9.1%	82,798	-11.4%
10	Robusta Coffee 10 Tonne Options, ICE Futures Europe	527,532	27.7%	165,990	20.6%
11	Milling Wheat Options, Euronext Derivatives Market	367,437	-38.3%	190,813	-45.6%
12	Guar Seed 10 MT Futures, National Commodity & Derivatives Exchange	326,935	-34.1%	16,646	10.6%
13	White Maize 100 Ton (WMAZ) Futures, JSE Securities Exchange	322,653	45.0%	22,874	-10.4%
14	Yellow Maize 100 Ton (YMAZ) Futures, JSE Securities Exchange	229,888	22.3%	25,380	6.8%
15	Corn Cash-Settled (CCM) Options, B3	228,117	2.2%	179,298	46.2%

Cocoa – Supply Shortage Sends Futures to Record Highs

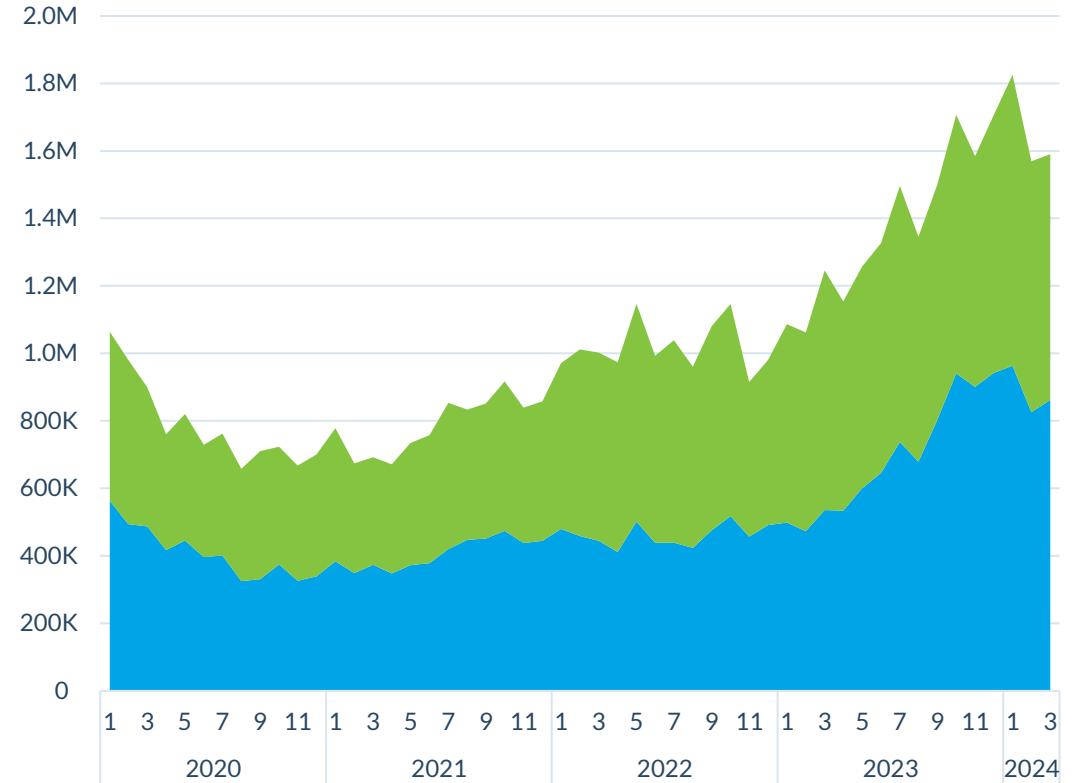
Quarterly Volume

■ ICE Europe ■ ICE US



End of Month Open Interest

■ ICE Europe ■ ICE US





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Appendix

Exchange Ranking – Part One

Rank	Exchange	Jan-Mar 2024 Volume	YoY % Change	Mar 2024 Open Interest	YoY % Change
1	National Stock Exchange of India	30,484,803,989	92.2%	30,936,238	19.3%
	National Stock Exchange of India	30,479,551,375	92.2%	30,689,894	18.3%
	NSE International Exchange ²	5,252,614	n/a	246,344	n/a
2	BSE	5,905,616,144	3182.2%	1,174,617	-61.8%
	BSE	5,905,118,270	3892.9%	1,174,073	-61.8%
	India International Exchange	497,874	-98.4%	544	-23.5%
3	B3	2,063,723,393	-1.5%	214,522,937	30.8%
4	CME Group	1,608,102,727	-3.5%	112,035,441	-4.1%
	Chicago Mercantile Exchange	817,819,441	-12.0%	61,344,908	-15.9%
	Chicago Board of Trade	602,076,656	6.1%	33,701,145	18.6%
	New York Mercantile Exchange	149,329,745	14.2%	14,572,468	9.0%
	Commodity Exchange (COMEX)	38,876,885	0.7%	2,416,920	18.4%
5	Intercontinental Exchange	1,073,581,742	9.0%	92,108,320	19.4%
	NYSE Arca ¹	359,142,826	6.9%	n/a	n/a
	ICE Futures Europe	352,698,537	11.5%	43,112,098	20.1%
	NYSE Amex ¹	209,669,703	2.8%	n/a	n/a
	ICE Futures U.S.	124,657,080	13.6%	44,128,808	14.9%
	ICE Endex	25,668,395	45.0%	4,818,937	73.2%
	ICE Futures Abu Dhabi	1,132,564	119.4%	46,136	20.2%
ICE Futures Singapore	612,637	4.3%	2,341	5.0%	

¹ US equity options are cleared through the Options Clearing Corp. Exchange, ² NSE International Exchange began trading in July 2023.

Exchange Ranking – Part Two

Rank	Exchange	Jan-Mar 2024 Volume	YoY % Change	Mar 2024 Open Interest	YoY % Change
6	Cboe Global Markets	918,274,211	-0.5%	386,820	11.9%
	Cboe Options Exchange ¹	516,239,900	6.9%	n/a	n/a
	Cboe EDGX Options Exchange ¹	186,774,349	16.2%	n/a	n/a
	Cboe BZX Options Exchange ¹	110,742,889	-23.8%	n/a	n/a
	Cboe C2 Options Exchange ¹	91,074,392	-23.9%	n/a	n/a
	Cboe Futures Exchange	13,420,513	-6.6%	385,846	11.7%
	Cboe Europe Derivative Exchange	15,570	13.1%	182	119.3%
	ErisX ²	6,598	n/a	792	n/a
7	Nasdaq	792,218,305	-4.8%	4,933,877	-13.5%
	Nasdaq PHLX ¹	273,686,838	-6.5%	n/a	n/a
	Nasdaq ISE ¹	168,743,220	10.6%	n/a	n/a
	Nasdaq Options Market ¹	142,398,269	-24.0%	n/a	n/a
	Nasdaq GEMX ¹	67,296,434	29.0%	n/a	n/a
	Nasdaq MRX ¹	64,857,586	58.4%	n/a	n/a
	Nasdaq BX Options ¹	58,918,461	-32.0%	n/a	n/a
	Nasdaq Exchanges Nordic Markets	16,261,000	-15.6%	4,864,102	-13.4%
	Nasdaq Commodities	56,497	15.4%	69,775	-17.5%

Exchange Ranking – Part Three

Rank	Exchange	Jan-Mar 2024 Volume	YoY % Change	Mar 2024 Open Interest	YoY % Change
8	Korea Exchange	570,262,965	13.9%	15,937,152	55.3%
9	Eurex	512,294,854	-7.1%	133,886,616	-5.4%
10	Dalian Commodity Exchange	508,653,847	10.4%	14,800,022	6.5%
11	Zhengzhou Commodity Exchange	491,132,646	-27.1%	12,464,423	-27.2%
12	Borsa Istanbul	487,564,951	-2.8%	15,830,522	19.0%
13	Moscow Exchange	431,539,126	72.3%	65,312,432	335.1%
14	Miami International Holdings	423,452,250	-2.6%	75,737	2.9%
	MIAX Options ¹	170,277,411	-2.0%	n/a	n/a
	MIAX Pearl ¹	153,535,300	-13.9%	n/a	n/a
	MIAX Emerald ¹	98,918,285	20.8%	n/a	n/a
	Minneapolis Grain Exchange	721,254	9.0%	75,737	2.9%
15	Shanghai Futures Exchange	419,931,123	-14.1%	10,907,022	11.0%
	Shanghai Futures Exchange	386,284,804	-16.0%	10,458,267	10.8%
	Shanghai International Energy Exchange	33,646,319	16.8%	448,755	16.7%
16	TMX Group	222,958,220	8.5%	15,617,340	16.1%
	Boston Options Exchange ¹	179,187,321	11.7%	n/a	n/a
	Montreal Exchange	43,770,899	-2.9%	15,617,340	16.1%

Exchange Ranking – Part Four

Rank	Exchange	Jan-Mar 2024 Volume	YoY % Change	Mar 2024 Open Interest	YoY % Change
17	Multi Commodity Exchange of India	153,395,569	90.9%	667,868	44.0%
18	Hong Kong Exchanges and Clearing	135,541,372	12.4%	14,904,928	-4.8%
	Hong Kong Exchanges and Clearing	91,698,119	5.9%	12,385,521	-9.5%
	London Metal Exchange	43,843,253	29.2%	2,519,407	27.5%
19	Japan Exchange Group	112,743,220	29.5%	3,700,795	-1.9%
	Osaka Exchange	112,363,797	29.8%	3,652,544	-1.9%
	Tokyo Commodity Exchange	379,423	-23.1%	48,251	1.7%
20	Taiwan Futures Exchange	84,497,330	20.5%	1,214,945	23.7%
21	Singapore Exchange	65,702,633	4.8%	5,170,201	0.4%
22	China Financial Futures Exchange	61,719,906	64.9%	1,767,349	27.8%
23	ASX	56,343,339	-0.3%	10,455,981	9.5%
	ASX 24	39,721,912	-0.7%	3,904,766	12.3%
	ASX	16,621,427	0.6%	6,551,215	7.9%
24	JSE Securities Exchange	53,471,867	-13.2%	21,149,729	-10.0%
25	Members Exchange ¹³	43,127,191	n/a	n/a	n/a
26	Euronext	40,008,420	-9.6%	22,734,958	-1.0%
27	MATba ROFEX	35,841,347	-78.6%	1,946,687	-23.6%
	MATba ROFEX	35,830,870	-78.6%	1,944,257	-23.5%
	Uruguay Futures Exchange	10,477	249.2%	2,430	-48.1%

FIA

The logo consists of the letters 'F', 'I', and 'A' in a bold, sans-serif font. The 'F' is dark grey. The 'I' is dark grey with a green triangle overlapping its right side. The 'A' is blue with a green triangle overlapping its left side. The background features large, overlapping geometric shapes in light green, light blue, and white.