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The Flow Show

When Love Breaks Down

Scores on the Doors: commodities 42.3%, oil 41.1%, US\$ 9.6%, cash 0.1%, gold -0.2%, govt bonds -11.9%,HY bonds -12.5%, IG bonds -13.4%, stocks -17.8%, bitcoin -38.2% YTD.

The Way We Were: "Millennials are quitting jobs to become crypto day traders", USA Today, Aug 12th 2021.

The Biggest Picture: crash in crypto (Chart 2)/speculative tech now rivals internet bubble crash (Nasdaq -73% peak-to-trough) & GFC (banks -78%); trading pattern of post-bubble assets always furious bear rallies amidst dead sideways trading range for couple of years.

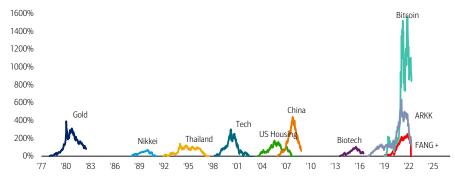
The Price is Right: crypto implosion (COIN -90%, Terra -99% on combo of Nasdaq unwind, low liquidity, pool migration, whale attacks) exacerbates Wall St "fear & loathing", fear of VC "marks", PE collapse, bank loans breakdown (Chart 3), dumping of Big Tech; good news for those expecting a bear bounce in the next few weeks...last of crowded trades" short Japan yen & long commodities starting to unwind (Chart 4), dollar" not yet melting up into new territory (Chart).

The Tale of Tape: rally in bonds this week not (yet) coinciding with rally in biotech (below '18 & '20 lows), China credit (Chart 6), EM, all of which were early "tells" of "rates shock"; GDP/EPS estimates to be cut in coming weeks (when banks down, yields up, no bueno...Chart 7), but >25% of MSCI ACWI index now trading <10x forward PE.

Weekly Flows: exodus from Wall St...\$1.8bn from gold, \$6.2bn from equities (Chart 17), \$11.4bn from bonds, \$19.7bn from cash.

Flows to Know: big risk-off week: largest IG+HY+EM debt outflow since Apr'20 (\$19.3), largest bank loans outflow since Jun'20 (\$0.7bn), largest Treasuries inflow since Mar'20 (\$11.5bn), largest EM stocks outflow since Jun'20 (\$4.4bn), largest YTD outflow from tech stocks (\$1.1bn – Chart 15-16 & 18), 1st YTD outflow from materials (\$0.9bn).

Chart 2: Greed & Fear...Overshoots & Undershoots...t'was ever thus History of asset bubbles



Source: BofA Global Investment Strategy, Bloomberg

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More on page 2...

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Investment Strategy Global

BofA Data **Analytics**



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Chart 1: BofA Bull & Bear Indicator

Flat at 2.1

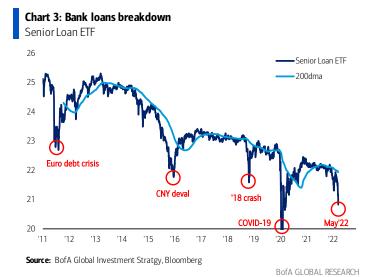


Source: BofA Global Investment Strategy The indicator identified above as the BofA Bull & Bear Indicator is intended to be an indicative metric only and may not be used for reference purposes or as a measure of performance for any financial instrument or contract, or otherwise relied upon by third parties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

Credit vs Equity Capitulation: for every \$100 of equity inflows since Jan'21, \$4 has been redeemed; for every \$100 of credit inflows since Apr'20, \$25 has been redeemed; capitulation has progressed much further in credit than in equities...risk-on will appear first in bonds not stocks.

BofA Private Clients: \$3.0tn AUM...63.4% stocks, 17.6% bonds, 11.8% cash (highest since Feb'21); GWIM cash % AUM not showing capitulation yet (Chart 23).

BofA Bull & Bear Indicator: flat at 2.1 (Chart 1), has loitered here past 4-6 weeks as we await sustained equity outflows, another uber-bearish <u>BofA Fund Manager Survey</u>.



CNYJPY vs Commodity Index 20 675 CRB RIND Index (RHS) 19 625 18 575 525 475 15 425 375 '16 '17 '20 '21 '18 '19

Source: BofA Global Investment Stratgy, Bloomberg

Chart 4: Short Japan yen & long commodities starting to unwind

Are We There Yet? No...fear & loathing suggest stocks prone to imminent bear market rally but we do not think ultimate lows have been reached, nor ultimate highs in yields; BofA "capitulation" checklist using today's data vs COVID '20, Euro-debt crisis '12, GFC '09, tech bubble '01 data @ lows (Table 2)...

- BofA FMS cash level 5.5% of AUM...capitulation
- BofA FMS growth expectations net -71%...capitulation
- BofA FMS profits expectations net -63%...capitulation
- BofA FMS rate expectations net +86%...no...rate <u>cut</u> expectations always seen at lows
- BofA FMS equity AA net +6%...no...lows require -20-30% allocation (i.e. investors UW stocks)
- BofA FMS bond AA net -68%...no...lows require investors to close their UW bond allocation
- BofA GWIM private client equity AA 63%...no...prior lows saw equity allocations pullback to at least 56%
- Equity inflow unwind...no...for every \$100 inflows past few weeks we have seen just \$4 redemptions vs >\$50 prior in prior bear markets
- Equity redemptions % AUM...no...outflows thus far 0.2% AUM vs 3-6% at prior lows.



When Love Breaks Down: definition of true capitulation "investors selling what they love"...Apple poster child for QE bull market...now in bear market...100-week moving average for Apple is \$137 (big one to hold), 200-week is \$97.

Chart 5: Dollar not yet melting up into new territory



Source: BofA Global Investment Stratgy, Bloomberg

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Chart 7: Banks down, yields up, no bueno

Banks vs S&P 500 price relative and US 5-year Treasury yield



Source: BofA Global Investment Stratgy, Bloomberg

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Chart 6: Rally in bonds not (yet) coinciding with rally in China credit China and US HY vs IG total return relatives



Source: BofA Global Investment Stratgy, Bloomberg

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Table 1: Policy panic Global inflation and policy

			Policy Rate	YTD Hikes
	CPI YoY (%)	PPI YoY (%)	(%)	(bp)
Eurozone	7.5	36.8	0.00	0
Germany	7.4	30.9	0.00	0
Japan	1.2	9.5	-0.10	0
Sweden	6.4	24.5	0.25	25
United States	8.3	15.7	1.00	75
United Kingdom	7.0	11.9	1.00	75
Canada	6.7	18.5	1.00	75
Hungary	9.5	25.9	5.40	300
Poland	12.3	20.0	5.25	350
Brazil	12.1	16.1	12.75	350

Source: BofA Global Investment Stratgy, Bloomberg

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1P vs 3Ps: bearish Positioning + Profit recession + Policy panic = Big Low for risk assets = new bull market; bearish Positioning without Profit recession + Policy panic = bear market rallies.

Policy Panic: global consumer inflation 6-12%, producer inflation 10-30%, highest policy rate in G7 = 1% (Table 1), Fed yet to start QT...real policy rates terrifyingly negative (a 250-year symbol of crashes, panics & wars – Chart 8); 0.4% monthly prints = end-year core CPI 6%, 0.2% monthly prints 4% (Chart 9)...big political problem (Chart 10) = policy panic of 2022 is *tighter* not *easier* Fed; contagious Wall St credit event and/or rise in unemployment can reverse Fed, at the earliest autumn; meanwhile fiscal policy maker desperation (see price controls announcement across US/Europe) & dollar debasement come first, both of which ironically will cause higher yields.



Table 2: Are We There Yet?

Capitulation Indicators

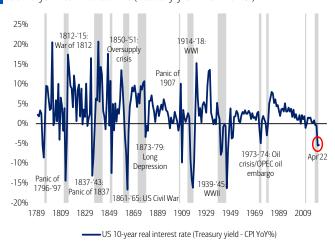
	Dotcom Dec'00-Mar'01	GFC Jul-Oct'08	Euro Debt Crisis Nov'11-Apr'12	COVID Mar-Apr'20	Today	Extreme Bear Low
BofA FMS Cash % of AUM	8.0	5.4	5.3	5.9	5.5	✓
BofA FMS Stronger economy	-59	-65	-29	-49	-71	✓
BofA FMS Stronger profits	-52	-74	-41	-64	-63	✓
BofA FMS Higher short term rates	-77	-75	-9	-44	86	Χ
BofA FMS Equities net OW %	-	-45	-7	-27	6	Χ
BofA FMS Bonds net OW %	-	26	-23	-13	-68	Χ
BofA Bull and Bear Indicator	-	0.0	0.0	0.0	2.1	Χ
BofA GWIM equity AA (% AUM)	-	39%	48%	54%	63%	Χ
Equity flows (for every \$100 inflow, \$x outflow)	-	-113	-53	-61	-3	Χ
Total equity outflow (% AUM)	-	6.8%	2.6%	2.8%	0.2%	Χ

Source: BofA Global Fund Manager Survey, BofA Global Investment Strategy, EPFR

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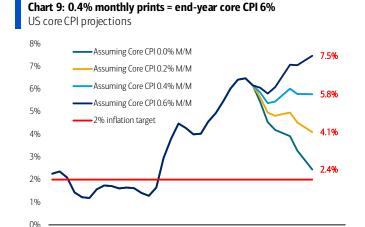
Chart 8: Real rates terrifyingly negative

US 10-year real interest rate (Treasury yield – CPI YoY %)



 $\textbf{Source:} \ \ \textbf{BofA Global Investment Stratgy, Bloomberg, Global Financial Data}$

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Source: BofA Global Investment Stratgy, Bloomberg

Nov'20

Apr'21

Sep'21

Feb'22

Jul'22

Jun'20

Jan'20

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Dec'22

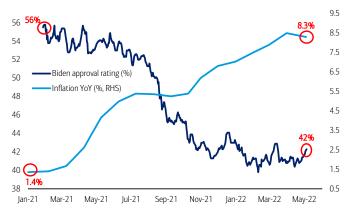
20th vs 21st century: trailing PE for US stocks in 20th century averaged 14x vs 19x in 21st century thus far; we believe secular inflation driven by trends in society (inequality), politics (populism/progressivism), geopolitics (war), society (inequality & inclusion), environment (net-zero), economy (end of globalization, demographics (China population decline) means higher inflation, rates & reversion of PE to norm (14-16x past 120 years – Chart 11); why we think SPX 3600-3800 potential entry level, though likely undershoots (note average bear decline = 37.3% & avg duration = 289 days (Table 3) = today's bear ends Oct 19th '22 with S&P500 at 3000, Nasdaq at 10000...good news is bear markets quicker than bull markets (Table 4).

At the Lows: best strategy to own will unquestionably be humiliated "60-40" strategy...strategy currently on course for worst return in 100 years (Chart 12 – it's mean return over this period has been 9%); in contrast 25/25/25/25 portfolio (equities/bonds/cash/commodities) just positive YTD (Chart 13 - albeit underperforming mean of 7% return); humiliated "60-40" better bet than hubristic "25/25/25/25" once lows closer later this year (Chart 14).



Chart 10: Inflation a big political problem

Biden approval rating vs inflation



Source: BofA Global Investment Stratgy, Bloomberg

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Table 3: Good new is bear markets...

History of US equity bear markets (S&P 500)

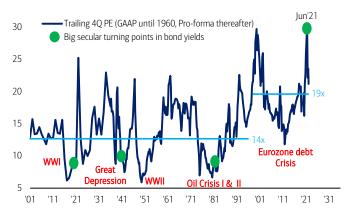
Peak	Trough	Decline	Recovery	Event (s)
09/1929	06/1932	86.2%	03/1937	Crash of 1929, 1st part of Great Depression
03/1937	04/1942	60.0%	05/1946	2nd part of Great Depression, WWII
10/2007	03/2009	56.8%	02/2020	Global Financial Crisis
06/1911	12/1920	51.0%	12/1924	WWI, Post-War Auto Bubble Burst
03/2000	10/2002	49.1%	10/2007	Dot-com bubble burst
01/1973	10/1974	48.2%	08/1987	Inflationary Bear Market, Vietnam, Watergate
11/1968	05/1970	36.1%	01/1973	Start of Inflationary Bear Market
01/1906	10/1907	34.2%	08/1908	Panic of 1907
02/2020	03/2020	33.9%	03/2020	COVID-19 Crash of 2020
08/1987	10/1987	33.2%	07/1990	Black Monday
4/1899	06/1900	30.4%	03/1901	Cornering of Northern Pacific Stock
05/1946	06/1949	29.6%	08/1956	Post-war Bear Market
12/1961	06/1962	28.0%	02/1966	Height of Cold War, Cuban Missile Crisis
10/1892	07/1893	27.3%	03/1894	Silver Agitation
11/1886	03/1888	22.0%	05/1889	Depression, Railroad strikes
04/1903	09/1903	21.7%	11/1904	Rich Man's Panic
8/1897	03/1898	21.1%	08/1898	Outbreak of Boer War
09/1909	07/1910	20.6%	02/1911	Enforcement of the Sherman Anti-Trust Act
5/1890	07/1891	20.1%	02/1892	Barings Brothers Crisis

Source: BofA Global Investment Strategy, Ibbotson, SBBI Yearbook, Bloomberg

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Chart 11: 20th vs 21st century

S&P 500 Trailing 4Q PE



Source: BofA US Equity & Quant Strategy

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Table 4: ...quicker than bull markets

History of US equity bull markets (S&P 500)

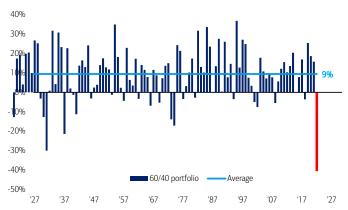
	equity builthank	(Duration	Prior Bear
Start	End	Rally	(months)	Market
6/1/1932	3/5/1937	323%	57	-86%
4/29/1942	5/29/1946	153%	49	-54%
6/14/1949	8/2/1956	265%	86	-30%
10/22/1957	12/12/1961	86%	50	-22%
6/27/1962	2/9/1966	79%	44	-28%
10/7/1966	11/29/1968	48%	25	-22%
5/26/1970	1/11/1973	74%	32	-36%
10/3/1974	11/28/1980	126%	73	-48%
8/12/1982	8/25/1987	229%	60	-27%
12/4/1987	7/16/1990	65%	31	-34%
10/11/1990	3/24/2000	417%	113	-20%
10/9/2002	10/9/2007	101%	60	-49%
3/9/2009	1/3/2022	609%	154	-57%
Average		198%	64	-39%

Source: BofA Global Investment Strategy, Ibbotson, Bloomberg



Chart 12: Best strategy will unquestionably be "60-40" strategy

60/40 portfolio returns

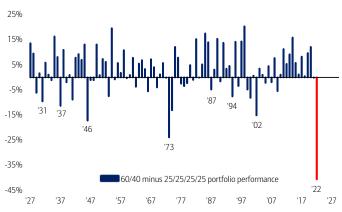


Source: BofA Global Investment Strategy, Global Financial Data

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Chart 14: Humiliated "60-40" better bet than hubristic "25/25/25"

60/40 portfolio vs 25/25/25/25 returns

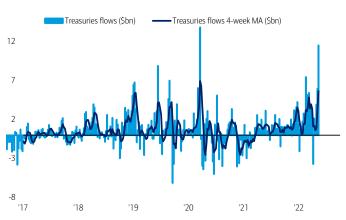


Source: BofA Global Investment Strategy, Global Financial Data

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Chart 16: Largest Treasuries inflow since Mar'20

Treasuries flows (weekly &4 week moving average)

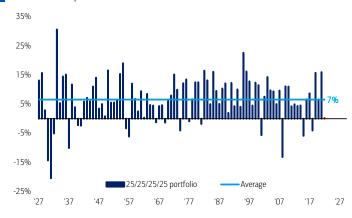


Source: BofA Global Investment Strategy, EPFR

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Chart 13: 25/25/25/25 just positive YTD

25/25/25/25 portfolio returns

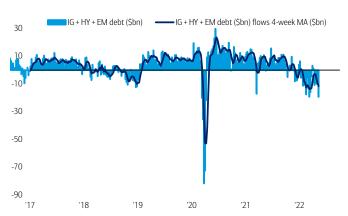


Source: BofA Global Investment Strategy, Global Financial Data

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Chart 15: Largest IG + HY + EM debt outflow since Apr'20

IG + HY + EM debt flows (weekly & 4 week moving average)

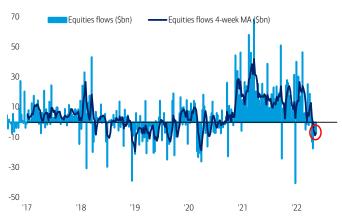


Source: BofA Global Investment Strategy, EPFR

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Chart 17: \$6.2 bn from equities

Equities flows (weekly & 4 week moving average)

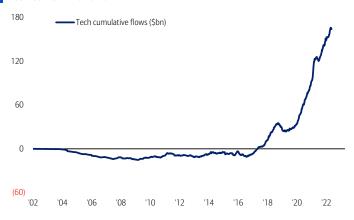


Source: BofA Global Investment Strategy, EPFR



Chart 18: Largest YTD outflow from tech stocks

Tech cumulative flows



Source: BofA Global Investment Strategy, EPFR



Table 5: \$23tn in '20, \$9tn in '21, -\$2tn in '22 in fiscal and monetary stimulus

Global Monetary and Fiscal Stimulus by country in US dollar billions, % GDP, rate cut % and short description of stimulus

	Fiscal	Monetary			Data		
Countries		Stimulus (\$bp)	0/- CDD	Pata Cut	Rate	Control Pank Actions	Figeal Stimulus
Country	(\$bn)	(\$bn)	% GDP	Rate Cut	Hike	Central Bank Actions	Fiscal Stimulus
Italy*	972.6	388.4	68.0%	-	-	-	SME Loans and public aid
Germany*	1722.2	746.5	64.2% 56.0%	- 0.65%		- Cut Rates; BoE capital buffer boost; QE	Loan commitments; healthcare aid
UK	975.1	607.9	56.0%	0.65%	0.90%		SME Loans and public aid
						Cut rates to 0%; Unlimited QE; \$1.5Tn on reverse repos; Commercial Paper Funding Facility; Primary	
USA	6992.0	4319.4	52.1%	1.50%	0.75%	Dealer Credit Facility; Money Market Mutual Fund	SME Loans and public aid; Direct consumer
USA	0.7.72.0	1 .رار د	JZ. 170	1.50 70	0.7 570	Liquidity Facility; Moriey Market Mutual Fund Liquidity Facility; Dollar Swap Line with Central	checks; Healthcare aid
						Banks; TALF	
	0165.5					,	SME Loans and public aid; FLIP; Tax Deferrals;
Japan	2102.6	564.4	51.7%	-	-	BoJ boost to asset purchases; QE	Health aide
Bulgaria*	20.6	12.9	50.4%	-	-	-	SME Loans and Healthcare aid
Sweden*	72.5	184.6	48.4%	-	0.25%	SEK500Bn (\$50Bn) to SMES	Public aid and delayed taxes
Poland*	170.6	114.5	48.3%	1.40%	4.15%	Cut Rates; Reduce reserve ratio	SME Loans and public aid
France*	761.6	525.3	47.5%	-	-	-	Loan commitments; SME Loans and public aid
Australia	273.9	265.4	47.3%	0.65%	0.25%	Cut Rates; Bank lending; ABS purchases; Yield	SME Loans and public aid; Subsidies
					U.ZJ /U	Curve Control; QE	
Singapore	78.5	88.0	45.9%	-	-	Cut Rates; Lending	SME Loans and public aid
Romania*	54.3	41.1	45.0%	1.25%	1.00%	Cut Rates	SME Loans and public aid
Denmark*	84.0	68.3	43.3%	0.15%	0.10%	Raised Rates	Paid wages
Spain*	328.7	270.4	43.0%	-	-	-	Loan guarantees
Austria*	86.1	86.6	38.7%	-	-	-	Loan commitments; SME Loans and public aid
Canada	326.7	338.9	38.2%	1.50%	0.75%	Cut Rates; QE	Direct support; tax deferrals; SME Loans and public aid; Business Credit Availability
Czech*	45.2	47.7	37.8%	2.00%	5.50%	Cut Rates	SME Loans and public aid
Colombia	45.2 27.2	2.6	37.6%	2.50%	3.25%	Cut Rates Cut Rates; Lending	Cash transfers: Health commitment
Finland*	43.2	52.3	35.4%	2.30%	3.23%	cuchates, Lenuing	Healthcare aids; SME Loans
New Zealand	44.5	18.0	30.7%	1.00%	1.25%	Cut Rates; Lending	SME Loans and public aid
Bahrain	11.3	-	29.6%	0.75%	0.50%	Cut Rates	SME Loans and public aid
Ireland*	37.2	75.4	29.0%	-	-	-	SME Loans and public aid
Netherlands*	72.1	176.4	27.3%	-	-	-	Healthcare aid
Thailand	94.4	31.2	23.7%	0.75%	-	Cut Rates; Lending	SME Loans and public aid
Peru	39.5	8.7	22.8%	2.00%	3.25%	Cut Rates; Lending	Cash Transfer
Euro area*	2133*	3550*	21.1%	_	-	ECB QE; TLTRO facility; PEPP of public/private	Direct support; tax deferrals; SME Loans and public
Lui0 died	۷ ۱ کا کا	טכככ	∠1.170	-	-	securities	aid; credit lines
Chile	28.7	32.0	20.6%	2.00%	6.50%	Cut Rates; Credit lines to banks; Purchase of \$4Bn	Healthcare aid, SME Loans and public aid
						in bank bonds	. Isala leare aid, Sivie Eduris and public did
Hungary*	29.8	31.3	19.4%	1.25%	4.95%	Cut Rates	-
United Arab	7.2	70.0	19.0%	-	-	Lending	-
Emirates							CME Loans and public aid Liquidity to finance 1
South Korea	274.5	1.2	17.2%	0.75%	1.00%	Cut Rates; Broaden the eligible collateral for open market operations; QE	SME Loans and public aid; Liquidity to financial
Iceland	1.6	3.2	16.9%	1.75%	3.00%	Cut Rates; Lending	markets SME Loans and public aid
India	486.7	54.3	16.9%	1.75%	3.00%	Cut Rates; Lending Cut Rates; Lending	SME Loans and public aid
Switzerland	106.2	J4.J -	15.1%	1.1370	-	-	SME Loans and public aid
Dominican							Sivie Eduris and pablic ald
Republic	-	12.1	14.8%	1.00%	1.50%	Cut Rates; Lending	-
Hong Kong	44.6	6.5	13.7%	1.14%	-	Cut Rates; Lending	SME Loans and public aid
Turkey	94.6	-	12.7%	7.50%	8.25%	Cut Rates	SME Loans and public aid; Tax cuts
Brazil	222.3	10.0	12.4%	2.25%	10.00%	Cut Pater: Landing	Healthcare aid, SME Loans and public aid; Credit
DIdZII		10.0			10.00%	Cut Rates; Lending	lines to individuals and firms; Tax cuts
Tunisia	1.4	-	11.9%	0.50%	-	Cut Rates	Healthcare aid
China	903.4	593.1	10.6%	0.95%	_	Cut Rates; Expanded repos; RRR cuts	Loan commitments; rate cuts for some banks;
						·	Relief Measures
Norway	38.5	-	9.2%	1.50%	1.00%	Cut Rates; Bank lending	SME Loans and public aid
Mexico	20.4	94.0	9.0%	3.50%	2.50%	Cut Rates; Lending	Healthcare aid
Kazakhstan	14.3	-	8.4%	2.75%	1.50%	Cut Rates	Healthcare aid
South Africa	30.0	- C 1	8.4%	2.75%	0.75%	Cut Rates	Tax exemptions
Philippines	18.2	6.4 -	6.9%	1.75%	-	Cut Rates; Cut reserve requirement	Healthcare aid, SME Loans and public aid
Indonesia Argontina	76.2 30.8	-	6.9% 5.9%	1.25% -	9.00%	Cut Rates	Loan commitments; public and health aid SME Loans and Healthcare aid
Argentina		-				-	SME Loans and Healthcare aid Healthcare aid, SME Loans and public aid;
Russia	95.7	-	5.8%	4.75%	14.75%	Cut Rates	Healthcare aid, SME Loans and public aid; education aid
							CUUCAUUT diu



Table 5: \$23tn in '20, \$9tn in '21, -\$2tn in '22 in fiscal and monetary stimulus

Global Monetary and Fiscal Stimulus by country in US dollar billions, % GDP, rate cut % and short description of stimulus

		Monetary Stimulus			Rate		
Country	(\$bn)	(\$bn)	% GDP	Rate Cut	Hike	Central Bank Actions	Fiscal Stimulus
Senegal	1.3	-	5.4%	-	-	-	Healthcare aid
Bangladesh	7.7	9.5	4.9%	1.25%	-	Cut Rates; Lending	Healthcare aid
Saudi Arabia	24.9	13.3	4.9%	0.75%	0.75%	Cut Rates; Lending	SME Loans and public aid
Honduras	1.1	-	4.6%	0.75%	-	Cut Rates	Healthcare aid
Israel	-	16.3	4.2%	0.15%	0.25%	Cut Rates; Lending; Corporate debt purchases	-
El Salvador	1.0	-	3.8%	-	-	-	Cash transfers
Albania	0.6	-	3.7%	0.50%	0.50%	Cut Rates	Healthcare aid
Vietnam	9.4	_	3.6%	1.50%	-	Cut Rates	SME Loans and public aid; Tariff Exemption
			2.1%	1.50%	1.00%	Cut Nates Cut Rates	SME Loans and public aid
Egypt	6.4	-					
Malaysia	4.7	3.0	2.1%	1.25%	0.25%	Cut Rates; Cut reserve ratio	SME Loans and public aid
Qatar	-	3.6	1.9%	0.50%	-	Cut Rates; Lending	-
Guatemala	-	1.5	1.8%	1.00%	-	Cut Rates; Lending	-
Guatemala	-	1.5	1.8%	1.00%	-	Cut Rates; Lending	=
Pakistan	3.6	1.1	1.6%	8.25%	3.75%	Cut Rates; Lending	-
Mongolia	-	0.1	0.9%	1.00%	2.50%	Cut Rates; Lending	-
Kenya	0.5	-	0.6%	1.25%	-	Cut Rates	-
Nigeria	1.8	-	0.4%	2.00%	-	Cut Rates	-
Taiwan	2.0	-	0.3%	0.25%	0.25%	Cut Rates	SME Loans and public aid
Georgia	1.1	-	0.2%	0.50%	2.00%	Cut Rates	-
Angola	-	_	-	0.50 /0	4.50%	Hike rates	<u>-</u>
Jamaica	-	_	_	-	4.50%	Hiked Rates	_
Jamaica IMF	200.0	-	-	-	4.50%	HINEU Nates	Public Emergency Aid; Loan commitments
		-	-			Cut rates	rublic Emergency Ala; Loan commitments
Kyrgzstan	-	-	-	-	4.00%	Cut rates	-
Tajikistan	-	-	-	-	1.50%	Cut Rates	-
Uruguay	-	-	-	-	4.00%	-	-
World Bank	12.0	-	-	-	-	-	SME Loans and public aid
Zambia	-	-	-	13.50%	1.00%	Cut Rates	-
Zimbabwe	-	-	-	10.00%	-	Cut Rates	-
Mozambique	-	-	-	5.50%	5.00%	Cut Rates	-
Ukraine .	-	-	-	4.00%	4.00%	Cut Rates	-
Sri Lanka	_	-	-	3.75%	9.00%	Cut Rates	-
Myanmar	-	-	_	3.00%	-	Cut Rates	-
South Sudan	_	_	_	3.00%	_	Cut Rates	_
Lesotho	_	_	_	2.75%	0.50%	Cut Nates Cut Rates	_
Ghana	-	-	-	2.75%	3.50%	Cut Rates	-
	-	-					-
Paraguay	-	-	-	2.50%	6.00%	Cut Rates	-
Uganda	-	-	-	2.50%	- 0.500/	Cut Rates	-
Namibia	-	-	-	2.50%	0.50%	Cut Rates	-
Gambia	-	-	-	2.00%	-	Cut Rates	-
Seychelles	-	-	-	2.00%	-	Cut Rates	-
Tanzania	-	-	-	2.00%	-	Cut Rates	-
Uzbekistan	-	-	-	2.00%	-	Cut Rates	-
ESwatini	-	-	-	1.50%	-	Cut Rates	-
Guinea	_	-	-	1.50%	-	Cut Rates	-
Malawi	_	-	_	1.50%	_	Cut Rates	-
Mauritania	_	_	_	1.50%	0.25%	Cut Rates	_
Moldova	_	_	_	1.45%	9.00%	Cut Nates Cut Rates	_
	-	-	-				-
Armenia	-	-	-	1.25%	5.00%	Hiked rates	-
Azerbaijan	-	-	-	1.25%	1.50%	Cut Rates	-
Botswana	-	-	-	1.00%	0.51%	Cut Rates	-
Kuwait	-	-	-	1.00%	0.50%	Cut Rates	-
Oman	-	-	-	0.75%	-	Cut Rates	-
Congo	-	-	-	0.50%	-	Cut Rates	-
Morocco	-	-	-	0.50%	-	Cut Rates	-
orth Macedonia	-	-	-	0.50%	-	Cut Rates	-
Rwanda	-	-	-	0.50%	-	Cut Rates	-
West Africa	_	-	_	0.50%	_	Cut Rates	-
Belarus	_	_	_	0.25%	4.25%	Cut Rates	<u>-</u>
				J.ZJ /U	1.20/0	CULTUICS	

Source: BofA Global Investment Strategy, Bloomberg



Asset Class Flows (Table 7)

Equities: \$6.2bn outflow (\$4.8bn to ETFs, \$11.0bn from mutual funds)

Bonds: outflow past 6 weeks (\$11.4bn)

Precious metals: outflow past 3 weeks (\$1.8bn)

Fixed Income Flows (Chart 19)

IG bond largest outflow in 9 weeks (\$11.6bn)

HY bond outflows past 5 weeks (\$2.5bn)

EM debt largest outflow since Apr'20 (\$5.1bn)

Munis outflows past 13 weeks (\$1.9bn)

MBS outflows past 2 weeks (\$1.5bn)

Govt/Tsy largest inflow since Mar'20 (\$11.5bn)

TIPS outflows past 3 weeks (\$0.4bn)

Bank loan 1st outflow in 8 weeks (\$0.7bn)

Equity Flows (Table 6)

US: 1st inflow in 5 weeks (\$93mn)

Japan: inflows past 2 weeks (\$0.4bn)

Europe: outflows past 13 weeks (\$2.3bn)

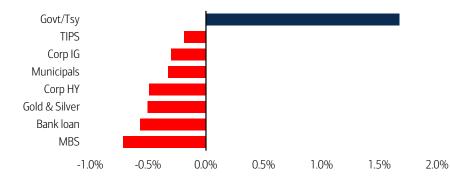
EM: 1st outflow in 7 weeks (\$4.4bn)

By style: inflows **US large cap** (\$6.7bn), **US small cap** (\$0.3bn), **US** value (\$0.1bn); outflow US growth (\$2.7bn).

By sector: outflows energy (\$0.1bn), com svs (\$0.3bn), hcare (\$0.3bn), **real estate** (\$0.4bn), **consumer** (\$0.4bn), **utils** (\$0.5bn), materials (\$0.9bn), tech (\$1.1bn), financials (\$2.6bn).

Chart 19: FICC flows to Treasuries

Weekly FICC flows as a % AUM



Source: EPFR Global

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Table 6: YTD flows into equities remain positive

Global flows by asset class, \$mn

TAME OF BUILDING		
Wk % AUM	YTD	YTD %AUM
0.0%	164,866	1.0%
0.1%	246,664	3.3%
-0.1%	-81,899	-0.9%
-0.2%	-129,705	-1.8%
-0.5%	26,292	6.3%
-0.3%	-290,487	-4.3%
	0.0% 0.1% -0.1% -0.2% -0.5%	0.0% 164,866 0.1% 246,664 -0.1% -81,899 -0.2% -129,705 -0.5% 26,292

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Table 7: Net fund flows to DM outpacing EM

Global equity flows by region

*week of 5/11/2022: Source: EPFR Global

	Wk % AUM	YTD
Total Equities	0.0%	164,866
long-only funds	-0.1%	-81,899
ETFs	0.1%	246,664
Total EM	-0.3%	54,530
Brazil	-1.3%	-522
Russia	0.3%	223
India	-0.4%	-1,291
China	-0.7%	34,548
Total DM	0.0%	110,336
US	0.0%	78,985
Europe	-0.2%	-35,729
Japan	0.1%	-1,828
International	0.0%	62,073

Total Equities = Total EM + Total DM

Source: EPFR Global

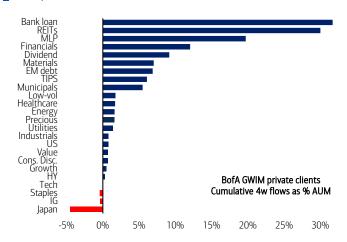
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10

BofA private client flows & allocations

Chart 20: GWIM flows have favored bank loan, REITS, MLP

BofA private client 4-week ETF flows as % of AUM



Source: BofA Global investment Strategy

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Chart 22: GWIM debt allocation at 17.6%

BofA private client debt holdings as % of AUM



Source: BofA Global investment Strategy

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Chart 24: GWIM ETF holdings continue to rise as % AUM

BofA private client ETF holdings as % of AUM



Source: BofA Global investment Strategy

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Chart 21: GWIM equity allocation at 63.4%

BofA private client equity holdings as % of AUM



Source: BofA Global investment Strategy

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Chart 23: GWIM cash allocation below LT average

BofA private client cash holdings as % of AUM



Source: BofA Global investment Strategy

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Chart 25: GWIM top 10 stocks for 1-year SPX beta

1-year S&P 500 beta for top 10 stocks held by BofA private clients



Source: BofA Global investment Strategy



The Asset Class Quilt of Total Returns

Chart 26: Commodities top returning asset class YTD 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*
Commodifies 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%	Commodifies 46.3%	Commodifies 42.2%
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%	S&P 500 16.3%	REITS 33.2%	Gold 1.1%
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%	MSCI EM 15.8%	S&P 500 26.9%	Cash 0.1%
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 8.8%	US Treasuries -8.8%
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%	US Treasuries 8.2%	Global HY 1.4%	Global HY -11.9%
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%	Global HY 8.0%	Cash 0.0%	Global IG -13.4%
Global HY -5.8%	REITS -7.8%	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%	MSCI EAFE 5.4%	US Treasuries -2.4%	MSCI EAFE -17.0%
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%	Global IG -3.0%	S&P 500 -17.4%
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 -7.6%	Gold -4.1%	MSCI EM -17.9%
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%	Commodifies -15.0%	MSCI EM -4.6%	REITS -18.8%

Source: BofA Global Investment Strategy, Bloomberg. *2022 YTD



BofA Rules & Tools

Table 8: 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	2.1	Neutral	1-3 months
Sell when investor sentiment > 8.0; Buy when investor sentiment < 2.0				
Bof A Global FMS Cash Indicator	Contrarian	5.5%	Buy	4 weeks
Buy when cash at or above 5.0%; Sell when cash at or below 4.0%				
BofA Global Breadth Rule	Contrarian	-88.9%	Buy	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	-0.6%	Neutral	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	0.1%	Neutral	8 weeks
Buy when outflows from EM equities > 3.0% of AUM; Sell when inflows > 1.5% of AUM over 4 wks				
Macro				
Bof A Global EPS Growth Model	Macro	14.0%	EPS growth accelerating	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 guide to our trading models

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BofA Bull & Bear Indicator (B&B)

Our BofA Bull & Bear Indicator is at 2.1, signal is Neutral.

Chart 27: BofA Bull & Bear Indicator Flat at 2.1



Source: BofA Global Investment Strategy

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Table 9: BofA B&B Indicator

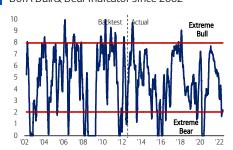
BofA Bull & Bear current component readings

Components	Percentile	Sentiment
HF positioning	71%	Bullish
Credit mkt technicals	28%	Neutral
Equity market breadth	24%	Neutral
Equity flows	60%	Bullish
Bond flows	12%	Bearish
I O nositioning	4%	V Rearish

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

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Chart 28: BofA Bull & BearBofA Bull & Bear Indicator since 2002



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

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Disclaimer: The indicators identified above as the BofA Bull & Bear Indicator, MVP Model, BofA Global Breadth Rule, BofA EM Flow Trading Rule, BofA Global FMS Global FMS Global FMS Global FMS Lash 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.

2022 Cross-Asset Winners & Losers

Table 10: 2022 YTD ranked returns

Year-to-date ranked cross asset returns

Assets		Equities		Sectors		Fixed Income		FX vs. USD	Commodities	
1 Oil	40.6%	1 Turkey Equities	17.2%	1 ACWI Energy	20.3%	1 3-Month Treasury Bills	0.1%	1 Brazilian real	8.5% 1 Natural Gas	104.8%
2 US Dollar	8.5%	2 Brazil Equities	10.7%	2 ACWI Utilities	-3.8%	2 2-year Treasury	-2.9%	2 Mexican peso	1.1% 2 Iron Ore	45.1%
Industrial Metals	1.7%	3 S. Africa Equities	-2.4%	3 ACWI Consumer Staples	-7.3%	3 TIPS	-6.8%	3 South African rand	-0.9% 3 WTI Crude Oil	40.6%
l Gold	1.4%	4 Australia Equities	-4.8%	4 ACWI BioTechnology	-9.7%	4 US Mortgage Master	-8.3%	4 Indonesian rupiah	-2.1% 4 Brent Crude Oil	38.2%
UK Equities	-5.8%	5 UK Equities	-5.8%	5 ACWI Materials	-10.2%	5 Treasury Master	-8.8%	5 Canadian dollar	-2.7% 5 Platinum	2.6%
Pacific Rim xJapan	-7.7%	6 Portugal Equities	-5.9%	6 ACWI Banks	-12.0%	6 US Corp HY	-9.9%	6 Singapore dollar	-2.9% 6 Gold	1.4%
High Yield Bonds	-11.9%	7 Mexico Equities	-6.2%	7 ACWI Healthcare	-12.9%	7 CCC HY	-11.1%	7 Indian rupee	-3.8% 7 Copper	-4.0%
Government Bonds	-12.4%	8 Greece Equities	-7.6%	8 ACWI Financials	-13.3%	8 US Corp IG	-12.8%	8 Australian dollar	-4.5% 8 Silver	-7.7%
Investment Grade Bonds	-13.5%	9 Canada Equities	-7.8%	9 ACWI Real Estate	-17.9%	9 EM Corporate	-13.3%	9 Chinese renminbi	-5.4%	
Europe Equities	-16.4%	10 Spain Equities	-9.0%	10 ACWI Industrials	-18.2%	10 BBB IG	-13.4%	10 Korean won	-6.8%	
EM Equities	-17.4%	11 Hong Kong Equities	-10.1%	11 ACWI Telecoms	-24.7%	11 Japan Govt	-13.5%	11 Taiwanese dollar	-6.8%	
? Japan Equities	-17.4%	12 India Equities	-10.7%	12 ACWI Info Tech	-26.3%	12 German Govt	-15.0%	12 Euro	-7.5%	
EM Sovereign Bonds	-17.6%	13 Singapore Equities	-15.7%	13 ACWI Cons. Discretionary	-29.3%	13 Non-US IG Government	-15.0%	13 NZ dollar	-8.0%	
US Equities	-18.3%	14 Switzerland Equities	-16.3%			14 European HY	-15.7%	14 Swiss franc	-8.2%	
		15 France Equities	-17.4%			15 EM Sovereign	-17.6%	15 British pound	-9.5%	
		16 Japan Equities	-17.4%			16 UK Govt	-18.3%	16 Norwegian krone	-9.6%	
		17 Italy Equities	-18.0%			17 30-year Treasury	-21.6%	17 Swedish krona	-10.1%	
		18 US Equities	-18.3%					18 Japanese yen	-11.5%	
		19 Korea Equities	-19.0%					19 Turkish lira	-13.2%	
		20 Taiwan Equities	-19.2%							
		21 Germany Equities	-21.5%							
		22 China Equities	-24.3%							

Source: BofA Global Investment Strategy, Bloomberg, as of 11 May 2022

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Table 11: The Overbought & Oversold

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

Assets		Equities		Sectors		Fixed Income		FX vs. USD	Commoditie	s
1 Oil	24.5%	1 Turkey Equities	4.2%	1 ACWI Energy	12.8%	1 3-Month Treasury Bills	0.1%	1 Brazilian real	3.1% 1 Natural Gas	52.2%
2US Dollar	8.0%	2 Brazil Equities	-1.6%	2 ACWI Utilities	-0.2%	2 Japan Govt	-1.6%	2 Mexican peso	0.6% 2 Iron Ore	27.1%
3Gold	0.8%	3 Mexico Equities	-3.4%	3 ACWI Consumer Staples	-3.4%	3 2-year Treasury	-2.3%	3 Indonesian rupiah	-1.6% 3 WTI Crude Oil	24.5%
4Industrial Metals	-1.5%	4 Portugal Equities	-4.2%	4 ACWI BioTechnology	-8.3%	4 TIPS	-4.6%	4 Singapore dollar	-2.4% 4 Brent Crude Oil	22.2%
5UK Equities	-4.5%	5 UK Equities	-4.5%	5 ACWI Healthcare	-8.5%	5 US Mortgage Master	-6.6%	5 Canadian dollar	-2.7% 5 Gold	0.9%
6Pacific Rim xJapan	-8.0%	6 Australia Equities	-4.5%	6 ACWI Materials	-8.6%	6 Treasury Master	-6.9%	6 Indian rupee	-2.9% 6 Platinum	-1.0%
High Yield Bonds	-9.8%	7 Canada Equities	-6.8%	7 ACWI Banks	-12.1%	7 German Govt	-7.1%	7 Australian dollar	-4.6% 7 Copper	-4.0%
Government Bonds	-10.8%	8 S. Africa Equities	-7.2%	8 ACWI Financials	-12.6%	8 European HY	-7.4%	8 Chinese renminbi	-4.7% 8 Silver	-9.1%
Investment Grade Bonds	-11.1%	9 Spain Equities	-8.4%	9 ACWI Real Estate	-13.1%	9 US Corp HY	-7.6%	9 Taiwanese dollar	-5.4%	
Europe Equities	-12.4%	10 India Equities	-9.2%	10 ACWI Industrials	-14.3%	10 UK Govt	-8.0%	10 South African rand	-5.5%	
US Equities	-13.3%	11 Greece Equities	-10.2%	11 ACWI Info Tech	-19.2%	11 CCC HY	-9.2%	11 Korean won	-6.2%	
2EM Sov Bonds	-13.5%	12 Switzerland Equities	-10.3%	12 ACWI Telecoms	-22.0%	12 US Corp IG	-10.0%	12 Swiss franc	-6.8%	
Japan Equities	-15.3%	13 Hong Kong Equities	-11.9%	13 ACWI Cons. Discretionary	-24.5%	13 BBB IG	-10.5%	13 Euro	-7.1%	
EM Equities	-15.9%	14 France Equities	-12.6%			14 EM Corporate	-10.7%	14 NZ dollar	-8.2%	
		15 US Equities	-13.3%			15 EM Sovereign	-13.5%	15 British pound	-8.6%	
		16 Italy Equities	-13.4%			16 Non-US IG Government	-13.7%	16 Norwegian krone	-9.5%	
		17 Taiwan Equities	-14.2%			17 30-year Treasury	-16.6%	17 Swedish krona	-9.7%	
		18 Japan Equities	-15.3%					18 Japanese yen	-10.9%	
		19 Korea Equities	-15.6%					19 Argentine peso	-11.3%	
		20 Singapore Equities	-16.4%					20 Turkish lira	-21.4%	
		21 Germany Equities	-18.0%							
		22 China Equities	-23.8%							

Source: BofA Global Investment Strategy, Bloomberg



Disclosures

Important Disclosures

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Investment rating Total return expectation (within 12-month period of date of initial rating) Ratings dispersion guidelines for coverage cluster^{R1}

Buy	≥ 10%	≤ /0%
Neutral	≥ 0%	≤ 30%
Underperform	N/A	≥ 20%

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