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## Delta-One Flows & Positioning

Strong inflows to Semis/AI and Space themes amid Iran deal optimism; continued outflows from EM and Ags; CTAs trim rates shorts, sell commodities

In this publication, we analyze flow and positioning metrics for global futures and US-listed ETFs across asset classes.

### Weekly Highlights

- **Equities and rates were net bought last week** across both ETFs and futures on Iran deal optimism. **The AI and Space themes stayed in focus:** Semiconductor ETFs pulled in >4z inflows, alongside strong demand for memory (DRAM, KORU) and space (NASA, ARKX). EM equity ETFs continued to see outflows, led by China and Latam.
- **ETF Flows:** Equities (\$35.9Bn, 0.8z) and Fixed Income (\$12.3Bn, 0.4z) saw strong inflows, Commodities (-\$1.6Bn, -1.1z) saw outflows, and Currency/Multi-asset (\$0.3Bn, -0.4z) recorded below-average inflows.
- Regionally, the **US (\$32Bn, 1.1z)** drove the bulk of equity inflows last week. International DM (\$5Bn, -0.4z) was below-average, though Canada saw strong inflows (1.8z). **EM outflows persisted for a fourth week, led by China (-2.7z) and LatAm (-2.4z)**, though Korea saw ~1z inflows. Separately, we saw a >\$40Bn switch from IVV into VOO ahead of IVV's ex-dividend date.
- In equity sectors, **Tech (3.4z) led with heavy inflows, driven primarily by Semis (~\$5.5Bn, 4.3z)**. Real Estate, Financials, Health Care, and Energy each saw ~1z inflows.
- In equity styles, factor flows were near average, while Volatility (-2.1z) and Single Stock ETFs saw outflows, and Call/put writing (-1.9z) saw their weakest inflows in over a year.
- **Thematic ETFs posted strong inflows (\$9.7Bn, 3.8z)**, including ~\$0.9Bn into DRAM and ~\$0.8Bn into NASA. That said, most thematic inflows came from ARKK/ARKQ (~\$7.4Bn), likely driven by custom in-kind basket rebalances that could reverse this week (and potentially some flows linked to last week's megacap IPO).
- In Fixed Income, **Mortgages (2.1z)** and IG Corporates (1.1z) saw strong inflows, while **International bonds (-1.5z)** posted notable outflows.
- **Agriculture saw a third week of outflows (-1.7z)**, while Precious Metals saw ~1z outflows driven by Gold.
- **Futures Flows:** Last week we saw large net buying (>1.5z) in NDX, Nikkei 225, Hang Seng, CSI 500, TAIEX, Japan 10y and CHF futures, and large net selling (<-1.5z) in RTY, Bovespa, Euro Stoxx 50, ASX 200, Italy/China 10y and Wheat futures.
- **CTAs remain significantly long global equities and likely bought China & India w/w.** They likely **trimmed rates shorts** as yields fell, and remain short DM FX vs USD. CTAs likely net sold commodities overall w/w (ex-Copper, where they added to longs) and are biased short ags.

### Global Equity Derivatives Strategy

**Bram Kaplan, CFA** <sup>AC</sup>

(1-212) 272-1215

bram.kaplan@jpmorgan.com

J.P. Morgan Securities LLC

**Daniel Motoc, CFA** <sup>AC</sup>

(1-212) 622-0105

daniel.motoc@jpmchase.com

J.P. Morgan Securities LLC

**Arda Sebuktekin**

(1-212) 270-4397

arda.sebuktekin@jpmchase.com

J.P. Morgan Securities LLC

**Tony SK Lee**

(852) 2800-8857

tony.sk.lee@jpmorgan.com

J.P. Morgan Securities (Asia Pacific) Limited/ J.P. Morgan Broking (Hong Kong) Limited

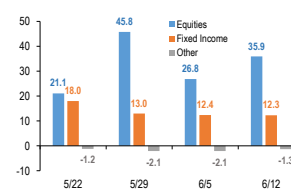
**Davide Silvestrini**

(44-20) 7134-4082

davide.silvestrini@jpmorgan.com

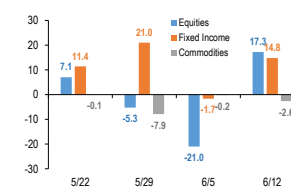
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### 4w US ETF Flows (\$Bn)



Source: J.P. Morgan Equity Derivatives Strategy, Bloomberg Finance L.P.

### 4w Global Futures Flows (\$Bn)



Source: J.P. Morgan Equity Derivatives Strategy, Bloomberg Finance L.P. Sum of futures in Tables 1-5.

- **CFTC Positioning:** Asset Managers sold VIX and rotated from 2y into Ultra bonds. Leveraged Funds cut shorts in SPX (1.1z), NDX (2.2z), and UST 2y (1.7z) futures, and hold historically low shorts across 2-10y bonds. Managed Money sold Brent, Copper, and Ags w/w.

# Futures Flows & Positioning

**Table 1: Equity Futures Flows & Positioning**

See Appendix for definitions; asterisk denotes expiry week

Americas	Ticker	Net Flow - 1y History	1w Net Flow (z)	4w Net Flow (z)	1w Return	OI Change (w/w)	OI Correlation w/Spot	CTA Signal
S&P 500	ES1 Index		0.5	-0.3	0.6%	2.7%	-18%	Long
Nasdaq 100	NQ1 Index		1.6	-1.2	2.3%	-1.3%	2%	Long
Russell 2000	RTY1 Index		-2.3	-1.7	3.9%	9.5%	9%	Long
DJIA	DM1 Index		-1.1	1.0	0.7%	0.0%	-25%	Long
S&P MidCap 400	FA1 Index		0.2	-0.6	2.8%	11.3%	-6%	Long
MSCI EM	MES1 Index		1.0	-0.1	-0.1%	1.9%	-18%	Long
MSCI EAFE	MFS1 Index		-1.0	-1.0	1.0%	4.2%	-36%	Long
VIX	UX1 Index		0.2	1.0	-17.8%	-5.0%	1%	Short
S&P TSX 60	PT1 Index		-1.1	-1.0	1.6%	13.9%	-2%	Long
Bovespa	XB1 Index		-1.8	-1.8	1.3%	-1.1%	6%	Neutral
EMEA	Ticker	Net Flow - 1y History	1w Net Flow (z)	4w Net Flow (z)	1w Return	OI Change (w/w)	OI Correlation w/Spot	CTA Signal
Euro Stoxx 50	VG1 Index		-2.0	-1.4	2.1%	6.0%	19%	Long
FTSE 100	Z1 Index		-1.6	-0.7	1.0%	7.9%	45%	Long
DAX	GX1 Index		-0.9	-0.5	-0.5%	15.1%	-13%	Long
SMI	SM1 Index		0.3	0.9	2.4%	3.4%	16%	Long
CAC 40	CF1 Index		1.1	0.3	1.6%	9.8%	16%	Long
FTSE/JSE Top 40	A11 Index		0.2	0.9	1.2%	30.3%	28%	Neutral
BIST 30	A51 Index		1.1	-0.5	2.7%	-1.4%	-3%	Long
APAC	Ticker	Net Flow - 1y History	1w Net Flow (z)	4w Net Flow (z)	1w Return	OI Change (w/w)	OI Correlation w/Spot	CTA Signal
TOPIX	TP1 Index		-0.9	-0.8	-1.7%	-18.8% *	-3%	Long
Nikkei 225	NK1 Index		1.8	1.7	-0.9%	-15.4% *	-4%	Long
ASX SPI 200	XP1 Index		-1.9	-1.2	2.1%	2.5%	6%	Long
KOSPI 200	KM1 Index		-1.2	1.5	-0.4%	-21.2% *	-3%	Long
Hang Seng	HI1 Index		1.8	-0.7	-1.0%	7.1%	-34%	Short
Hang Seng China Ent.	HC1 Index		0.0	-0.5	-0.7%	3.4%	-27%	Short
FTSE China A50	XU1 Index		-1.2	-1.9	0.0%	-4.3%	-1%	Long
CSI 300	IFB1 Index		-0.1	0.0	-0.8%	-2.5%	11%	Long
CSI 500	FFD1 Index		2.0	1.1	-1.8%	-2.1%	1%	Long
CSI 1000	IFD1 Index		1.2	1.3	-1.7%	-2.0%	-26%	Long
SSE50	FFB1 Index		1.1	0.2	0.9%	1.7%	0%	Short
NIFTY 50	JGS1 Index		0.3	-0.1	1.1%	-1.4%	-14%	Neutral
SET 50	BC1 Index		0.0	-0.3	0.0%	2.3%	30%	Long
SGX FTSE Taiwan	TWT1 Index		-0.3	-1.5	-1.9%	-3.3%	14%	Long
TAIEX	FT1 Index		2.3	0.3	-2.0%	-5.7%	30%	Long
MSCI Singapore	QZ1 Index		-0.1	1.0	-0.9%	-4.6%	12%	Long

Source: J.P. Morgan Equity Derivatives Strategy, CFTC, Bloomberg Finance L.P.

**Table 2: Fixed Income Futures Flows & Positioning**

See Appendix for definitions; asterisk denotes expiry week

Americas	Ticker	Net Flow - 1y History	1w Net Flow (z)	1w Net Flow (DV01)	4w Net Flow (z)	1w Return	OI Change (w/w)	OI Correlation w/Spot	CTA Signal
2y UST	TU2 Comdty		0.0	-\$135k/01	-2.0	0.1%	-1.6%	-11%	Short
5y UST	FV2 Comdty		-0.1	-\$377k/01	-0.8	0.3%	-1.7%	4%	Short
10y UST	TY2 Comdty		0.7	+\$4,263k/01	0.5	0.4%	-0.2%	-13%	Short
UST Ultra 10y Note	UXY2 Comdty		0.2	+\$178k/01	-0.4	0.4%	0.4%	-9%	Short
UST Long Bond	US2 Comdty		-1.0	-\$3,370k/01	-0.9	0.6%	2.4%	6%	Short
UST Ultra Bond	WN2 Comdty		0.8	+\$2,612k/01	0.3	0.5%	3.0%	-30%	Short
Canada 10y	CN2 Comdty		-0.5	-\$310k/01	0.0	0.5%	5.4%	19%	Long
EMEA	Ticker	Net Flow - 1y History	1w Net Flow (z)	1w Net Flow (DV01)	4w Net Flow (z)	1w Return	OI Change (w/w)	OI Correlation w/Spot	CTA Signal
Germany 2y	DU1 Comdty		1.3	+\$1,952k/01	1.3	0.1%	0.2% *	16%	Short
Germany 5y	OE1 Comdty		-0.2	+\$425k/01	0.7	-0.6%	-3.5% *	-17%	Short
Germany 10y	RX1 Comdty		-1.0	-\$3,603k/01	-0.1	0.3%	-3.5% *	-20%	Neutral
Germany 30y	UB1 Comdty		-0.6	-\$702k/01	-0.5	-0.2%	0.5% *	-14%	Short
10y Gilt	G 2 Comdty		-0.3	-\$132k/01	-0.6	0.7%	1.9%	-17%	Short
France 10y	OAT1 Comdty		0.0	+\$294k/01	-0.3	-0.4%	-1.1% *	23%	Short
Italy 10y	IK1 Comdty		-1.8	-\$2,447k/01	-0.6	0.2%	1.8% *	-3%	Neutral
APAC	Ticker	Net Flow - 1y History	1w Net Flow (z)	1w Net Flow (DV01)	4w Net Flow (z)	1w Return	OI Change (w/w)	OI Correlation w/Spot	CTA Signal
Japan 10y	JB1 Comdty		2.2	+\$6,932k/01	4.5	0.1%	1.5% *	-7%	Short
Australia 10y	XM1 Comdty		1.3	+\$1,931k/01	1.0	0.1%	8.2% *	-1%	Neutral
China 10y	TFT1 Comdty		-2.1	-\$3,512k/01	0.5	-0.5%	-11.3% *	11%	Neutral
Korea 10y	KAA1 Comdty		0.3	-\$109k/01	0.2	0.6%	0.4%	-13%	Short

Source: J.P. Morgan Equity Derivatives Strategy, CFTC, Bloomberg Finance L.P.

**Table 3: Interest Rates Futures Flows & Positioning**

See Appendix for definitions; asterisk denotes expiry week

Global	Ticker	Net Flow - 1y History	1w Net Flow (z)	1w Net Flow (DV01)	4w Net Flow (z)	1w Chg (bps)	OI Change (w/w)	OI Correlation w/Spot	CTA Signal
3M SOFR	SFR1 Comdty		0.3	+\$10k/01	-0.8	0.00	2.2%	-3%	Long
3M Euribor	ER1 Comdty		0.9	+\$525k/01	0.3	-0.50	1.5%	-25%	Short
3M SONIA	SFI1 Comdty		0.4	+\$6k/01	0.3	0.00	-1.2%	25%	Long

Source: J.P. Morgan Equity Derivatives Strategy, CFTC, Bloomberg Finance L.P.

**Table 4: Commodity Futures Flows & Positioning**

See Appendix for definitions; asterisk denotes expiry week

Energy	Ticker	Net Flow - 1y History	1w Net Flow (z)	4w Net Flow (z)	1w Return	OI Change (w/w)	OI Correlation w/Spot	CTA Signal
Brent Crude	CO1 Comdty		-1.3	-1.3	-6.2%	1.1%	-27%	Neutral
WTI	CL1 Comdty		-1.2	-0.8	-6.3%	-0.6%	8%	Neutral
US Natural Gas	NG1 Comdty		-1.3	-0.7	-3.4%	-0.3%	-17%	Short
Gasoline	XB1 Comdty		-1.0	0.9	0.1%	0.6%	6%	Neutral
Heating Oil	HO1 Comdty		-0.9	-1.1	-5.1%	3.1%	7%	Neutral
Low Sulphur Gasoil	QS1 Comdty		0.1	-0.2	-8.9%	0.3% *	14%	Neutral
TTF Nat Gas	TZT1 Comdty		0.6	-0.3	-3.6%	2.3%	12%	Neutral
Base Metals	Ticker	Net Flow - 1y History	1w Net Flow (z)	4w Net Flow (z)	1w Return	OI Change (w/w)	OI Correlation w/Spot	CTA Signal
Copper	HG1 Comdty		-0.1	-1.3	2.6%	-0.4%	-17%	Long
Nickel	LN1 Comdty		0.9	1.2	-4.2%	4.7%	28%	Neutral
Aluminum	LA1 Comdty		0.7	-0.9	-2.6%	-2.8%	3%	Neutral
Precious Metals	Ticker	Net Flow - 1y History	1w Net Flow (z)	4w Net Flow (z)	1w Return	OI Change (w/w)	OI Correlation w/Spot	CTA Signal
Gold	GC1 Comdty		-1.3	-0.6	-2.8%	2.1%	-13%	Short
Silver	SI1 Comdty		-1.2	-0.3	-1.6%	4.4%	28%	Neutral
Agriculture	Ticker	Net Flow - 1y History	1w Net Flow (z)	4w Net Flow (z)	1w Return	OI Change (w/w)	OI Correlation w/Spot	CTA Signal
Soybean	S 1 Comdty		1.3	-0.3	-0.7%	-1.6%	10%	Short
Corn	C 1 Comdty		-1.2	-0.2	-1.1%	1.5%	-1%	Short
Wheat	W 1 Comdty		-1.9	-1.6	0.8%	-5.2%	10%	Neutral

Source: J.P. Morgan Equity Derivatives Strategy, CFTC, Bloomberg Finance L.P.

**Table 5: FX/Crypto Futures Flows & Positioning**

See Appendix for definitions; asterisk denotes expiry week

FX/Crypto	Ticker	Net Flow - 1y History	1w Net Flow (z)	4w Net Flow (z)	1w Return	OI Change (w/w)	OI Correlation w/Spot	CTA Signal
EUR/USD	EC1 Curncy		1.4	1.7	0.4%	5.2%	11%	Short
GBP/USD	BP1 Curncy		1.1	1.2	0.6%	13.8%	-12%	Neutral
JPY/USD	JY1 Curncy		0.4	0.4	0.0%	-0.6%	-13%	Short
CAD/USD	CD1 Curncy		0.8	1.5	-0.2%	45.8%	9%	Short
AUD/USD	AD1 Curncy		0.8	1.5	0.1%	-6.7%	12%	Neutral
USD/CNH	XUC1 Curncy		-1.0	0.5	-0.3%	-3.7%	18%	Short
CHF/USD	SF1 Curncy		1.9	2.4	0.1%	27.8%	18%	Short
USD/BRL	UC1 Curncy		-0.7	-0.5	-2.5%	3.6%	-16%	Short
Bitcoin	BTC1 Curncy		-0.5	-1.3	0.3%	8.0%	16%	Short
Ether	DCR1 Curncy		-0.4	-0.6	-1.2%	5.0%	22%	Short

Source: J.P. Morgan Equity Derivatives Strategy, CFTC, Bloomberg Finance L.P.

# CTA Signals

Table 6: Equity CTA Signals

"Current" levels are as of morning ET Jun 15; see Appendix for definitions

			Current CTA Levels							CTA Levels in 1w										
Americas	Ticker	Current	Prior Week CTA Signal	1m Mom.	3m Mom.	6m Mom.	12m Mom.	50d MA	100d MA	200d MA	CTA Signal	1m Mom.	3m Mom.	6m Mom.	12m Mom.	50d MA	100d MA	200d MA	CTA Signal	1w Chg
S&P 500	ES1 Index	7,533	Long	7,476	6,688	6,818	6,022	7,274	7,040	6,908	Long	7,470	6,612	6,896	6,023	7,368	7,073	6,940	Long	-
Nasdaq 100	NQ1 Index	30,303	Long	29,466	24,622	25,149	21,839	28,131	26,508	25,811	Long	29,466	24,305	25,546	21,895	28,796	26,772	26,014	Long	-
Russell 2000	RTY1 Index	2,996	Long	2,840	2,502	2,537	2,123	2,808	2,703	2,595	Long	2,847	2,509	2,548	2,131	2,856	2,722	2,614	Long	-
DJIA	DM1 Index	51,809	Long	49,854	46,872	48,355	42,578	49,689	48,986	48,170	Long	50,378	46,278	48,513	42,482	50,203	49,135	48,359	Long	-
S&P MidCap 400	FA1 Index	3,847	Long	3,654	3,369	3,340	3,035	3,654	3,568	3,438	Long	3,658	3,383	3,372	3,046	3,696	3,589	3,456	Long	-
MSCI EM	MES1 Index	1,781	Long	1,700	1,485	1,367	1,201	1,660	1,589	1,490	Long	1,679	1,461	1,389	1,185	1,691	1,603	1,504	Long	-
MSCI EAFE	MFS1 Index	3,155	Long	3,064	2,928	2,862	2,629	3,063	3,040	2,939	Long	3,088	2,851	2,891	2,585	3,080	3,046	2,951	Long	-
VIX	UX1 Index	16.61	Short	18.84	24.00	16.47	19.74	19.59	20.66	19.35	Short	19.63	25.00	17.08	20.85	18.87	20.55	19.34	Short	↓
S&P TSX 60	PT1 Index	2,072	Long	1,975	1,907	1,845	1,583	1,989	1,949	1,876	Long	2,009	1,853	1,873	1,579	2,005	1,959	1,887	Long	-
Bovespa	XB1 Index	173,680	Neutral	179,524	181,319	160,668	138,319	184,747	184,393	168,548	Neutral	178,658	181,722	162,024	139,189	182,853	184,494	169,504	Neutral	-
EMEA	Ticker	Current	Prior Week CTA Signal	1m Mom.	3m Mom.	6m Mom.	12m Mom.	50d MA	100d MA	200d MA	CTA Signal	1m Mom.	3m Mom.	6m Mom.	12m Mom.	50d MA	100d MA	200d MA	CTA Signal	1w Chg
Euro Stoxx 50	VG1 Index	6,260	Long	5,860	5,741	5,738	5,327	5,921	5,898	5,773	Long	5,995	5,539	5,760	5,230	5,985	5,916	5,800	Long	-
FTSE 100	Z 1 Index	10,479	Long	10,283	10,323	9,707	8,868	10,415	10,379	10,024	Long	10,470	9,959	9,882	8,801	10,408	10,398	10,061	Long	-
DAX	GX1 Index	25,005	Long	24,217	23,580	24,195	23,661	24,456	24,359	24,262	Long	24,824	22,837	24,372	23,263	24,616	24,363	24,296	Long	-
SMI	SM1 Index	13,794	Long	13,198	12,889	12,988	12,189	13,190	13,189	12,892	Long	13,469	12,375	13,132	11,872	13,315	13,231	12,939	Long	-
CAC 40	CF1 Index	8,452	Long	8,016	7,942	8,104	7,725	8,137	8,140	8,095	Long	8,086	7,726	8,132	7,567	8,178	8,159	8,118	Long	-
FTSE/JSE Top 40	AI1 Index	108,351	Short	109,387	108,621	105,585	88,516	108,500	110,225	106,946	Neutral	106,696	102,989	109,697	87,802	108,359	109,817	107,370	Neutral	↑
BIST 30	A51 Index	16,772	Long	17,093	15,335	12,533	10,530	16,276	15,746	14,067	Long	15,957	15,230	12,391	10,213	16,503	15,890	14,120	Long	↑
APAC	Ticker	Current	Prior Week CTA Signal	1m Mom.	3m Mom.	6m Mom.	12m Mom.	50d MA	100d MA	200d MA	CTA Signal	1m Mom.	3m Mom.	6m Mom.	12m Mom.	50d MA	100d MA	200d MA	CTA Signal	1w Chg
TOPIX	TP1 Index	4,004	Long	3,893	3,592	3,410	2,772	3,813	3,747	3,507	Long	3,843	3,521	3,409	2,773	3,858	3,769	3,534	Long	-
Nikkei 225	NK1 Index	69,400	Long	62,690	53,440	50,153	38,107	60,949	57,857	52,921	Long	61,527	52,090	50,157	38,420	62,917	58,808	53,709	Long	-
ASX SPI 200	XP1 Index	8,925	Short	8,662	8,599	8,650	8,557	8,761	8,776	8,783	Long	8,620	8,444	8,685	8,497	8,766	8,781	8,785	Long	-
KOSPI 200	KM1 Index	1,376.0	Long	1,213.5	826.2	575.9	390.8	1,083.8	941.5	736.9	Long	1,194.0	832.8	579.8	403.0	1,153.3	981.8	765.3	Long	-
Hang Seng	H11 Index	24,832	Short	26,146	25,667	25,629	23,985	25,651	25,887	26,042	Short	25,507	24,853	25,776	23,469	25,562	25,739	26,009	Short	-
Hang Seng China Ent.	HC1 Index	8,375	Short	8,794	8,751	8,925	8,701	8,633	8,739	8,982	Short	8,544	8,443	8,924	8,499	8,609	8,683	8,956	Short	-
FTSE China A50	XU1 Index	15,767	Neutral	15,848	14,862	15,114	13,341	15,503	15,128	15,168	Long	15,399	14,481	15,310	13,348	15,620	15,180	15,193	Long	↑
CSI 300	IFB1 Index	4,865	Neutral	4,931	4,655	4,541	3,869	4,754	4,708	4,628	Long	4,794	4,474	4,587	3,838	4,802	4,715	4,647	Long	↑
CSI 500	FFD1 Index	8,356	Neutral	8,734	8,140	7,103	5,756	8,247	8,235	7,683	Long	8,485	7,581	7,204	5,649	8,333	8,242	7,737	Long	-
CSI 1000	IFD1 Index	8,453	Neutral	8,831	8,136	7,289	6,122	8,306	8,231	7,804	Long	8,600	7,580	7,343	6,033	8,404	8,243	7,844	Long	-
SSE50	FFB1 Index	2,931	Short	3,004	2,961	2,973	2,675	2,917	2,964	2,974	Short	2,919	2,835	3,016	2,663	2,927	2,953	2,977	Neutral	↑
NIFTY 50	JGS1 Index	23,970	Short	23,733	23,459	26,020	24,917	23,828	24,219	24,977	Neutral	23,746	22,991	26,218	24,943	23,891	24,143	24,947	Neutral	-
SET 50	BC1 Index	1,029	Long	997	941	834	728	986	957	893	Long	1,006	941	837	693	936	968	900	Long	-
SGX FTSE Taiwan	TWT1 Index	3,990	Long	3,516	2,715	2,288	1,828	3,440	3,604	2,668	Long	3,520	2,666	2,308	1,815	3,582	3,147	2,726	Long	-
TAIEX	FT1 Index	45,597	Long	41,361	33,456	27,945	22,075	40,567	36,682	31,789	Long	41,345	32,966	28,218	21,608	41,947	37,562	32,433	Long	-
MSCI Singapore	QZ1 Index	461	Long	454.3	438.7	440.7	403.2	442.4	451.1	449.9	Long	459.6	437.3	441.9	400.9	453.9	451.1	406.1	Long	-

Source: J.P. Morgan Equity Derivatives Strategy, Bloomberg Finance L.P.

Table 7: Fixed Income CTA Signals

"Current" levels are as of morning ET Jun 15; see Appendix for definitions

Americas	Ticker	Current	Prior Week CTA Signal	Current CTA Levels								CTA Levels in 1w								1w Chg
				1m Mom.	3m Mom.	6m Mom.	12m Mom.	50d MA	100d MA	200d MA	CTA Signal	1m Mom.	3m Mom.	6m Mom.	12m Mom.	50d MA	100d MA	200d MA	CTA Signal	
2y UST	TU2 Comdty	103.2	Short	103.1	103.9	104.4	103.6	103.5	103.8	104.1	Short	103.1	103.5	104.3	103.9	103.4	103.7	104.0	Short	-
5y UST	FV2 Comdty	107.1	Short	106.6	108.5	109.4	108.1	107.5	108.2	108.8	Short	106.8	107.7	109.2	108.7	107.4	108.1	108.7	Short	-
10y UST	TY2 Comdty	109.8	Short	108.7	111.6	112.6	110.7	110.1	111.0	111.9	Short	109.2	110.3	112.3	111.5	110.0	110.9	111.8	Short	-
UST Ultra 10y Note	UXY2 Comdty	112.1	Short	110.5	114.1	115.1	112.6	112.4	113.4	114.3	Short	111.3	112.7	114.9	113.9	112.2	113.3	114.2	Short	-
UST Long Bond	US2 Comdty	112.8	Short	109.7	114.5	115.4	113.3	112.4	113.8	115.1	Short	111.0	112.6	115.2	114.2	112.4	113.7	115.0	Neutral	↑
UST Ultra Bond	WN2 Comdty	115.3	Short	111.6	117.2	118.2	116.5	114.8	116.4	118.1	Short	113.1	115.8	118.3	119.0	114.7	116.3	118.1	Short	-
Canada 10y	CN2 Comdty	120.9	Short	117.7	120.1	120.7	120.8	119.5	120.0	120.9	Long	119.7	119.0	120.1	121.0	119.6	120.1	120.9	Long	↓
EMEA	Ticker	Current	Prior Week CTA Signal	1m Mom.	3m Mom.	6m Mom.	12m Mom.	50d MA	100d MA	200d MA	CTA Signal	1m Mom.	3m Mom.	6m Mom.	12m Mom.	50d MA	100d MA	200d MA	CTA Signal	1w Chg
Germany 2y	DU1 Comdty	105.9	Short	105.6	106.0	106.8	107.3	105.8	106.2	106.6	Short	105.9	105.7	106.7	107.3	105.8	106.1	106.5	Neutral	-
Germany 5y	OE1 Comdty	115.0	Short	114.8	116.0	116.1	117.9	115.4	115.9	116.7	Short	115.7	115.4	116.0	117.9	115.4	115.8	116.6	Short	↓
Germany 10y	RX1 Comdty	126.4	Short	124.1	126.2	127.5	130.9	125.4	126.6	127.6	Neutral	125.9	125.4	127.5	130.8	125.5	126.5	127.5	Neutral	-
Germany 30y	UB1 Comdty	109.0	Short	106.0	110.0	110.0	121.5	108.4	109.5	111.5	Short	109.3	110.1	109.9	120.7	108.3	109.4	111.4	Short	↓
10y Gilt	G 2 Comdty	88.8	Short	85.4	89.1	91.3	92.9	87.6	89.0	90.1	Short	87.9	88.0	91.0	93.3	87.6	88.9	90.0	Neutral	↑
France 10y	OAT1 Comdty	119.5	Short	118.3	119.8	120.5	124.2	119.4	120.4	121.0	Short	120.1	118.7	120.5	124.1	119.4	120.2	121.0	Short	-
Italy 10y	IK1 Comdty	118.6	Short	116.4	117.8	120.0	121.0	117.5	118.8	119.7	Neutral	118.4	116.2	120.1	120.9	117.7	118.6	119.6	Neutral	-
APAC	Ticker	Current	Prior Week CTA Signal	1m Mom.	3m Mom.	6m Mom.	12m Mom.	50d MA	100d MA	200d MA	CTA Signal	1m Mom.	3m Mom.	6m Mom.	12m Mom.	50d MA	100d MA	200d MA	CTA Signal	1w Chg
Japan 10y	JB1 Comdty	129.5	Short	128.0	131.3	133.3	138.8	129.3	130.5	133.0	Short	128.2	131.0	132.8	139.3	129.2	130.4	132.8	Short	-
Australia 10y	XM1 Comdty	95.2	Neutral	94.9	95.0	95.2	95.7	95.0	95.1	95.3	Neutral	95.1	95.0	95.2	95.8	95.0	95.1	95.3	Neutral	-
China 10y	TFT1 Comdty	108.8	Long	109.0	108.2	108.0	109.1	108.8	108.5	108.3	Neutral	109.0	108.2	108.2	109.1	108.9	108.6	108.3	Neutral	-
Korea 10y	KAA1 Comdty	107.2	Short	106.1	110.9	113.5	118.1	108.4	109.6	112.8	Short	107.1	108.9	113.0	118.3	108.1	109.4	112.4	Short	-

Source: J.P. Morgan Equity Derivatives Strategy, Bloomberg Finance L.P.

Table 8: Interest Rates CTA Signals

"Current" levels are as of morning ET Jun 15; see Appendix for definitions

Global	Ticker	Current	Prior Week CTA Signal	Current CTA Levels								CTA Levels in 1w								1w Chg	
				1m Mom.	3m Mom.	6m Mom.	12m Mom.	50d MA	100d MA	200d MA	CTA Signal	1m Mom.	3m Mom.	6m Mom.	12m Mom.	50d MA	100d MA	200d MA	CTA Signal		
3M SOFR	SFR1 Comdty	96.4	Neutral	96.4	96.3	96.2	95.7	96.4	96.3	96.2	Long	96.4	96.3	96.3	95.7	96.4	96.3	96.2	Long	-	
	Jun 26 expiry	SFR2 Comdty	96.3	Neutral	96.3	96.3	-0.1%	0.6%	96.3	96.3	96.3	Neutral	96.3	96.3	96.5	96.0	96.3	96.3	96.3	Neutral	-
	Sep 26 expiry	SFR3 Comdty	96.3	Short	96.2	96.4	96.6	95.9	96.3	96.4	96.4	Short	96.2	96.2	96.7	96.3	96.3	96.4	96.4	Neutral	↑
	Dec 26 expiry	SFR4 Comdty	96.1	Short	96.1	96.4	96.8	96.2	96.2	96.4	96.6	Short	96.1	96.2	96.8	96.5	96.2	96.4	96.6	Short	-
	Mar 27 expiry	SFR5 Comdty	96.1	Short	96.0	96.5	96.9	96.4	96.2	96.4	96.6	Short	96.0	96.2	96.9	96.7	96.2	96.4	96.6	Short	-
	Jun 27 expiry	SFR6 Comdty	96.1	Short	96.0	96.5	96.9	96.6	96.2	96.5	96.7	Short	96.0	96.3	96.8	96.8	96.2	96.4	96.7	Short	-
	Sep 27 expiry	SFR7 Comdty	96.1	Short	96.0	96.6	96.9	96.7	96.3	96.5	96.7	Short	96.0	96.4	96.8	96.9	96.2	96.5	96.7	Short	-
	Dec 27 expiry	SFR8 Comdty	96.1	Short	96.0	96.6	96.9	96.7	96.3	96.5	96.7	Short	96.1	96.5	96.8	96.9	96.3	96.5	96.7	Short	-
	Mar 28 expiry	SFR9 Comdty	96.2	Short	96.1	96.7	96.8	96.7	96.3	96.5	96.7	Short	96.1	96.5	96.7	96.8	96.3	96.5	96.7	Short	-
	Jun 28 expiry	SFR10 Comdty	96.2	Short	96.1	96.6	96.8	96.6	96.3	96.5	96.7	Short	96.1	96.5	96.7	96.8	96.3	96.5	96.6	Short	-
	Sep 28 expiry	SFR11 Comdty	96.2	Short	96.0	96.6	96.7	96.6	96.3	96.5	96.6	Short	96.1	96.5	96.6	96.7	96.3	96.5	96.6	Short	-
	Dec 28 expiry	SFR12 Comdty	96.2	Short	96.0	96.6	96.6	96.5	96.3	96.5	96.6	Short	96.1	96.4	96.6	96.7	96.3	96.4	96.6	Short	-
	Mar 29 expiry	SFR13 Comdty	96.2	Short	96.0	96.6	96.6	96.5	96.3	96.4	96.5	Short	96.1	96.4	96.5	96.6	96.2	96.4	96.5	Short	-
	Jun 29 expiry	SFR14 Comdty	96.2	Short	96.0	96.5	96.5	96.4	96.3	96.4	96.5	Short	96.1	96.4	96.5	96.6	96.2	96.4	96.5	Short	-
	Sep 29 expiry	SFR15 Comdty	96.2	Short	96.0	96.5	96.5	96.4	96.2	96.4	96.5	Short	96.1	96.3	96.4	96.5	96.2	96.3	96.5	Short	-
	Dec 29 expiry	SFR16 Comdty	96.1	Short	96.0	96.5	96.4	96.4	96.2	96.3	96.4	Short	96.0	96.3	96.4	96.5	96.2	96.3	96.4	Short	-
3M Euribor	ER1 Comdty	97.6	Short	97.6	97.6	97.9	98.1	97.6	97.7	97.8	Short	97.7	97.4	98.0	98.1	97.6	97.7	97.8	Short	-	
3M SONIA	SF11 Comdty	96.3	Long	96.3	96.2	96.2	95.7	96.2	96.2	96.2	Long	96.3	96.2	96.3	95.9	96.3	96.2	96.2	Long	-	

Source: J.P. Morgan Equity Derivatives Strategy, Bloomberg Finance L.P.

Table 9: Commodity CTA Signals

"Current" levels are as of morning ET Jun 15; see Appendix for definitions

Energy	Ticker	Current	Prior Week CTA Signal	Current CTA Levels								CTA Levels in 1w								1w Chg
				1m Mom.	3m Mom.	6m Mom.	12m Mom.	50d MA	100d MA	200d MA	CTA Signals	1m Mom.	3m Mom.	6m Mom.	12m Mom.	50d MA	100d MA	200d MA	CTA Signals	
Brent Crude	CO1 Comdty	83.2	Neutral	109.5	109.4	60.0	77.3	101.1	92.5	78.3	Neutral	96.7	107.6	61.7	67.5	101.0	92.9	78.5	Neutral	-
WTI	CL1 Comdty	80.4	Neutral	104.9	96.9	56.3	75.0	96.7	87.1	73.6	Neutral	93.1	94.8	57.8	64.8	96.6	87.6	73.9	Neutral	-
US Natural Gas	NG1 Comdty	3.11	Short	3.05	3.11	3.97	3.94	2.88	3.16	3.45	Short	2.95	3.02	4.28	3.40	2.89	3.14	3.45	Neutral	↑
Gasoline	XB1 Comdty	296.4	Long	364.8	317.1	170.1	229.6	332.7	288.0	238.1	Neutral	326.9	313.1	173.0	208.9	332.3	289.2	238.6	Neutral	-
Heating Oil	HO1 Comdty	330.4	Neutral	407.5	438.3	213.4	252.4	385.2	352.3	291.5	Neutral	373.3	425.8	214.1	231.4	384.4	353.9	292.3	Neutral	-
Low Sulphur Gasoil	QS1 Comdty	938	Neutral	1,205	1,312	612	755	1,177	1,062	871	Neutral	1,065	1,298	630	681	1,173	1,068	874	Neutral	-
TTF Nat Gas	TZT1 Comdty	43.60	Long	50.50	58.59	27.72	39.88	46.53	44.72	37.79	Neutral	46.44	54.07	28.10	35.01	46.61	44.86	37.90	Neutral	-
				-13.7%	-25.6%	57.3%	9.3%	-6.3%	-2.5%	15.4%		-6.1%	-19.4%	55.2%	24.5%	-6.5%	-2.8%	15.0%		
Base Metals	Ticker	Current	Prior Week CTA Signal	1m Mom.	3m Mom.	6m Mom.	12m Mom.	50d MA	100d MA	200d MA	CTA Signals	1m Mom.	3m Mom.	6m Mom.	12m Mom.	50d MA	100d MA	200d MA	CTA Signals	1w Chg
Copper	HG1 Comdty	650.7	Long	624.3	544.3	539.0	483.8	616.2	597.0	555.2	Long	633.6	548.1	558.8	495.2	618.0	597.6	556.2	Long	-
Nickel	LN1 Comdty	17,800	Long	18,617	19,510	14,498	14,873	18,346	17,832	16,270	Neutral	18,802	17,111	15,696	14,919	18,412	17,860	16,595	Neutral	-
Aluminum	LA1 Comdty	3,419	Long	3,642	3,325	2,903	2,539	3,625	3,419	3,122	Neutral	3,697	3,329	2,944	2,534	3,637	3,429	3,130	Neutral	-
Precious Metals	Ticker	Current	Prior Week CTA Signal	1m Mom.	3m Mom.	6m Mom.	12m Mom.	50d MA	100d MA	200d MA	CTA Signals	1m Mom.	3m Mom.	6m Mom.	12m Mom.	50d MA	100d MA	200d MA	CTA Signals	1w Chg
Gold	GC1 Comdty	4,336	Short	4,535	4,692	4,349	3,389	4,591	4,766	4,430	Short	4,491	4,474	4,497	3,326	4,598	4,767	4,438	Short	-
Silver	SI1 Comdty	70.92	Neutral	75.92	72.50	65.89	36.99	75.65	79.25	67.49	Neutral	75.60	69.86	72.85	36.14	75.81	79.10	67.70	Neutral	-
Agriculture	Ticker	Current	Prior Week CTA Signal	1m Mom.	3m Mom.	6m Mom.	12m Mom.	50d MA	100d MA	200d MA	CTA Signals	1m Mom.	3m Mom.	6m Mom.	12m Mom.	50d MA	100d MA	200d MA	CTA Signals	1w Chg
Soybean	S 1 Comdty	1,103	Neutral	1,207	1,164	1,053	1,075	1,171	1,154	1,106	Short	1,189	1,168	1,062	1,032	1,170	1,154	1,107	Short	-
Corn	C 1 Comdty	406.8	Short	472.7	466.2	442.9	432.8	450.3	444.9	435.6	Short	457.8	465.4	450.7	412.0	449.8	445.0	435.9	Short	-
Wheat	W 1 Comdty	572	Neutral	664	603	508	566	612	590	554	Neutral	635	603	521	528	612	590	555	Neutral	-
				-13.9%	-5.1%	12.6%	1.1%	-6.6%	-3.0%	3.2%		-9.9%	-5.1%	9.8%	8.3%	-6.5%	-3.1%	3.1%		

Source: J.P. Morgan Equity Derivatives Strategy, Bloomberg Finance L.P.

Table 10: FX/Crypto CTA Signals

"Current" levels are as of morning ET Jun 15; see Appendix for definitions

FX/Crypto	Ticker	Current	Prior Week CTA Signal	Current CTA Levels								CTA Levels in 1w								1w Chg
				1m Mom.	3m Mom.	6m Mom.	12m Mom.	50d MA	100d MA	200d MA	CTA Signals	1m Mom.	3m Mom.	6m Mom.	12m Mom.	50d MA	100d MA	200d MA	CTA Signals	
EUR/USD	EC1 Curcny	1.16	Short	1.16	1.16	1.18	1.15	1.17	1.17	1.17	Short	1.16	1.16	1.18	1.17	1.17	1.17	1.17	Short	↓
GBP/USD	BP1 Curcny	134.3	Short	134.1	133.4	133.8	134.3	134.6	134.7	134.2	Neutral	134.4	133.2	135.0	136.9	134.6	134.7	134.2	Short	↓
JPY/USD	JY1 Curcny	62.4	Short	63.0	63.4	64.5	69.6	63.1	63.6	64.6	Short	62.9	63.0	64.5	69.8	63.1	63.5	64.6	Short	-
CAD/USD	CD1 Curcny	71.6	Short	72.8	73.1	72.8	73.4	72.7	73.0	72.5	Short	72.4	72.5	73.4	73.3	72.7	73.0	72.5	Short	-
AUD/USD	AD1 Curcny	70.7	Neutral	71.3	70.4	66.1	65.0	71.3	70.7	68.3	Neutral	71.5	69.0	67.1	65.4	71.3	70.8	68.4	Neutral	-
USD/CNH	XUC1 Curcny	6.76	Short	6.80	6.88	7.02	7.17	6.80	6.85	6.96	Short	6.77	6.90	6.99	7.16	6.80	6.85	6.96	Short	-
CHF/USD	SF1 Curcny	126.2	Short	127.4	127.8	127.0	123.6	127.6	128.2	127.0	Short	127.6	126.9	127.9	125.9	127.6	128.1	127.0	Short	-
USD/BRL	UC1 Curcny	5,053	Neutral	5,032	5,276	5,534	5,517	5,049	5,149	5,278	Short	5,040	5,236	5,545	5,526	5,054	5,150	5,278	Short	-
Bitcoin	BTC1 Curcny	66,675	Short	77,145	70,565	86,282	104,280	74,106	73,027	87,691	Short	75,525	68,528	87,138	107,063	74,080	72,791	87,460	Short	-
Ether	DCR1 Curcny	1,795	Short	2,126	2,156	2,868	2,510	2,143	2,165	2,897	Short	2,062	2,071	2,928	2,436	2,138	2,154	2,884	Short	-
				-13.6%	-5.5%	-22.7%	-36.1%	-10.0%	-8.7%	-24.0%		-11.7%	-2.7%	-23.5%	-37.7%	-10.0%	-8.4%	-23.8%		
				-15.6%	-16.8%	-37.4%	-28.5%	-16.3%	-17.1%	-38.1%		-13.0%	-13.3%	-38.7%	-26.3%	-16.1%	-16.7%	-37.8%		

Source: J.P. Morgan Equity Derivatives Strategy, Bloomberg Finance L.P.

## CFTC Futures Positioning

Table 11: Commitment of Traders (COT) Legacy Report

Data as of 6/9/2026

Equity	Non-Commercial	Non-Commercial (z)	Non-Commercial w/w Chg	Commercial	Commercial (z)	Commercial w/w Chg
S&P 500	-205,644	-1.5	15,124 (0.5z)	90,660	110	-19,414 (-0.6z)
Nasdaq 100	-1,349	-1.5	13,600 (1.5z)	-720	115	-14,532 (-1.4z)
DJIA	-2,019	0.4	2,438 (0.6z)	-2,915	107	-1,924 (-0.5z)
MSCI EM	57,095	-0.8	-23,119 (-1.0z)	-76,397	110	27,150 (1.2z)
Russell 2000	-37,966	-0.1	-23,042 (-1.9z)	34,081	02	22,160 (1.7z)
MSCI EAFE	3,036	-0.2	7,128 (0.7z)	-10,176	02	-7,922 (-0.7z)
S&P MidCap 400	160	-1.4	872 (1.0z)	-3,819	12	334 (0.3z)
VIX	-74,420	-1.3	-4,468 (-0.3z)	72,459	02	-214 (-0.1z)
Fixed Income	Non-Commercial	Non-Commercial (z)	Non-Commercial w/w Chg	Commercial	Commercial (z)	Commercial w/w Chg
2y UST	-1,219,838	0.9	130,350 (1.6z)	1,156,276	1.6	-159,482 (-1.9z)
5y UST	-1,320,162	2.0	49,056 (0.3z)	1,317,080	1.9	-34,194 (-0.2z)
10y UST	-863,807	-0.7	-34,232 (-0.4z)	864,695	1.8	42,953 (0.4z)
UST Ultra 10y Note	-117,107	1.3	65,983 (1.7z)	229,011	1.3	-33,909 (-0.8z)
UST Long Bond	-163,305	-0.7	-3,452 (-0.1z)	67,844	1.6	-4,528 (-0.2z)
UST Ultra Bond	-318,731	-2.0	-31,021 (-1.6z)	320,235	2.5	24,231 (1.2z)
Commodities	Non-Commercial	Non-Commercial (z)	Non-Commercial w/w Chg	Commercial	Commercial (z)	Commercial w/w Chg
WTI	130,301	0.0	-25,573 (-1.3z)	-170,726	1.2	17,383 (0.8z)
US Natural Gas	-193,957	-1.3	-7,842 (-0.5z)	175,738	1.1	1,825 (0.0z)
Gasoline	47,043	-1.6	-8,579 (-1.1z)	-58,973	0.4	7,886 (1.0z)
Copper	74,450	1.7	-4,383 (-0.9z)	-83,935	1.5	4,710 (1.0z)
Gold	173,837	-0.8	-2,183 (-0.1z)	-201,036	1.1	5,309 (0.3z)
Silver	22,214	-0.1	-1,712 (-0.2z)	-40,368	1.1	2,293 (0.5z)
Soybean	150,463	0.3	-37,321 (-1.4z)	-122,120	1.2	42,770 (1.6z)
Corn	103,559	0.3	-96,383 (-2.0z)	-53,122	1.2	58,272 (1.3z)
Wheat	-57,853	-1.2	-17,091 (-1.3z)	56,192	0.1	17,753 (1.5z)
Interest Rates	Non-Commercial	Non-Commercial (z)	Non-Commercial w/w Chg	Commercial	Commercial (z)	Commercial w/w Chg
3M SOFR	-2,534,063	-1.1	-385,462 (-2.1z)	2,533,569	4.1	323,661 (1.7z)
1M Fed Funds	-177,055	-1.7	-44,731 (-0.5z)	171,960	0.8	50,152 (0.5z)
FX/Crypto	Non-Commercial	Non-Commercial (z)	Non-Commercial w/w Chg	Commercial	Commercial (z)	Commercial w/w Chg
EUR/USD	13,932	-1.8	-34,934 (-1.8z)	-38,085	1.9	31,311 (1.4z)
GBP/USD	-64,213	-1.9	-11,995 (-0.8z)	75,870	1.0	14,777 (0.8z)
JPY/USD	-145,818	-1.1	-16,251 (-0.6z)	142,369	2.0	14,601 (0.5z)
CAD/USD	-119,999	-1.9	-25,888 (-1.5z)	128,812	0.9	29,206 (1.5z)
AUD/USD	18,160	0.6	-23,652 (-2.1z)	-36,669	1.5	24,104 (2.0z)
CHF/USD	-36,665	-1.6	-3,756 (-1.1z)	49,741	1.7	4,912 (1.2z)
Bitcoin	3,018	1.9	560 (1.0z)	-2,906	1.9	-311 (-0.5z)
Ether	3,782	1.1	-835 (-1.1z)	-3,918	1.0	114 (0.3z)

Source: J.P. Morgan Equity Derivatives Strategy, CFTC, Bloomberg Finance L.P.

Table 12: Traders in Financial Futures and COT Disaggregated Report

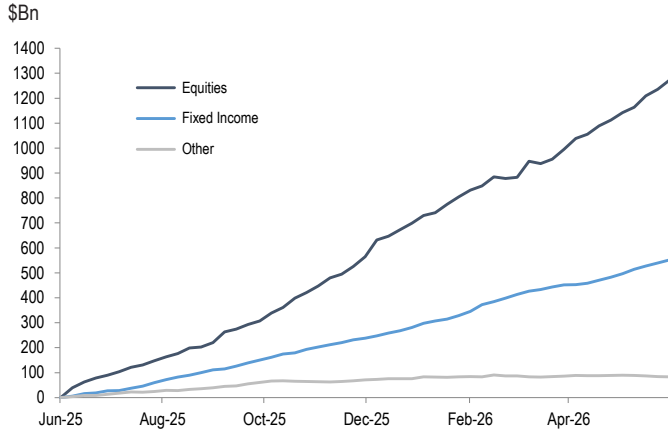
Data as of 6/9/2026

Equity	Asset Manager	Asset Manager (z)	Asset Manager w/w Chg	Leveraged Funds	Leveraged Funds (z)	Leveraged Funds w/w Chg	Dealer	Dealer (z)	Dealer w/w Chg	Other Reportables	Other Reportables (z)	Other Reportables
S&P 500	984,086	11	2,227 (0.0z)	-451,586	9	49,146 (1.1z)	-683,325	5	-63,818 (-1.6z)	35,841	3	8,155 (0.6z)
Nasdaq 100	83,367	8	4,276 (0.7z)	-34,306	8	19,344 (2.2z)	-47,341	8	-16,662 (-1.4z)	-3,789	4	-7,890 (-2.7z)
DJIA	-689	4	-1,584 (-0.4z)	-7,646	4	4,098 (1.1z)	3,347	2	-1,982 (-0.5z)	54	4	-18 (-0.1z)
MSCI EM	422,809	6	6,750 (0.3z)	67,501	2	-15,115 (-0.6z)	-492,233	2	15,904 (0.8z)	-17,379	8	-3,508 (-0.3z)
Russell 2000	-16,315	1	-6,181 (-0.6z)	-74,454	6	-1,114 (0.0z)	85,962	1	1,982 (0.1z)	922	1	4,431 (1.1z)
MSCI EAFE	235,308	3	-429 (0.0z)	-11,886	3	2,126 (0.2z)	-229,898	2	-2,496 (-0.3z)	-664	5	5 (-0.1z)
S&P MidCap 400	2,378	9	1,957 (1.3z)	-1,202	7	943 (1.1z)	-4,835	4	-1,694 (-1.3z)	0	3	0 (0.0z)
VIX	-26,394	2	-13,878 (-1.3z)	-35,290	8	-2,257 (-0.2z)	59,013	0	9,676 (0.9z)	710	9	1,777 (1.1z)
Fixed Income	Asset Manager	Asset Manager (z)	Asset Manager w/w Chg	Leveraged Funds	Leveraged Funds (z)	Leveraged Funds w/w Chg	Dealer	Dealer (z)	Dealer w/w Chg	Other Reportables	Other Reportables (z)	Other Reportables
2y UST	1,879,104	5	-79,666 (-0.8z)	-1,680,942	3	132,069 (1.7z)	-419,923	8	-90,304 (-1.8z)	158,199	7	8,769 (0.3z)
5y UST	2,930,024	3	32,120 (0.3z)	-2,230,356	2	27,239 (0.0z)	-704,901	6	-18,625 (-0.3z)	2,151	2	-25,872 (-0.2z)
10y UST	2,412,885	0	58,593 (0.5z)	-1,979,511	0	-16,417 (-0.2z)	-462,478	6	-20,322 (-0.4z)	29,992	8	-13,133 (-0.2z)
UST Ultra 10y Note	595,743	6	-67,411 (-1.5z)	-260,130	2	25,193 (0.6z)	-241,031	4	24,046 (0.9z)	17,322	2	50,246 (2.8z)
UST Long Bond	478,569	0	-3,082 (-0.1z)	-281,933	0	-1,871 (-0.2z)	-281,630	5	-11,245 (-0.4z)	-10,467	9	8,218 (1.2z)
UST Ultra Bond	1,139,250	2	57,380 (1.7z)	-935,158	9	-25,761 (-0.7z)	-213,303	2	-40,209 (-1.7z)	10,715	4	1,800 (0.0z)
Commodities	Producer	Producer (z)	Producer w/w Chg	Managed Money	Managed Money (z)	Managed Money w/w Chg	Swap Dealer	Swap Dealer (z)	Swap Dealer w/w Chg	Other Reportables	Other Reportables (z)	Other Reportables
Brent Crude	-460,314	7	49,515 (1.4z)	218,090	0	-28,819 (-0.8z)	271,425	6	-15,813 (-0.7z)	-75,529	7	-11,792 (-0.7z)
WTI	365,942	7	7,926 (0.4z)	94,725	8	3,960 (0.3z)	-536,668	2	9,457 (0.5z)	35,576	4	-29,533 (-1.9z)
US Natural Gas	-21,073	4	1,710 (0.2z)	-122,617	8	-7,763 (-0.3z)	196,811	9	115 (-0.2z)	-71,340	4	-79 (0.0z)
Gasoline	-79,363	0	5,980 (0.9z)	64,125	4	-3,648 (-0.5z)	20,390	1	1,906 (0.5z)	-17,082	2	-4,931 (-1.2z)
Copper	-109,260	5	5,644 (1.2z)	69,204	1	-6,543 (-1.4z)	25,325	0	-934 (-0.5z)	5,246	3	2,160 (0.6z)
Gold	-19,300	2	854 (0.1z)	105,863	5	-6,316 (-0.6z)	-181,736	7	4,455 (0.3z)	67,974	9	4,133 (0.5z)
Silver	-16,659	1	1,334 (0.5z)	10,403	9	-41 (0.2z)	-23,709	9	959 (0.2z)	11,811	4	-1,671 (-0.6z)
Soybean	-252,670	4	29,980 (1.2z)	97,859	0	-57,921 (-1.9z)	130,550	7	12,790 (2.0z)	52,604	4	20,600 (2.4z)
Corn	-398,197	6	58,487 (1.3z)	-1,306	0	-121,442 (-2.5z)	345,075	2	-215 (-0.3z)	104,865	2	25,059 (1.8z)
Wheat	-22,514	3	21,419 (1.9z)	-77,593	5	-22,953 (-1.5z)	78,706	1	-3,666 (-1.0z)	19,740	9	5,862 (1.3z)
Interest Rates	Asset Manager	Asset Manager (z)	Asset Manager w/w Chg	Leveraged Funds	Leveraged Funds (z)	Leveraged Funds w/w Chg	Dealer	Dealer (z)	Dealer w/w Chg	Other Reportables	Other Reportables (z)	Other Reportables
3M SOFR	-361,572	7	31,177 (0.4z)	-2,449,864	8	-346,475 (-1.9z)	2,890,339	3	257,393 (1.0z)	-79,397	2	-3,896 (-0.3z)
1M Fed Funds	-88,934	3	-10,824 (-0.2z)	-8,441	2	12,898 (0.1z)	75,395	7	9,293 (0.2z)	16,885	7	-5,946 (-0.6z)
FX/Crypto	Asset Manager	Asset Manager (z)	Asset Manager w/w Chg	Leveraged Funds	Leveraged Funds (z)	Leveraged Funds w/w Chg	Dealer	Dealer (z)	Dealer w/w Chg	Other Reportables	Other Reportables (z)	Other Reportables
EUR/USD	281,556	5	-4,365 (-0.2z)	-17,388	4	-29,415 (-2.6z)	-299,345	2	30,126 (1.2z)	11,024	6	31 (0.0z)
GBP/USD	-109,656	0	-8,090 (-0.5z)	22,312	5	-5,041 (-0.7z)	99,001	1	16,521 (0.8z)	0	2	-608 (-0.6z)
JPY/USD	-78,076	6	-12,064 (-0.9z)	-99,844	8	-11,781 (-0.8z)	123,546	2	22,918 (0.7z)	50,925	8	-723 (0.0z)
CAD/USD	-73,639	9	-21,673 (-1.3z)	-58,623	7	-14,022 (-2.2z)	130,981	9	41,129 (1.9z)	10,094	0	-2,116 (-1.5z)
AUD/USD	-12,083	3	-12,939 (-1.4z)	42,292	7	-16,508 (-2.1z)	-49,908	4	32,344 (2.3z)	1,190	6	-2,445 (-1.5z)
CHF/USD	-36,553	8	-4,036 (-1.1z)	-10,785	9	-836 (-0.3z)	59,865	1	5,231 (1.2z)	549	2	797 (1.2z)
Bitcoin	2,888	7	-215 (-0.2z)	-5,995	3	563 (0.3z)	3,689	1	218 (0.5z)	-470	4	-317 (-0.5z)
Ether	-3,242	3	61 (0.2z)	-4,651	9	-330 (-0.2z)	8,101	0	-632 (-0.3z)	-344	5	180 (0.4z)

Source: J.P. Morgan Equity Derivatives Strategy, CFTC, Bloomberg Finance L.P.

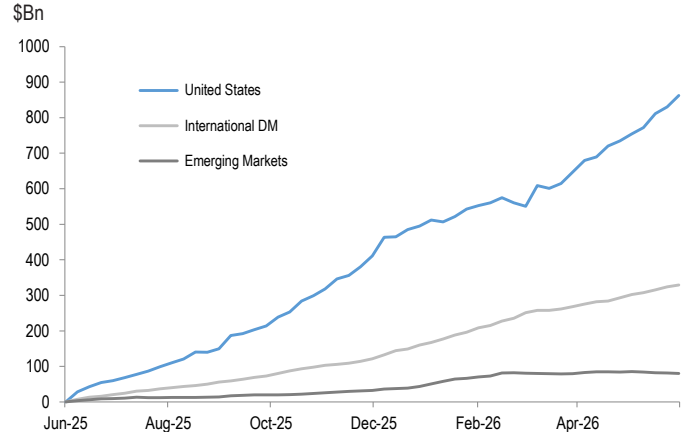
## ETF Flows

Figure 1: Asset Class Flows



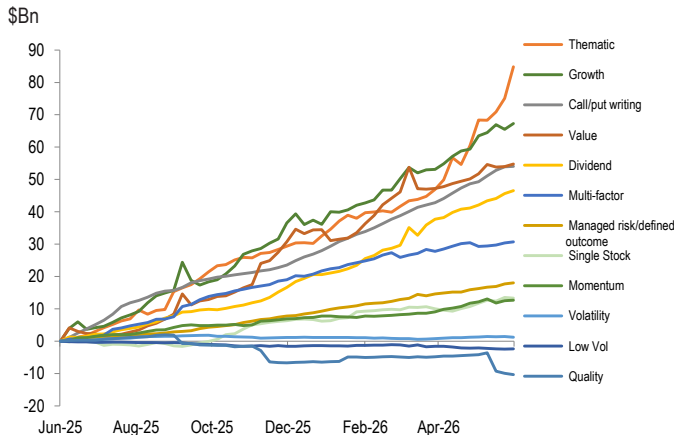
Source: J.P. Morgan Equity Derivatives Strategy, Bloomberg Finance L.P.

Figure 2: Equity Regional Flows



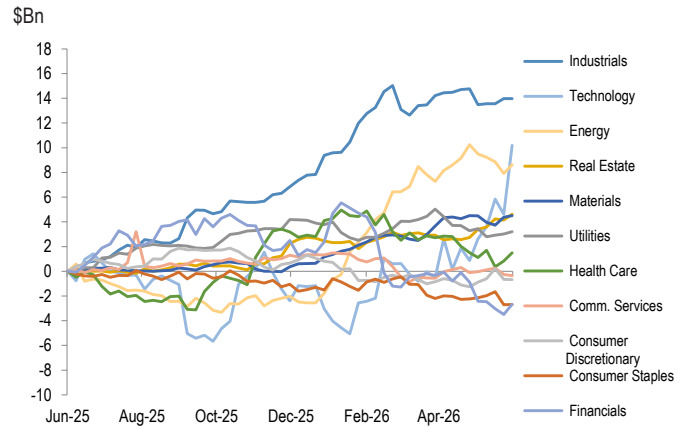
Source: J.P. Morgan Equity Derivatives Strategy, Bloomberg Finance L.P.

Figure 3: Equity Style Flows



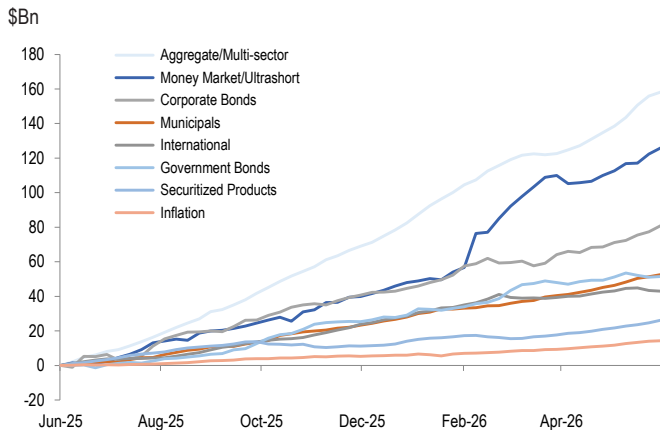
Source: J.P. Morgan Equity Derivatives Strategy, Bloomberg Finance L.P.

Figure 4: Equity Sector Flows



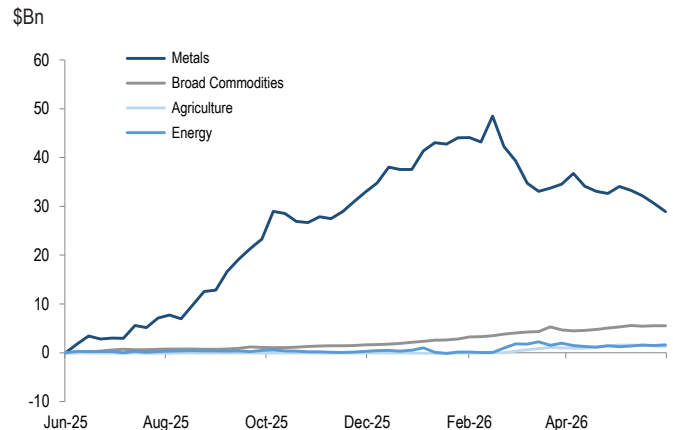
Source: J.P. Morgan Equity Derivatives Strategy, Bloomberg Finance L.P.

Figure 5: Fixed Income Flows



Source: J.P. Morgan Equity Derivatives Strategy, Bloomberg Finance L.P.

Figure 6: Commodity Flows



Source: J.P. Morgan Equity Derivatives Strategy, Bloomberg Finance L.P.

Table 13: ETF Flows by Asset Class

Asset Class	Net Flow - 1y History	Net 1w Flow (\$Bn)	Net 4w Flow (\$Bn)	Net 1w Flow (z)	Net 4w Flow (z)
Equities		35.9	129.6	0.8	1.1
Fixed Income		12.3	55.6	0.4	1.1
Commodities		-1.6	-4.8	-1.1	-1.6
Currency/Multi-asset		0.3	-2.0	-0.4	-1.4

Source: J.P. Morgan Equity Derivatives Strategy, Bloomberg Finance L.P.

Table 14: Equity ETF Flows by Region

Region	Net Flow - 1y History	Net 1w Flow (\$Mn)	Net 4w Flow (\$Mn)	Net 1w Flow (z)	Net 4w Flow (z)
United States		32,063	107,952	1.1	1.6
International DM		5,003	26,486	-0.4	0.1
Europe (Developed)		-168	-20	-0.5	-0.1
Asia Pac (Developed)		400	1,296	0.4	0.4
Japan		354	749	0.4	0.1
Canada		211	371	1.8	1.0
Emerging Markets		-1,120	-4,803	-1.2	-1.6
Latam		-702	-1,704	-2.4	-2.3
Mexico		-85	-212	-1.3	-1.2
Brazil		-375	-905	-2.2	-2.4
EM Asia		-648	-3,301	-1.2	-2.4
China		-821	-2,006	-2.7	-3.0
Korea		412	-1,071	0.7	-1.0
India		-46	-58	0.0	0.2
CEEMEA		45	-82	0.9	-0.6
MENA		-45	-19	-1.9	-0.9

Source: J.P. Morgan Equity Derivatives Strategy, Bloomberg Finance L.P.

Table 15: Equity ETF Flows by Style

Style	Net Flow - 1y History	Net 1w Flow (\$Mn)	Net 4w Flow (\$Mn)	Net 1w Flow (z)	Net 4w Flow (z)
Growth		1,777	3,798	0.2	-0.5
Value		787	2,994	-0.1	-0.3
Dividend		894	4,453	0.0	0.5
Multi-factor		320	1,448	-0.4	-0.7
Momentum		158	496	-0.2	-0.7
Quality		-382	-6,153	-0.2	-2.7
Low Vol		52	-296	0.6	-0.4
Call/put writing		135	4,739	-1.9	0.4
Managed risk/defined outcome		363	1,790	0.1	0.9
Volatility		-252	-116	-2.1	-0.6
Thematic		9,737	16,426	3.8	2.5
Single Stock		-211	1,577	-0.8	0.4

Source: J.P. Morgan Equity Derivatives Strategy, Bloomberg Finance L.P.

Table 16: Equity ETF Flows by Sector

Sector	Net Flow - 1y History	Net 1w Flow (\$Mn)	Net 4w Flow (\$Mn)	Net 1w Flow (z)	Net 4w Flow (z)
Consumer Discretionary		-17	206	0.0	0.3
Consumer Staples		19	-541	0.2	-0.7
Energy		708	-858	0.8	-0.9
Financials		819	-252	1.0	0.0
Health Care		656	382	0.9	0.2
Industrials		13	503	-0.4	-0.5
Materials		121	8	0.1	-0.5
Real Estate		486	1,231	1.4	1.3
Technology		5,570	7,570	3.4	2.4
Comm. Services		-86	-321	-0.1	-0.4
Utilities		182	-247	0.4	-0.6

Source: J.P. Morgan Equity Derivatives Strategy, Bloomberg Finance L.P.

Table 17: Fixed Income ETF Flows by Segment

Segment	Net Flow - 1y History	Net 1w Flow (\$Bn)	Net 4w Flow (\$Bn)	Net 1w Flow (z)	Net 4w Flow (z)
Aggregate/Multi-sector		2.3	19.7	-0.6	1.8
Government Bonds		0.4	0.3	-0.5	-1.3
Short-term		-0.1	1.7	-0.5	0.7
Medium-term		0.2	1.0	-0.5	-1.0
Long-term		0.0	-4.3	0.2	-2.2
Corporate Bonds		3.6	9.7	1.0	1.0
IG		2.9	7.5	1.1	0.9
HY		0.6	1.8	0.2	0.2
Money Market/Ultrashort		3.5	13.1	0.3	0.4
Municipals		1.1	6.1	0.1	1.4
Mortgage		1.0	2.0	2.1	1.3
Inflation		0.3	2.5	0.0	2.1
International		-0.4	-0.2	-1.5	-1.7
Loans		0.5	2.4	0.3	0.8

Source: J.P. Morgan Equity Derivatives Strategy, Bloomberg Finance L.P.

Table 18: Commodity ETF Flows by Segment

Segment	Net Flow - 1y History	Net 1w Flow (\$Mn)	Net 4w Flow (\$Mn)	Net 1w Flow (z)	Net 4w Flow (z)
Broad Commodities		-13	213	-0.6	-0.6
Energy		171	383	0.5	0.5
Precious Metals		-1,608	-5,063	-1.0	-1.4
Base Metals		-37	-50	-1.1	-0.8
Agriculture		-130	-301	-1.7	-1.5

Source: J.P. Morgan Equity Derivatives Strategy, Bloomberg Finance L.P.

Bram Kaplan, CFA <sup>AC</sup> (1-212) 272-1215  
 bram.kaplan@jpmorgan.com  
 J.P. Morgan Securities LLC

Daniel Motoc, CFA <sup>AC</sup> (1-212) 622-0105  
 daniel.motoc@jpmchase.com

Arda Sebuktekin (1-212) 270-4397  
 arda.sebuktekin@jpmchase.com

Tony SK Lee (852) 2800-8857  
 tony.sk.lee@jpmorgan.com

Table 19: Currency/Multi-asset ETF Flows by Segment

Currency/Multi-asset	Net Flow - 1y History	Net 1w Flow (\$Mn)	Net 4w Flow (\$Mn)	Net 1w Flow (z)	Net 4w Flow (z)
Fiat		120	121	1.5	0.5
Cryptocurrency		-252	-5,123	-0.5	-1.7
Asset Allocation		111	490	-0.4	-0.6
Liquid Alts		293	2,521	0.4	3.1

Source: J.P. Morgan Equity Derivatives Strategy, Bloomberg Finance L.P.

**Table 20: Top-Performing ETFs**

1W & 4W, excludes levered ETFs

ETF Name	1w Perf	Ticker	ETF Name	4w Perf
DRAM Roundhill Memory ETF	16.5%	COLO	Global X MSCI Colombia ETF	22.6%
PSI Invesco Semiconductors ETF	15.8%	DRAM	Roundhill Memory ETF	19.2%
KDEF PLUS Korea Defense Industry In	13.4%	XTN	State Street SPDR S&P Transpor	17.0%
FLKR Franklin FTSE South Korea ETF	12.9%	CHPS	Xtrackers Semiconductor Select	13.6%
MKOR Matthews Korea Active ETF	12.9%	JETS	US Global Jets ETF	13.0%

Source: J.P. Morgan Equity Derivatives Strategy, Bloomberg Finance L.P.

**Table 21: Bottom-Performing ETFs**

1W & 4W, excludes levered ETFs

Ticker	ETF Name	1w Perf	Ticker	ETF Name	4w Perf
SMCY	Yieldmax Smci Option Income St	-26.6%	MSTY	YieldMax MSTR Option Income St	-32.7%
MSOS	AdvisorShares Pure US Cannabis	-7.9%	FSOL	Fidelity Solana Fund	-27.0%
JEDI	Defiance Drone And Modern Warf	-7.1%	ETHE	Grayscale Ethereum Staking ETF	-26.4%
BNO	United States Brent Oil Fund L	-6.6%	ETHW	Bitwise Ethereum ETF	-26.3%
MJ	Amplify Alternative Harvest ET	-6.2%	FETH	Fidelity Ethereum Fund	-26.3%

Source: J.P. Morgan Equity Derivatives Strategy, Bloomberg Finance L.P.

**Table 22: Largest Fund Inflows**

1W & 4W

Ticker	ETF Name	1w Inflow	Ticker	ETF Name	4w Inflow
VOO	Vanguard S&P 500 ETF	\$48.2Bn (3.1z)	VOO	Vanguard S&P 500 ETF	\$68.6Bn (3.2z)
ARKK	ARK Innovation ETF	\$6.2Bn (4.7z)	SPY	State Street SPDR S&P 500 ETF	\$15.9Bn (1.3z)
QQQ	Invesco QQQ Trust Series 1	\$3.5Bn (1.0z)	SGOV	iShares 0-3 Month Treasury Bon	\$6.2Bn (1.4z)
SOXX	iShares Semiconductor ETF	\$2.9Bn (4.4z)	VTI	Vanguard Total Stock Market ET	\$5.6Bn (1.5z)
IWM	iShares Russell 2000 ETF	\$2.4Bn (1.4z)	ARKK	ARK Innovation ETF	\$5.5Bn (4.5z)

Source: J.P. Morgan Equity Derivatives Strategy, Bloomberg Finance L.P.

**Table 23: Largest Fund Outflows**

1W & 4W

Ticker	ETF Name	1w Outflow	Ticker	ETF Name	4w Outflow
IVV	iShares Core S&P 500 ETF	-\$43.9Bn (-2.2z)	IVV	iShares Core S&P 500 ETF	-\$33.7Bn (-1.6z)
SPYM	State Street SPDR Portfolio S&	-\$2.9Bn (-2.1z)	QUAL	iShares MSCI USA Quality Facto	-\$7.0Bn (-3.0z)
EFV	iShares MSCI EAFE Value ETF	-\$1.0Bn (-1.8z)	EFV	iShares MSCI EAFE Value ETF	-\$5.5Bn (-4.8z)
BSV	Vanguard Short-Term Bond ETF	-\$0.9Bn (-3.7z)	IBIT	iShares Bitcoin Trust ETF	-\$3.7Bn (-2.0z)
GLD	SPDR Gold Shares	-\$0.9Bn (-0.7z)	GLD	SPDR Gold Shares	-\$3.3Bn (-1.5z)

Source: J.P. Morgan Equity Derivatives Strategy, Bloomberg Finance L.P.

## Futures Liquidity

Table 24: Equity Futures Liquidity

See Appendix for definitions

Americas	Ticker	Bid/Ask Spread (% of notional, bps)	Market Depth (contracts, top of book)	Market Depth (z)	ADV (prior week - \$Bn)	ADV (prior week - z)	1y ADV (\$Bn)
S&P 500	ES1 Index	0.4	9	-1.9	899.1	2.5	525.0
Nasdaq 100	NQ1 Index	0.5	1	-2.0	495.3	3.1	285.5
Russell 2000	RTY1 Index	0.9	2	-2.8	46.2	2.2	26.6
DJIA	DM1 Index	0.5	2	-2.4	40.2	2.2	24.5
S&P MidCap 400	FA1 Index	6.9	2	-0.8	9.4	2.4	4.3
MSCI EM	MES1 Index	1.2	4	-3.0	28.8	2.0	10.6
MSCI EAFE	MFS1 Index	1.7	2	-1.4	23.2	2.4	7.5
VIX	UX1 Index	27.1	527	0.6	5.8	1.2	3.6
S&P TSX 60	PT1 Index	2.2	3	0.2	10.6	1.1	5.7
Bovespa	XB1 Index	0.3	90	0.3	123.5	0.7	104.9
EMEA	Ticker	Bid/Ask Spread (% of notional, bps)	Market Depth (contracts, top of book)	Market Depth (z)	ADV (prior week - \$Bn)	ADV (prior week - z)	1y ADV (\$Bn)
Euro Stoxx 50	VG1 Index	1.7	108	-1.2	71.8	1.2	45.1
FTSE 100	Z 1 Index	1.0	5	-0.8	16.3	0.6	11.2
DAX	GX1 Index	1.5	2	-2.1	25.5	0.6	22.0
SMI	SM1 Index	1.5	5	0.1	5.7	0.3	4.9
CAC 40	CF1 Index	1.3	4	-0.4	4.5	-0.3	5.4
FTSE/JSE Top 40	AI1 Index	4.1	3	-1.2	2.3	1.2	1.2
BIST 30	A51 Index	1.8	11	-1.3	1.1	0.6	0.9
APAC	Ticker	Bid/Ask Spread (% of notional, bps)	Market Depth (contracts, top of book)	Market Depth (z)	ADV (prior week - \$Bn)	ADV (prior week - z)	1y ADV (\$Bn)
TOPIX	TP1 Index	1.7	7	-1.3	55.0	4.4	15.1
Nikkei 225	NK1 Index	2.1	6	-1.8	45.6	4.7	14.3
ASX SPI 200	XP1 Index	1.3	8	0.4	7.8	0.2	7.0
KOSPI 200	KM1 Index	3.8	2	-1.4	45.4	2.2	26.5
Hang Seng	HI1 Index	0.9	4	-0.8	20.0	0.0	19.9
Hang Seng China Ent.	HC1 Index	1.4	22	0.6	7.1	-1.3	8.0
FTSE China A50	XU1 Index	0.8	16	0.1	7.4	0.1	6.8
CSI 300	IFB1 Index	1.2	3	-1.2	26.5	0.6	23.4
CSI 500	FFD1 Index	1.4	3	-0.5	42.7	1.1	31.3
CSI 1000	IFD1 Index	1.2	3	-0.9	65.9	1.6	49.4
NIFTY 50	JGS1 Index	1.5	3	0.8	3.3	-0.4	3.8
SET 50	BC1 Index	1.5	33	1.6	1.0	0.1	1.0
SSE50	FFB1 Index	1.4	3	0.5	7.6	0.5	7.0
SGX FTSE Taiwan	TWT1 Index	2.0	2	-1.2	11.4	1.2	7.1
TAIEX	FT1 Index	1.6	2	-2.6	54.1	3.4	24.3
MSCI Singapore	QZ1 Index	1.8	5	-1.0	1.0	-0.3	1.4

Source: J.P. Morgan Equity Derivatives Strategy, Bloomberg Finance L.P.

**Table 25: Fixed Income Futures Liquidity**

See Appendix for definitions

Americas	Ticker	Bid/Ask Spread (% of notional, bps)	Market Depth (contracts, top of book)	Market Depth (z)	ADV (prior week - \$Bn)	ADV (prior week - z)	1y ADV (\$Bn)
2y UST	TU2 Comdty	0.4	2,770	0.1	210.9	-0.1	231.3
5y UST	FV2 Comdty	0.7	1,370	0.1	166.8	-0.2	192.5
10y UST	TY2 Comdty	1.4	2,385	-0.2	230.5	-0.2	253.3
UST Ultra 10y Note	UXY2 Comdty	1.4	910	-0.5	67.4	-0.3	82.2
UST Long Bond	US2 Comdty	2.8	793	0.0	54.9	-0.2	61.7
UST Ultra Bond	WN2 Comdty	2.8	435	-0.4	42.5	-0.2	52.2
Canada 10y	CN2 Comdty	0.9	93	0.7	18.5	0.2	17.0
EMEA	Ticker	Bid/Ask Spread (% of notional, bps)	Market Depth (contracts, top of book)	Market Depth (z)	ADV (prior week - \$Bn)	ADV (prior week - z)	1y ADV (\$Bn)
Germany 2y	DU1 Comdty	0.5	2,339	-0.3	103.0	0.0	105.5
Germany 5y	OE1 Comdty	0.9	1,677	0.4	134.5	0.1	126.8
Germany 10y	RX1 Comdty	0.8	569	-0.2	173.9	0.0	176.0
Germany 30y	UB1 Comdty	1.9	146	1.7	19.7	-0.2	21.6
10y Gilt	G 2 Comdty	1.2	105	2.5	28.9	-0.4	39.9
France 10y	OAT1 Comdty	0.9	207	2.5	40.8	0.0	40.6
Italy 10y	IK1 Comdty	0.9	172	1.9	50.8	0.1	49.8
APAC	Ticker	Bid/Ask Spread (% of notional, bps)	Market Depth (contracts, top of book)	Market Depth (z)	ADV (prior week - \$Bn)	ADV (prior week - z)	1y ADV (\$Bn)
Japan 10y	JB1 Comdty	0.8	20	-0.8	105.8	3.5	33.5
Australia 10y	XM1 Comdty	0.6	756	0.4	63.0	3.8	17.6
China 10y	TFT1 Comdty	0.5	147	0.3	18.9	0.6	15.8
Korea 10y	KAA1 Comdty	1.1	38	0.4	7.6	0.1	7.5

Source: J.P. Morgan Equity Derivatives Strategy, Bloomberg Finance L.P.

**Table 26: Interest Rates Futures Liquidity**

See Appendix for definitions

Global	Ticker	Bid/Ask Spread (% of notional, bps)	Market Depth (contracts, top of book)	Market Depth (z)	ADV (prior week - \$Bn)	ADV (prior week - z)	1y ADV (\$Bn)
3M SOFR	SFR1 Comdty	0.5	5,873	-0.3	1,015.1	0.4	899.4
3M Euribor	ER1 Comdty	0.6	2,710	-0.4	720.6	0.7	524.0
3M SONIA	SF11 Comdty	0.5	12,255	12.2	279.1	-0.1	296.3

Source: J.P. Morgan Equity Derivatives Strategy, Bloomberg Finance L.P.

**Table 27: Commodity Futures Liquidity**

See Appendix for definitions

Energy	Ticker	Bid/Ask Spread (% of notional, bps)	Market Depth (contracts, top of book)	Market Depth (z)	ADV (prior week - \$Bn)	ADV (prior week - z)	1y ADV (\$Bn)
Brent Crude	CO1 Comdty	2.6	4	1.0	107.5	0.2	99.0
WTI	CL1 Comdty	2.3	4	1.1	82.5	0.3	70.6
US Natural Gas	NG1 Comdty	4.0	11	0.3	16.0	-0.3	18.5
Gasoline	XB1 Comdty	4.7	2	0.6	21.7	0.3	18.9
Heating Oil	HO1 Comdty	6.9	2	1.8	22.2	0.0	22.3
Low Sulphur Gasoil	QS1 Comdty	6.0	4	1.5	37.4	0.4	30.9
TTF Nat Gas	TZT1 Comdty	8.4	12	1.0	14.0	0.1	12.8
Base Metals	Ticker	Bid/Ask Spread (% of notional, bps)	Market Depth (contracts, top of book)	Market Depth (z)	ADV (prior week - \$Bn)	ADV (prior week - z)	1y ADV (\$Bn)
Copper	HG1 Comdty	1.8	3	-1.4	14.3	1.4	9.7
Nickel	LN1 Comdty	10.0	3	0.3	9.3	2.1	5.2
Aluminum	LA1 Comdty	9.8	3	1.5	24.4	2.4	12.7
Precious Metals	Ticker	Bid/Ask Spread (% of notional, bps)	Market Depth (contracts, top of book)	Market Depth (z)	ADV (prior week - \$Bn)	ADV (prior week - z)	1y ADV (\$Bn)
Gold	GC1 Comdty	1.1	2	0.0	77.5	-0.6	103.3
Silver	SI1 Comdty	3.9	2	0.1	26.2	-0.2	31.2
Agriculture	Ticker	Bid/Ask Spread (% of notional, bps)	Market Depth (contracts, top of book)	Market Depth (z)	ADV (prior week - \$Bn)	ADV (prior week - z)	1y ADV (\$Bn)
Soybean	S 1 Comdty	2.6	41	-0.2	18.2	0.4	16.1
Corn	C 1 Comdty	6.3	321	-1.3	13.5	1.6	9.2
Wheat	W 1 Comdty	5.2	25	-1.3	6.3	1.4	4.1

Source: J.P. Morgan Equity Derivatives Strategy, Bloomberg Finance L.P.

**Table 28: FX/Crypto Futures Liquidity**

See Appendix for definitions

FX/Crypto	Ticker	Bid/Ask Spread (% of notional, bps)	Market Depth (contracts, top of book)	Market Depth (z)	ADV (prior week - \$Bn)	ADV (prior week - z)	1y ADV (\$Bn)
EUR/USD	EC1 Curncy	0.5	37	1.3	94.8	3.6	31.1
GBP/USD	BP1 Curncy	1.0	60	0.9	15.3	1.8	8.4
JPY/USD	JY1 Curncy	0.9	82	3.1	26.1	2.9	13.4
CAD/USD	CD1 Curncy	0.9	85	1.1	16.3	4.2	5.5
AUD/USD	AD1 Curncy	1.0	45	-0.1	16.1	2.4	7.4
USD/CNH	XUC1 Curncy	0.2	18	1.0	31.7	2.1	18.6
CHF/USD	SF1 Curncy	0.7	6	1.3	12.6	4.0	4.5
USD/BRL	UC1 Curncy	1.4	59	0.2	12.7	0.3	12.0
Bitcoin	BTC1 Curncy	5.7	2	-0.7	3.2	-1.4	5.9
Ether	DCR1 Curncy	5.7	3	1.0	1.2	-1.2	3.2

Source: J.P. Morgan Equity Derivatives Strategy, Bloomberg Finance L.P.

## Appendix

*\*Unless otherwise specified, all Z-scores are calculated over a 1Y period.  $Z\text{-score} = (\text{Current Value} - \text{Average}) / \text{Standard Deviation}$*

### Flows and Positioning Definitions

1. **Net Flows:** The net flow traded on a futures contract, calculated across the futures chain. Volumes are classified via an attribution of trade-by-trade flows, based on whether the trade price was on the bid side (identified as a sell flow) or offer side (identified as a buy flow) of the order book.
2. **AM + HF:** Asset managers' and Hedge Funds' positioning in the relevant futures contract, as reported in the latest CFTC Traders in Financial Futures report. Expressed as a Z-score.
3. **Non-Commercial:** Non-commercial entities' positioning in the relevant futures contract, as reported in the latest CFTC Commitment of Traders report. Expressed as a Z-score.
4. **OI Change:** The weekly change in the notional value of contracts outstanding for the relevant futures contracts.
5. **OI Correlation w/Spot:** The 3M correlation between changes in the number of contracts outstanding and the price of the future's underlying spot index. A positive (negative) correlation indicates likely increased (decreased) positioning as open interest is growing at the same time as the market is rallying (selling off), indicating the incremental contracts opened are most likely initiated by investors looking to go directionally long (short), respectively.
6. **CTA Signals:** Whether CTAs are likely to be short, neutral, or long a certain futures contract based on key momentum signals – see more below.

### CTA Signals Definitions

1. **CTA Signal:** Whether CTAs are likely to be short, neutral, or long in a certain futures contract based on key momentum signals. Our metric looks at seven signals, assigning a score of -1, 0, or 1 depending on whether the index is below/at/above the relevant signal. The net score determines our CTA metric. The seven signals we look at are 1M, 3M, 6M, and 12M momentum and 50d, 100d, and 200d moving averages. In each cell, the top number is the price level of the signal that indicates where CTAs are likely to buy or sell the contract, and the bottom number is the distance from the signal to the current futures price. Cells shaded in green are currently long momentum signals and those in red are short signals.
2. **1w Chg:** Indicates the change in CTA signals in one week's time if futures levels are unchanged. "↑" indicates CTAs are likely to become longer/less short, "↓" indicates they will become shorter/less long, and "-" indicates no change.

### Liquidity Definitions

1. **Bid/Ask Spread:** The average bid/ask spread on the futures contract, expressed as a percentage of notional, in bps.
2. **Market Depth:** The average number of contracts at the top of the order book intraday (averaged across the bid and offer side).
3. **ADV:** The average daily notional value traded on a particular futures contract.

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Bram Kaplan, CFA <sup>AC</sup>  
(1-212) 272-1215  
bram.kaplan@jpmorgan.com

Global Markets Strategy  
15 June 2026

J.P.Morgan

Completed 15 Jun 2026 02:52 PM EDT

Disseminated 15 Jun 2026 03:11 PM EDT