

The Flow Show

Stay BIG, sell rips

Scores on the Doors: gold 26.2%, govt bonds 5.6%, IG bonds 3.9%, HY bonds 2.5%, cash 1.3%, commodities -1.8%, stocks -3.3%, US\$ -8.5%, oil -12.5%, crypto -25.6% YTD.

Zeitgeist: “If no recession, equity lows are in, simple; but can’t jump back on bull unless Treasury yields falling below 4%, and earnings growth stays above 5%”, asset allocator.

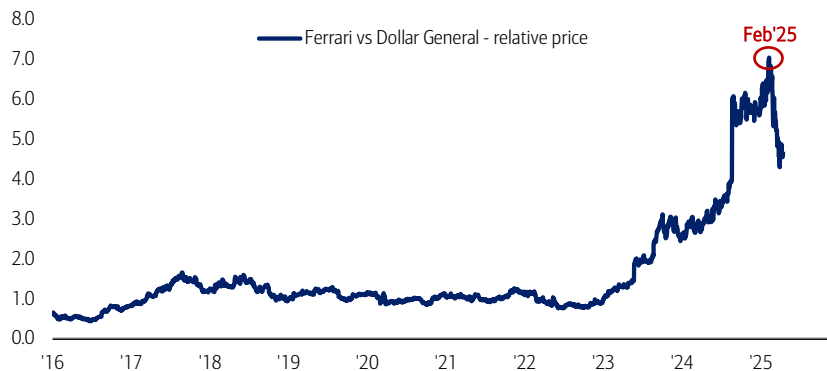
Tale of the Tape: 3Bs of **B**onds (fastest 50bps UST jump since May'09), **B**ase (Trump approval drop from 53% to 46% – Chart 3), **B**illionaires (>\$5tn Magnificent 7 market cap loss) spurred Trump/Powell, Bessent/China, Musk/DOGE “blinks” & risk rally; **3Cs** of China peace, Fed **C**uts, resilient **C**onsumer now needed to debunk “sell-rip” mantra.

The Price is Right: “sell hubris, buy humiliation”...304 stocks in S&P500, 58 in Nasdaq 100 currently trading below their 2021-22 highs...remarkable flip from “US exceptionalism” hubris to “US repudiation” (lots of oversold US stocks); in contrast, Spanish stocks +25% YTD (\$-terms), highest since Euro debt crisis humiliation, as reallocation of global capital from US begins (e.g. Latin American capital now heading to Madrid not Miami).

The Biggest Picture: Ferrari relative to Dollar General at 9-month low (Chart 2); Wall St (US private sector financial assets) was >6x Main St (US GDP – Chart 7) now 5.4x as US household equity wealth -\$6tn YTD (Chart 4); populists winning “War on Inequality,” and AI bigger threat to middle than working class...“long necessities, short luxuries.”

Chart 2: Short Wall St, long Main St

Ferrari vs Dollar General – relative price



Source: BofA Global Investment Strategy, Bloomberg

BofA GLOBAL RESEARCH

More on page 2...

Trading ideas and investment strategies discussed herein may give rise to significant risk and are not suitable for all investors. Investors should have experience in relevant markets and the financial resources to absorb any losses arising from applying these ideas or strategies.

>> Employed by a non-US affiliate of BofAS and is not registered/qualified as a research analyst under the FINRA rules.

Refer to “Other Important Disclosures” for information on certain BofA Securities entities that take responsibility for the information herein in particular jurisdictions.

BofA Securities does and seeks to do business with issuers covered in its research reports. As a result, investors should be aware that the firm may have a conflict of interest that could affect the objectivity of this report. Investors should consider this report as only a single factor in making their investment decision.

Refer to important disclosures on page 12 to 14.

24 April 2025

Investment Strategy
Global

BofA
Data
Analytics



Michael Hartnett
Investment Strategist
BofAS
+1 646 855 1508
michael.hartnett@bofa.com

Elyas Galou >>
Investment Strategist
BofASE (France)
+33 1 8770 0087
elyas.galou@bofa.com

Anya Shelekhin
Investment Strategist
BofAS
+1 646 855 3753
anya.shelekhin@bofa.com

Myung-Jee Jung
Investment Strategist
BofAS
+1 646 855 0389
myung-jee.jung@bofa.com

Chart 1: BofA Bull & Bear Indicator

Down to 3.9 from 4.1



Source: BofA Global Investment Strategy The indicator identified above as the BofA Bull & Bear Indicator is intended to be an indicative metric only and may not be used for reference purposes or as a measure of performance for any financial instrument or contract, or otherwise relied upon by third parties for any other purpose, without the prior written consent of BofA Global Research. This indicator was not created to act as a benchmark.

BofA GLOBAL RESEARCH

Weekly Flows: \$33.0bn to cash, \$9.2bn to stocks, \$3.3bn to gold, \$2.5bn to crypto, \$0.7bn from bonds.

Flows to Know:

- Crypto: largest weekly inflow of '25 (\$2.5bn – Chart 14),
- Treasuries: biggest 4-week inflow since Mar'23 (\$29.4bn – Chart 15),
- Equities: inflows to all regions (Europe \$3.4bn, EM \$1.0bn, Japan \$1.0bn) bar US equities (\$0.8bn outflows),
- Long-only global equity funds: 1st inflow since Jan'25 (\$0.8bn – Chart 16),
- Tech: 6th week of inflows (\$0.5bn).

BofA Private Clients: \$3.6tn AUM...60.8% stocks, 20.1% bonds, 11.9% cash; largest private client cash drawdown since Oct'22; private clients buying “deflationary defensives” such as low-volatility, high-dividend, utility ETFs past 4 weeks, selling “inflation hedges” such as bank loans, TIPS, financial sector ETFs.

BofA Bull & Bear Indicator: falls from 4.1 to 3.9 on increased hedging against lower oil & US stocks, partially offset by global equity inflows, corporate bond outperformance.

On Positioning: Dec 17th BofA Global Fund Manager Survey showed [record-high allocation to US stocks](#); Apr 15th Global FMS showed [record intentions to cut US stocks](#); markets stop panicking when policymakers start panicking as 30-year US Treasury at 5% is the unambiguous “panic” level for US policymakers past 2-3 years; rhetorically, US policymakers have allayed concerns of imminent global recession & US\$ debasement, breaking dangerous cycle of “higher yields/lower US\$/lower stocks”; current “pain trade” unquestionably a narrow, Mag 7-led, squeeze higher in US stocks & US dollar, but clean break of critical bull vs. bear levels (e.g., SPX 5690 = 50-week MA) requires 3Cs of Fed Cuts, China peace, Consumer resilience...

- **Cuts...**Fed guides Treasury yields lower via “we’re there as always, if you need us” rhetoric; note market probabilities for Fed cut = 8% at May 7th FOMC, 65% at June 18th FOMC, 100% at July 30th FOMC;
- **China...**Trump-Xi peace deal which at minimum takes US tariffs on China (currently 145%) well below 60% level Trump promised during election campaign;
- **Consumer...**resilient US consumer spending, perhaps driven by tight labor market on back of immigration controls (US Southwest border encounters 11k/month in Feb/Mar vs >100k/month average in '24 and >300k peak in Dec'23 – Chart 6), which reverses US consumer recession consensus based on 1. negative wealth effect for the 1% (BofA private client equity holdings data shows US household equity wealth down \$6tn thus far in 2025 – Chart 4) at time when top 10% of earners account for 50% of US consumer spending (highest since 1989), and 2. inflation angst for 99% (inflation expectations highest since 1981 – Chart 5) causing rise in household savings.

We remain H1 buyers of dips in bonds, international & gold, sellers of SPX/US\$ rallies...

“We’ve never had it so good”¹: we say 2025 big picture is peak valuations in stocks and credit, following glory of past 5 years...global interest rates at 5000-year lows, >\$30tn of global policy stimulus, US government deficits of 9% GDP, a 50% surge in US nominal GDP, record low unemployment in US & Europe, record profit margins, AI boom

¹ British Prime Minister Harold Macmillan (1957-63) on the “fragile prosperity” of the late-1950s.



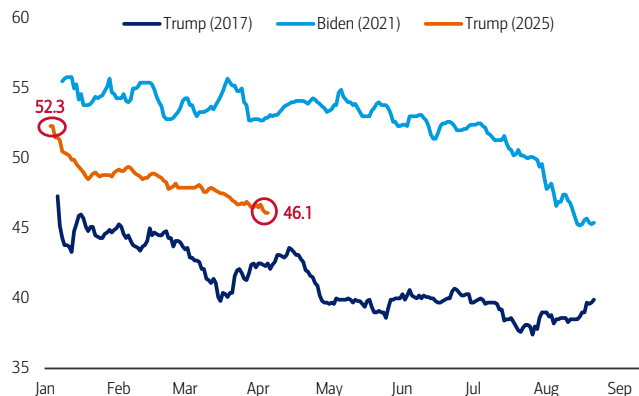
(Chart 9), all leading to record highs in global stocks, corporate bonds, gold, crypto, all in stark contrast to 50% collapse in price of 30-year US Treasury bond (Chart 8); we say new world order means new valuations...

- 14x was average S&P 500 price-earnings ratio (P/E) in 20th century, an era cursed by world wars, cold wars, depressions, stagflation;
- 20x was average S&P 500 P/E in 21st century, an era seeing globalization, technology, the monetary indulgence of omnipotent central banks;
- 20x has been floor for S&P 500 P/E in first half of 2020s, a decade of magnificent US exceptionalism augmented by fiscal excess and AI boom (Dec'24 \$18tn market cap of Magnificent 7 almost on par with \$20tn GDP of G7 economies ex-USA);
- 20x we say new ceiling for P/E as globalization reverses, Fed less independent, fiscal/monetary excess ends, 3-4% new inflation normal outside recessions, US savings rate rises...(AI capex remains the path to >20x elevated US P/E).

Secular US dollar depreciation (Chart 11) cleanest investment theme to play
 DeepSeek = peak US exceptionalism (US stocks hit all-time high vs RoW stocks in Nov'24 – Chart 10), DOGE = peak US government spending, MAGA = start of Europe fiscal excess, Liberation Day = peak globalization + acceleration of China rebalancing from exports to consumption, and so on; weaker US dollar will play out either slowly with lower yields or quickly with higher yields, it's brutally flagged by soaring gold price (Chart 12), and while “reports of the death of the Magnificent 7 have been greatly exaggerated” (they remain central to AI theme), weak US\$ theme favors increased global asset allocation to commodities, Emerging Markets (Chart 13), international (China tech, EU/Japan banks).

Chart 3: Trump approval drops from 53% to 46% in 3 months

US presidential approval ratings (first year of term)

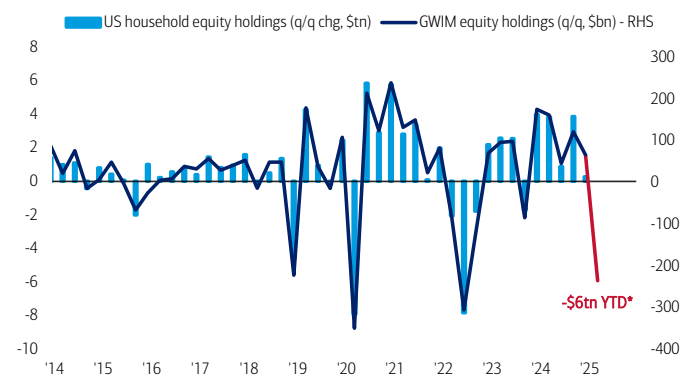


Source: BofA Global Investment Strategy, Bloomberg, Real Clear Politics

BofA GLOBAL RESEARCH

Chart 4: US household equity wealth est. -\$6tn YTD

Fed US household equity holdings & BofA private client equity holdings



Source: BofA Global Investment Strategy, Bloomberg, Federal Reserve. *YTD change in US household equity holdings based on YTD change in GWIM equity holdings

BofA GLOBAL RESEARCH

Chart 5: US inflation expectations jump to highest since 1981

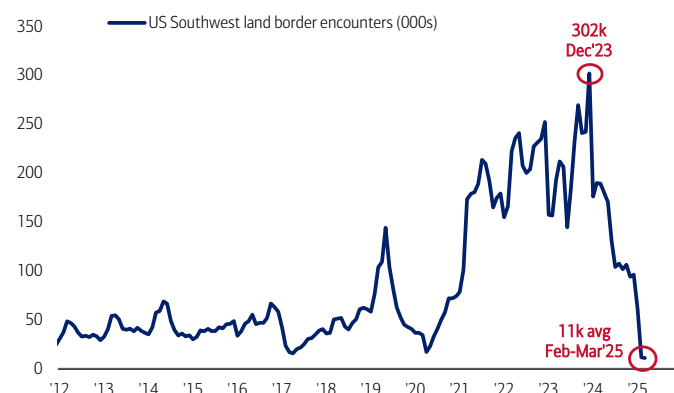
US inflation expectations (%)



Source: BofA Global Investment Strategy, Bloomberg, University of Michigan (CONSPXMD Index)
BofA GLOBAL RESEARCH

Chart 6: US Southwest border encounters have collapsed

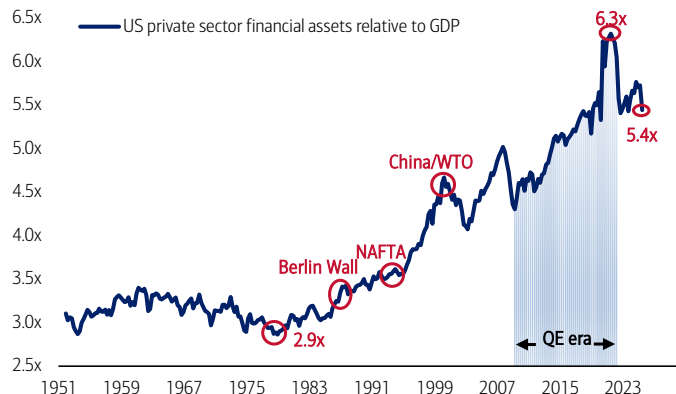
US Southwest land border encounters (000s)



Source: BofA Global Investment Strategy, U.S. Customs and Border Protection
BofA GLOBAL RESEARCH

Chart 7: 'War on Inequality' being won

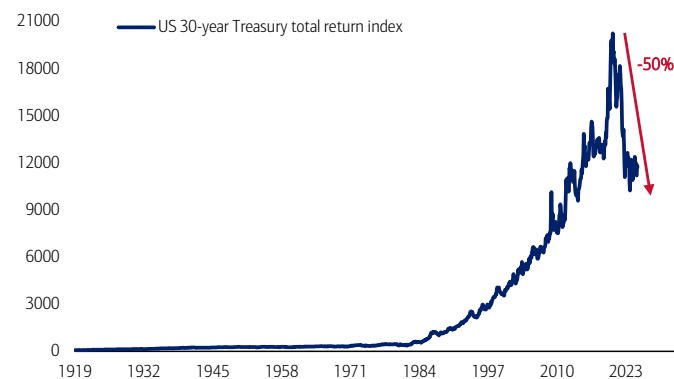
US private sector financial assets relative to GDP



Source: BofA Global Investment Strategy, Haver, Bloomberg
BofA GLOBAL RESEARCH

Chart 8: US 30-year Treasury total return index -50% from peak

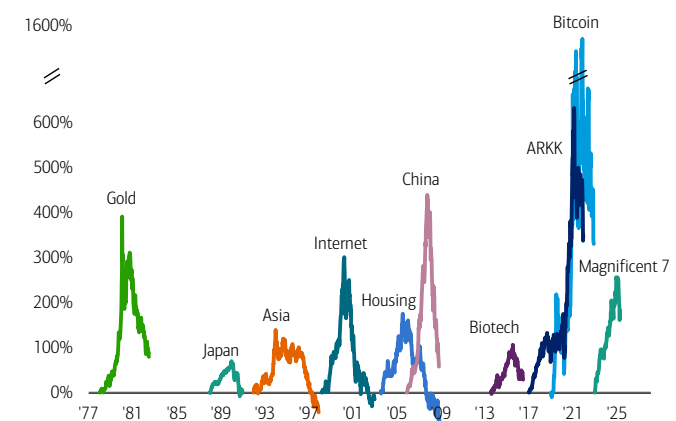
US 30-year Treasury total return index



Source: BofA Global Investment Strategy, Global Financial Data
BofA GLOBAL RESEARCH

Chart 9: Asset bubbles of past 50 years

History of asset bubbles



Source: BofA Global Investment Strategy, Bloomberg
BofA GLOBAL RESEARCH

Chart 10: 'Lagnificent 7'...Peak US exceptionalism

US vs. Global equities (US\$ terms)

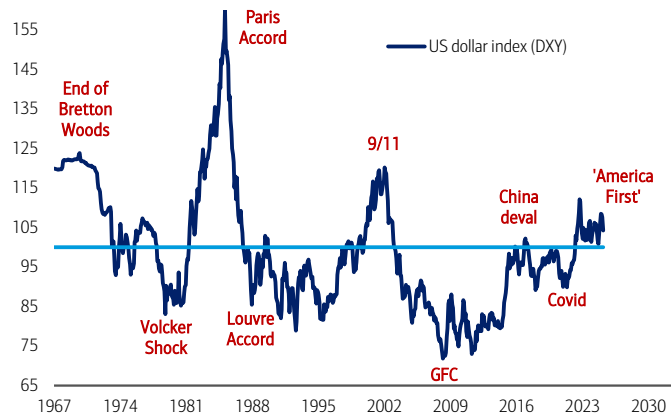


Source: BofA Global Investment Strategy, Global Financial Data, Bloomberg
BofA GLOBAL RESEARCH



Chart 11: 'Peak US exceptionalism' = weaker US dollar

US dollar index (DXY)



Source: BofA Global Investment Strategy, Bloomberg

BofA GLOBAL RESEARCH

Chart 12: Gold at all-time high under 'Trump 2.0'...US\$ depreciation

Gold spot price (\$/oz)

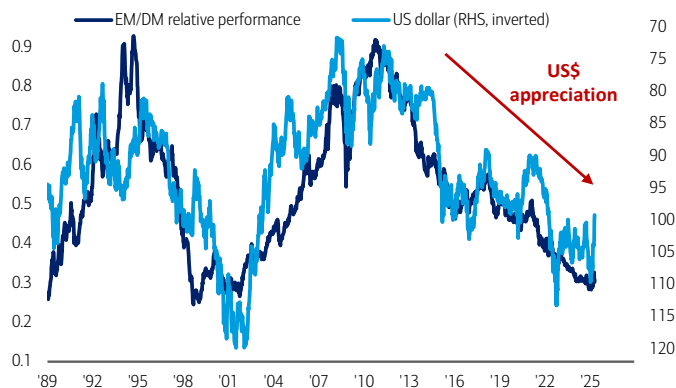


Source: BofA Global Investment Strategy, Bloomberg

BofA GLOBAL RESEARCH

Chart 13: US\$ depreciation = EM outperforms DM

EM/DM relative performance vs US\$ (DXY Index)

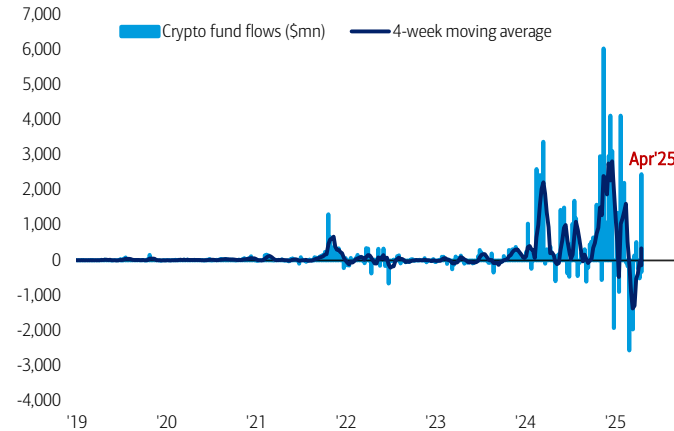


Source: BofA Global Investment Strategy, Bloomberg

BofA GLOBAL RESEARCH

Chart 14: Crypto funds see biggest weekly inflow of 2025

Flows to crypto funds, weekly vs 4wk-ma (\$bn)

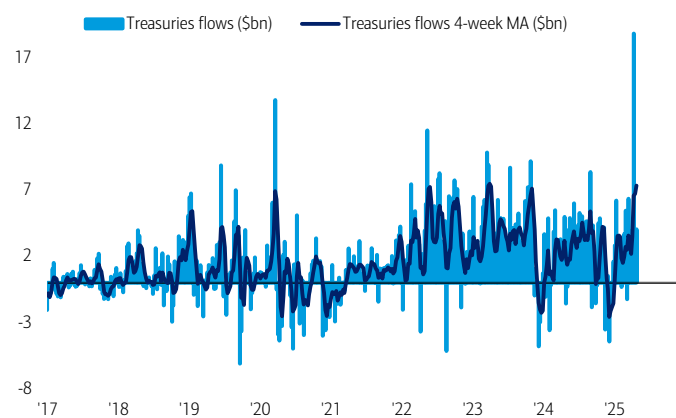


Source: EPFR

BofA GLOBAL RESEARCH

Chart 15: Biggest 4-week inflow to Treasuries since Mar'23

Flows to Treasury funds, weekly vs 4wk-ma (\$bn)

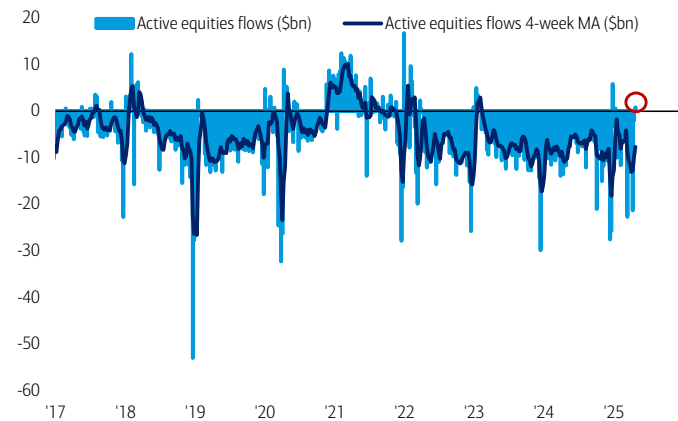


Source: EPFR

BofA GLOBAL RESEARCH

Chart 16: First weekly inflow to long-only equity funds of '25

Flows to global active equity funds, weekly vs 4wk-ma (\$bn)



Source: EPFR

BofA GLOBAL RESEARCH



Asset Class Flows (Table 1)

Equities: \$9.2bn inflow (\$8.2bn inflow to ETFs, \$0.8bn inflow to mutual funds)

Bonds: outflows past 3 weeks (\$0.7bn)

Precious metals: inflows past 15 weeks (\$3.3bn)

Fixed Income Flows (Chart 15)

IG Bond outflows past 3 weeks (\$3.0bn)

HY Bond outflows past 5 weeks (\$1.1bn)

EM Debt inflows resume (\$0.2bn)

Munis outflows past 5 weeks (\$0.3bn)

Govt/Tsy inflows past 7 weeks (\$4.0bn)

TIPS inflows resume (\$0.2bn)

Bank loan outflows past 7 weeks (\$0.3bn)

Equity Flows (Table 2)

US: outflows past 2 weeks (\$0.8bn)

Japan: inflows past 2 weeks (\$1.0bn)

Europe: inflows past 2 weeks (\$3.4bn)

EM: inflows resume (\$1.0bn)

By style: inflows **US large cap** (\$4.7bn), **US value** (\$0.9bn), outflows **US growth** (\$0.3bn), **US small cap** (\$3.0bn).

By sector: inflows **materials** (\$2.5bn), **tech** (\$0.5bn), **utils** (\$0.3bn), **real estate** (\$0.2bn), **com svcs** (\$0.2bn), consumer (\$0.1bn), outflows **energy** (\$0.8bn), **financials** (\$0.9bn), **hcare** (\$0.9bn).

Table 1: Cumulative YTD flows by asset class

Global flows by asset class, \$mn

	Wk % AUM	YTD	YTD %AUM
Equities	0.0%	258,892	1.2%
ETFs	0.1%	385,232	3.3%
LO	0.0%	-126,463	-1.2%
Bonds	0.0%	132,778	1.6%
Commodities	0.9%	36,598	6.4%
Money-market	0.3%	305,454	3.3%

*week ended 4/23/2025; Source: EPFR Global

BofA GLOBAL RESEARCH

Table 2: US equity inflows still dominating YTD

Global equity flows by region, \$mn

	Wk % AUM	YTD
Total Equities	0.0%	258,892
long-only funds	0.0%	-126,463
ETFs	0.1%	385,232
Total EM	0.1%	8,275
Brazil	-3.2%	-934
India	0.2%	-2,917
China	0.2%	8,692
Total DM	0.0%	250,617
US	0.0%	155,238
Europe	0.2%	31,349
Japan	0.1%	11,956
International	0.1%	43,987

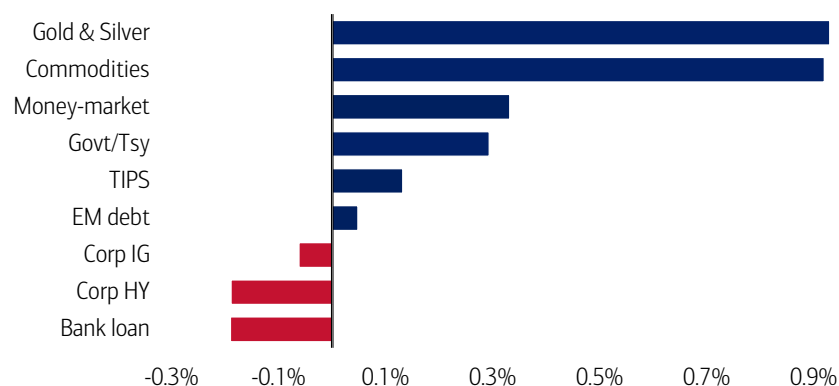
Total Equities = Total EM + Total DM

Source: EPFR Global

BofA GLOBAL RESEARCH

Chart 20: FICC inflows to gold, commodities, cash

Weekly FICC flows as a % AUM



Source: EPFR Global

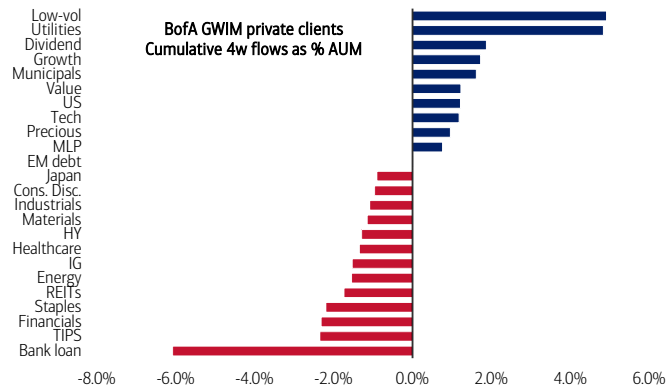
BofA GLOBAL RESEARCH



BofA private client flows & allocations

Chart 21: Private clients bought low-vol, utilities & dividend ETFs

BofA private clients 1-week ETF flows as % of AUM

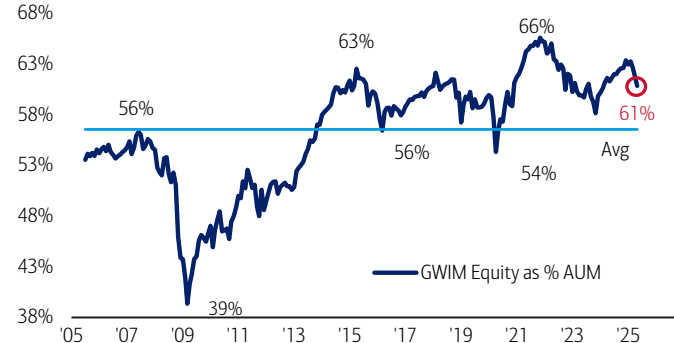


Source: BofA Global Investment Strategy

BofA GLOBAL RESEARCH

Chart 22: GWIM equity allocation at 61%

BofA private client equity holdings as % of AUM



Source: BofA Global Investment Strategy

BofA GLOBAL RESEARCH

Chart 23: GWIM debt allocation at 20%

BofA private client debt holdings as % of AUM

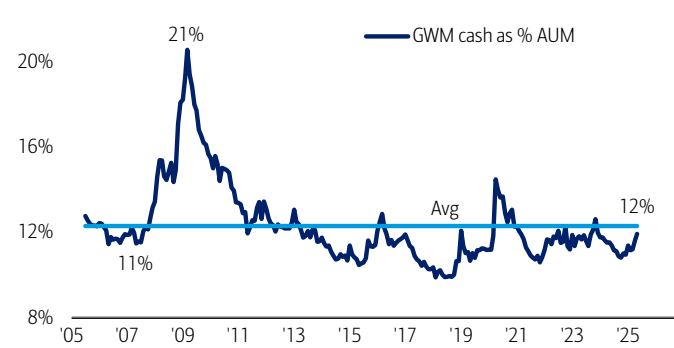


Source: BofA Global Investment Strategy

BofA GLOBAL RESEARCH

Chart 24: GWIM cash allocation at 12%

BofA private client cash holdings as % of AUM

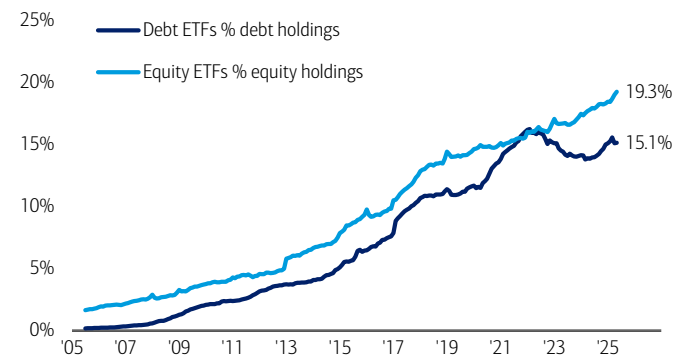


Source: BofA Global Investment Strategy

BofA GLOBAL RESEARCH

Chart 25: GWIM equity ETFs 19%, debt ETFs 15% of AUM

BofA private client ETF holdings as % of AUM

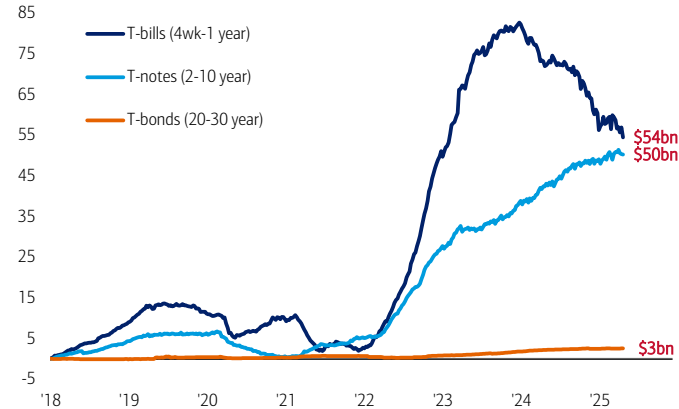


Source: BofA Global Investment Strategy

BofA GLOBAL RESEARCH

Chart 26: BofA private clients continue to add to T-notes

BofA private client cumulative inflow to Treasuries since '18



Source: BofA Global Investment Strategy

BofA GLOBAL RESEARCH



The Asset Class Quilt of Total Returns

Chart 27: Historical asset class performance by year

Ranked cross asset returns by year since 2000

2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025*
Commodities 58.2%	US Treasuries 6.7%	Commodities 39.5%	MSCI EM 56.3%	REITS 32.0%	MSCI EM 34.5%	REITS 37.5%	MSCI EM 39.8%	US Treasuries 14.0%	MSCI EM 79.0%	Gold 29.2%	US Treasuries 9.8%	REITS 23.8%	S&P 500 32.4%	S&P 500 13.7%	S&P 500 1.4%	Commodities 17.5%	MSCI EM 37.8%	Cash 1.8%	S&P 500 31.5%	Gold 24.8%	Commodities 46.3%	Commodities 31.1%	S&P 500 26.3%	Gold 26.7%	Gold 25.4%
US Treasuries 13.4%	Global IG 4.6%	Gold 25.6%	MSCI EAFE 39.2%	Commodities 28.7%	Commodities 33.7%	MSCI EM 32.6%	Commodities 33.0%	Gold 4.3%	Global HY 62.0%	MSCI EM 19.2%	Gold 8.9%	Global HY 19.3%	MSCI EAFE 23.3%	REITS 11.7%	US Treasuries 0.8%	Global HY 14.8%	MSCI EAFE 25.9%	US Treasuries 0.8%	REITS 27.4%	MSCI EM 18.8%	REITS 37.1%	Cash 1.5%	MSCI EAFE 18.9%	S&P 500 25.0%	MSCI EAFE 9.1%
REITS 8.5%	Cash 4.4%	Global IG 14.9%	REITS 33.5%	MSCI EM 26.0%	Gold 17.8%	MSCI EAFE 26.9%	Gold 31.9%	Cash 2.1%	MSCI EAFE 32.5%	REITS 15.9%	Global IG 4.5%	MSCI EM 18.6%	Global HY 8.0%	US Treasuries 6.0%	Cash 0.1%	S&P 500 12.0%	S&P 500 22.0%	Gold -1.9%	MSCI EAFE 22.8%	S&P 500 18.4%	S&P 500 28.7%	Gold -0.8%	Global HY 13.4%	MSCI EM 8.0%	Global IG 3.9%
Cash 6.2%	Global HY 3.1%	US Treasuries 11.6%	Commodities 30.1%	MSCI EAFE 20.7%	MSCI EAFE 14.0%	Gold 23.2%	MSCI EAFE 11.6%	Global IG -8.3%	REITS 31.7%	S&P 500 15.1%	Global HY 2.6%	MSCI EAFE 17.9%	REITS 0.7%	Global IG 3.2%	MSCI EAFE -0.8%	MSCI EM 11.2%	Gold 12.9%	Global HY -3.3%	Commodities 20.1%	Global IG 10.3%	MSCI EAFE 11.9%	US Treasuries -12.9%	Gold 12.7%	Global HY 7.5%	MSCI EM 2.7%
Global IG 3.1%	Gold -0.7%	Cash 1.8%	Global HY 30.7%	Global HY 12.4%	REITS 10.7%	S&P 500 15.8%	US Treasuries 9.1%	Global HY -27.9%	S&P 500 26.5%	Global HY 13.9%	S&P 500 2.1%	S&P 500 16.0%	Global IG 0.1%	Gold 0.1%	REITS -3.4%	Gold 8.6%	REITS 11.5%	Global IG -3.4%	MSCI EM 18.6%	MSCI EAFE 8.4%	Global HY 1.4%	Global HY -13.2%	REITS 11.3%	Commodities 5.5%	Global HY 2.5%
Gold -5.4%	MSCI EM -2.4%	Global HY -1.1%	S&P 500 28.7%	S&P 500 10.9%	S&P 500 4.9%	Global HY 13.5%	Global IG 7.3%	S&P 500 -37.0%	Commodities 26.1%	Commodities 13.3%	Cash 0.1%	Global IG 11.1%	Cash 0.1%	Cash 0.0%	Global IG -3.8%	Global IG 4.3%	Global HY 10.2%	REITS -3.9%	Gold 17.9%	US Treasuries 8.2%	Cash 0.0%	MSCI EAFE -13.9%	MSCI EM 10.1%	Cash 5.3%	US Treasuries 2.2%
Global HY -5.6%	REITS -7.6%	REITS -2.4%	Gold 19.9%	Global IG 9.4%	Cash 3.1%	Global IG 7.2%	S&P 500 5.5%	Commodities -42.6%	Gold 25.0%	MSCI EAFE 8.2%	Commodities -2.6%	Gold 8.3%	Commodities -2.1%	Global HY -0.1%	Global HY -4.2%	REITS 1.3%	Global IG 9.3%	S&P 500 -4.3%	Global HY 13.7%	Global HY 8.0%	MSCI EM -2.3%	Global IG -16.7%	Global IG 9.5%	MSCI EAFE 4.4%	Cash 1.3%
S&P 500 -9.1%	S&P 500 -11.9%	MSCI EM -6.0%	Global IG 14.5%	Gold 4.6%	US Treasuries 2.8%	Cash 4.9%	Cash 5.0%	MSCI EAFE -43.1%	Global IG 19.2%	Global IG 6.0%	REITS -9.4%	US Treasuries 2.2%	MSCI EM -2.3%	MSCI EM -1.8%	Gold -10.4%	US Treasuries 1.1%	Commodities 7.6%	Commodities -13.1%	Global IG 11.4%	Cash 0.5%	US Treasuries -2.4%	S&P 500 -18.1%	Cash 5.1%	REITS 3.2%	REITS 0.7%
MSCI EAFE -14.0%	MSCI EAFE -21.2%	MSCI EAFE -15.7%	US Treasuries 2.3%	US Treasuries 3.5%	Global HY 1.5%	US Treasuries 3.1%	Global HY 3.0%	REITS -50.2%	Cash 0.2%	US Treasuries 5.9%	MSCI EAFE -11.7%	Cash 0.1%	US Treasuries -3.3%	MSCI EAFE -4.5%	MSCI EM -14.9%	MSCI EAFE 1.0%	US Treasuries 2.4%	MSCI EAFE -13.2%	US Treasuries 7.0%	REITS -4.4%	Global IG -3.0%	MSCI EM -19.8%	US Treasuries 3.9%	Global IG 1.2%	Commodities -2.5%
MSCI EM -30.6%	Commodities -21.4%	S&P 500 -22.1%	Cash 1.1%	Cash 1.3%	Global IG -3.0%	Commodities -0.2%	REITS -10.0%	MSCI EM -53.2%	US Treasuries -3.7%	Cash 0.1%	MSCI EM -18.2%	Commodities -0.3%	Gold -27.3%	Commodities -29.3%	Commodities -29.4%	Cash 0.3%	Cash 0.8%	MSCI EM -14.3%	Cash 2.2%	Commodities -15.0%	Gold -4.1%	REITS -25.2%	Commodities -3.5%	US Treasuries 0.5%	S&P 500 -8.2%

Source: BofA Global Investment Strategy, Bloomberg. *2025 YTD

BofA GLOBAL RESEARCH

BofA Rules & Tools

Table 3: BofA Global Investment Strategy Proprietary Indicators

Current reading of all BofA Global Investment Strategy Proprietary Indicators

Proprietary Indicators	Category	Current reading	Current signal	Duration of signal
Contrarian				
BofA Bull & Bear Indicator (B&B)	Contrarian	3.9	Neutral	1-3 months
Sell when investor sentiment > 8.0; Buy when investor sentiment < 2.0				
BofA Global FMS Cash Indicator	Contrarian	4.8%	Neutral	4 weeks
Buy when cash at or above 5.0%; Sell when cash at or below 4.0%				
BofA Global Breadth Rule	Contrarian	31.1%	Neutral	3 months
Buy when net 88% of markets in MSCI ACWI trading below 200-day moving & 50-day moving averages				
BofA Global Flow Trading Rule	Contrarian	-1.7%	Buy	8 weeks
Buy when outflows from global equities & HY > 1.0% AUM over 4wks; Sell when inflows > 1.0% AUM over 4wks				
BofA EM Flow Trading Rule	Contrarian	1.5%	Neutral	8 weeks
Buy when outflows from EM equities > 3.0% of AUM; Sell when inflows > 1.5% of AUM over 4 wks				
Macro				
BofA Global EPS Growth Model	Macro	5%	EPS growth rising	6-12 months
Model indicates trend in year-on-year change in 12-month forward global EPS growth.				
Source: BofA Global Investment Strategy. For a (see report) guide to our trading models				

BofA GLOBAL RESEARCH

BofA Bull & Bear Indicator (B&B)

Our BofA Bull & Bear Indicator is at 3.9 signal is Neutral.

Chart 28: BofA Bull & Bear Indicator

Down to 3.9 from 4.1


Source: BofA Global Investment Strategy

BofA GLOBAL RESEARCH

Table 4: BofA B&B Indicator

BofA Bull & Bear current component readings

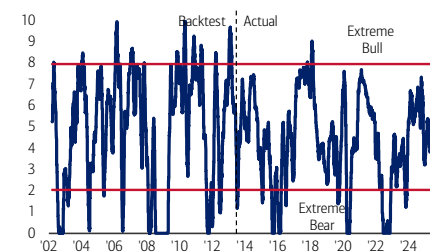
Components	Percentile	Sentiment
HF positioning	9%	V Bearish
Credit mkt technicals	79%	Bullish
Equity market breadth	51%	Neutral
Equity flows	75%	Bullish
Bond flows	8%	V Bearish
LO positioning	32%	Neutral

Source: BofA Global Investment Strategy, Bloomberg, EPFR Global, Lipper FMI, Global FMS, CFTC, MSCI

BofA GLOBAL RESEARCH

Chart 29: BofA Bull & Bear Indicator at 3.9

BofA Bull & Bear Indicator since 2002


Source: BofA Global Investment Strategy, EPFR Global, FMS, CFTC, MSCI

BofA GLOBAL RESEARCH

Disclaimer: The indicators identified above as the BofA Bull & Bear Indicator, MVP Model, BofA Global Breadth Rule, BofA EM Flow Trading Rule, BofA Global Flow Trading Rule, BofA Global FMS Macro Indicator, BofA Global FMS Cash Rule, Global Wave, Sell-Side Indicator, and Global Financial Stress Indicator are intended to be indicative metrics only and may not be used for reference purposes or as a measure of performance for any financial instrument or contract, or otherwise relied upon by third parties for any other purpose, without the prior written consent of BofA Global Research. These indicators were not created to act as a benchmark.

The analysis of the BofA Bull & Bear Indicator in this report is back-tested and does not represent the actual performance of any account or fund. Back-tested performance depicts the hypothetical back-tested performance of a particular strategy over the time period indicated. In future periods, market and economic conditions will differ and the same strategy will not necessarily produce the same results. No representation is being made that any actual portfolio is likely to have achieved returns similar to those shown herein. In fact, there are frequently sharp differences between back-tested returns and the actual results realized in the actual management of a portfolio. Back-tested performance results are created by applying an investment strategy or methodology to historical data and attempts to give an indication as to how a strategy might have performed during a certain period in the past if the product had been in existence during such time. Back-tested results have inherent limitations including the fact that they are calculated with the full benefit of hindsight, which allows the security selection methodology to be adjusted to maximize the returns. Further, the results shown do not reflect actual trading or the impact that material economic and market factors might have had on a portfolio manager's decision-making under actual circumstances. Back-tested returns do not reflect advisory fees, trading costs, or other fees or expenses.



2025 Cross-Asset Winners & Losers

Exhibit 1: 2025 YTD ranked returns

Year-to-date cross asset returns in US dollar terms

Ranked Returns, USD-terms (YTD 2025)

Assets		Equities		Sectors		Fixed Income		FX vs. USD		Commodities							
1	Gold	24.1%	1	Greece Equities	33.3%	1	ACWI Consumer Staples	8.5%	1	European HY	10.4%	1	Swedish krona	14.2%	1	Gold	24.1%
2	Europe Equities	12.9%	2	Spain Equities	30.6%	2	ACWI Utilities	8.2%	2	German Govt	9.4%	2	Japanese yen	9.6%	2	Silver	14.7%
3	UK Equities	10.6%	3	Germany Equities	21.4%	3	ACWI Banks	5.7%	3	Non-US IG Government	8.7%	3	Euro	9.3%	3	Platinum	8.6%
4	Government Bonds	5.6%	4	Mexico Equities	21.2%	4	ACWI Financials	3.9%	4	Japan Govt	8.0%	4	Swiss franc	9.2%	4	Copper	8.3%
5	Investment Grade Bonds	3.9%	5	Italy Equities	19.4%	5	ACWI Materials	3.0%	5	UK Govt	7.5%	5	Brazilian real	8.2%	5	Iron Ore	-0.7%
6	EM Sovereign Bonds	2.8%	6	Brazil Equities	16.4%	6	ACWI Real Estate	1.0%	6	TIPS	3.0%	6	Norwegian krone	8.1%	6	Commodities	-2.5%
7	EM Equities	2.7%	7	S. Africa Equities	15.4%	7	ACWI BioTechnology	0.9%	7	EM Sovereign	2.8%	7	NZ dollar	6.3%	7	Brent Crude Oil	-11.4%
8	High Yield Bonds	2.5%	8	Switzerland Equities	13.6%	8	ACWI Industrials	0.9%	8	Treasury Master	2.2%	8	Mexican peso	6.1%	8	WTI Crude Oil	-13.2%
9	Pacific Rim xJapan	2.4%	9	France Equities	11.9%	9	ACWI Healthcare	-1.0%	9	2-year Treasury	1.8%	9	British pound	5.9%			
10	Japan Equities	1.9%	10	UK Equities	10.6%	10	ACWI Energy	-2.5%	10	US Mortgage Master	1.8%	10	Singapore dollar	3.8%			
11	Industrial Metals	1.9%	11	China Equities	9.8%	11	ACWI Telecoms	-4.2%	11	EM Corporate	1.4%	11	Canadian dollar	3.6%			
12	US Dollar	-8.0%	12	Korea Equities	9.1%	12	ACWI Cons. Discretionary	-10.0%	12	3-Month Treasury Bills	1.3%	12	Korean won	3.1%			
13	US Equities	-8.4%	13	Portugal Equities	8.7%	13	ACWI Info Tech	-14.7%	13	US Corp IG	1.0%	13	Australian dollar	2.8%			
14	Oil	-13.2%	14	Singapore Equities	7.4%				14	BBB IG	0.8%	14	South African rand	1.0%			
			15	Canada Equities	3.7%				15	30-year Treasury	0.7%	15	Taiwanese dollar	0.9%			
			16	Hong Kong Equities	1.9%				16	US Corp HY	0.5%	16	Indian rupee	0.2%			
			17	Japan Equities	1.9%				17	CCC HY	-1.9%	17	Chinese renminbi	0.2%			
			18	Australia Equities	1.6%							18	Bitcoin	0.0%			
			19	India Equities	1.1%							19	Indonesian rupiah	-4.5%			
			20	US Equities	-8.4%							20	Turkish lira	-7.7%			
			21	Türkiye Equities	-12.5%												
			22	Taiwan Equities	-14.5%												

Source: BofA Global Investment Strategy, Bloomberg, as of 23 April 2025.

BofA GLOBAL RESEARCH

Table 5: The Overbought & Oversold

Ranked deviation from 200-day moving averages in US dollar terms

Ranked Deviation from 200-Day Moving Average, USD-terms

Assets		Equities		Sectors		Fixed Income		FX vs. USD		Commodities							
1	Gold	20.6%	1	Greece Equities	24.6%	1	ACWI Banks	4.9%	1	Non-US IG Government	4.6%	1	Swedish krona	9.0%	1	Gold	20.1%
2	Europe Equities	6.0%	2	Spain Equities	20.9%	2	ACWI Consumer Staples	4.5%	2	2-year Treasury	1.7%	2	Swiss franc	5.5%	2	Silver	7.6%
3	UK Equities	5.9%	3	Germany Equities	15.0%	3	ACWI Utilities	4.3%	3	3-Month Treasury Bills	1.7%	3	Euro	5.3%	3	Copper	1.8%
4	Government Bonds	2.7%	4	Italy Equities	12.0%	4	ACWI Financials	3.8%	4	European HY	1.6%	4	Japanese yen	4.7%	4	Platinum	0.3%
5	Investment Grade Bonds	2.1%	5	Mexico Equities	11.1%	5	ACWI Real Estate	0.0%	5	EM Sovereign	1.6%	5	Norwegian krone	3.7%	5	Iron Ore	-0.9%
6	High Yield Bonds	2.0%	6	Singapore Equities	9.0%	6	ACWI Industrials	-1.4%	6	TIPS	1.3%	6	British pound	3.4%	6	Natural Gas	-2.8%
7	EM Sov Bonds	1.6%	7	China Equities	8.8%	7	ACWI Telecoms	-1.5%	7	US Corp HY	0.8%	7	Mexican peso	1.7%	7	Brent Crude Oil	-11.3%
8	Japan Equities	1.5%	8	S. Africa Equities	7.3%	8	ACWI Materials	-4.0%	8	EM Corporate	0.7%	8	Singapore dollar	1.2%	8	WTI Crude Oil	-12.3%
9	EM Equities	0.5%	9	UK Equities	5.9%	9	ACWI Cons. Discretionary	-4.8%	9	Treasury Master	0.6%	9	NZ dollar	1.2%			
10	Pacific Rim xJapan	0.1%	10	France Equities	5.2%	10	ACWI BioTechnology	-6.7%	10	CCC HY	0.3%	10	Brazilian real	1.1%			
11	Industrial Metals	-1.0%	11	Switzerland Equities	5.0%	11	ACWI Energy	-6.7%	11	US Mortgage Master	0.3%	11	Canadian dollar	1.0%			
12	US Dollar	-4.6%	12	Canada Equities	3.2%	12	ACWI Healthcare	-7.4%	12	German Govt	0.2%	12	Taiwanese dollar	0.1%			
13	US Equities	-6.2%	13	Hong Kong Equities	2.0%	13	ACWI Info Tech	-10.7%	13	US Corp IG	-0.1%	13	Russian ruble	0.0%			
14	Oil	-12.3%	14	Japan Equities	1.5%				14	BBB IG	-0.2%	14	Indian rupee	-0.4%			
			15	Brazil Equities	1.5%				15	UK Govt	-0.3%	15	Chinese renminbi	-1.0%			
			16	Russia Equities	0.0%				16	Japan Govt	-1.8%	16	Korean won	-1.4%			
			17	India Equities	-0.3%				17	30-year Treasury	-3.8%	17	Australian dollar	-1.5%			
			18	Portugal Equities	-1.7%							18	South African rand	-2.5%			
			19	Australia Equities	-2.1%							19	Indonesian rupiah	-5.0%			
			20	Korea Equities	-3.7%							20	Turkish lira	-8.2%			
			21	US Equities	-6.2%							21	Argentine peso	-12.9%			
			22	Taiwan Equities	-11.6%												
			23	Türkiye Equities	-12.9%												

Source: BofA Global Investment Strategy, Bloomberg, as of 23 April 2025.

BofA GLOBAL RESEARCH



Acronyms

FMS – Fund Manager Survey
 GWIM – Global Wealth and Investment Management
 MA – Moving average
 MMF – Money Market Fund
 FCI – Financial conditions index
 AUM – Assets Under Management
 U-rate – unemployment rate
 RoW – Rest of World

Disclosures

Important Disclosures

FUNDAMENTAL EQUITY OPINION KEY: Opinions include a Volatility Risk Rating, an Investment Rating and an Income Rating. **VOLATILITY RISK RATINGS**, indicators of potential price fluctuation, are: A - Low, B - Medium and C - High. **INVESTMENT RATINGS** reflect the analyst's assessment of both a stock's absolute total return potential as well as its attractiveness for investment relative to other stocks within its Coverage Cluster (defined below). Our investment ratings are: 1 - Buy stocks are expected to have a total return of at least 10% and are the most attractive stocks in the coverage cluster; 2 - Neutral stocks are expected to remain flat or increase in value and are less attractive than Buy rated stocks and 3 - Underperform stocks are the least attractive stocks in a coverage cluster. An investment rating of 6 (No Rating) indicates that a stock is no longer trading on the basis of fundamentals. Analysts assign investment ratings considering, among other things, the 0-12 month total return expectation for a stock and the firm's guidelines for ratings dispersions (shown in the table below). The current price objective for a stock should be referenced to better understand the total return expectation at any given time. The price objective reflects the analyst's view of the potential price appreciation (depreciation).

Investment rating	Total return expectation (within 12-month period of date of initial rating)	Ratings dispersion guidelines for coverage cluster ^{R1}
Buy	≥ 10%	≤ 70%
Neutral	≥ 0%	≤ 30%
Underperform	N/A	≥ 20%

^{R1} Ratings dispersions may vary from time to time where BofA Global Research believes it better reflects the investment prospects of stocks in a Coverage Cluster.

INCOME RATINGS, indicators of potential cash dividends, are: 7 - same/higher (dividend considered to be secure), 8 - same/lower (dividend not considered to be secure) and 9 - pays no cash dividend. **Coverage Cluster** is comprised of stocks covered by a single analyst or two or more analysts sharing a common industry, sector, region or other classification(s). A stock's coverage cluster is included in the most recent BofA Global Research report referencing the stock.

Due to the nature of strategic analysis, the issuers or securities recommended or discussed in this report are not continuously followed. Accordingly, investors must regard this report as providing stand-alone analysis and should not expect continuing analysis or additional reports relating to such issuers and/or securities.

BofA Global Research personnel (including the analyst(s) responsible for this report) receive compensation based upon, among other factors, the overall profitability of Bank of America Corporation, including profits derived from investment banking. The analyst(s) responsible for this report may also receive compensation based upon, among other factors, the overall profitability of the Bank's sales and trading businesses relating to the class of securities or financial instruments for which such analyst is responsible.

Other Important Disclosures

Prices are indicative and for information purposes only. Except as otherwise stated in the report, for any recommendation in relation to an equity security, the price referenced is the publicly traded price of the security as of close of business on the day prior to the date of the report or, if the report is published during intraday trading, the price referenced is indicative of the traded price as of the date and time of the report and in relation to a debt security (including equity preferred and CDS), prices are indicative as of the date and time of the report and are from various sources including BofA Securities trading desks.

The date and time of completion of the production of any recommendation in this report shall be the date and time of dissemination of this report as recorded in the report timestamp.

This report may refer to fixed income securities or other financial instruments that may not be offered or sold in one or more states or jurisdictions, or to certain categories of investors, including retail investors. Readers of this report are advised that any discussion, recommendation or other mention of such instruments is not a solicitation or offer to transact in such instruments. Investors should contact their BofA Securities representative or Merrill Global Wealth Management financial advisor for information relating to such instruments.

Recipients who are not institutional investors or market professionals should seek the advice of their independent financial advisor before considering information in this report in connection with any investment decision, or for a necessary explanation of its contents.

Officers of BofAS or one or more of its affiliates (other than research analysts) may have a financial interest in securities of the issuer(s) or in related investments.

Refer to [BofA Global Research policies relating to conflicts of interest](#).

"BofA Securities" includes BofA Securities, Inc. ("BofAS") and its affiliates. Investors should contact their BofA Securities representative or Merrill Global Wealth Management financial advisor if they have questions concerning this report or concerning the appropriateness of any investment idea described herein for such investor. "BofA Securities" is a global brand for BofA Global Research.

Information relating to Non-US affiliates of BofA Securities and Distribution of Affiliate Research Reports:

BofAS and/or Merrill Lynch, Pierce, Fenner & Smith Incorporated ("MLPF&S") may in the future distribute, information of the following non-US affiliates in the US (short name: legal name, regulator): Merrill Lynch (South Africa): Merrill Lynch South Africa (Pty) Ltd., regulated by the Financial Sector Conduct Authority; MLI (UK): Merrill Lynch International, regulated by the Financial Conduct Authority (FCA) and the Prudential Regulation Authority (PRA); BofASE (France): BofA Securities Europe SA is authorized by the Autorité de Contrôle Prudentiel et de Résolution (ACPR) and regulated by the ACPR and the Autorité des Marchés Financiers (AMF). BofA Securities Europe SA ("BofASE") with registered address at 51, rue La Boétie, 75008 Paris is registered under no 842 602 690 RCS Paris. In accordance with the provisions of French Code Monétaire et Financier (Monetary and Financial Code), BofASE is an établissement de crédit et d'investissement (credit and investment institution) that is authorised and supervised by the European Central Bank and the Autorité de Contrôle Prudentiel et de Résolution (ACPR) and regulated by the ACPR and the Autorité des Marchés Financiers. BofASE's share capital can be found at www.bofam.com/BofASEdisclaimer; BofA Europe (Milan): Bank of America Europe Designated Activity Company, Milan Branch, regulated by the Bank of Italy, the European Central Bank (ECB) and the Central Bank of Ireland (CBI); BofA Europe (Frankfurt): Bank of America Europe Designated Activity Company, Frankfurt Branch regulated by BaFin, the ECB and the CBI; BofA Europe (Madrid): Bank of America Europe Designated Activity Company, Sucursal en España, regulated by the Bank of Spain, the



ECB and the CBI; Merrill Lynch (Australia): Merrill Lynch Equities (Australia) Limited, regulated by the Australian Securities and Investments Commission; Merrill Lynch (Hong Kong): Merrill Lynch (Asia Pacific) Limited, regulated by the Hong Kong Securities and Futures Commission (HKSF); Merrill Lynch (Singapore): Merrill Lynch (Singapore) Pte Ltd, regulated by the Monetary Authority of Singapore (MAS); Merrill Lynch (Canada): Merrill Lynch Canada Inc, regulated by the Canadian Investment Regulatory Organization; Merrill Lynch (Mexico): Merrill Lynch Mexico, SA de CV, Casa de Bolsa, regulated by the Comisión Nacional Bancaria y de Valores; BofA Japan: BofA Securities Japan Co., Ltd., regulated by the Financial Services Agency; Merrill Lynch (Seoul): Merrill Lynch International, LLC Seoul Branch, regulated by the Financial Supervisory Service; Merrill Lynch (Taiwan): Merrill Lynch Securities (Taiwan) Ltd., regulated by the Securities and Futures Bureau; BofA India: BofA Securities India Limited, regulated by the Securities and Exchange Board of India (SEBI); Merrill Lynch (Israel): Merrill Lynch Israel Limited, regulated by Israel Securities Authority; Merrill Lynch (DIFC): Merrill Lynch International (DIFC Branch), regulated by the Dubai Financial Services Authority (DFSA); Merrill Lynch (Brazil): Merrill Lynch S.A. Corretora de Títulos e Valores Mobiliários, regulated by Comissão de Valores Mobiliários; Merrill Lynch KSA Company: Merrill Lynch Kingdom of Saudi Arabia Company, regulated by the Capital Market Authority. This information has been approved for publication and is distributed in the United Kingdom (UK) to professional clients and eligible counterparties (as each is defined in the rules of the FCA and the PRA) by MLI (UK), which is authorized by the PRA and regulated by the FCA and the PRA - details about the extent of our regulation by the FCA and PRA are available from us on request; has been approved for publication and is distributed in the European Economic Area (EEA) by BofASE (France), which is authorized by the ACPR and regulated by the ACPR and the AMF; has been considered and distributed in Japan by BofAS Japan, a registered securities dealer under the Financial Instruments and Exchange Act in Japan, or its permitted affiliates; is issued and distributed in Hong Kong by Merrill Lynch (Hong Kong) which is regulated by HKSF; is issued and distributed in Taiwan by Merrill Lynch (Taiwan); is issued and distributed in India by BofAS India; and is issued and distributed in Singapore to institutional investors and/or accredited investors (each as defined under the Financial Advisers Regulations) by Merrill Lynch (Singapore) (Company Registration No 198602883D). Merrill Lynch (Singapore) is regulated by MAS. Merrill Lynch Equities (Australia) Limited (ABN 65 006 276 795), AFS License 235132 (MLEA) distributes this information in Australia only to 'Wholesale' clients as defined by s.761G of the Corporations Act 2001. With the exception of Bank of America N.A., Australia Branch, neither MLEA nor any of its affiliates involved in preparing this information is an Authorised Deposit-Taking Institution under the Banking Act 1959 nor regulated by the Australian Prudential Regulation Authority. No approval is required for publication or distribution of this information in Brazil and its local distribution is by Merrill Lynch (Brazil) in accordance with applicable regulations. Merrill Lynch (DIFC) is authorized and regulated by the DFSA. Information prepared and issued by Merrill Lynch (DIFC) is done so in accordance with the requirements of the DFSA conduct of business rules. BofA Europe (Frankfurt) distributes this information in Germany and is regulated by BaFin, the ECB and the CBI. BofA Securities entities, including BofA Europe and BofASE (France), may outsource/delegate the marketing and/or provision of certain research services or aspects of research services to other branches or members of the BofA Securities group. You may be contacted by a different BofA Securities entity acting for and on behalf of your service provider where permitted by applicable law. This does not change your service provider. Please refer to the [Electronic Communications Disclaimers](#) for further information.

This information has been prepared and issued by BofAS and/or one or more of its non-US affiliates. The author(s) of this information may not be licensed to carry on regulated activities in your jurisdiction and, if not licensed, do not hold themselves out as being able to do so. BofAS and/or MLPF&S is the distributor of this information in the US and accepts full responsibility for information distributed to BofAS and/or MLPF&S clients in the US by its non-US affiliates. Any US person receiving this information and wishing to effect any transaction in any security discussed herein should do so through BofAS and/or MLPF&S and not such foreign affiliates. Hong Kong recipients of this information should contact Merrill Lynch (Asia Pacific) Limited in respect of any matters relating to dealing in securities or provision of specific advice on securities or any other matters arising from, or in connection with, this information. Singapore recipients of this information should contact Merrill Lynch (Singapore) Pte Ltd in respect of any matters arising from, or in connection with, this information. For clients that are not accredited investors, expert investors or institutional investors Merrill Lynch (Singapore) Pte Ltd accepts full responsibility for the contents of this information distributed to such clients in Singapore.

General Investment Related Disclosures:

Taiwan Readers: Neither the information nor any opinion expressed herein constitutes an offer or a solicitation of an offer to transact in any securities or other financial instrument. No part of this report may be used or reproduced or quoted in any manner whatsoever in Taiwan by the press or any other person without the express written consent of BofA Securities. This document provides general information only, and has been prepared for, and is intended for general distribution to, BofA Securities clients. Neither the information nor any opinion expressed constitutes an offer or an invitation to make an offer, to buy or sell any securities or other financial instrument or any derivative related to such securities or instruments (e.g., options, futures, warrants, and contracts for differences). This document is not intended to provide personal investment advice and it does not take into account the specific investment objectives, financial situation and the particular needs of, and is not directed to, any specific person(s). This document and its content do not constitute, and should not be considered to constitute, investment advice for purposes of ERISA, the US tax code, the Investment Advisers Act or otherwise. Investors should seek financial advice regarding the appropriateness of investing in financial instruments and implementing investment strategies discussed or recommended in this document and should understand that statements regarding future prospects may not be realized. Any decision to purchase or subscribe for securities in any offering must be based solely on existing public information on such security or the information in the prospectus or other offering document issued in connection with such offering, and not on this document. Securities and other financial instruments referred to herein, or recommended, offered or sold by BofA Securities, are not insured by the Federal Deposit Insurance Corporation and are not deposits or other obligations of any insured depository institution (including, Bank of America, N.A.). Investments in general and, derivatives, in particular, involve numerous risks, including, among others, market risk, counterparty default risk and liquidity risk. No security, financial instrument or derivative is suitable for all investors. Digital assets are extremely speculative, volatile and are largely unregulated. In some cases, securities and other financial instruments may be difficult to value or sell and reliable information about the value or risks related to the security or financial instrument may be difficult to obtain. Investors should note that income from such securities and other financial instruments, if any, may fluctuate and that price or value of such securities and instruments may rise or fall and, in some cases, investors may lose their entire principal investment. Past performance is not necessarily a guide to future performance. Levels and basis for taxation may change.

This report may contain a short-term trading idea or recommendation, which highlights a specific near-term catalyst or event impacting the issuer or the market that is anticipated to have a short-term price impact on the equity securities of the issuer. Short-term trading ideas and recommendations are different from and do not affect a stock's fundamental equity rating, which reflects both a longer term total return expectation and attractiveness for investment relative to other stocks within its Coverage Cluster. Short-term trading ideas and recommendations may be more or less positive than a stock's fundamental equity rating.

BofA Securities is aware that the implementation of the ideas expressed in this report may depend upon an investor's ability to "short" securities or other financial instruments and that such action may be limited by regulations prohibiting or restricting "shortselling" in many jurisdictions. Investors are urged to seek advice regarding the applicability of such regulations prior to executing any short idea contained in this report.

Foreign currency rates of exchange may adversely affect the value, price or income of any security or financial instrument mentioned herein. Investors in such securities and instruments, including ADRs, effectively assume currency risk.

BofAS or one of its affiliates is a regular issuer of traded financial instruments linked to securities that may have been recommended in this report. BofAS or one of its affiliates may, at any time, hold a trading position (long or short) in the securities and financial instruments discussed in this report.

BofA Securities, through business units other than BofA Global Research, may have issued and may in the future issue trading ideas or recommendations that are inconsistent with, and reach different conclusions from, the information presented herein. Such ideas or recommendations may reflect different time frames, assumptions, views and analytical methods of the persons who prepared them, and BofA Securities is under no obligation to ensure that such other trading ideas or recommendations are brought to the attention of any recipient of this information.

In the event that the recipient received this information pursuant to a contract between the recipient and BofAS for the provision of research services for a separate fee, and in connection therewith BofAS may be deemed to be acting as an investment adviser, such status relates, if at all, solely to the person with whom BofAS has contracted directly and does not extend beyond the delivery of this report (unless otherwise agreed specifically in writing by BofAS). If such recipient uses the services of BofAS in connection with the sale or purchase of a security referred to herein, BofAS may act as principal for its own account or as agent for another person. BofAS is and continues to act solely as a broker-dealer in connection with the execution of any transactions, including transactions in any securities referred to herein.

Copyright and General Information:

Copyright 2025 Bank of America Corporation. All rights reserved. iQDatabase® is a registered service mark of Bank of America Corporation. This information is prepared for the use of BofA Securities clients and may not be redistributed, retransmitted or disclosed, in whole or in part, or in any form or manner, without the express written consent of BofA Securities. This document and its content is provided solely for informational purposes and cannot be used for training or developing artificial intelligence (AI) models or as an input in any AI application (collectively, an AI tool). Any attempt to utilize this document or any of its content in connection with an AI tool without explicit written permission from BofA Global Research is strictly prohibited. BofA Global Research information is distributed simultaneously to internal and client websites and other portals by BofA Securities and is not publicly-available material. Any unauthorized use or disclosure is prohibited. Receipt and review of this information constitutes your agreement not to redistribute, retransmit, or disclose to others the contents, opinions, conclusion, or information contained herein (including any investment recommendations, estimates or price targets) without first obtaining express permission from an authorized officer of BofA Securities.

Materials prepared by BofA Global Research personnel are based on public information. Facts and views presented in this material have not been reviewed by, and may not reflect information

known to, professionals in other business areas of BofA Securities, including investment banking personnel. BofA Securities has established information barriers between BofA Global Research and certain business groups. As a result, BofA Securities does not disclose certain client relationships with, or compensation received from, such issuers. To the extent this material discusses any legal proceeding or issues, it has not been prepared as nor is it intended to express any legal conclusion, opinion or advice. Investors should consult their own legal advisers as to issues of law relating to the subject matter of this material. BofA Global Research personnel's knowledge of legal proceedings in which any BofA Securities entity and/or its directors, officers and employees may be plaintiffs, defendants, co-defendants or co-plaintiffs with or involving issuers mentioned in this material is based on public information. Facts and views presented in this material that relate to any such proceedings have not been reviewed by, discussed with, and may not reflect information known to, professionals in other business areas of BofA Securities in connection with the legal proceedings or matters relevant to such proceedings.

This information has been prepared independently of any issuer of securities mentioned herein and not in connection with any proposed offering of securities or as agent of any issuer of any securities. None of BofAS any of its affiliates or their research analysts has any authority whatsoever to make any representation or warranty on behalf of the issuer(s). BofA Global Research policy prohibits research personnel from disclosing a recommendation, investment rating, or investment thesis for review by an issuer prior to the publication of a research report containing such rating, recommendation or investment thesis.

Any information relating to sustainability in this material is limited as discussed herein and is not intended to provide a comprehensive view on any sustainability claim with respect to any issuer or security.

Any information relating to the tax status of financial instruments discussed herein is not intended to provide tax advice or to be used by anyone to provide tax advice. Investors are urged to seek tax advice based on their particular circumstances from an independent tax professional.

The information herein (other than disclosure information relating to BofA Securities and its affiliates) was obtained from various sources and we do not guarantee its accuracy. This information may contain links to third-party websites. BofA Securities is not responsible for the content of any third-party website or any linked content contained in a third-party website. Content contained on such third-party websites is not part of this information and is not incorporated by reference. The inclusion of a link does not imply any endorsement by or any affiliation with BofA Securities. Access to any third-party website is at your own risk, and you should always review the terms and privacy policies at third-party websites before submitting any personal information to them. BofA Securities is not responsible for such terms and privacy policies and expressly disclaims any liability for them.

All opinions, projections and estimates constitute the judgment of the author as of the date of publication and are subject to change without notice. Prices also are subject to change without notice. BofA Securities is under no obligation to update this information and BofA Securities ability to publish information on the subject issuer(s) in the future is subject to applicable quiet periods. You should therefore assume that BofA Securities will not update any fact, circumstance or opinion contained herein.

Certain outstanding reports or investment opinions relating to securities, financial instruments and/or issuers may no longer be current. Always refer to the most recent research report relating to an issuer prior to making an investment decision.

In some cases, an issuer may be classified as Restricted or may be Under Review or Extended Review. In each case, investors should consider any investment opinion relating to such issuer (or its security and/or financial instruments) to be suspended or withdrawn and should not rely on the analyses and investment opinion(s) pertaining to such issuer (or its securities and/or financial instruments) nor should the analyses or opinion(s) be considered a solicitation of any kind. Sales persons and financial advisors affiliated with BofAS or any of its affiliates may not solicit purchases of securities or financial instruments that are Restricted or Under Review and may only solicit securities under Extended Review in accordance with firm policies.

Neither BofA Securities nor any officer or employee of BofA Securities accepts any liability whatsoever for any direct, indirect or consequential damages or losses arising from any use of this information.

