

A close-up photograph of an hourglass with blue sand, set against a solid blue background. The hourglass is positioned vertically, with the top bulb containing a small amount of sand. The sand is falling through the narrow neck into the bottom bulb. The lighting is soft, highlighting the texture of the sand and the glass.

This webinar will begin shortly.

FIA



Reminders

- The webinar will be recorded and posted to the FIA website within 24 hours of the live webinar.
 - Please use the “question” function on your webinar control panel to ask a question to the moderator or speakers.
-
- *Disclaimer: This webinar is intended for informational purposes only and is not intended to provide investment, tax, business, legal or professional advice. Neither FIA nor its members endorse, approve, recommend, or certify any information, opinion, product, or service referenced in this webinar. FIA makes no representations, warranties, or guarantees as to the webinar’s content.*



ETD Trading Trends

Q1 2023

—
10 May 2023



Presenters

Will Acworth, *SVP, Publications, Data & Research, FIA*

Guy Wolf, *Global Head of Market Analytics, Marex*




Agenda

- Overview
 - Five-Year Look-Back
 - India's NSE – The Main Driver for Record Growth
 - Tracking Institutional Participation – FIA Indexes
 - Exchange Ranking
- Financials
 - US Retail - CME Micros
 - EU Institutional – Eurex Total Return Futures
 - STIRS – Fed Funds and Euribor
- Commodities
 - Key Themes
 - Evolution of Quant Investing
 - Energy – Nymex Henry Hub and ICE Endex TTF
 - Metals – LME and CME; LME Nickel
 - China – Steel, Chemicals and Plastics
 - Agriculture – Cocoa

Methodology

- FIA collects data on volume and open interest from 85 exchanges and clearinghouses around the world
- 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



January 2022 Highlights

Worldwide volume of exchange-traded derivatives reached 6.08 billion contracts in the month of January, the third highest monthly total ever recorded. The January total was down 1% from December 2021 but up 30.2% from January 2021.

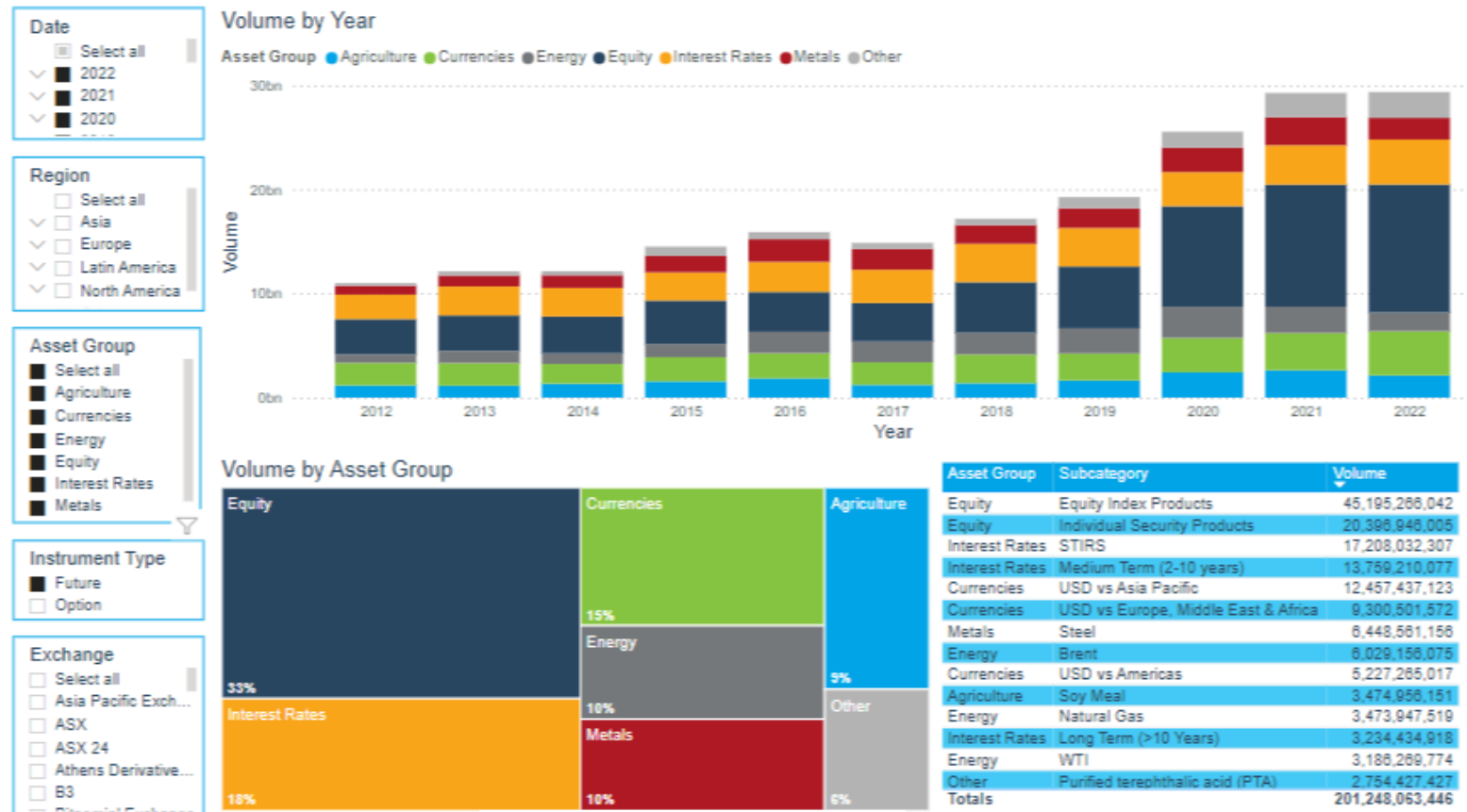
Total open interest at the end of January was 1 billion contracts. The January total was down 6.9% from December 2021 and down 2.9% from a year ago.

[DOWNLOAD](#)

January 2022	Futures	Options	Total	M/M	Y/Y
Asia-Pacific	789,204,262	2,385,557,589	3,174,761,851	-5.4%	53.3%
North America	436,941,886	994,474,148	1,431,416,034	11.1%	14.8%
Latin America	564,922,873	212,993,199	777,916,072	11.5%	8.2%
Europe	382,754,469	89,610,656	472,365,125	4.4%	13.6%
Other	217,116,361	6,043,184	223,159,545	-35.8%	2.8%
Grand Total	2,390,939,851	3,688,678,776	6,079,618,627	-1.0%	30.2%
M/M	-5.9%	2.4%	-1.0%		
Y/Y	1.9%	58.8%	30.2%		

ETD Tracker – FIA’s Data Visualization Tool

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.



Overview – Global Volume and Open Interest in Q1 2023

Type	Jan-Mar 2023 Volume	Change vs. Last Year	Mar 2023 Open Interest	Change vs. Last Year
Options	20,324,735,282	73.0%	881,885,772	8.5%
Futures	7,213,684,649	-2.6%	287,959,556	-0.2%
Total	27,538,419,931	43.8%	1,169,845,328	6.2%

Region	Jan-Mar 2023 Volume	Change vs. Last Year	Mar 2023 Open Interest	Change vs. Last Year
Asia-Pacific	18,729,381,506	78.5%	120,433,613	14.3%
North America	4,709,302,215	7.0%	603,385,040	4.8%
Latin America	2,266,302,761	3.9%	167,813,284	24.1%
Europe	1,256,265,837	-13.2%	240,245,842	-1.6%
Other	577,167,612	-8.4%	37,967,549	-7.6%
Total	27,538,419,931	43.8%	1,169,845,328	6.2%

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

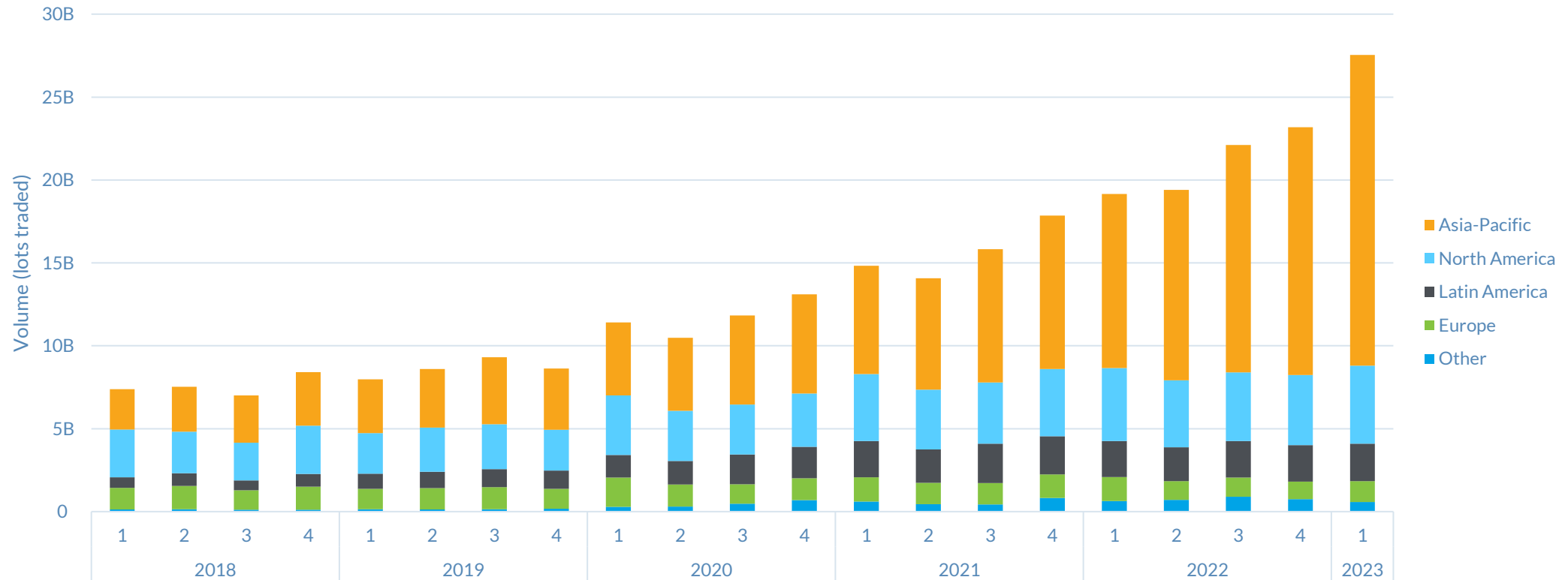
Overview – Global Volume and Open Interest in Q1 2023

Category	Jan-Mar 2023 Volume	Change vs. Last Year	Mar 2022 Open Interest	Change vs. Last Year
Equity	21,268,392,659	56.3%	788,087,279	3.6%
Currencies	2,017,940,929	9.6%	47,152,325	21.4%
Interest Rates	1,779,927,611	28.9%	186,018,140	6.5%
Other	710,083,676	21.0%	29,897,838	47.2%
Energy	614,955,887	5.9%	71,320,167	10.3%
Agriculture	574,696,407	-8.6%	28,094,733	5.4%
Metals	572,422,762	8.6%	19,274,846	21.3%
Total	27,538,419,931	43.8%	1,169,845,328	6.2%

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

Overview – Another Quarter of Record Volume

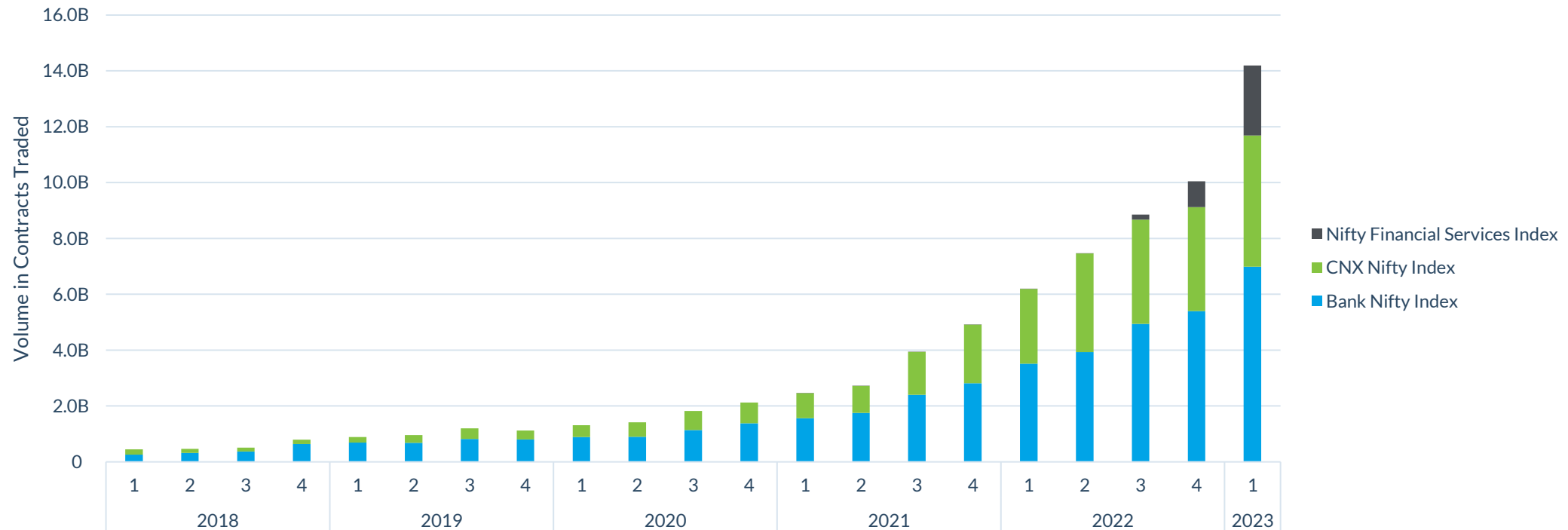
Global volume in Q1 2023 was 27.5 billion contracts, up 273% from 7.4 billion in Q1 2018



What's Driving the Growth in Trading Volume?

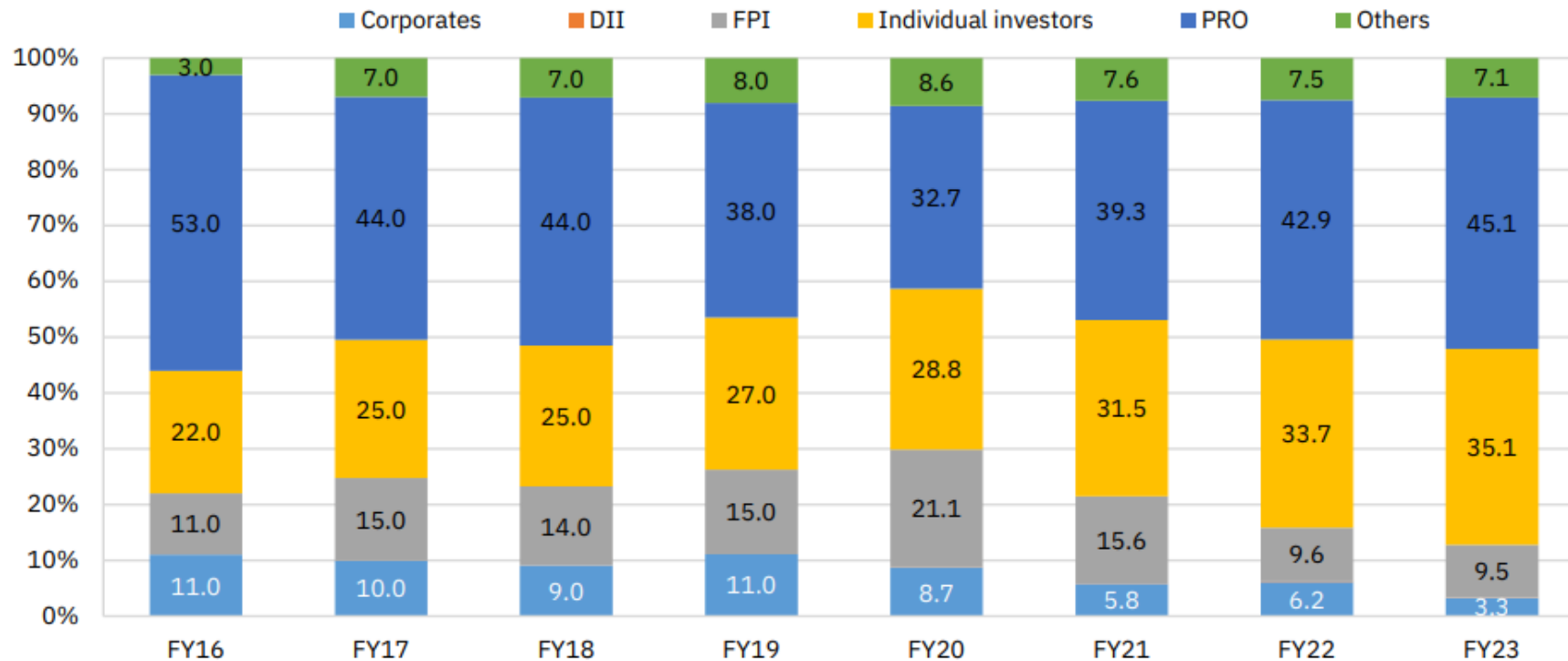
More than 14 billion equity index options traded on NSE India in the first quarter, up from 6.2 billion a year ago, and more than half of all futures and options traded worldwide

Top Three Index Options on NSE - Quarterly Volume



India's Equity Index Options: Trading Dominated by Proprietary Traders and Retail

Figure 149: Trends in share of client participation in Index Options (premium turnover) at NSE (%)



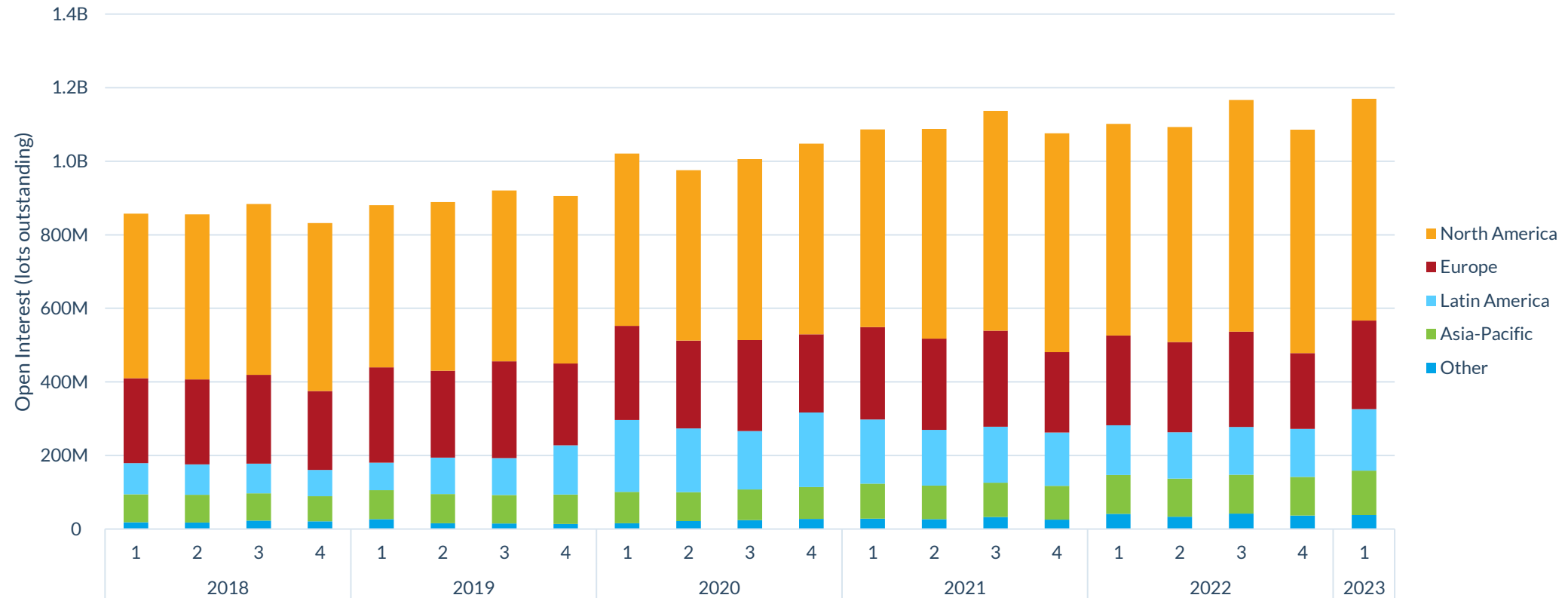
In FY 2023, 45% of turnover came from proprietary traders, 35% from retail, and 9.5% from foreign institutional investors.

Source: National Stock Exchange of India

Source: NSE EPR. Note: DII: Domestic Institutional Investors include Banks, Mutual Funds, Insurance Companies, NBFCs, Domestic VC Funds, AIFs, PMS clients etc., FII: Foreign Institutional Investors include FPIs, FDIs and Foreign VC Funds etc., Prop traders: Proprietary Traders, Individual investors: individual domestic investors, NRIs, sole proprietorship firms and HUFs, Others: Partnership Firms/LLP, Trust / Society, AIF, Depository Receipts, PMS clients, Statutory Bodies, OCB, FNs, etc. Above data represents share in gross turnover i.e., buy-side turnover + sell-side turnover.

Open Interest – Record High In Q1

Growth in APAC and LATAM pushes global open interest to 1.17 billion contracts in Q1



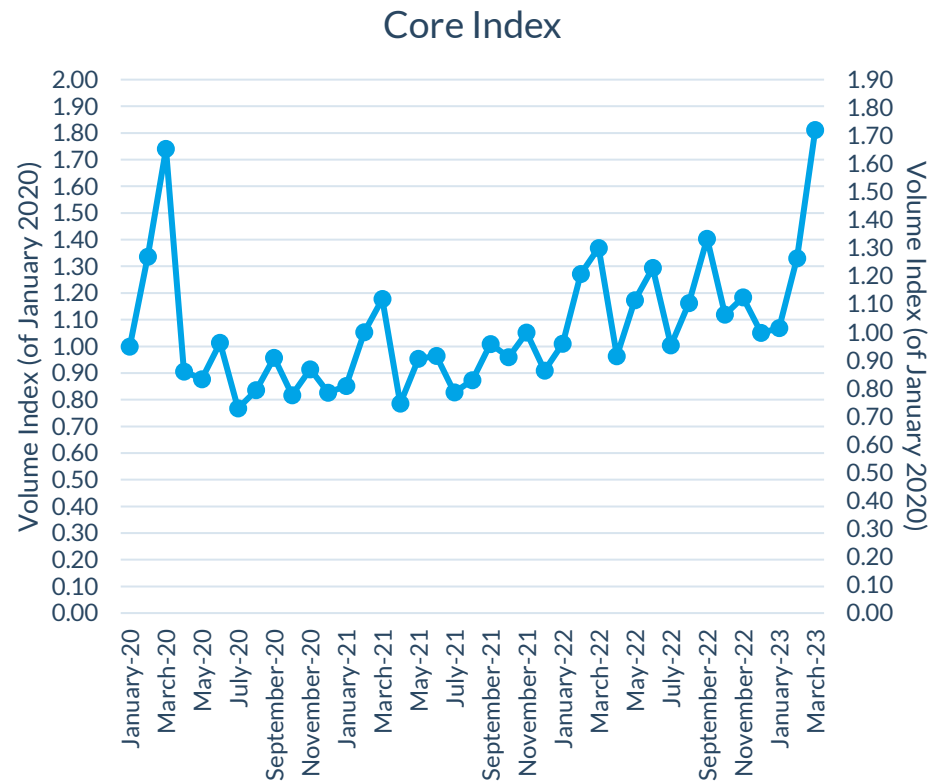


What's Happening in the Institutional Markets?

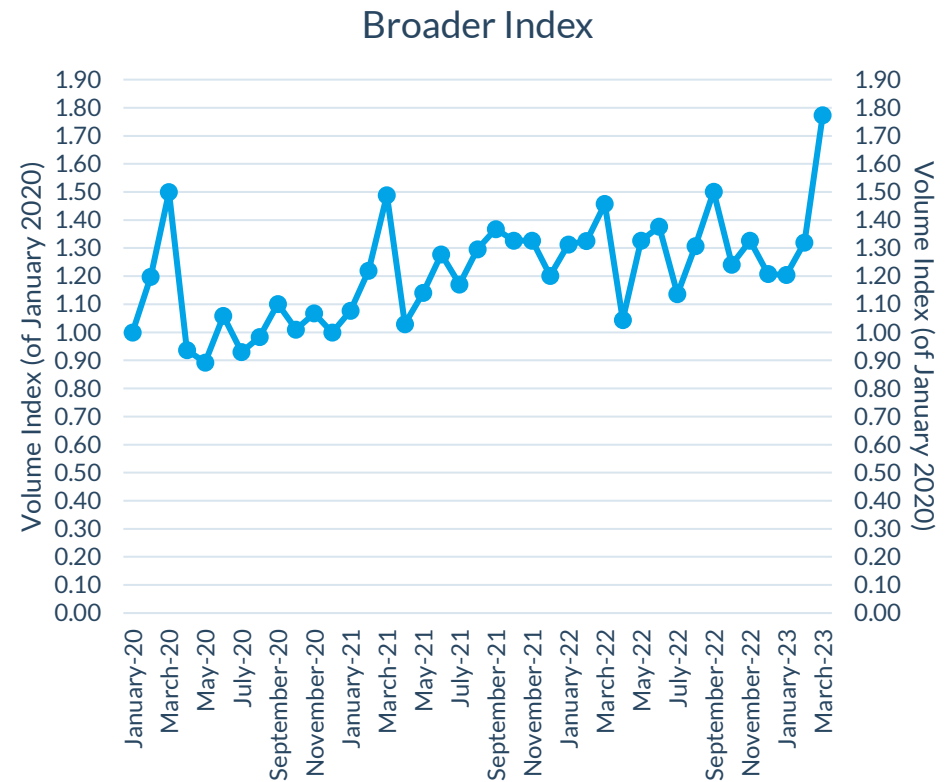
- Introducing two indices as proxies for tracking institutional use of futures at the global level
- The indices are based on volume in certain contracts widely used by asset managers, hedge funds, commodity producers and other institutional users
 - Core: 47 futures across four asset classes – equity indices, interest rates, commodities, and currencies
 - Broad: 100 futures across same four asset classes
- Selection parameters – volume, open interest, benchmark status, contract size, cross-border access. Micro and nano-sized contracts are excluded.
- Index starting point – January 2020
- Feedback welcomed at data@fia.org

Tracking Institutional Trading

Volume in core contracts see first large jump since the onset of the pandemic



Volume in the broader set of contracts has been trending higher since early 2022



Index Composition

Core Index = 47 contracts with relatively high volume, open interest and benchmark status

Broader Index = 47 contracts in the first tier plus 53 in the next tier

FIRST TIER					
	COMM	CURR	EQ	RATES	TOTAL
APAC	2		6	1	9
EMEA	6		5	6	17
AMER	8	3	5	5	21
TOTAL	16	3	16	12	47
NEXT TIER					
	COMM	CURR	EQ	RATES	TOTAL
APAC		2	7	5	14
EMEA	2		7	3	12
AMER	12	6	2	7	27
TOTAL	14	8	16	15	53

Contact data@fia.org for more information

Exchange Ranking – Part One

Rank	Exchange	Jan-Mar 2023 Volume	Change vs. 2022	Mar 2032 Open Interest	Change vs. 2022
1	National Stock Exchange of India	15,859,104,784	111.9%	25,934,527	1.2%
2	B3	2,095,817,191	-2.0%	163,973,761	35.2%
3	CME Group	1,666,448,886	3.7%	116,795,364	8.2%
4	Intercontinental Exchange *	984,677,177	6.2%	77,153,991	1.1%
5	Cboe Global Markets *	923,126,726	9.1%	345,629	13.4%
6	Nasdaq *	831,872,050	1.9%	5,704,335	-8.6%
7	Zhengzhou Commodity Exchange	673,319,657	37.2%	17,118,842	85.4%
8	Eurex	553,525,530	1.4%	142,640,779	-4.2%
9	Borsa Istanbul	501,657,651	-13.3%	13,301,592	-41.4%
10	Korea Exchange	500,457,851	0.3%	10,262,158	7.3%

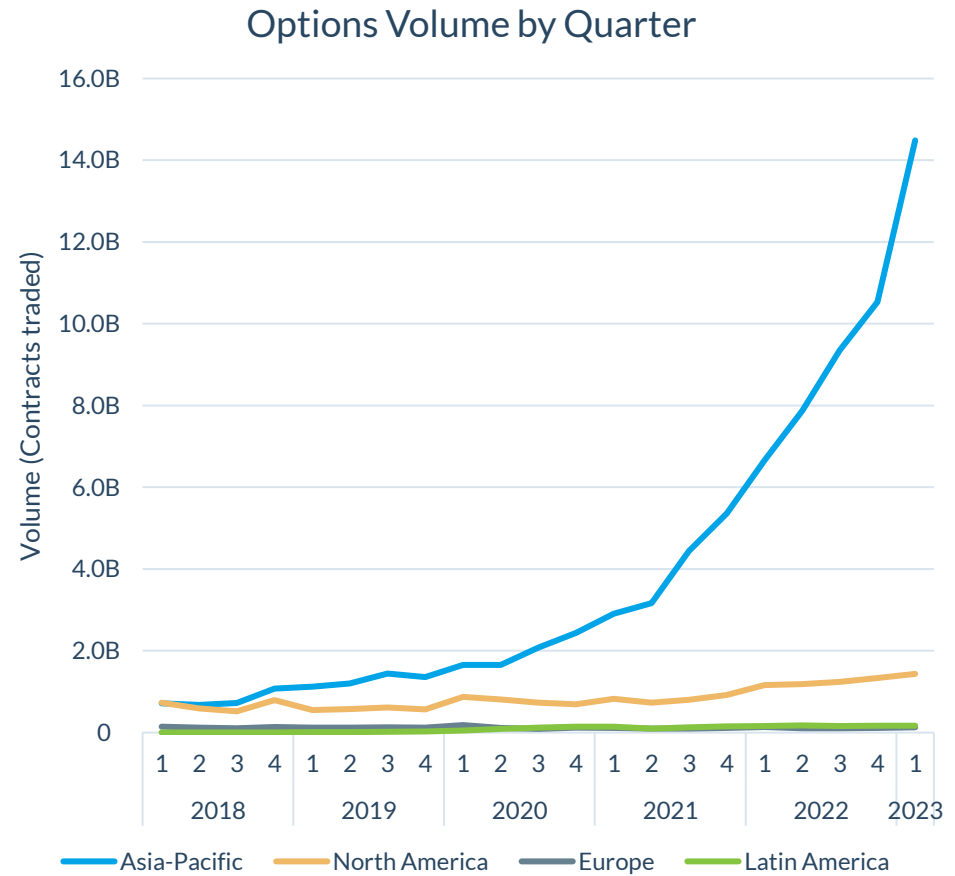
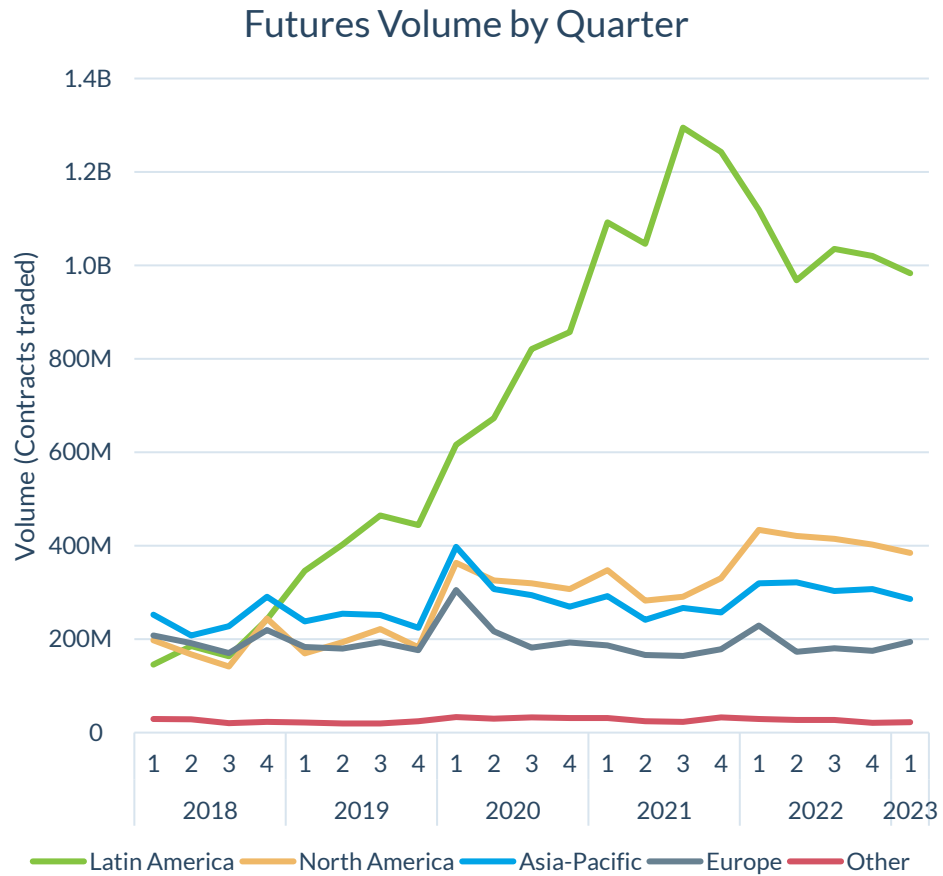
* Open interest at these exchange groups does not include US equity options cleared at OCC

Exchange Ranking – Part Two

Rank	Exchange	Jan-Dec 2022 Volume	Change vs. 2021	Dec 2022 Open Interest	Change vs. 2021
11	Shanghai Futures Exchange	488,736,621	14.8%	9,825,048	28.4%
12	Dalian Commodity Exchange	460,889,611	-21.2%	13,899,583	9.0%
13	Miami International Holdings *	434,618,588	24.7%	73,635	-1.3%
14	Moscow Exchange	250,439,279	-44.5%	15,010,864	279.4%
15	TMX Group *	205,460,316	9.0%	13,445,987	22.3%
16	BSE	179,931,295	-60.3%	3,077,368	9.9%
17	MATba ROFEX	167,099,025	297.5%	2,542,139	-80.5%
18	Hong Kong Exchanges and Clearing	120,536,063	-0.3%	15,664,462	17.1%
19	Japan Exchange Group	87,047,476	-21.3%	3,772,599	11.2%
20	Multi Commodity Exchange of India	80,371,834	76.3%	463,663	97.7%

* Open interest at these exchange groups does not include US equity options cleared at OCC

Equity Index Volume – By Region

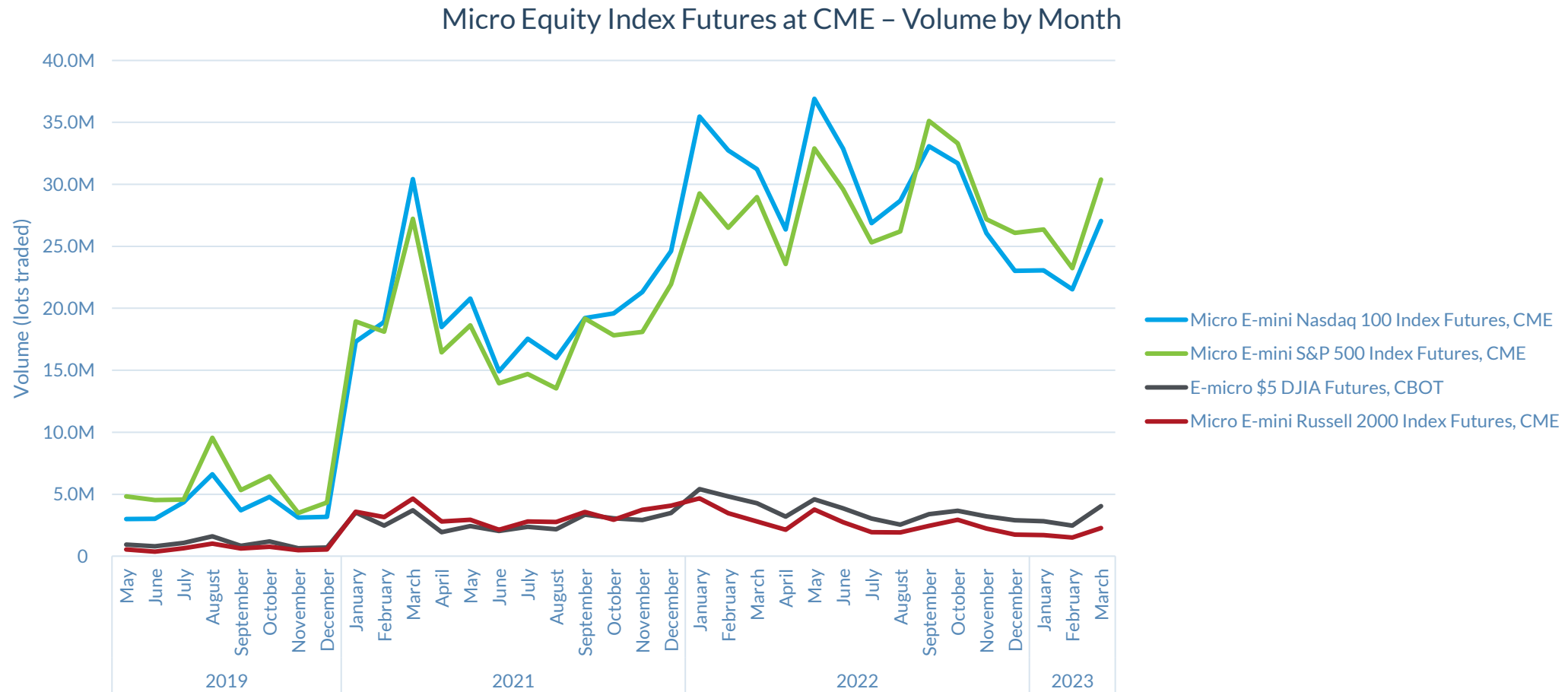


Equity Index – Top Contracts by Volume

Rank	Exchange	Jan-Mar 2023 Volume	Change vs. 2022	Mar 2023 Open Interest	Change vs. 2022
1	Bank Nifty Index Options, National Stock Exchange of India	6,989,899,277	99.0%	2,849,746	-0.3%
2	CNX Nifty Index Options, National Stock Exchange of India	4,697,608,247	75.1%	5,164,213	-0.6%
3	Nifty Financial Services Index Options, National Stock Exchange of India	2,504,989,139	144715.5%	1,058,992	283812.1%
4	Mini Ibovespa Index (WIN) Futures, B3	972,362,585	-12.2%	1,175,547	34.4%
5	SPDR S&P 500 ETF Options *	579,427,624	35.6%	23,027,762	30.5%
6	Powershares QQQ ETF Options *	189,532,110	19.4%	13,068,144	24.0%
7	S&P 500 Index (SPX) Options, Cboe Options Exchange	170,293,669	58.9%	18,992,158	18.8%
8	E-mini S&P 500 Futures, Chicago Mercantile Exchange	126,348,593	3.8%	2,218,326	4.9%
9	Kospi 200 Options, Korea Exchange	115,061,432	-8.9%	2,502,710	16.8%
10	Micro E-mini S&P 500 Index Futures, Chicago Mercantile Exchange	79,986,758	-5.6%	135,888	40.1%
11	Euro Stoxx 50 Index Futures, Eurex	75,244,389	1.9%	3,520,565	-5.8%
12	Micro E-mini Nasdaq 100 Index Futures, Chicago Mercantile Exchange	71,662,668	-27.9%	76,146	-10.9%
13	Euro Stoxx 50 Index Options, Eurex	64,724,867	-10.4%	32,419,874	-2.3%
14	Kospi 200 Weekly Options, Korea Exchange	63,176,454	22.0%	108,991	249.3%
15	iShares Russell 2000 ETF Options *	60,712,904	13.7%	9,807,156	40.1%

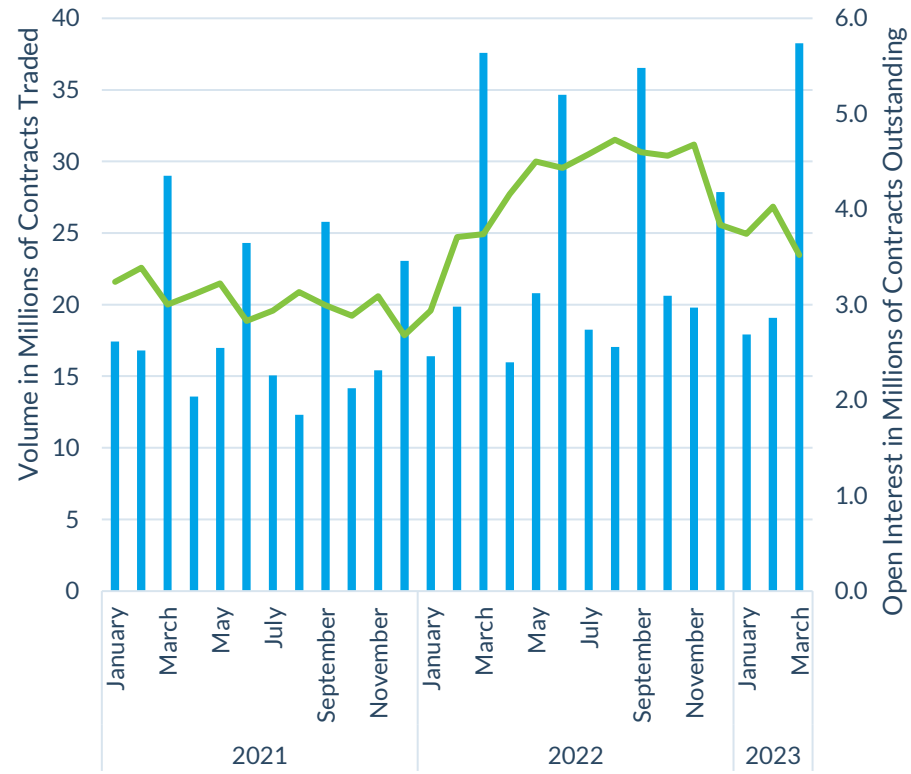
* Traded on multiple US options exchanges

US Retail – Trading of CME Micros Rebounds in Q1

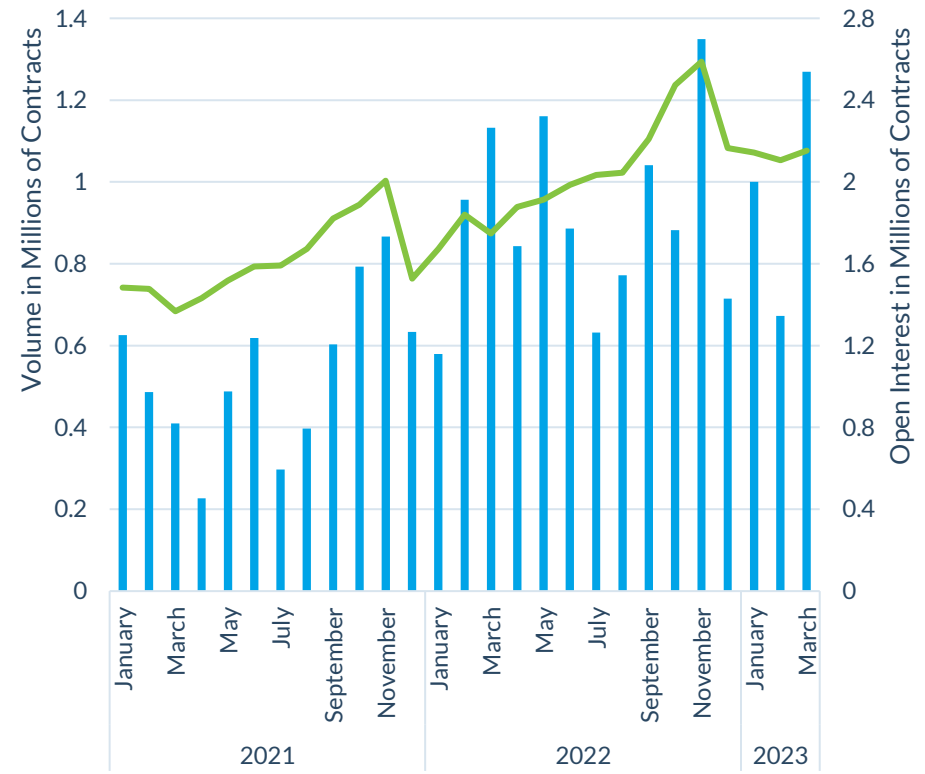


EU Institutional – Total Return Futures Gaining Traction on Eurex

Trading of traditional Eurostoxx 50 futures roughly unchanged from Q1 2022 ...

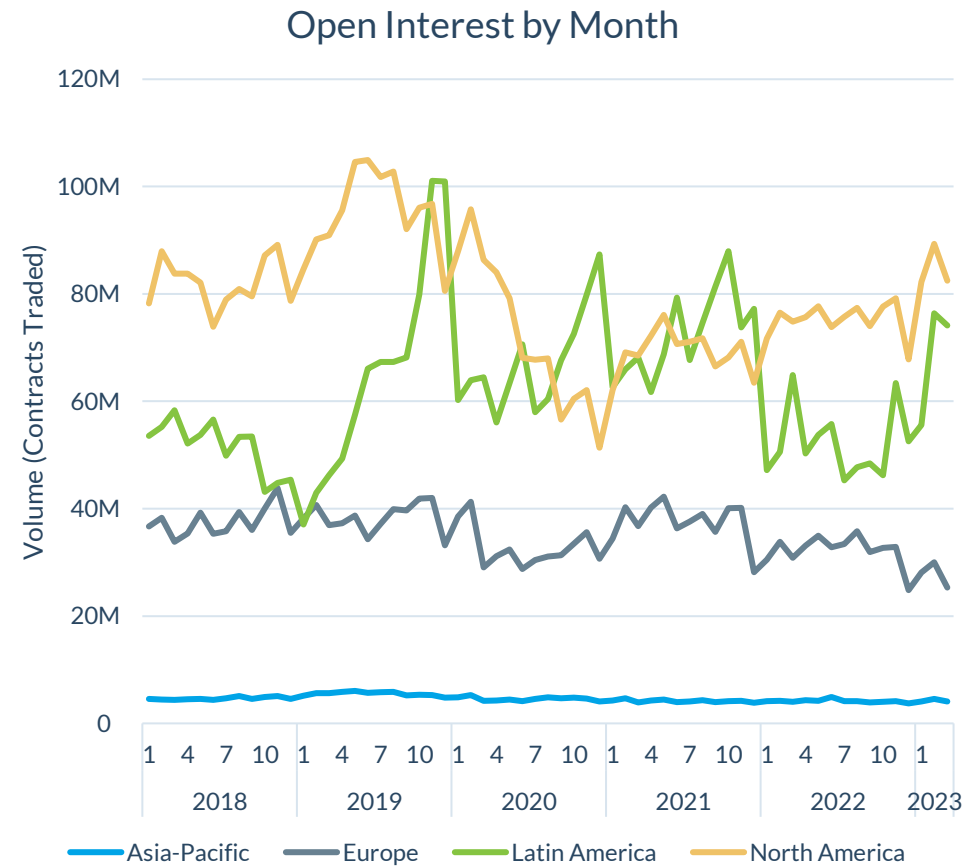
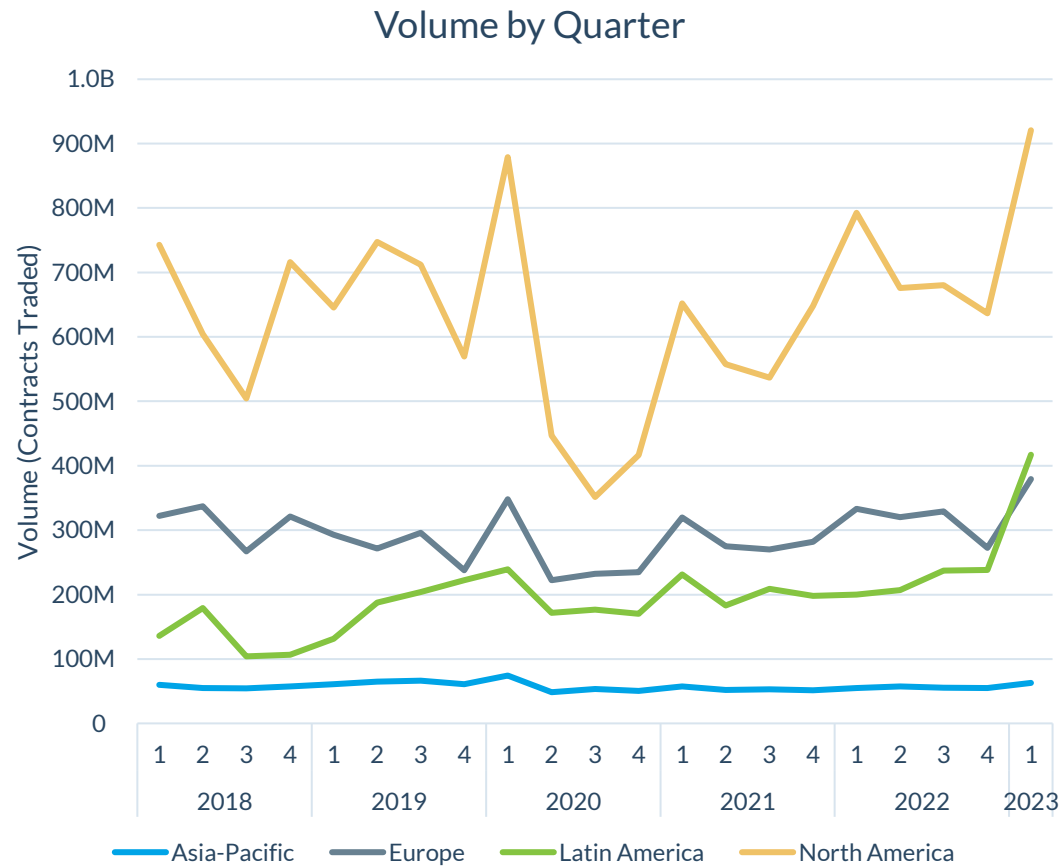


... but total return version gains in both volume and open interest

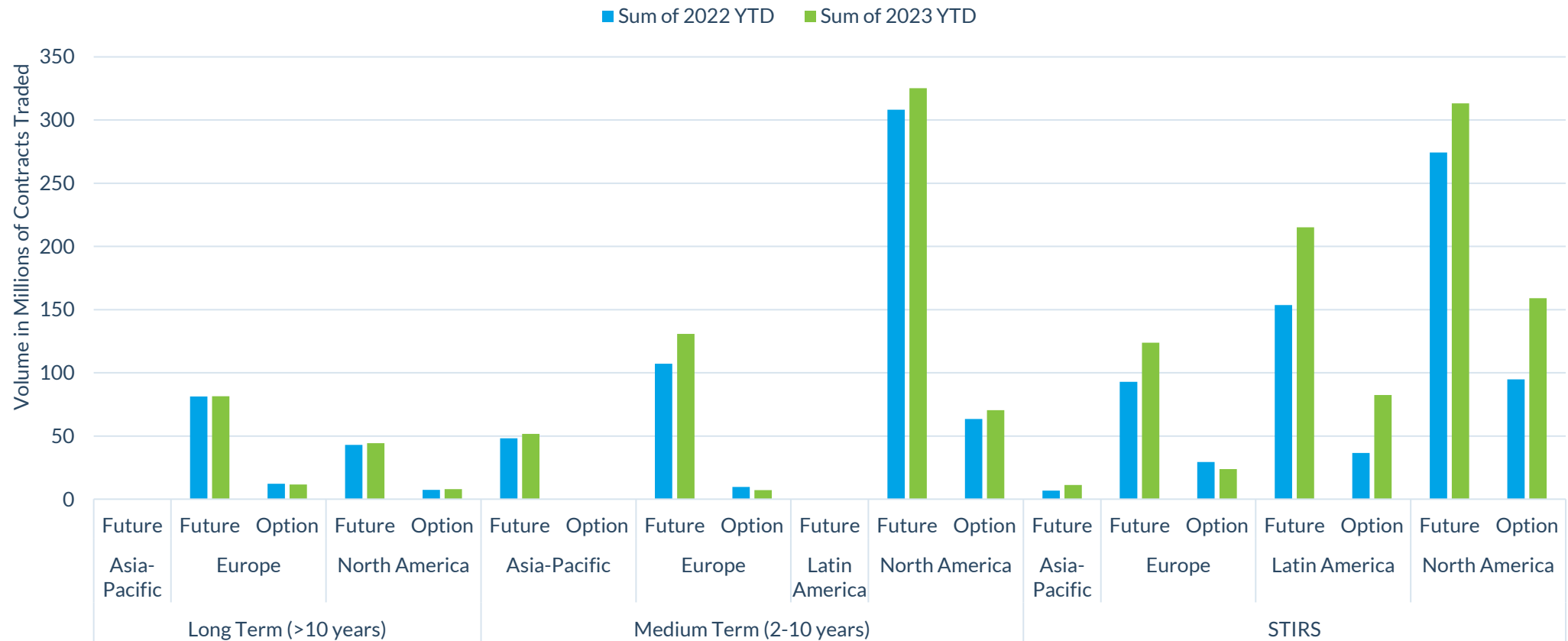


Note: Volume on left axis, Open Interest on right axis

Interest Rate Futures and Options - Overview



Interest Rates – Comparing Year-over-Year Growth in Futures and Options Volume

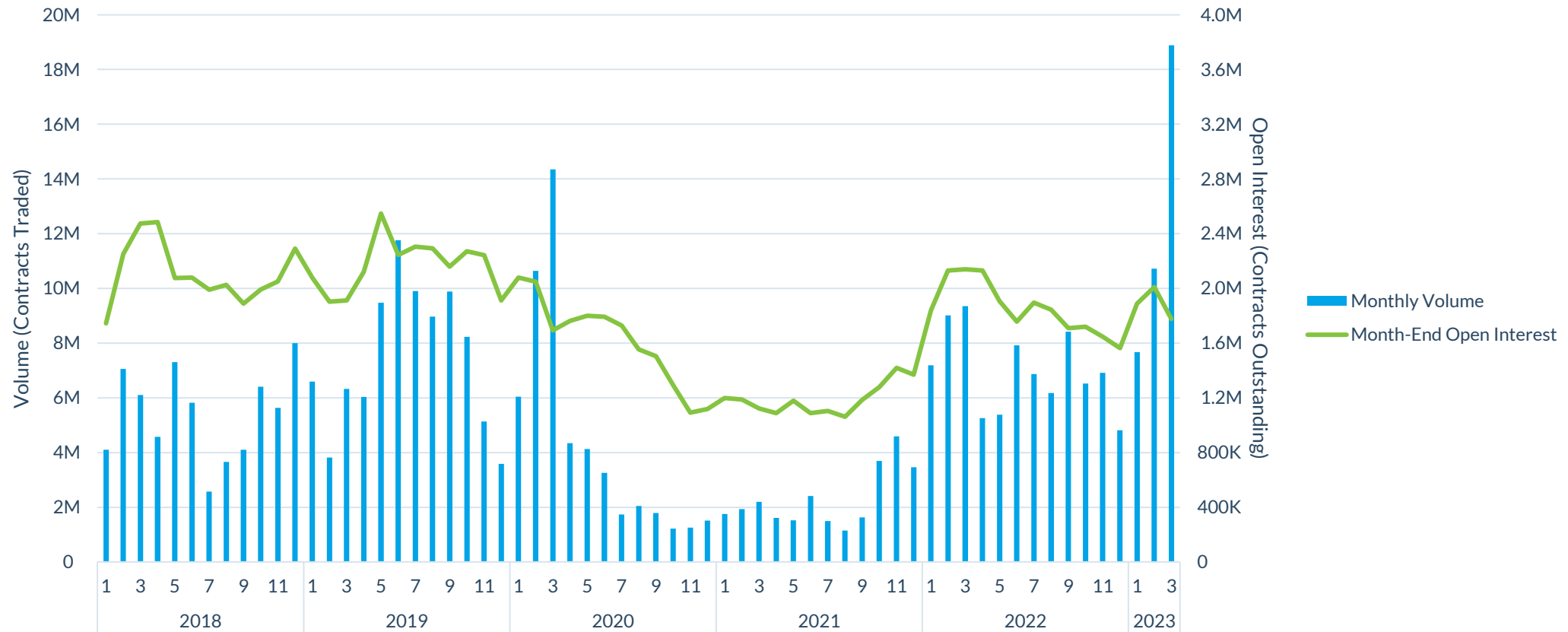


STIRS – Top Contracts by Q1 Volume

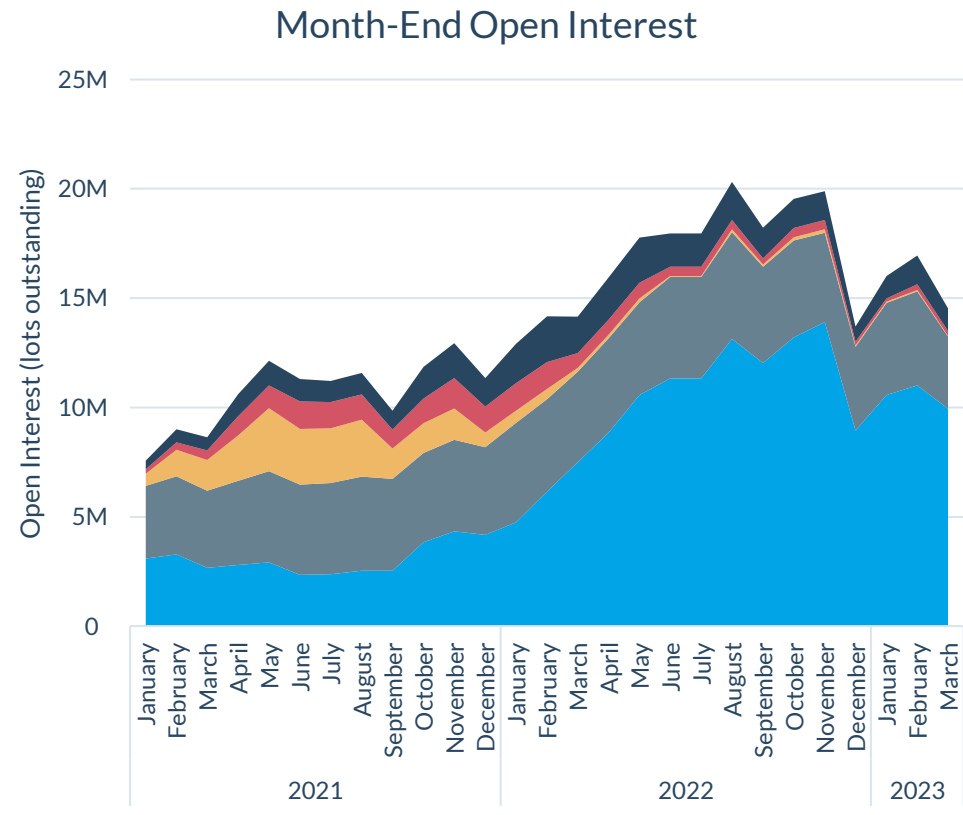
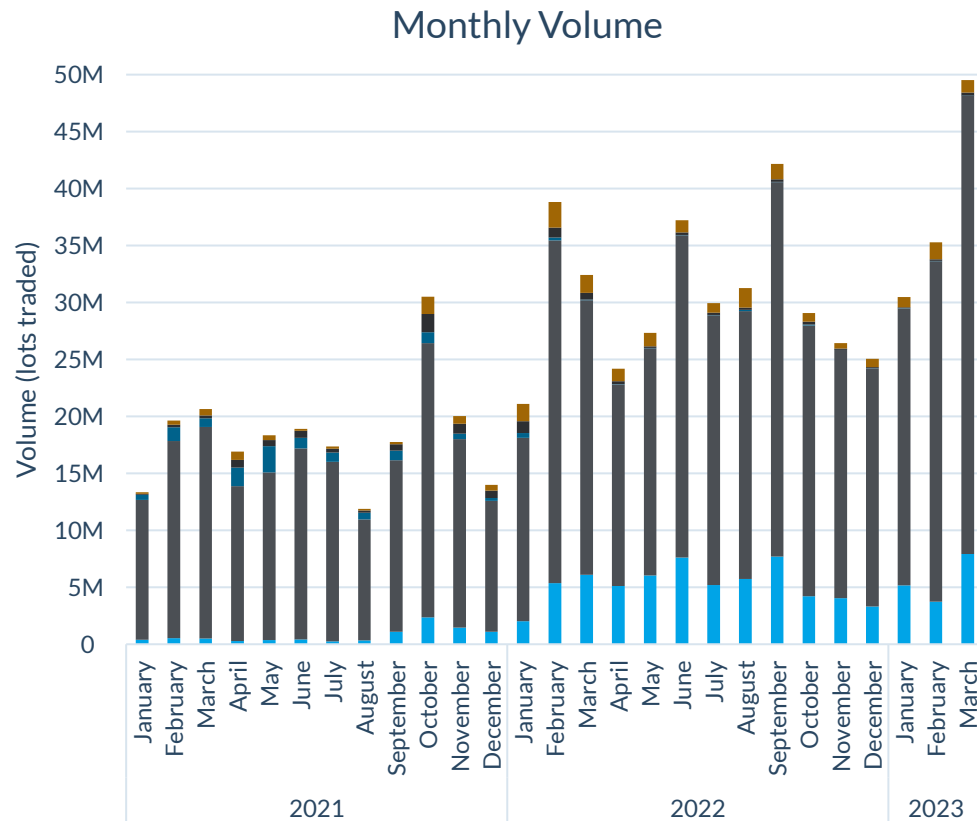
Rank	Exchange	Jan-Mar 2023 Volume	Change vs. 2022	Mar 2023 Open Interest	Change vs. 2022
1	3 Month SOFR Futures, Chicago Mercantile Exchange	230,847,281	230.7%	9,391,466	131.5%
2	One-Day Interbank Deposit (DI1) Futures, B3	211,541,432	40.1%	27,234,419	14.1%
3	3 Month SOFR Options, Chicago Mercantile Exchange	150,578,311	6128.2%	38,427,617	2700.1%
4	3 Month Euribor Futures, ICE Futures Europe	94,454,951	34.4%	3,307,475	-20.1%
5	Average One-Day Interbank Deposit Rate Index (IDI) Options, B3	82,374,846	125.7%	41,205,212	64.3%
6	Federal Funds Futures, Chicago Board of Trade	37,274,561	45.9%	1,777,193	-16.9%
7	3 Month SONIA Futures, ICE Futures Europe	27,476,435	36.5%	1,205,127	-36.5%
8	Eurodollar Futures, Chicago Mercantile Exchange	26,264,348	-84.5%	4,704,737	-57.2%
9	3 Month Euribor Options, ICE Futures Europe	16,846,309	24.6%	9,939,666	32.6%
10	1 Month SOFR Futures, Chicago Mercantile Exchange	11,440,257	150.1%	838,137	102.1%
11	90 Day Bank Bill Futures, ASX 24	9,640,218	83.1%	857,369	-8.5%
12	Eurodollar Options, Chicago Mercantile Exchange	7,903,854	-85.7%	5,472,834	-78.6%
13	3 Month BAX Futures, Montreal Exchange	6,425,908	30.6%	516,015	-42.5%
14	3 Month Euribor 1 Year Mid Curve Options, ICE Futures Europe	3,502,079	-34.2%	1,048,845	-37.3%
15	DI x IPCA Spread (DAP) Futures, B3	2,703,817	36.8%	1,484,225	30.4%

Fed Fund Futures – Abrupt Shift in Rate Expectations

Record trading in March as bank failures cloud outlook for Fed policy



Euribor Volume Jumps, But Open Interest Eases



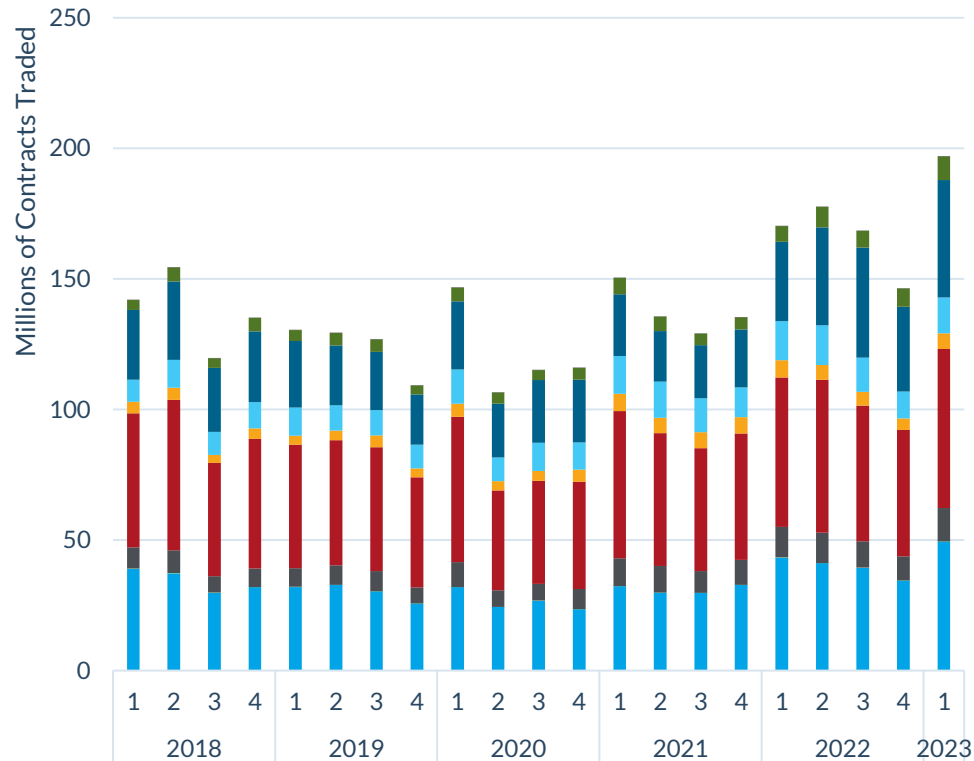
- 3 Month Euribor Options
- 3 Month Euribor Futures
- 3 Month Euribor 4 Year Mid Curve Options
- 3 Month Euribor 3 Year Mid Curve Options
- 3 Month Euribor 2 Year Mid Curve Options
- 3 Month Euribor 1 Year Mid Curve Options

Bonds – Top Contracts by Volume

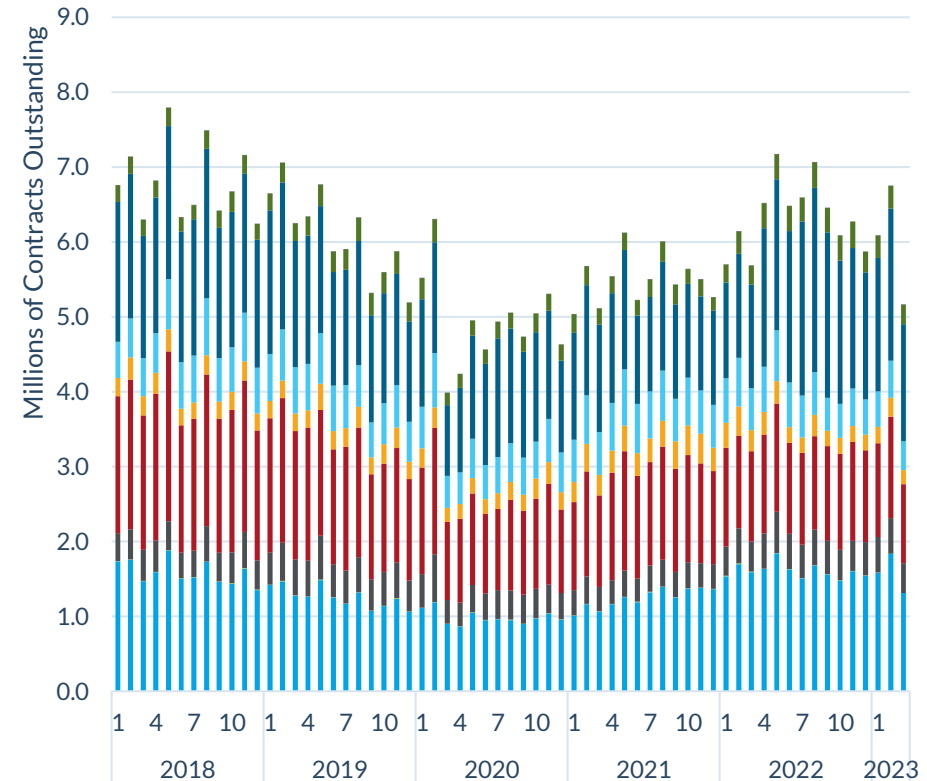
Rank	Exchange	Jan-Mar 2023 Volume	Change vs. 2022	Mar 2023 Open Interest	Change vs. 2022
1	10 Year Treasury Note Futures, Chicago Board of Trade	132,098,951	0.3%	4,248,005	14.5%
2	5 Year Treasury Note Futures, Chicago Board of Trade	97,245,421	7.8%	4,415,991	18.4%
3	Euro-Bund Futures, Eurex	60,992,442	6.5%	1,055,179	-12.4%
4	2 Year Treasury Note Futures, Chicago Board of Trade	50,173,204	14.0%	2,373,250	5.5%
5	Euro-Bobl Futures, Eurex	49,490,146	14.3%	1,311,614	-17.6%
6	10 Year Treasury Note Options, Chicago Board of Trade	49,022,692	7.6%	2,574,273	-17.2%
7	Euro-Schatz Futures, Eurex	44,973,997	48.4%	1,564,019	13.0%
8	Ultra 10 Year Treasury Note Futures, Chicago Board of Trade	29,870,479	7.6%	1,574,140	17.2%
9	30 Year Treasury Bond Futures, Chicago Board of Trade	26,706,285	-1.6%	1,191,819	5.6%
10	5 Year Treasury Note Options, Chicago Board of Trade	20,316,415	14.1%	1,555,883	-6.2%
11	Ultra Treasury Bond Futures, Chicago Board of Trade	17,578,820	11.2%	1,405,500	8.7%
12	Long Gilt Futures, ICE Futures Europe	14,614,314	-15.6%	390,548	-42.6%
13	Euro-OAT Futures, Eurex	13,710,434	-8.3%	384,096	-31.1%
14	Euro-BTP Futures, Eurex	12,673,661	9.3%	394,461	-2.0%
15	3 Year Treasury Bond Futures, ASX 24	12,359,372	13.9%	761,592	-11.3%

Eurex Bond Futures – Rising Volume, Falling Open Interest

Q1 surge for bond futures volume ...



... but OI falls to two-year low



■ Euro-Bobli ■ Euro-Bono ■ Euro-BTP ■ Euro-Bund ■ Euro-Buxl ■ Euro-OAT ■ Euro-Schatz ■ Short Term Euro-BTP ■ Swiss Government Bond (CONF)



Marex Perspective: Five Themes Impacting Commodity Derivatives

- Futures vs. Swaps: Bank capital regulations vs. ‘closed door’ margin/collateral requirements.
- Commodities as an Asset Class: Enhanced-beta and risk premia. Growth of quant as a strategy.
- Interest Rates and Volatility: Significant impact on margin requirements and cost of hedging inventory.
- Geopolitics: End of globalisation and increase in basis risk
- Decarbonisation Agenda: 20+ year impact on supply/demand dynamics for many commodities.



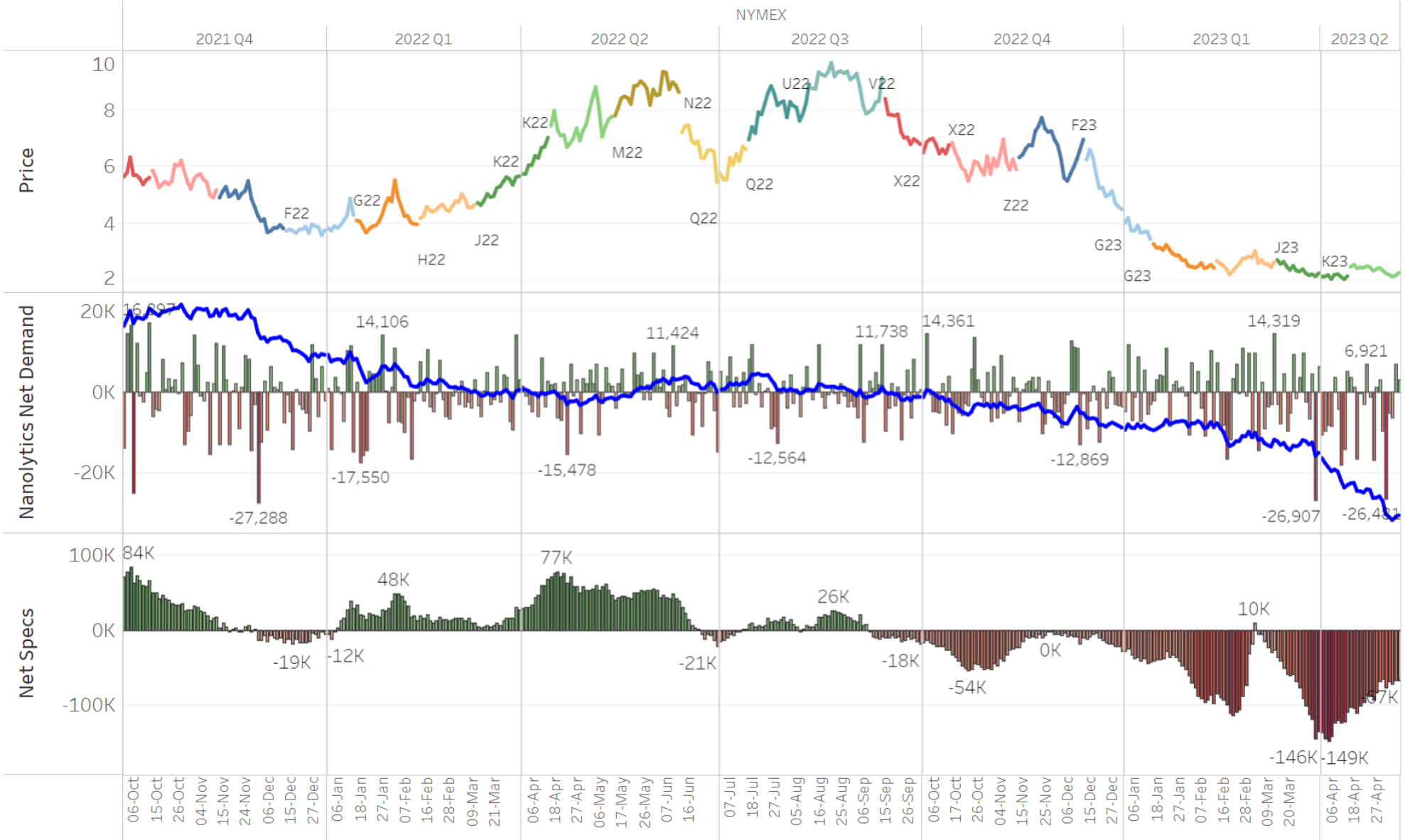
Marex Perspective: Evolution of quantitative investing in commodities

- Quant involvement in commodities is not new but it does evolve.
 - 1970's onwards: CTAs, "Turtle Traders", momentum strategies.
 - 2000 onwards: Passive long-only indices – S&P GSCI, BCOM.
 - 2010 onwards: Optimal roll yield long-only - Dynamic Roll' or 'Roll Select'
 - 2016 onwards: Risk Premia – Carry-extraction from term structure and volatility.
 - 2023 onwards: ?
- Quantitative strategies always come back in a different form having 'learned the lesson' of the previous cycle.

Energy – Top Contracts by Volume

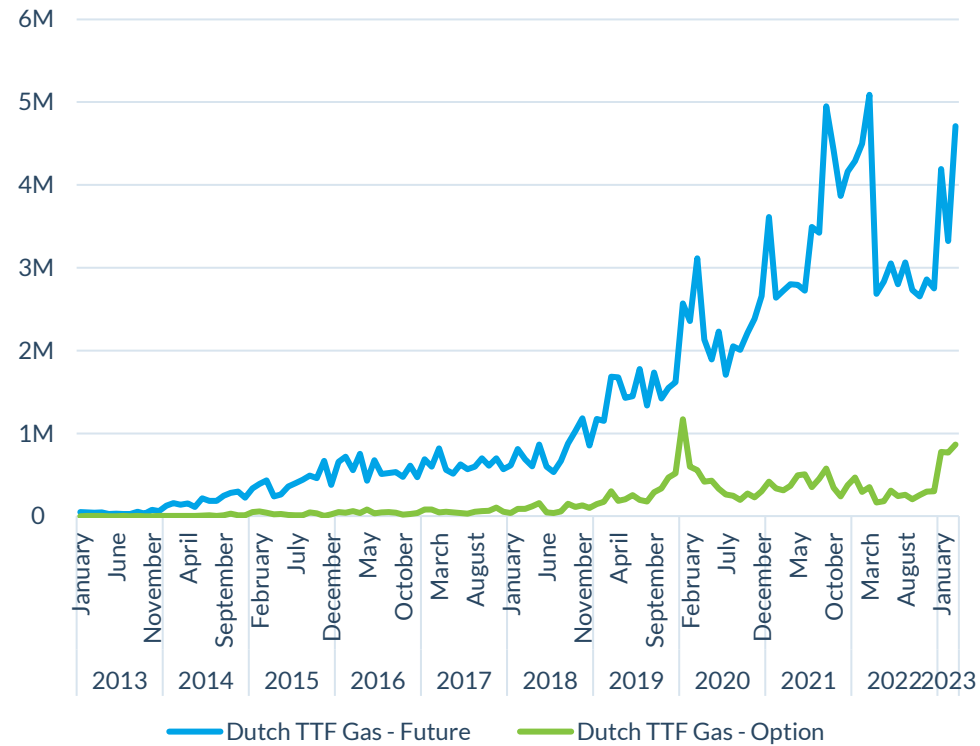
Rank	Exchange	Size	Jan-Mar 2023 Volume	Change vs. 2022	Mar 2023 Open Interest	Change vs. 2022
1	Henry Hub Natural Gas Futures, Moscow Exchange	100 MMBTU	65,400,125	626.8%	905,346	5725.2%
2	Fuel Oil Futures, Shanghai Futures Exchange	10 Metric Tons	63,563,409	85.0%	565,404	47.6%
3	Brent Crude Oil Futures, ICE Futures Europe	1,000 Barrels	63,261,839	-10.8%	2,210,755	17.3%
4	WTI Light Sweet Crude Oil (CL) Futures, NYMEX	1,000 Barrels	50,564,078	-24.9%	1,838,157	1.8%
5	Crude Oil Options, Multi Commodity Exchange of India	100 Barrels	37,015,886	239.7%	52,676	112.4%
6	Bitumen Futures, Shanghai Futures Exchange	10 Metric Tons	30,310,922	-19.5%	601,588	2.6%
7	Henry Hub Natural Gas (NG) Futures, NYMEX	10,000 MMBTU	26,018,473	9.5%	1,338,812	19.1%
8	Gas Oil Futures, ICE Futures Europe	100 Metric Tons	18,428,234	-10.2%	572,412	7.8%
9	Brent Oil Futures, Moscow Exchange	10 Barrels	13,797,942	-78.1%	364,788	213.9%
10	Dutch TTF Gas Futures, ICE Endex	1 MW/Day	12,225,434	-11.9%	1,088,458	-9.3%
11	WTI Light Sweet Crude Oil Futures, ICE Futures Europe	1,000 Barrels	12,007,104	-7.8%	471,946	-7.6%
12	Medium Sour Crude Oil Futures, Shanghai INE	1,000 Barrels	10,881,466	-18.7%	61,119	10.7%
13	Natural Gas Options, Multi Commodity Exchange of India	1250 MMBTU	10,797,665	721.5%	36,393	301.1%
14	Low Sulfur Fuel Oil Futures, Shanghai INE	10 Metric Tons	10,654,928	80.5%	151,634	153.2%
15	RBOB Gasoline Physical (RB) Futures, NYMEX	42,000 Gallons	9,986,989	-19.4%	307,895	8.4%

Nat Gas (NYMEX)

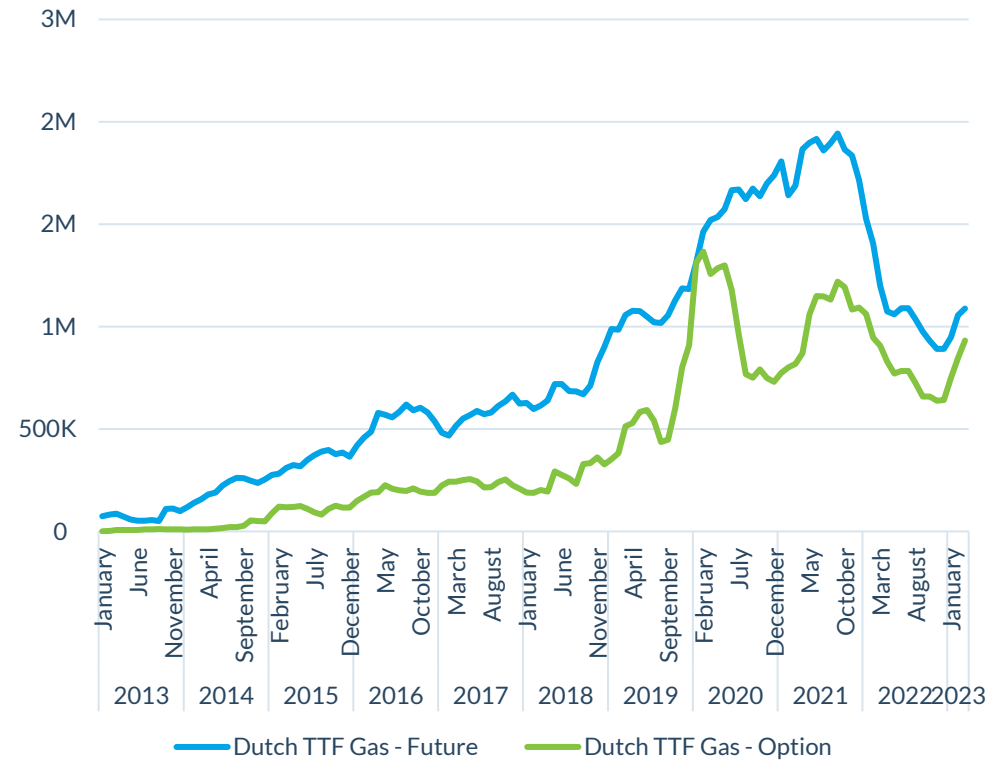


Nat Gas in Europe – Lasting Impact of Ukraine Shock

ICE TTF futures and options volume rebounds in Q1 ...



... but open interest remains well below peak set in mid-2021

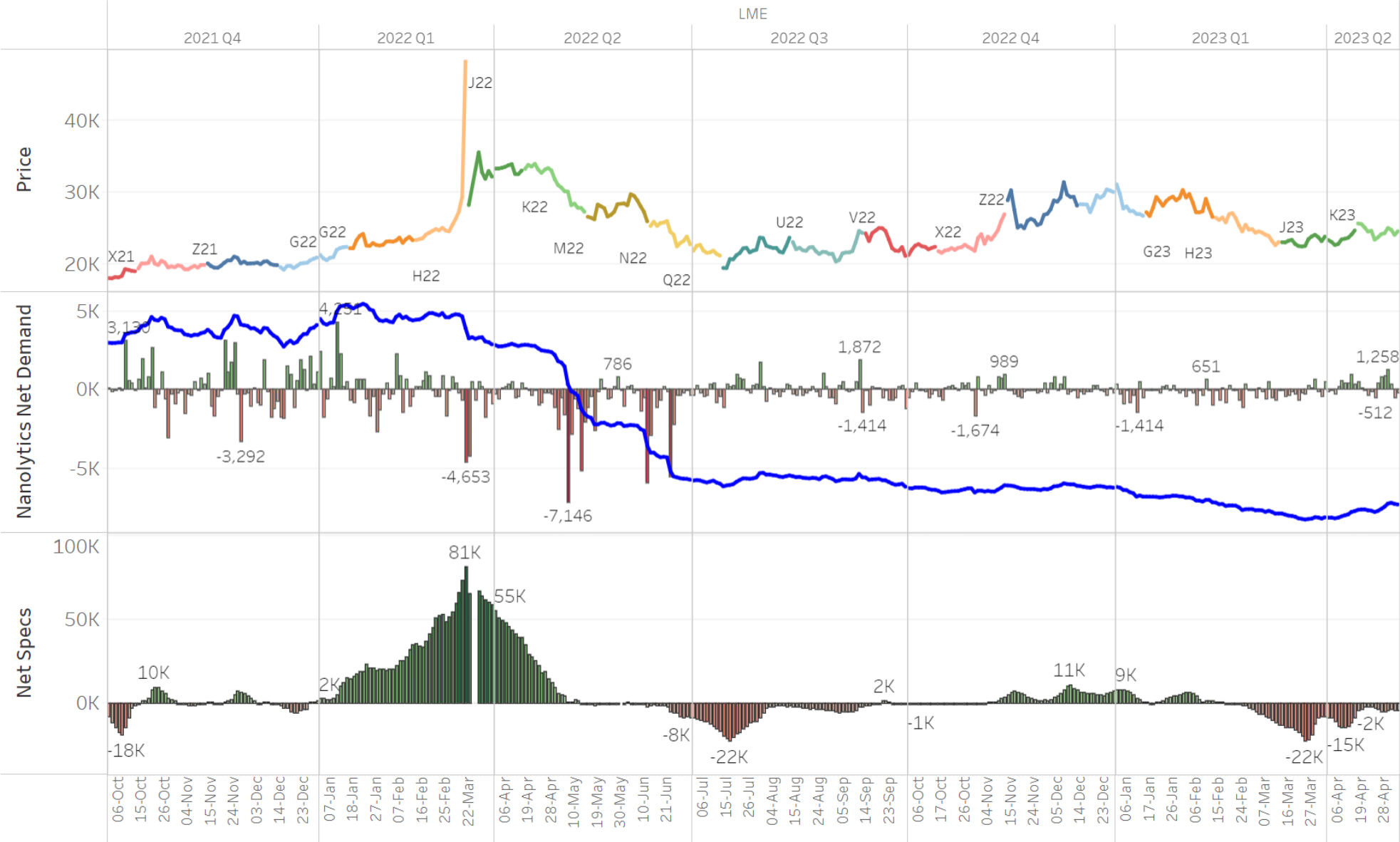


Industrial Metals – Top Contracts by Volume

Rank	Exchange	Size	Jan-Mar 2023 Volume	Change vs. 2022	Mar 2023 Open Interest	Change vs. 2022
1	Steel Rebar Futures, Shanghai Futures Exchange	10 Metric Tons	133,623,905	29.7%	2,799,475	14.6%
2	Silver Futures, Shanghai Futures Exchange	15 Kilograms	59,601,770	50.7%	1,053,746	62.6%
3	Iron Ore Futures, Dalian Commodity Exchange	100 Metric Tons	47,311,251	-9.3%	1,378,298	34.9%
4	Hot Rolled Coil Futures, Shanghai Futures Exchange	10 Metric Tons	27,998,615	-15.5%	1,019,412	2.2%
5	Aluminum Futures, Shanghai Futures Exchange	25 Metric Tons	16,703,640	-43.0%	460,979	8.1%
6	Iron Ore Options, Dalian Commodity Exchange	100 Metric Tons	15,776,083	107.6%	701,078	106.8%
7	Ferrosilicon (SF) Futures, Zhengzhou Commodity Exchange	5 Metric Tons	15,633,615	-4.6%	439,581	72.2%
8	Aluminium Futures, London Metal Exchange	25 Tons	12,989,133	-13.5%	740,234	7.6%
9	Silicon Manganese (SM) Futures, Zhengzhou Commodity Exchange	5 Metric Tons	12,416,359	52.8%	463,405	75.9%
10	Tin Futures, Shanghai Futures Exchange	1 Metric Ton	11,369,981	99.2%	100,843	102.8%
11	Nickel Futures, Shanghai Futures Exchange	1 Metric Ton	11,044,482	-50.3%	142,959	59.5%
12	Zinc Futures, Shanghai Futures Exchange	5 Metric Tons	10,851,396	-28.9%	165,925	-18.1%
13	Steel Rebar Options, Shanghai Futures Exchange ¹	10 Metric Tons	10,118,354	n/a	349,214	n/a
14	Copper Futures, Shanghai Futures Exchange	5 Metric Tons	9,352,948	-5.1%	438,340	23.1%
15	Copper Grade A Futures, London Metal Exchange	25 Metric Tons	8,242,834	11.1%	308,400	2.8%

Note 1: Began trading in December 2022

Nickel (LME)

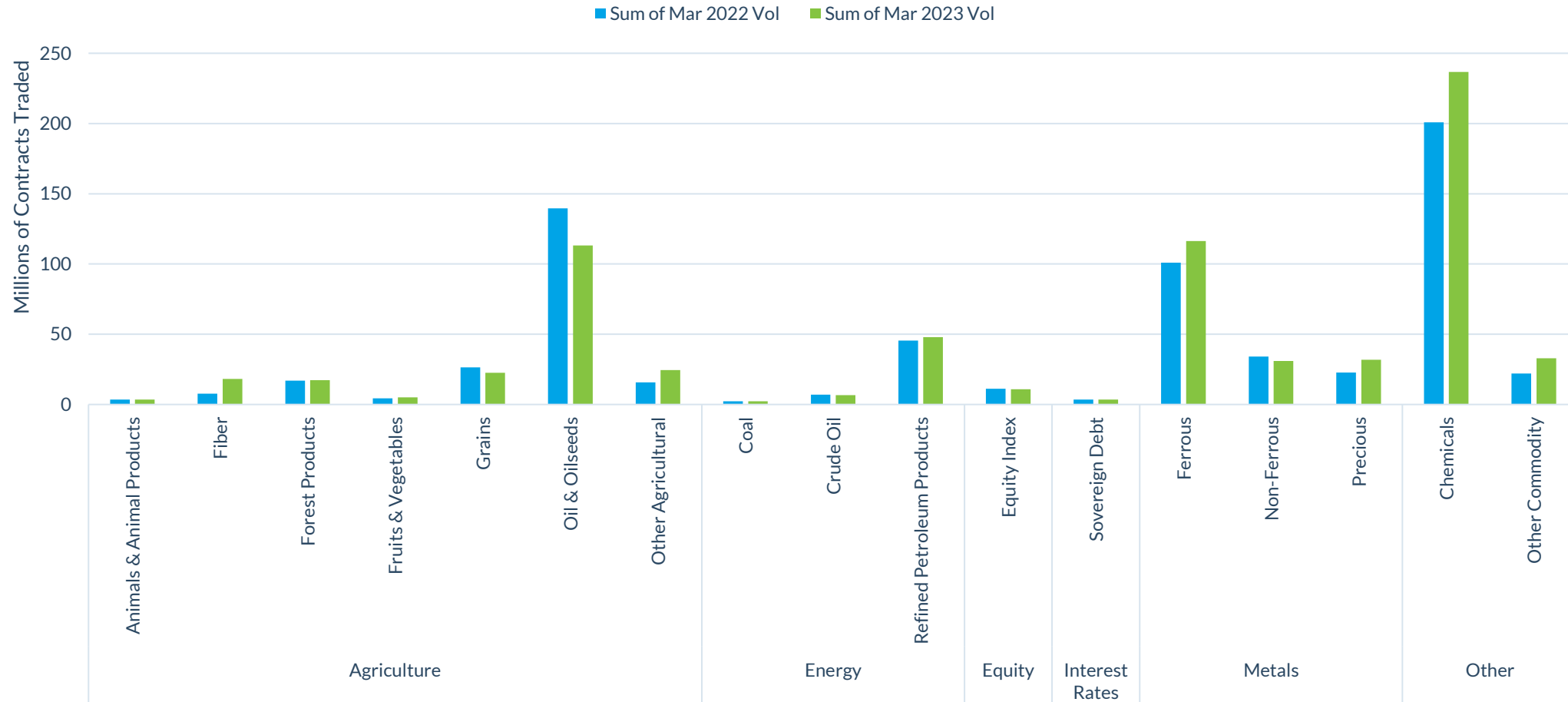


Industrial Metals – LME and Comex

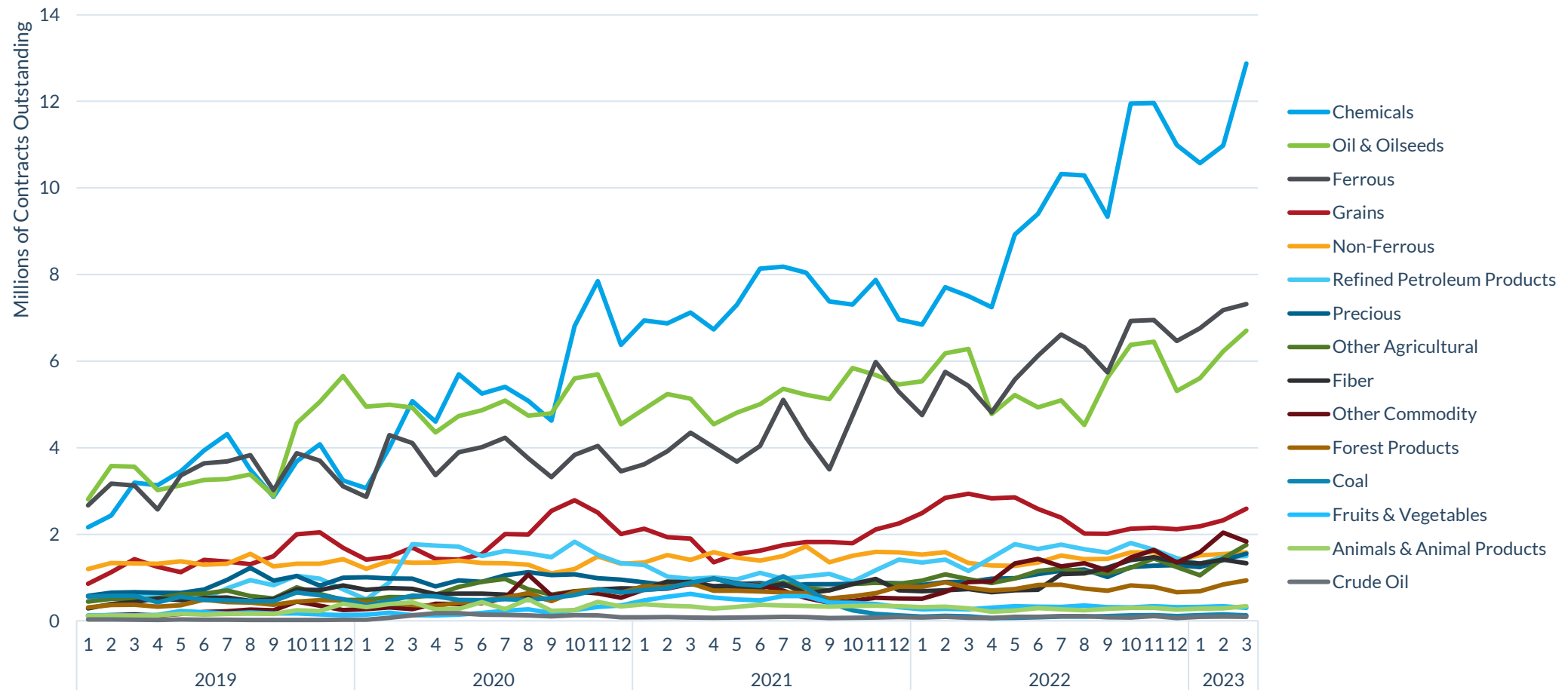
Rank	Exchange	Jan-Mar 2023 Volume	Change vs. 2022	Mar 2023 Open Interest	Change vs. 2022
1	Aluminium Futures, LME	12,989,133	-13.5%	740,234	7.6%
2	Copper Grade A Futures, LME	8,242,834	11.1%	308,400	2.8%
3	Copper (HG) Futures, COMEX	6,748,549	27.1%	218,280	4.1%
4	Special High Grade Zinc Futures, LME	4,932,236	-18.2%	218,980	-15.0%
5	Standard Lead Futures, LME	3,336,390	21.8%	117,306	-2.3%
6	Primary Nickel Futures, LME	2,263,985	-53.3%	155,936	-23.2%
7	High Grade Primary Aluminum Options, LME	625,540	-53.0%	173,149	-20.7%
8	Copper Grade A Options, LME	535,167	2.6%	135,096	25.3%
9	Copper (HX) Options, COMEX	517,559	156.3%	103,294	144.3%
10	Tin Futures, LME	290,279	6.6%	14,820	2.1%
11	Special High Grade Zinc Options, LME	275,899	-10.3%	47,604	-20.1%
12	Steel Scrap Futures, LME	226,098	115.2%	11,791	54.1%
13	Aluminum (ALI) Futures, COMEX	197,798	493.2%	2,882	642.8%
14	Standard Lead Options, LME	107,933	11.5%	17,263	-30.2%
15	US Midwest Domestic Hot-Rolled Coil Steel Futures, COMEX	103,112	20.4%	27,742	-14.9%

China – Wide Range of Commodity Futures Markets

Volume by Type of Commodity, Q1 2023 Compared to Q1 2022



China – Rising Open Interest in Three Commodity Groups

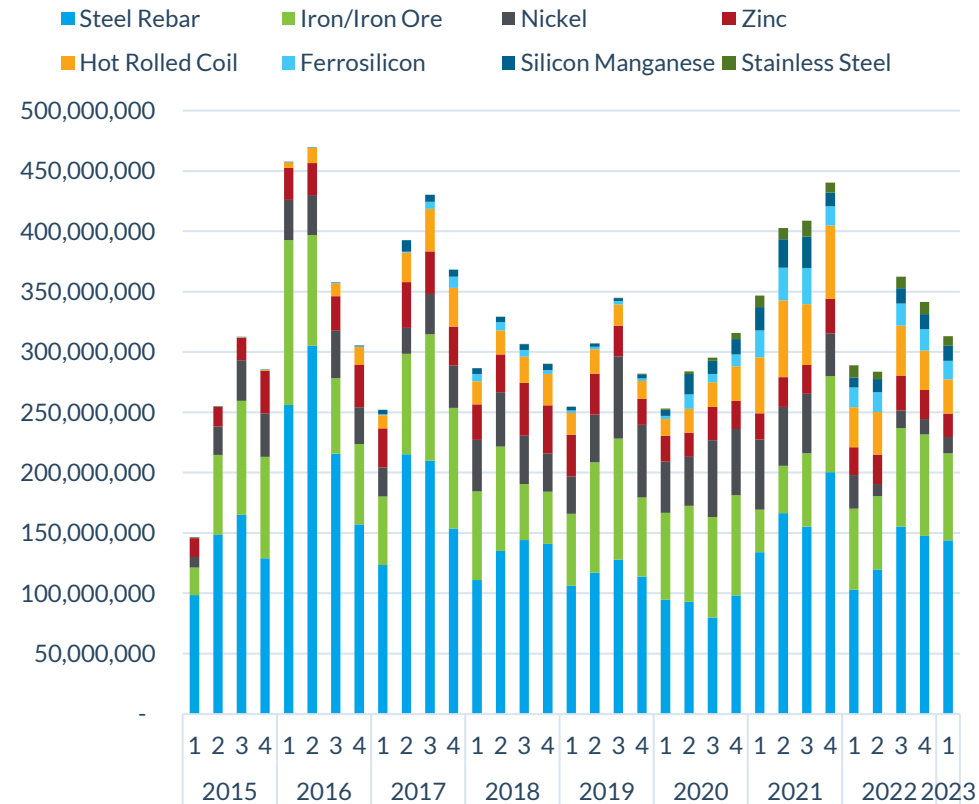


Industrial Materials Complex: Chemicals, Plastics and Other Commodities

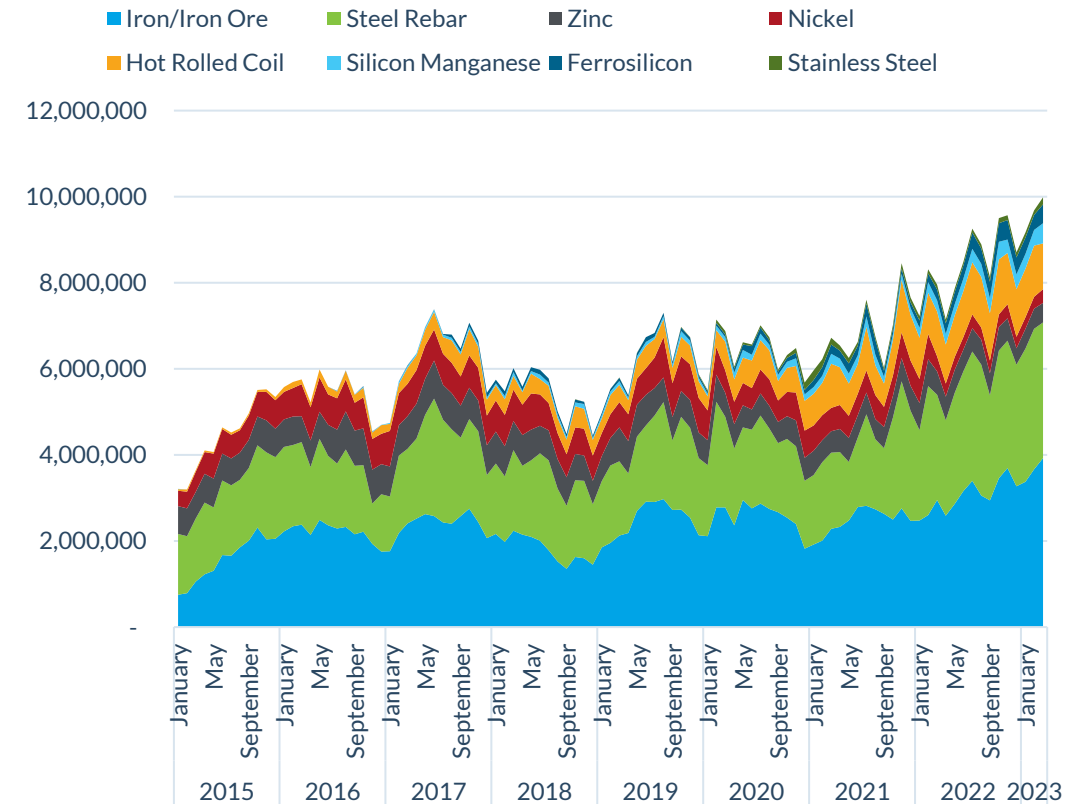
Rank	Exchange	Jan-Mar 2023 Volume	Change vs. 2022	Mar 2023 Open Interest	Change vs. 2022
1	Purified Terephthalic Acid (PTA) Futures, Zhengzhou Commodity Exchange	142,726,557	26.7%	3,561,161	87.1%
2	Methanol Futures, Zhengzhou Commodity Exchange	92,520,205	27.0%	2,679,903	85.0%
3	Soda Ash Futures, Zhengzhou Commodity Exchange	90,966,720	26.2%	1,389,303	75.8%
4	Flat Glass Futures, Zhengzhou Commodity Exchange	62,474,073	56.7%	1,456,489	93.8%
5	Polyvinyl Chloride (PVC) Futures, Dalian Commodity Exchange	59,859,096	-4.2%	1,052,916	44.4%
6	Purified Terephthalic Acid (PTA) Options, Zhengzhou Commodity Exchange	35,168,846	290.1%	817,453	291.8%
7	Polypropylene Futures, Dalian Commodity Exchange	29,109,162	-34.7%	775,689	26.2%
8	Linear Low Density Polyethylene (LLDPE) Futures, Dalian Commodity Exchange	22,254,727	-36.2%	593,192	-2.5%
9	Ethylene Glycol Futures, Dalian Commodity Exchange	20,019,546	-21.5%	556,948	23.7%
10	Polyester Staple Fiber Futures, Zhengzhou Commodity Exchange	18,911,445	65.5%	568,744	124.7%
11	Ethenylbenzene Futures, Dalian Commodity Exchange	16,037,273	4.5%	266,545	45.6%
12	Methanol Options, Zhengzhou Commodity Exchange	15,599,792	122.5%	377,065	115.4%
13	Urea Futures, Zhengzhou Commodity Exchange	11,075,885	124.8%	378,081	159.0%
14	Polyvinyl Chloride (PVC) Options, Dalian Commodity Exchange	2,648,880	106.5%	131,932	101.7%
15	Linear Low Density Polyethylene (LLDPE) Options, Dalian Commodity Exchange	1,427,431	18.8%	47,011	28.1%

China's Steel Complex – Shift in Composition

Though trading volume is stable ...

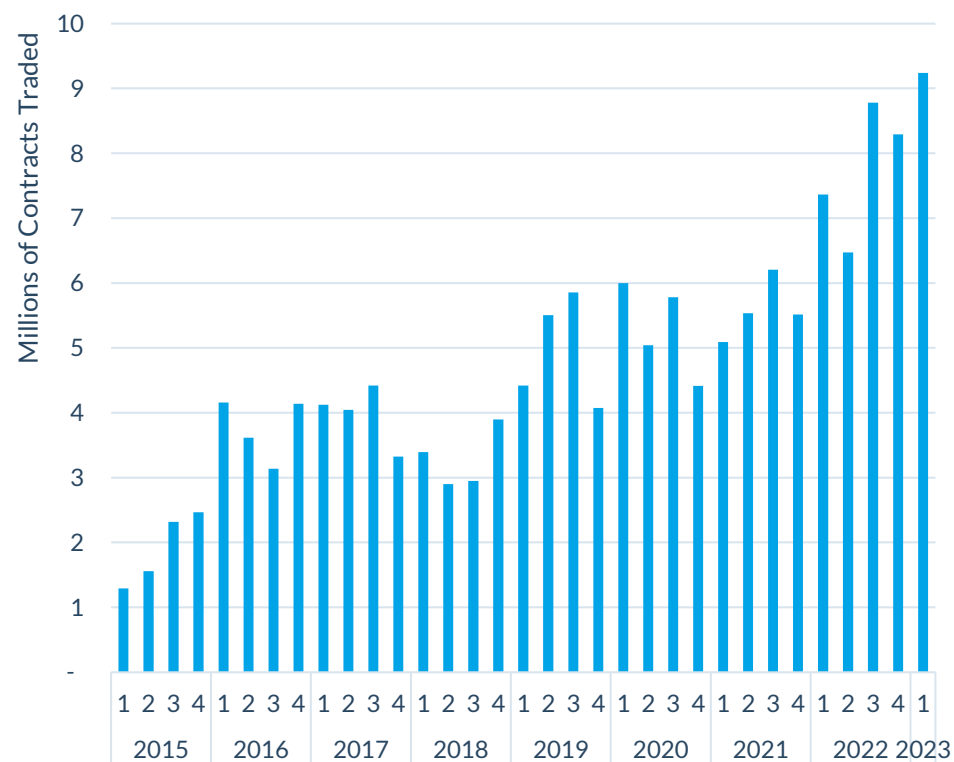


... Open interest is trending higher

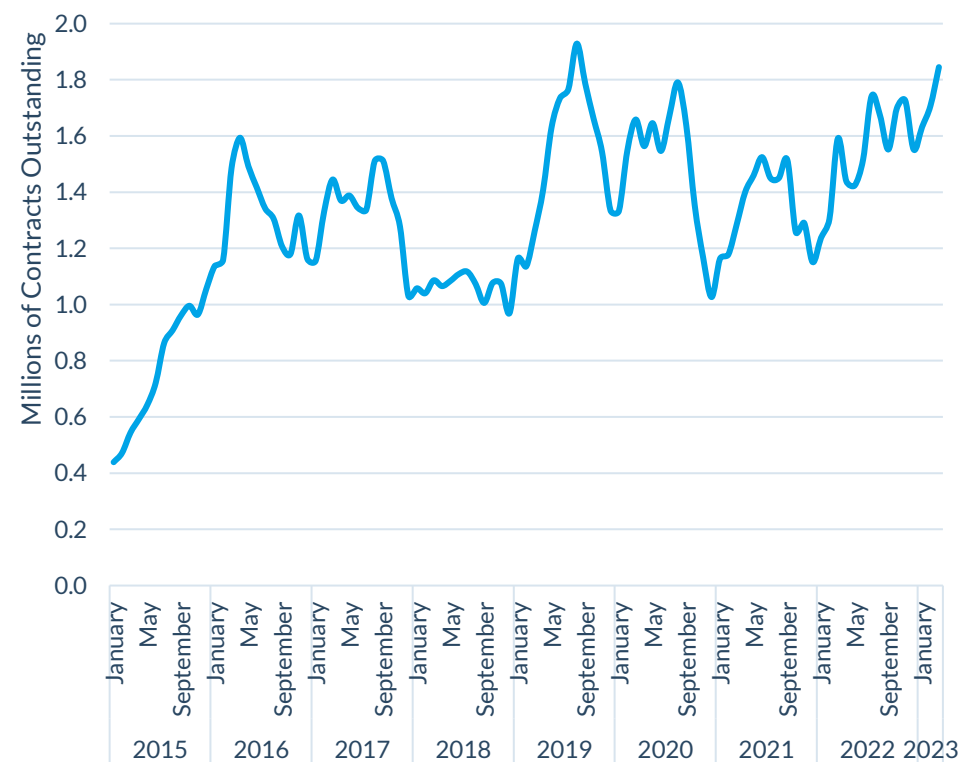


Offshore Exposure to China's Steel Industry – Iron Ore Complex at SGX

Volume hits record level in Q1



Open interest at highest level since 2019



Note: Volume includes all iron ore futures, options and swaps listed on SGX

China's Agriculture Futures – Volume Down, Open Interest Up in Q1

Rank	Exchange	Jan-Mar 2023 Volume	Change vs. 2022	Mar 2023 Open Interest	Change vs. 2022
1	Soybean Meal Futures, Dalian Commodity Exchange	55,875,682	-48.6%	2,161,487	-16.5%
2	RBD Palm Olein Futures, Dalian Commodity Exchange	46,891,620	-17.3%	799,439	33.7%
3	Rapeseed Meal (RM) Futures, Zhengzhou Commodity Exchange	36,388,164	-18.1%	828,865	16.4%
4	Soybean Oil Futures, Dalian Commodity Exchange	34,779,581	-27.5%	836,114	13.0%
5	Cotton No. 1 (CF) Futures, Zhengzhou Commodity Exchange	34,377,108	120.6%	1,007,340	95.2%
6	Corn Futures, Dalian Commodity Exchange	33,153,015	-11.4%	1,597,357	-11.2%
7	Rapeseed Oil (OI) Futures, Zhengzhou Commodity Exchange	31,718,087	44.6%	475,391	106.9%
8	White Sugar (SR) Futures, Zhengzhou Commodity Exchange	29,640,332	19.3%	1,212,007	100.5%
9	Natural Rubber Futures, Shanghai Futures Exchange	19,435,159	6.6%	364,339	9.7%
10	Woodpulp Futures, Shanghai Futures Exchange	14,850,837	-21.4%	361,576	24.7%
11	Corn Starch Futures, Dalian Commodity Exchange	11,529,111	-11.8%	409,153	13.6%
12	Apple (AP) Futures, Zhengzhou Commodity Exchange	9,907,325	-4.8%	231,856	8.8%
13	Soybean Meal Options, Dalian Commodity Exchange	8,639,934	-43.1%	554,217	-26.3%
14	White Sugar (SR) Options, Zhengzhou Commodity Exchange	8,327,774	76.0%	376,807	34.4%
15	Cotton No. 1 (CF) Options, Zhengzhou Commodity Exchange	7,380,758	204.2%	319,394	48.2%

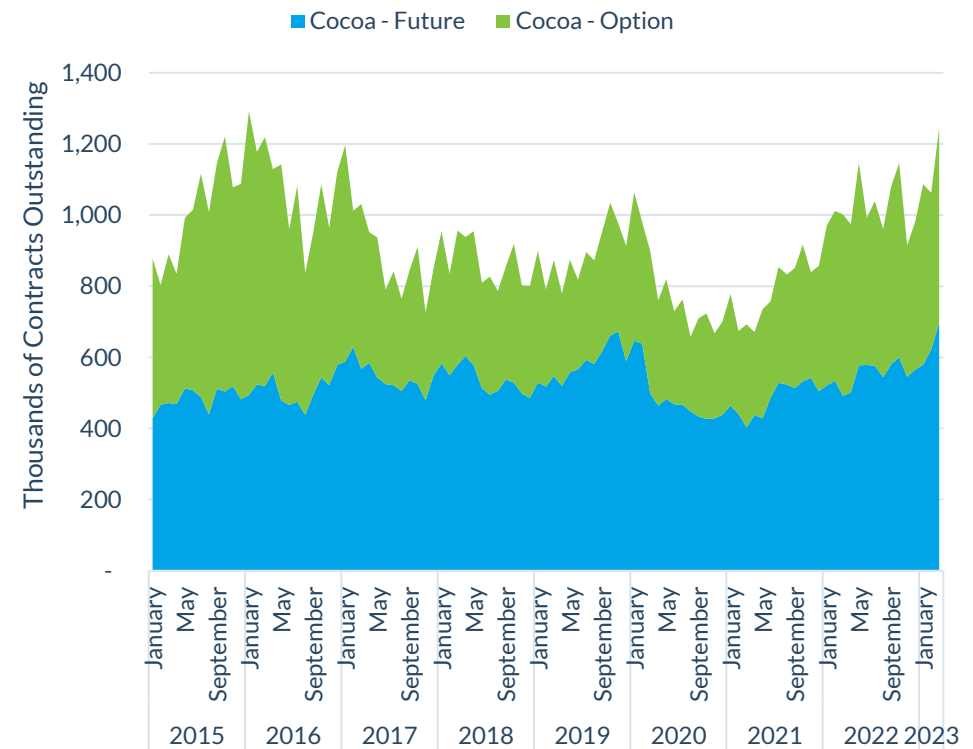
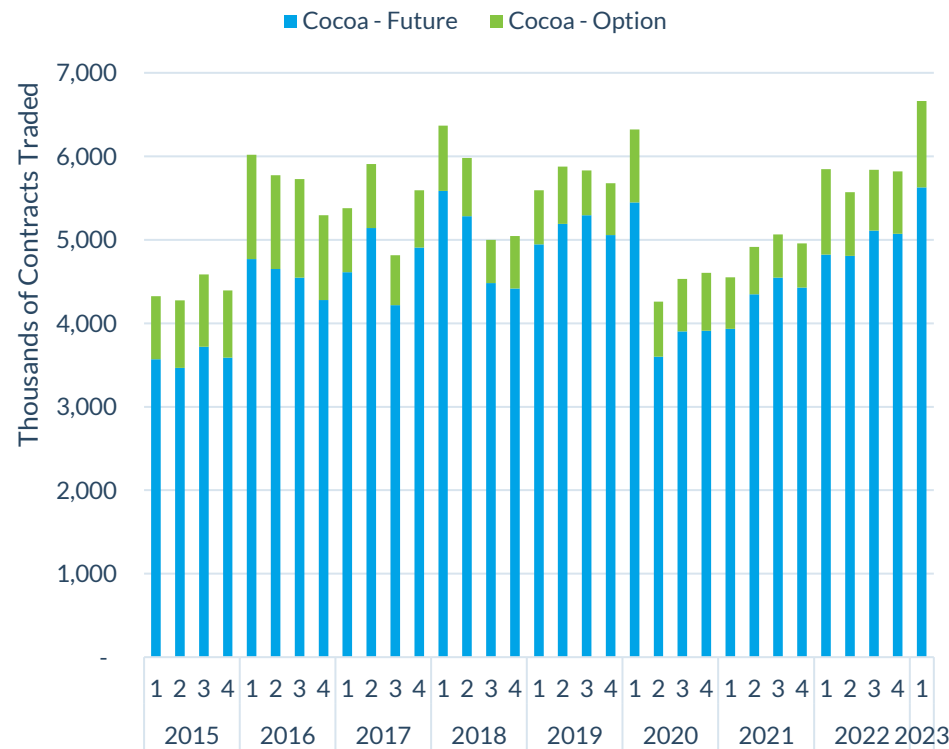
Top Contracts in Agriculture – ex China

Rank	Exchange	Jan-Mar 2023 Volume	Change vs. 2022	Mar 2023 Open Interest	Change vs. 2022
1	Corn Futures, Chicago Board of Trade	20,234,491	-11.2%	1,337,031	-12.8%
2	Soybean Futures, Chicago Board of Trade	14,849,699	2.9%	725,811	-4.7%
3	Sugar #11 Futures, ICE Futures U.S.	10,004,271	17.8%	989,483	19.9%
4	Soybean Oil Futures, Chicago Board of Trade	8,470,277	22.5%	480,502	39.8%
5	Soybean Meal Futures, Chicago Board of Trade	7,900,145	14.2%	427,036	7.2%
6	Chicago Soft Red Winter Wheat Futures, Chicago Board of Trade	6,729,286	-16.1%	377,148	9.6%
7	Corn Options, Chicago Board of Trade	5,656,034	-29.3%	1,253,272	-23.6%
8	Live Cattle Futures, Chicago Mercantile Exchange	4,127,340	1.3%	322,123	4.2%
9	Milling Wheat Futures, Euronext Derivatives Market	3,787,726	-5.9%	399,301	-14.7%
10	Soybean Options, Chicago Board of Trade	3,772,502	-35.7%	596,254	-20.3%
11	Cocoa Futures, ICE Futures U.S.	3,693,457	17.2%	400,547	66.1%
12	Crude Palm Oil (FCPO) Futures, Malaysia Derivatives Exchange	3,586,067	-10.9%	191,586	1.2%
13	Lean Hog Futures, Chicago Mercantile Exchange	3,215,551	3.5%	224,104	-5.9%
14	Coffee C Futures, ICE Futures U.S.	3,083,035	7.1%	202,250	-11.5%
15	KC Hard Red Winter Wheat Futures, Chicago Board of Trade	2,764,350	-18.2%	171,185	-4.1%

Cocoa Markets on ICE – Trading Activity Heats Up

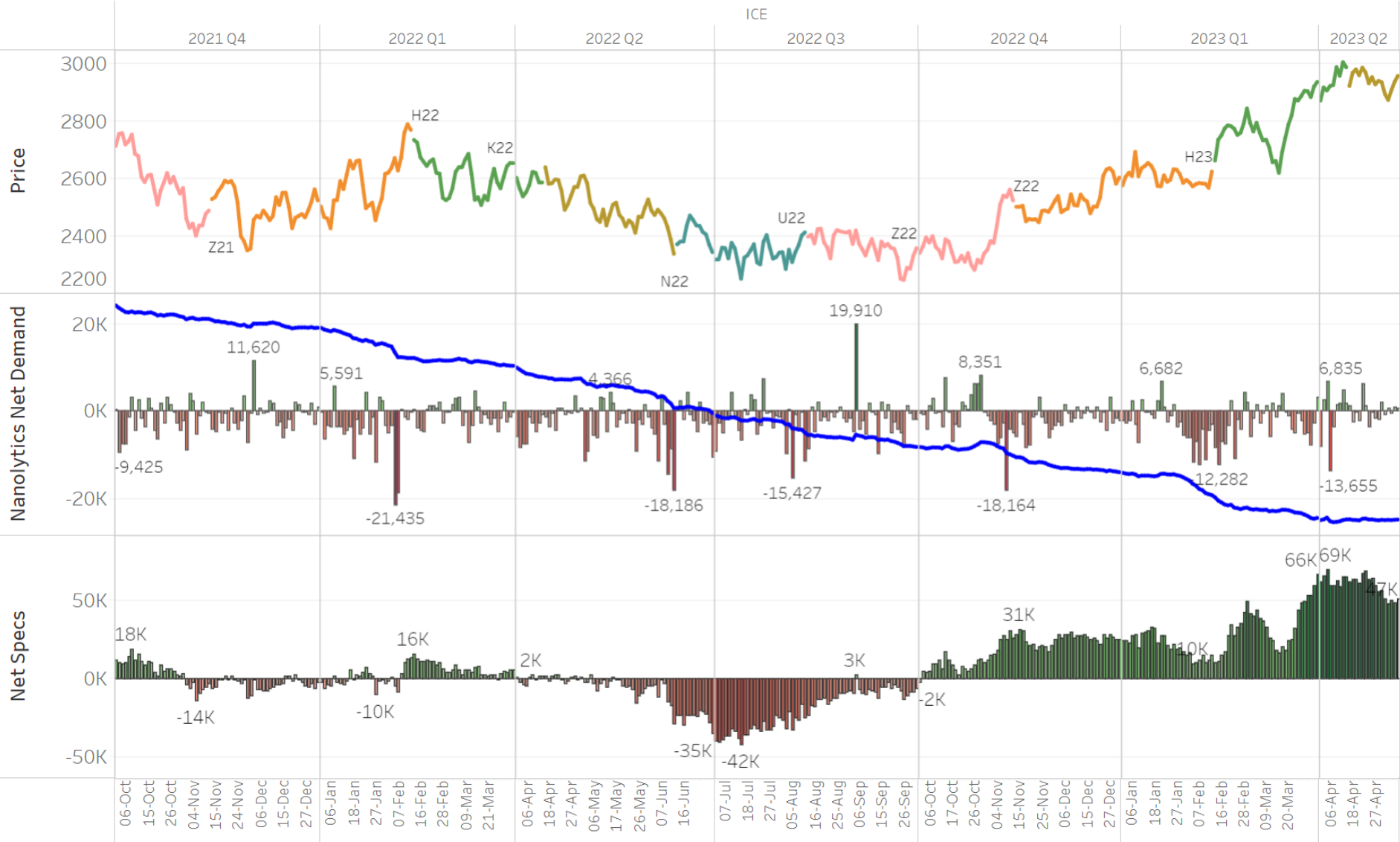
Quarterly volume surpasses pre-pandemic high ...

... as open interest rises to highest level since 2016



Note: volume and open interest includes ICE's New York and London cocoa contracts

Cocoa (ICE)





Thank you for joining us today!

Upcoming Webinars:



Event Contracts
10:00 – 11:00 AM ET



**Energy Transition:
Trends in Derivatives Transactions**
10:00 – 11:00 AM ET

<https://www.fia.org/fia/webinars>

Upcoming Conferences:



IDX: International Derivatives Expo
London



FIA Forum: Commodities
Houston

<https://www.fia.org/fia/events>

This presentation has been prepared by Marex for information purposes only.

The Marex[®] group of companies includes Marex Financial (including the Marex Solutions division), Marex Spectron International Limited, CSC Commodities UK Limited, Tangent Trading Limited, Marex Spectron Europe Limited, Marex North America LLC (including the Rosenthal Collins Group division), Marex Spectron USA LLC, Spectron Energy Inc., Marex Hong Kong Limited, Marex Spectron Asia Pte. Ltd., Spectron Energy (Asia) Pte. Ltd., Marex France SAS (including the BIP AM division), X-Change Financial Access, LLC, Starsupply Petroleum Europe B.V., Volcap Trading Partners Limited, Volcap Trading Partners France SAS and Arfinco S.A. (individually and collectively "Marex").

Information in this presentation should not be considered as advice, or as a recommendation or solicitation to purchase or otherwise deal in securities, investments or any other products. It has been prepared for institutional clients, is not directed at retail customers and does not take into account particular investment objectives, risk appetites, financial situations or needs. Recipients of the presentation should make their own trading or investment decisions based upon their own financial objectives and financial resources.

This presentation may contain forward looking statements including statements regarding our intent, belief or current expectations with respect to Marex's businesses and operations, market conditions, results of operation and financial condition, capital adequacy, specific provisions and risk management practices. Readers are cautioned not to place undue reliance on these forward-looking statements which may be subject to change without notice. While reasonable care has been used in the preparation of forecast information, actual results may vary in a materially positive or negative manner. Forecasts and hypothetical examples are subject to uncertainty and contingencies outside Marex's control. Past performance is not a reliable indication of future performance.

The information in this presentation is current as at the date of publication. No part of this presentation may be redistributed, copied or reproduced without prior written consent of Marex. While reasonable care has been taken to ensure that the facts stated are fair, clear and not misleading, Marex does not warrant or represent (expressly or impliedly) the accuracy, completeness or fitness for purpose or use of any information in this presentation. Any opinions expressed may be subject to change without notice. Marex accepts no liability whatsoever for any direct, indirect or consequential loss or damage arising out of the use of all or any of the data or information in this presentation.

This presentation has been approved by Marex Financial ("MF"). MF is incorporated under the laws of England and Wales (company no. 5613061, LEI no. 5493003EETVWYSU5A20 and VAT registration no. GB 872 8106 13) and is authorised and regulated by the Financial Conduct Authority (FCA registration number 442767). MF's registered address is at 155 Bishopsgate, London, EC2M 3TQ.

©2022 Marex. All rights reserved.

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. The 'A' is formed by overlapping shapes: a light green triangle on the left, a darker green triangle on the right, and a blue triangle on the right side of the 'A'.