

# Investor Sentiment: Risk-Love

## Fading euphoria, staying put

### Upbeat sentiment could trigger a short-term consolidation

[Global Equity Risk-Love](#), our contrarian sentiment indicator for equities, has moved from near-panic (25<sup>th</sup> percentile) in October to euphoria now. It is currently stationed at the 83<sup>rd</sup> percentile of history since 1987, after touching the 90<sup>th</sup> percentile two weeks back, opening up the potential for a pullback in the near term. We find optimism brewing across categories – surveys, put-call ratios, positioning/flows, and volatility and spreads – especially in the developed world, with sell side strategists' average recommended allocation climbing to its [highest level since May 2022 \(see note\)](#).

Despite coming off a tad in recent weeks on a snapback in the JPY (slated to be one of the most closely followed themes in 2024 per the Asia FMS), [Japan Risk-Love](#) is still elevated at the 79<sup>th</sup> percentile of history. Exuberance around the economy and the market has tempered somewhat with the moderation in price pressures, but it still sits atop investors' market preference list, as cited by net 45% of [FMS investors \(see note\)](#).

[Asia ex-Japan](#) and [Emerging Markets](#) Risk-Love also moved higher on a souring of the dollar sentiment (USD: down 4% from November highs) but are safely ensconced in the neutral zone, with EEMEA contributing disproportionately on improving equity flows.

[China Risk-Love](#) is hovering in low neutral levels after halving over the last three years, as waning policy expectations add to the litany of macroeconomic challenges. Risk-Love for [Korea](#) and [Taiwan](#) advanced within the neutral zone on favorable views on the tech sector, with Korean semis exports accelerating to the highest level since March 2022.

### Revisiting the checklist: hold your ground

We laid out a checklist of items last month to track the sustainability of the rally. See [Mr. Market and his mood swings 01 Dec 2023](#). An update of the factors, along with our [proprietary indicators \(see note\)](#), advises us to **stick to a mildly positive stance**, even if elevated sentiment triggers a consolidation in the near term.

**1. Technicals.** Market technicals remain steady despite the not-so-great start to the year, with 59% of global stocks and 88% of industry groups trading above their respective 200-day moving averages. If the pullback breaks down the market breadth though, a more holistic inspection is warranted.

**2. Margin financing.** We are encouraged by the uptick in margin financing in the US in November but a more sustained pick-up is vital for the rally to continue.

**3. Stock-bond correlation/Bond volatility.** Inflation has been the cornerstone of market gyrations over the past three years. [Continued on page 2...](#)

08 January 2024

Predictive Analytics  
Global

BofA

Data  
Analytics**Ritesh Samadhiya, CFA >>**Equity Strategist  
Merrill Lynch (Hong Kong)  
+852 3508 7907  
[ritesh.samadhiya@bofa.com](mailto:ritesh.samadhiya@bofa.com)**Aritra Baksi, CFA >>**Equity Strategist  
Merrill Lynch (Hong Kong)  
+852 3508 7914  
[aritra.baksi@bofa.com](mailto:aritra.baksi@bofa.com)

FMS: Fund Manager Survey

The indicator identified as Risk-Love 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.

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 19 to 21.**

12642735

Timestamp: 08 January 2024 10:19AM EST

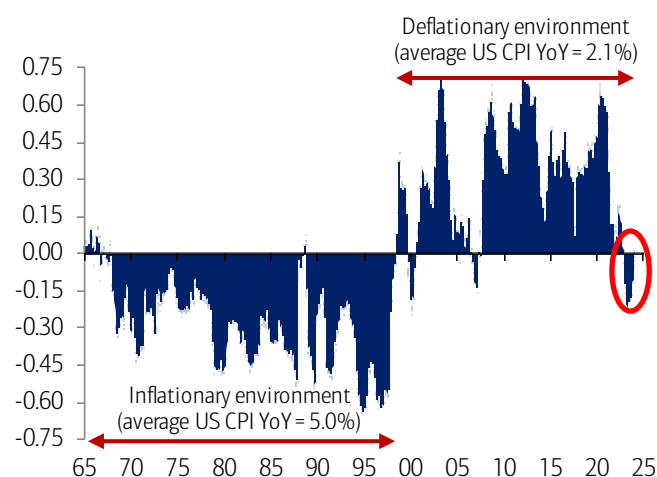
The negative equity-bond relationship in a backdrop of rising bond yields and bond volatility has been a concern for investors. But with the correlation gravitating towards zero as inflation settles down (*i.e. rising rates unlikely to hurt equities*), the setup is getting more palatable.

**4. Labor market.** The gradual (*non-recessionary*) cooling in the labor market reflected in the [December employment report \(see note\)](#) says that rebalance is in progress, despite the beat in headline payrolls. High frequency job postings data corroborates the view.

**5. Growth.** Growth-sensitive assets (such as cyclical/defensive stocks, copper, Korean exports, the US yield curve, BAA spread etc.) are tracking at the 34<sup>th</sup> percentile of history since 1988, considerably higher than the cycle lows of 8<sup>th</sup> percentile on 23 March 2023. Together with the upward revisions to the Atlanta Fed GDPNow, and the New York Fed Weekly Economic Index, it re-iterates that the US economy will likely be able to fend off the tightening cycle and avert a recession.

#### Exhibit 1: Stock-bond correlation has been negative since 4Q 2022...

Rolling 1yr correlation between S&P 500 and US bond yields

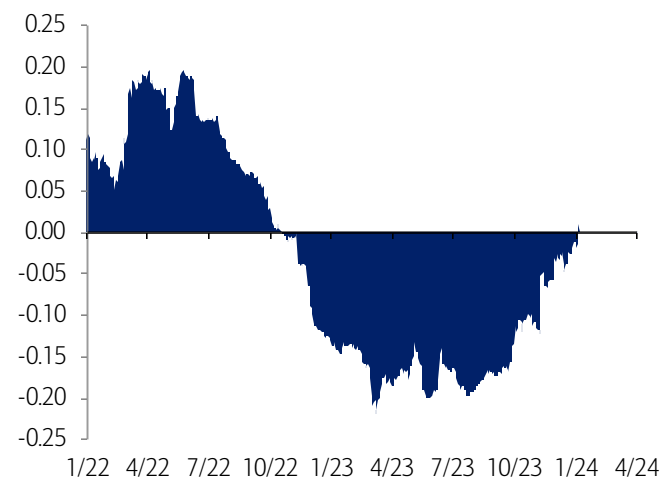


Source: BofA Predictive Analytics, Bloomberg. Notes: Based on daily returns.

BofA GLOBAL RESEARCH

#### Exhibit 2: ...but is clawing back towards zero now i.e. rising rates unlikely to hurt equities

Rolling 1yr correlation between S&P 500 and US bond yields

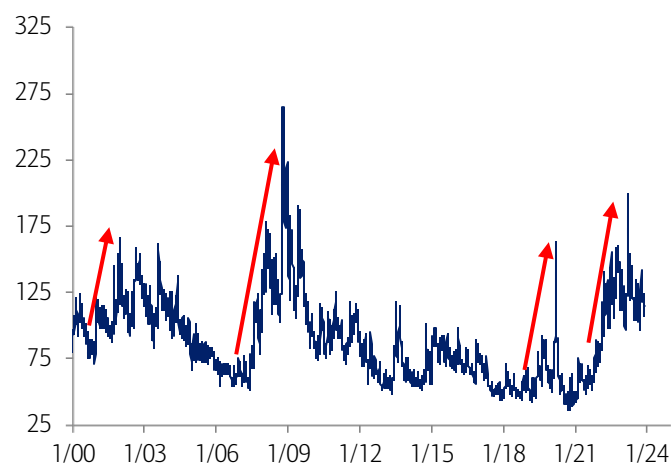


Source: BofA Predictive Analytics, Bloomberg. Notes: Based on daily returns.

BofA GLOBAL RESEARCH

#### Exhibit 3: September spike in bond volatility was a cause of concern...

Bond volatility: ICE BofA MOVE Index



Source: BofA Predictive Analytics, ICE Data Indices, LLC, Bloomberg

BofA GLOBAL RESEARCH

#### Exhibit 4: ...but settling down now

Bond volatility: ICE BofA MOVE Index

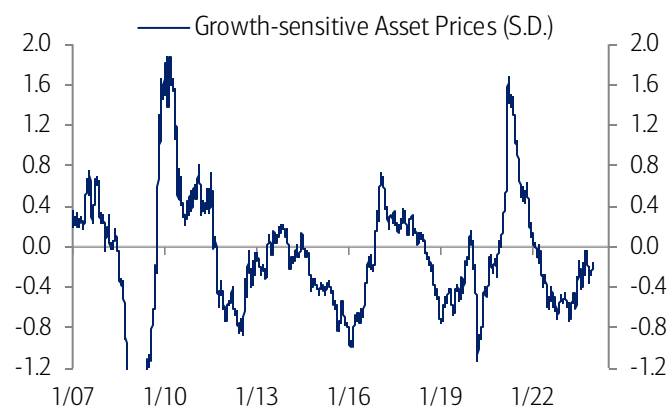


Source: BofA Predictive Analytics, ICE Data Indices, LLC, Bloomberg

BofA GLOBAL RESEARCH

**Exhibit 5: Growth-sensitive assets smell no recession brewing**

Based on assets with an opinion on global growth such as cyclical/defensive stocks, copper, Korean exports, the US yield curve, BAA spread etc.



Source: BofA Predictive Analytics, MSCI, Bloomberg, FactSet, Refinitiv

BofA GLOBAL RESEARCH

**Exhibit 6: US projected to grow 2.5% QoQ (SAAR) in 4Q 2023**

Atlanta Fed GDPNow: US 4Q 2023 GDP Forecast



Source: FRB Atlanta, Bloomberg

BofA GLOBAL RESEARCH

**Exhibit 7: Uptick in US margin financing in November is encouraging but a more sustained pick-up is vital for the rally to continue**

US Margin Debt (\$ bn)

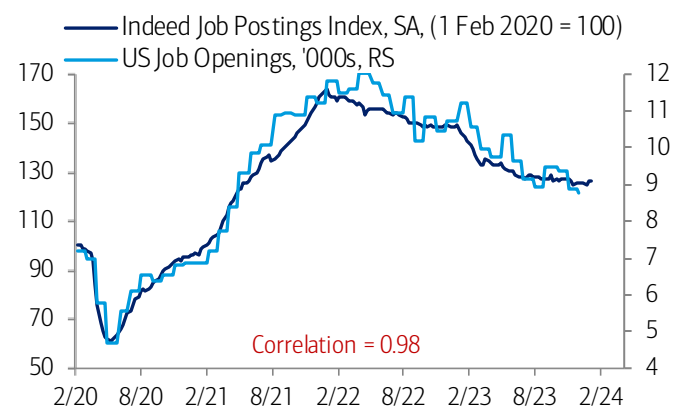


Source: FINRA

BofA GLOBAL RESEARCH

**Exhibit 8: Labor market rebalance is in the works**

The Indeed Job Postings Index is a 7-day moving average of job postings on Indeed sites as well as job-seeker search behavior on these sites

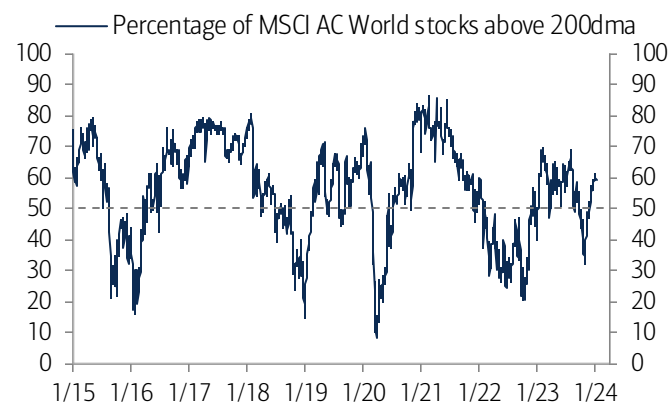


Source: BofA Predictive Analytics, BLS, Indeed, Bloomberg

BofA GLOBAL RESEARCH

**Exhibit 9: Market technicals are steady**

Breadth of global stocks trading above 200-day moving average: at 59%

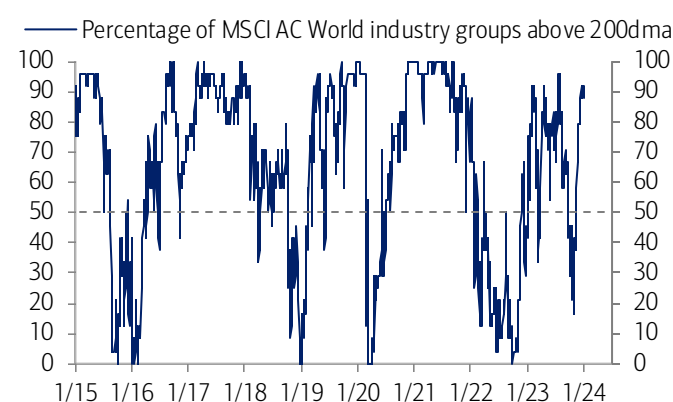


Source: BofA Predictive Analytics, MSCI, Bloomberg

BofA GLOBAL RESEARCH

**Exhibit 10: Market technicals are steady**

Breadth of global sectors trading above 200-day moving average: at 88%



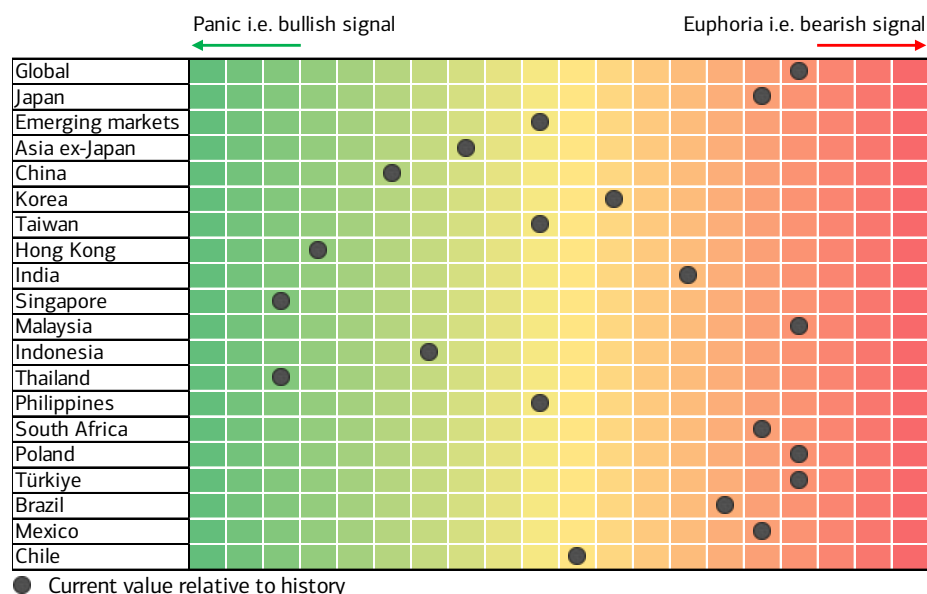
Source: BofA Predictive Analytics, MSCI, FactSet

BofA GLOBAL RESEARCH

# Risk-Love Summary

## Exhibit 11: Risk-Love Indicator (Equity sentiment) Summary

Where do Risk-Love indicators for individual countries/regions stand today vis-à-vis history?



Source: BofA Predictive Analytics

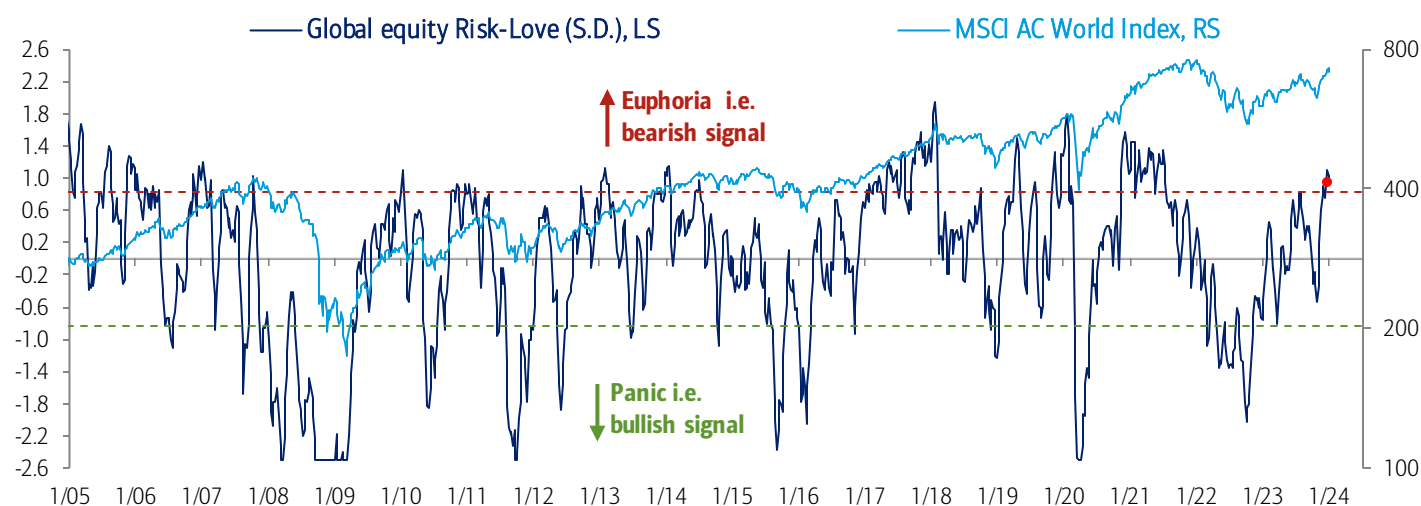
BofA GLOBAL RESEARCH

## Global Equity Risk-Love

Exhibit 12 shows our global equity Risk-Love indicator and Exhibits 13-16 show its components. This indicator tracks positioning, put-call ratios, investor surveys, price technicals and volatility, spreads, and correlations measures (see glossary for further details).

### Exhibit 12: Global Equity Risk-Love

Global Risk-Love is at the 83<sup>rd</sup> percentile of its history since 1987

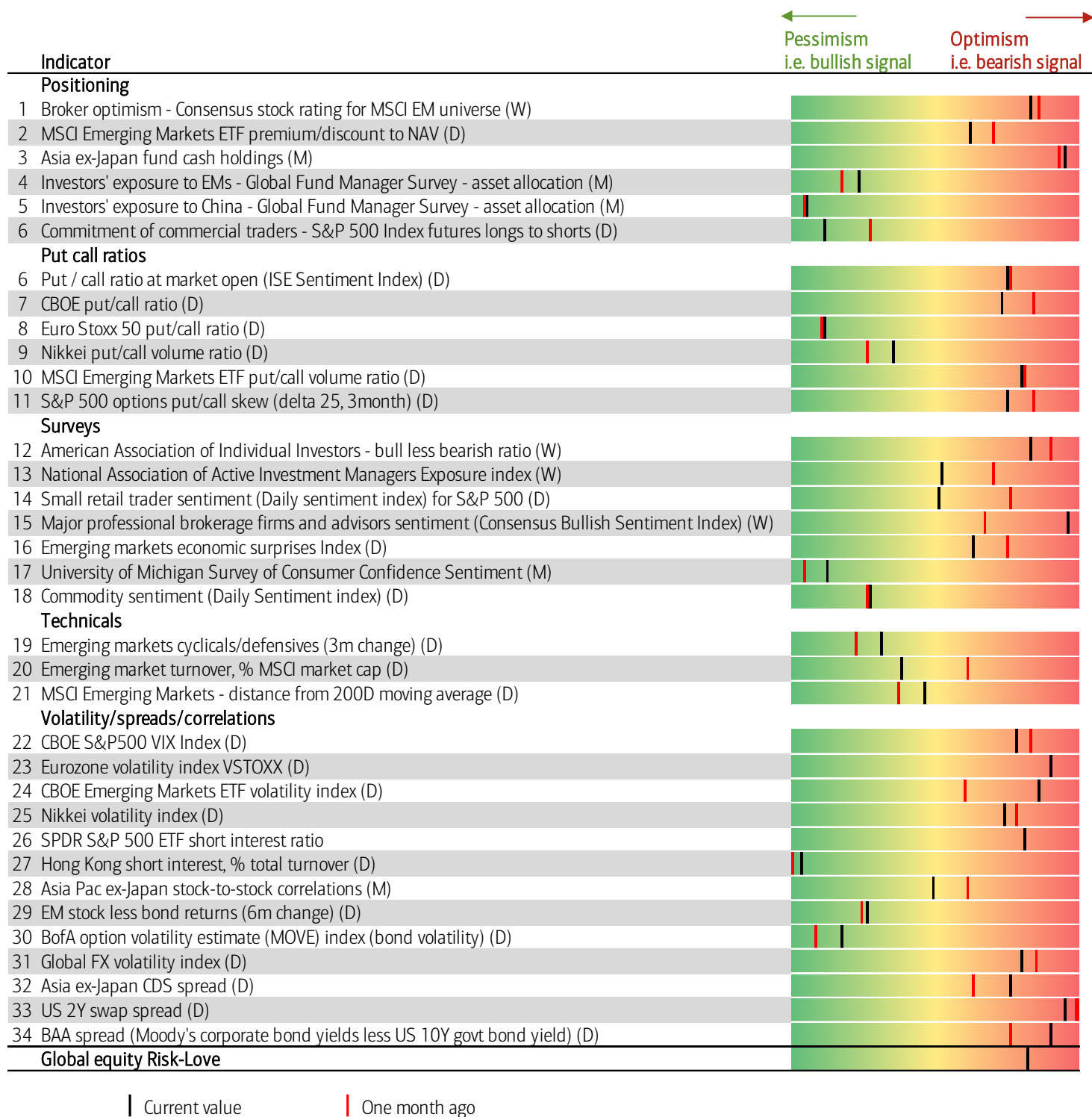


Source: BofA Predictive Analytics, Bloomberg

BofA GLOBAL RESEARCH

**Exhibit 13: Global Equity Risk-Love indicator components heatmap**

Where do input factors for Global Equity Risk-Love stand today vs. one month ago?

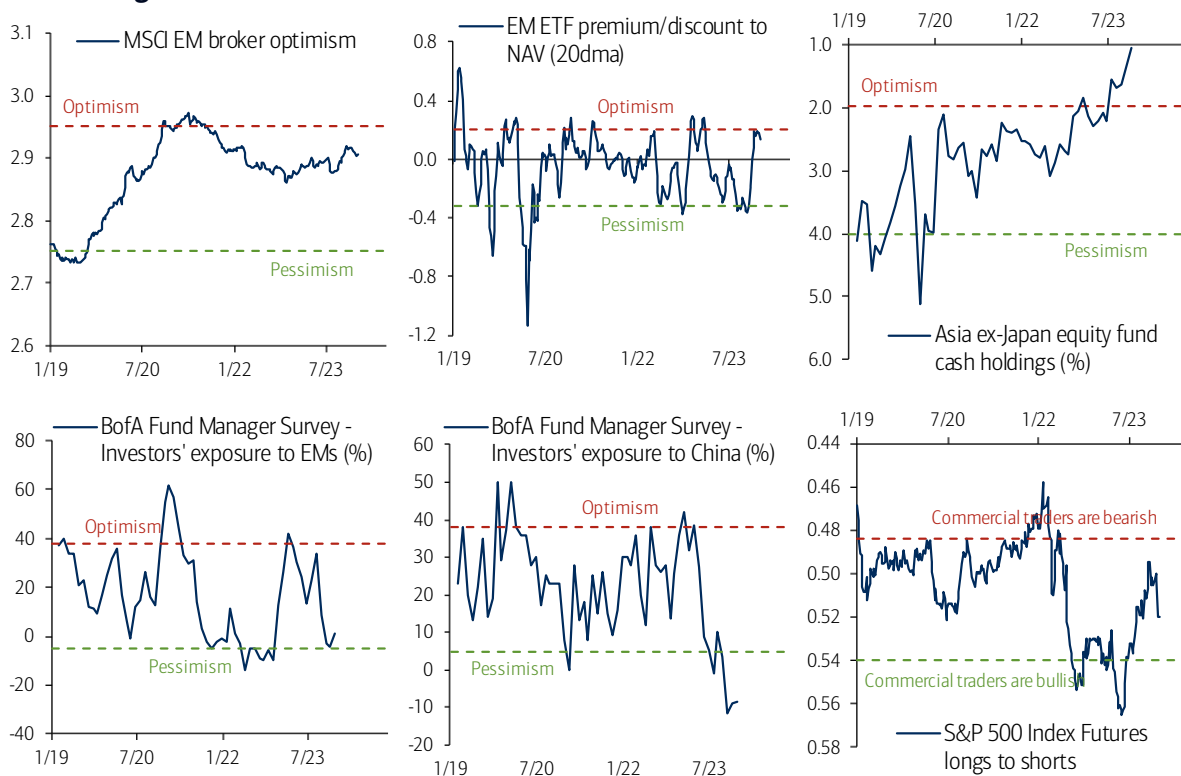
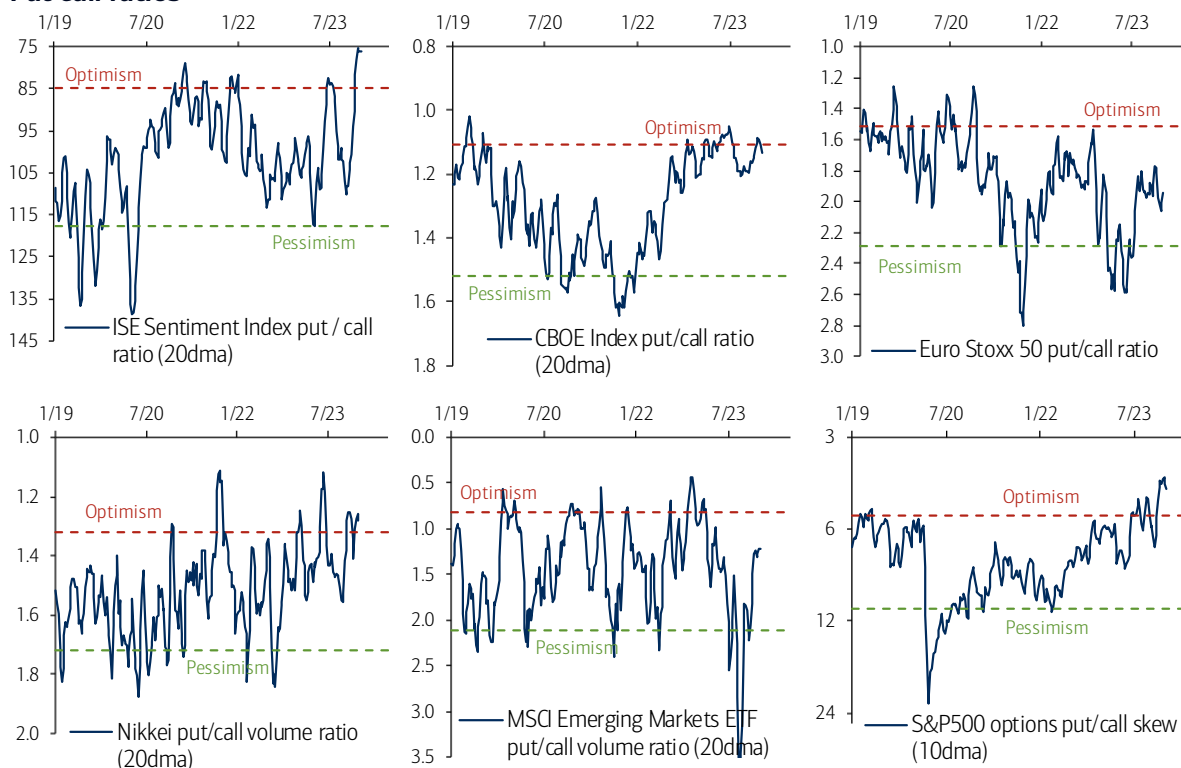


**Source:** BofA Predictive Analytics, Eikon Refinitiv, Bloomberg, CEIC, Factset, BofA Asia Pac Quantitative Strategy, Trade Futures, Consensus Inc. See Appendix for details. Note: D denotes daily data, W denotes weekly data and M denotes monthly data.

BofA GLOBAL RESEARCH

**Exhibit 14: Global Equity Risk-Love indicator components trends**

Recent trends in positioning and put-call ratios factors

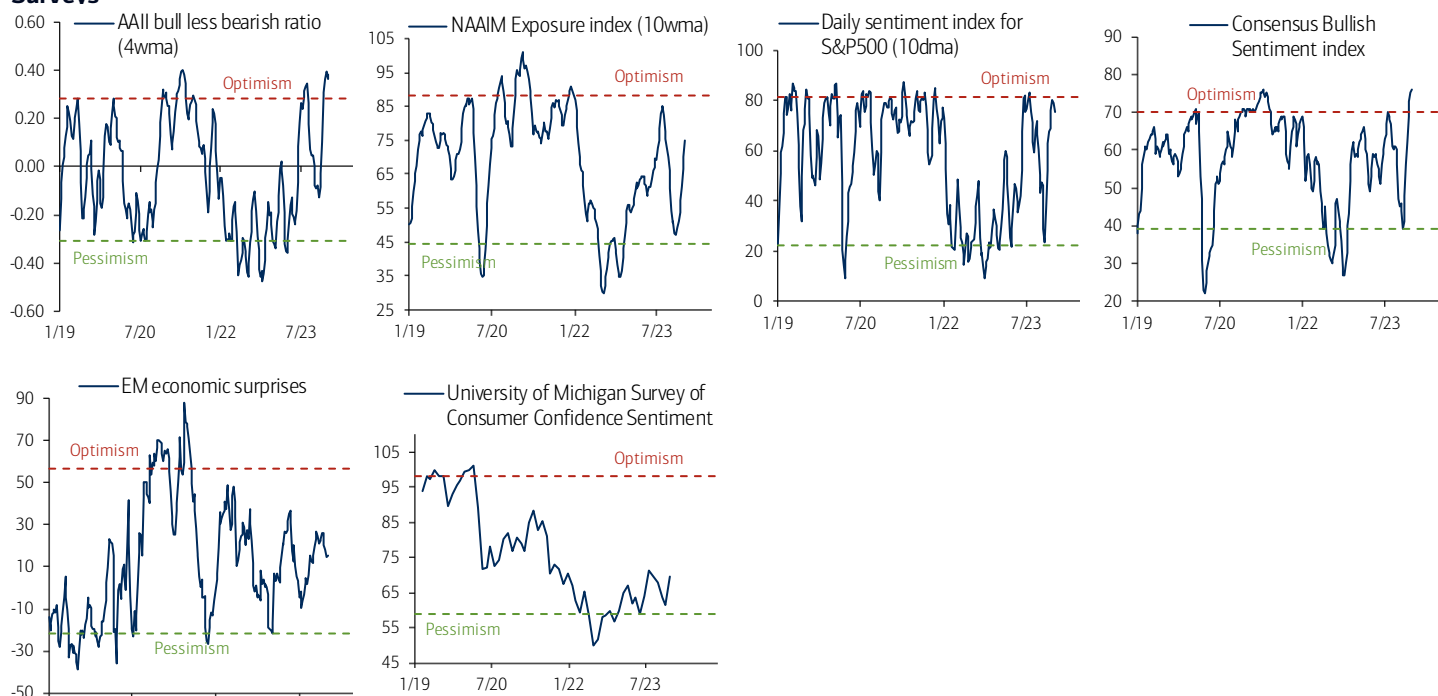
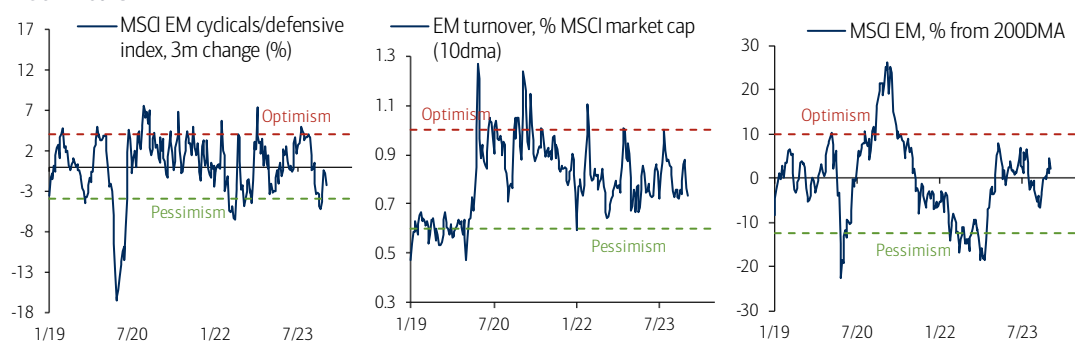
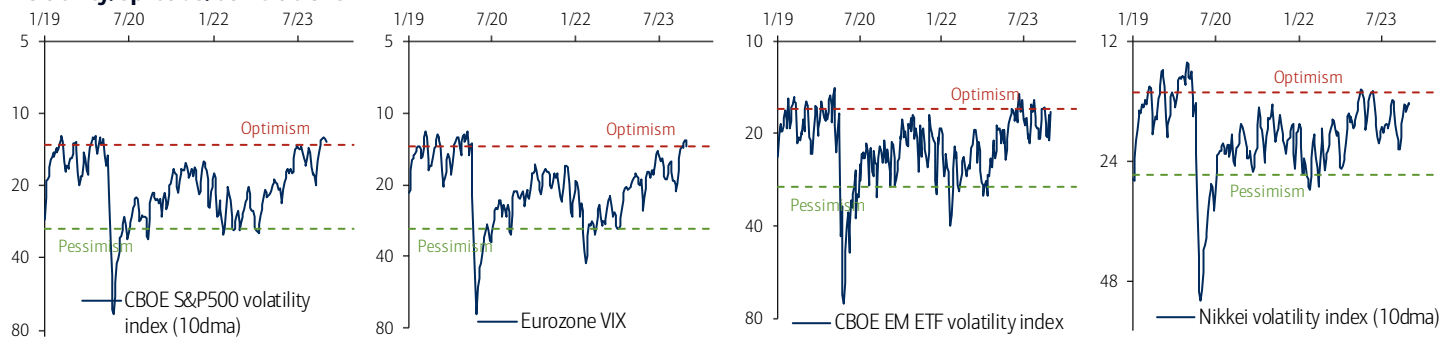
**Positioning****Put call ratios**

Source: BofA Predictive Analytics, Eikon Refinitiv, Bloomberg, CEIC, Factset, Trade Futures, Consensus Inc

BofA GLOBAL RESEARCH

**Exhibit 15: Global Equity Risk-Love indicator components trends cont'd**

Recent trends in surveys, technical, and volatility/spreads/correlations factors

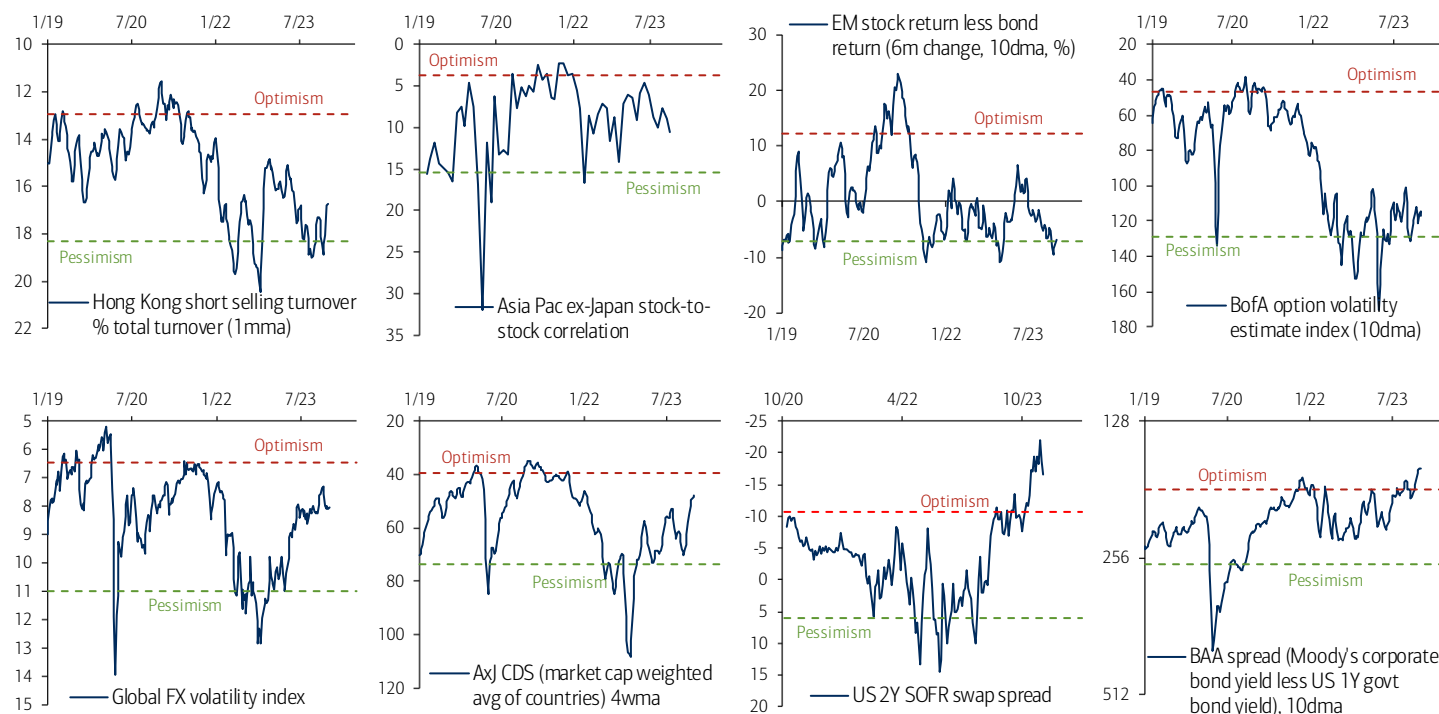
**Surveys****Technical****Volatility/spreads/correlations**

Source: BofA Predictive Analytics, Eikon Refinitiv, Bloomberg, CEIC, Factset, Trade Futures, Consensus Inc

BofA GLOBAL RESEARCH

**Exhibit 16: Global Equity Risk-Love indicator components trends cont'd**

Recent trends in volatility/spreads/correlations factors

**Volatility/spreads/correlations contd...**

Source: BofA Predictive Analytics, Eikon Refinitiv, Bloomberg, CEIC, Factset, Trade Futures, Consensus In, BofA Asia Pac Quantitative Strategy

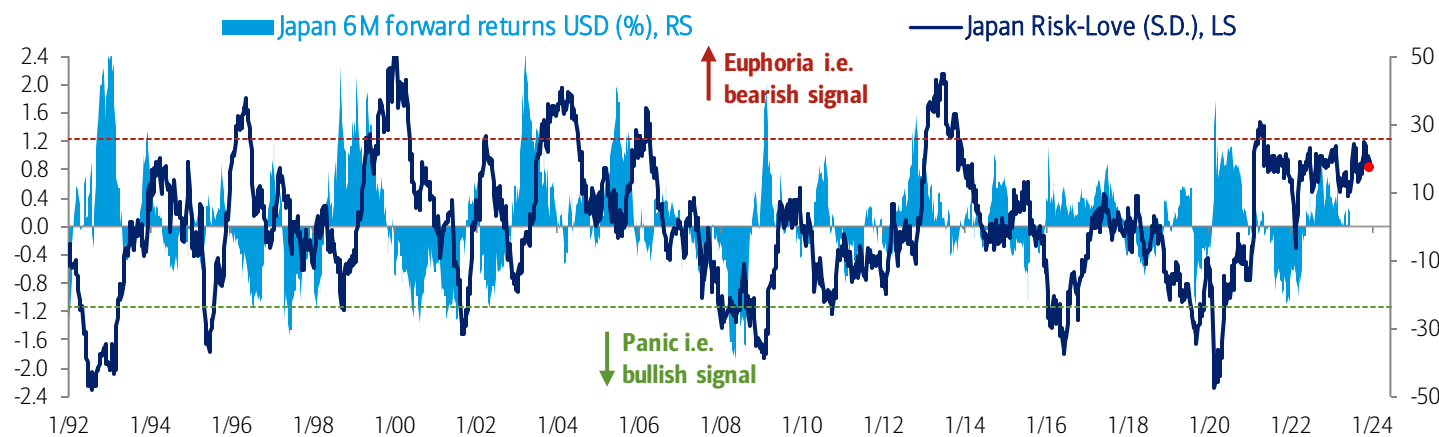
BofA GLOBAL RESEARCH

## Risk-Love by market

Exhibits 17-35 show Risk-Love measures for Asia and emerging markets.

**Exhibit 17: Japan Risk-Love is in the neutral zone**

Japan Risk-Love



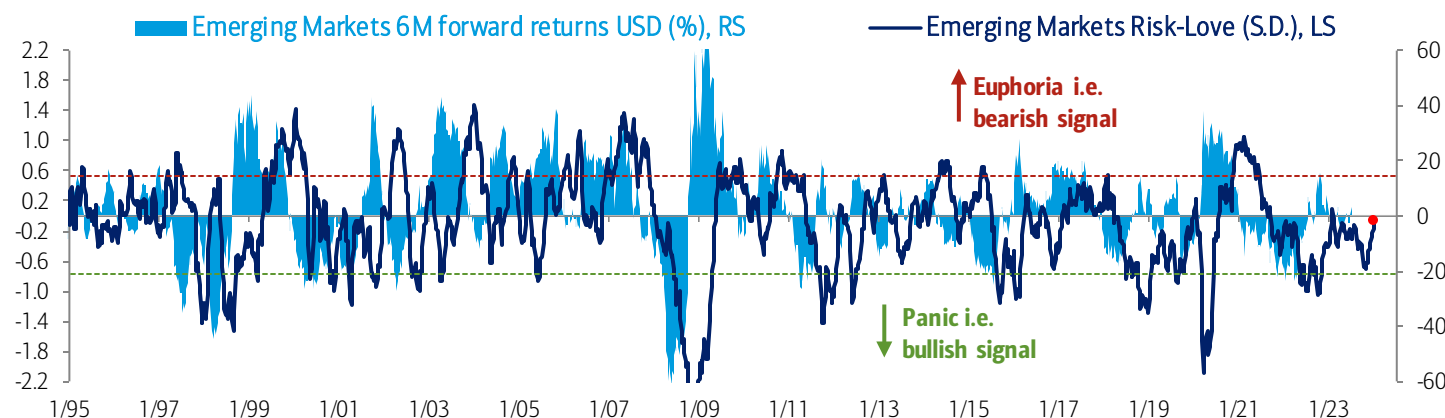
Source: BofA Predictive Analytics, FactSet

BofA GLOBAL RESEARCH



**Exhibit 18: Emerging Markets Risk-Love is in the neutral zone**

Emerging Markets Risk-Love

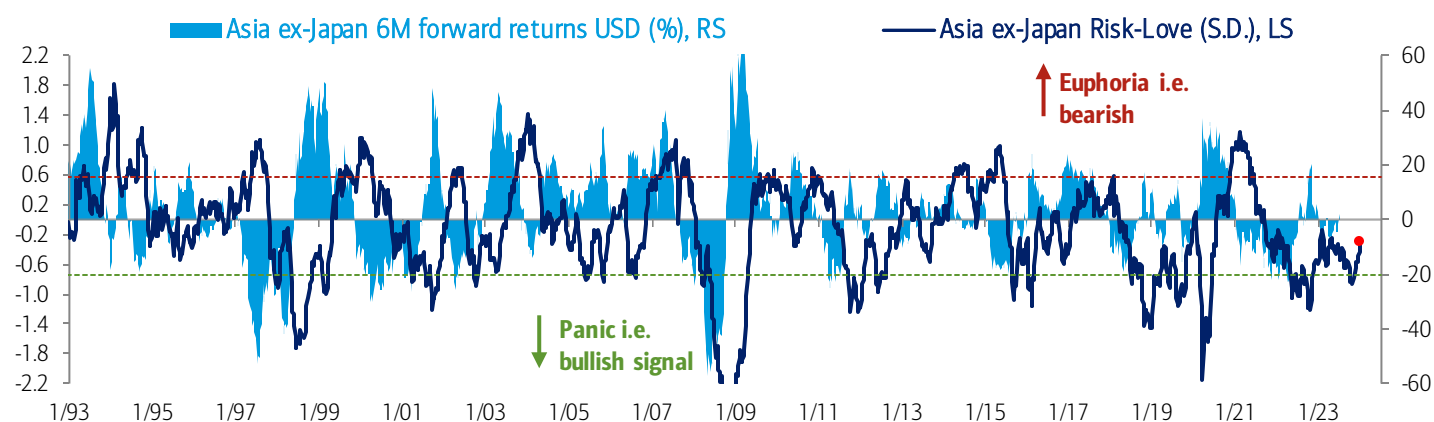


Source: BofA Predictive Analytics, FactSet

BofA GLOBAL RESEARCH

**Exhibit 19: Asia ex-Japan Risk-Love is in the neutral zone**

Asia ex-Japan Risk-Love



Source: BofA Predictive Analytics, FactSet

BofA GLOBAL RESEARCH

**Exhibit 20: China Risk-Love is in the neutral zone**

China Risk-Love



Source: BofA Predictive Analytics, FactSet

BofA GLOBAL RESEARCH



**Exhibit 21: Korea Risk-Love is in the neutral zone**

Korea Risk-Love

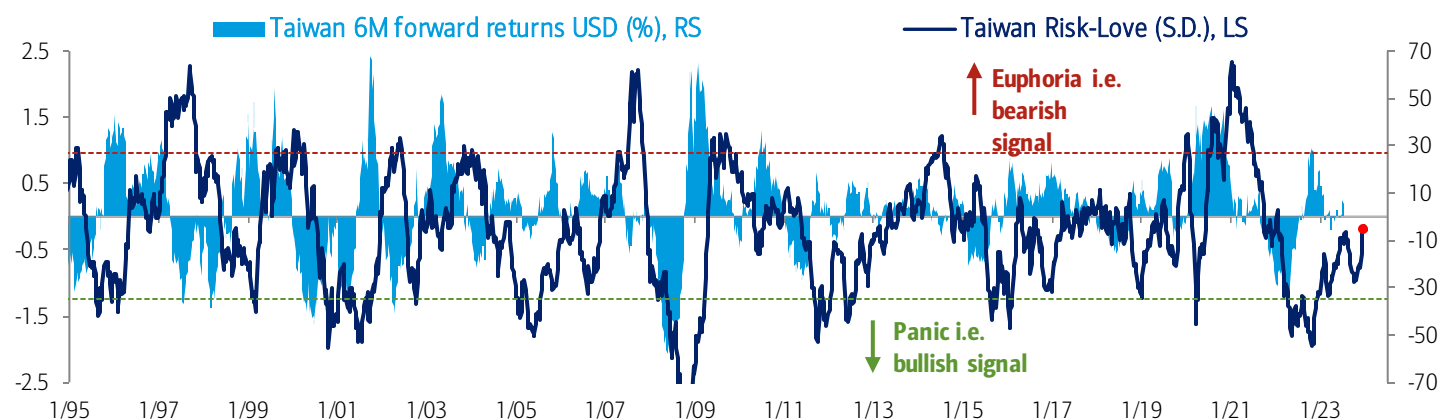


Source: BofA Predictive Analytics, FactSet

BofA GLOBAL RESEARCH

**Exhibit 22: Taiwan Risk-Love is in the neutral zone**

Taiwan Risk-Love



Source: BofA Predictive Analytics, FactSet

BofA GLOBAL RESEARCH

**Exhibit 23: Hong Kong Risk-Love has come out of the panic zone**

Hong Kong Risk-Love

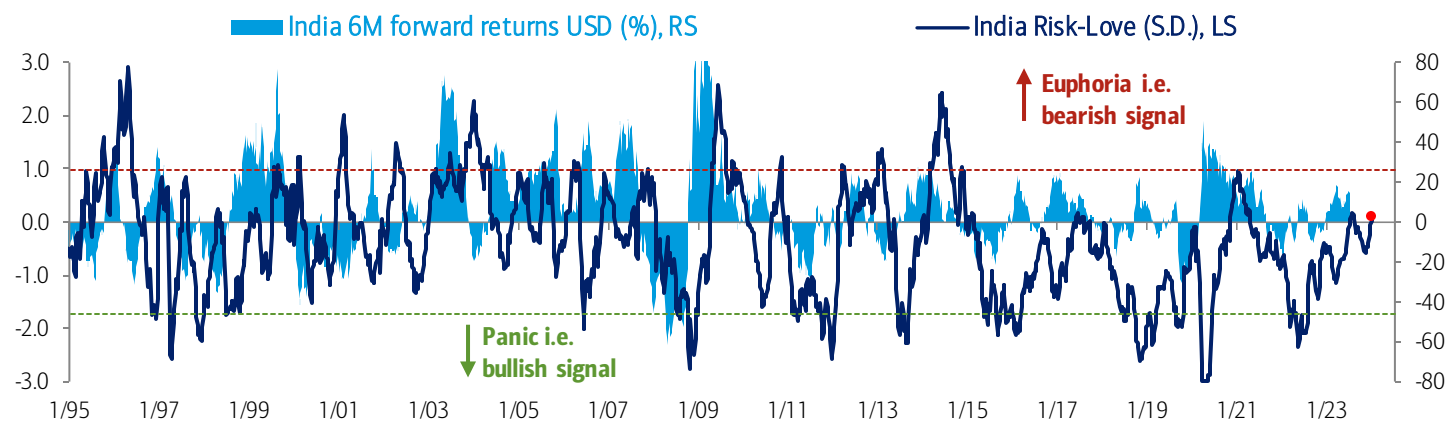


Source: BofA Predictive Analytics, FactSet

BofA GLOBAL RESEARCH

**Exhibit 24: India Risk-Love is in the neutral zone**

India Risk-Love



Source: BofA Predictive Analytics, FactSet

BofA GLOBAL RESEARCH

**Exhibit 25: Singapore Risk-Love is still in the panic zone**

Singapore Risk-Love



Source: BofA Predictive Analytics, FactSet

BofA GLOBAL RESEARCH

**Exhibit 26: Malaysia Risk-Love is in the neutral zone**

Malaysia Risk-Love



Source: BofA Predictive Analytics, FactSet

BofA GLOBAL RESEARCH

**Exhibit 27: Indonesia Risk-Love is in the neutral zone**

Indonesia Risk-Love

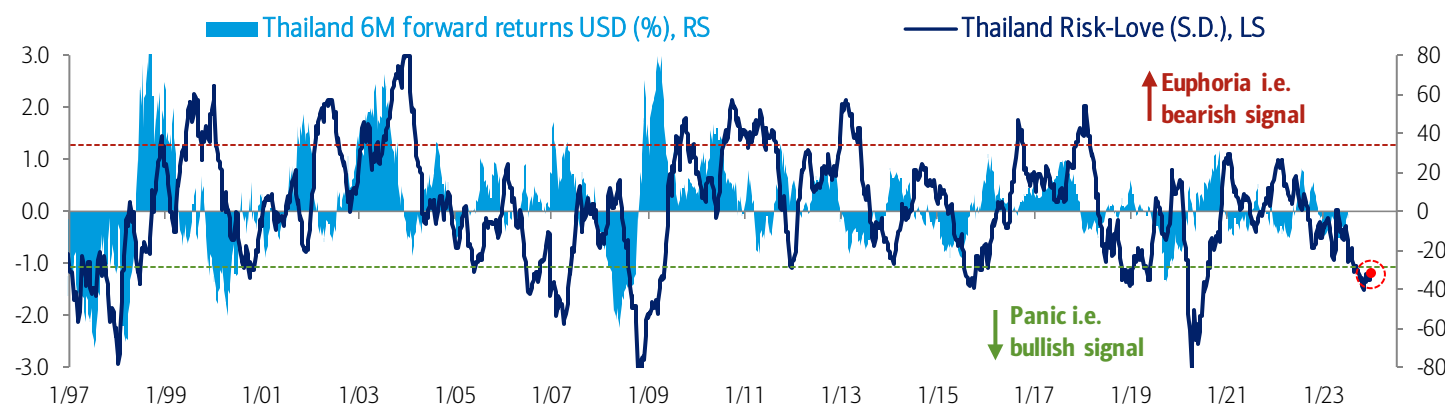


Source: BofA Predictive Analytics, FactSet

BofA GLOBAL RESEARCH

**Exhibit 28: Thailand Risk-Love is still in the panic zone**

Thailand Risk-Love

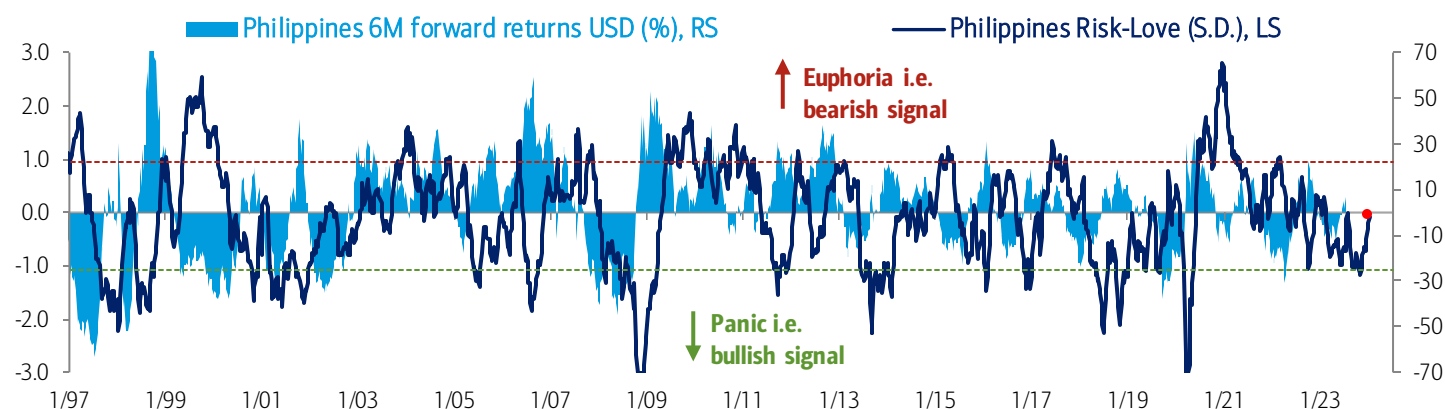


Source: BofA Predictive Analytics, FactSet

BofA GLOBAL RESEARCH

**Exhibit 29: The Philippines Risk-Love is in the neutral zone**

The Philippines Risk-Love



Source: BofA Predictive Analytics, FactSet

BofA GLOBAL RESEARCH

**Exhibit 30: South Africa Risk-Love is close to euphoria**

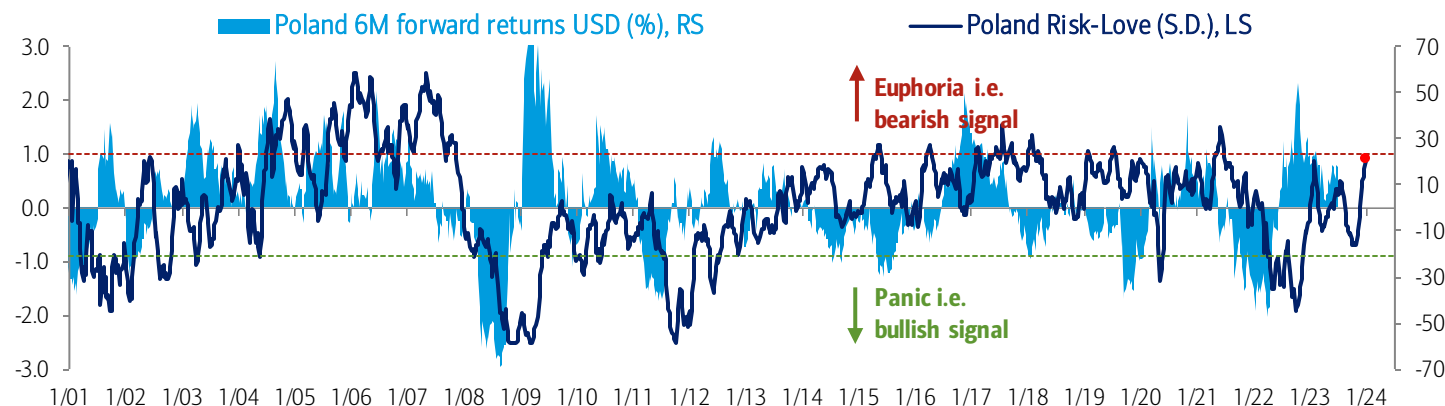
South Africa Risk-Love



BofA GLOBAL RESEARCH

**Exhibit 31: Poland Risk-Love is close to euphoria**

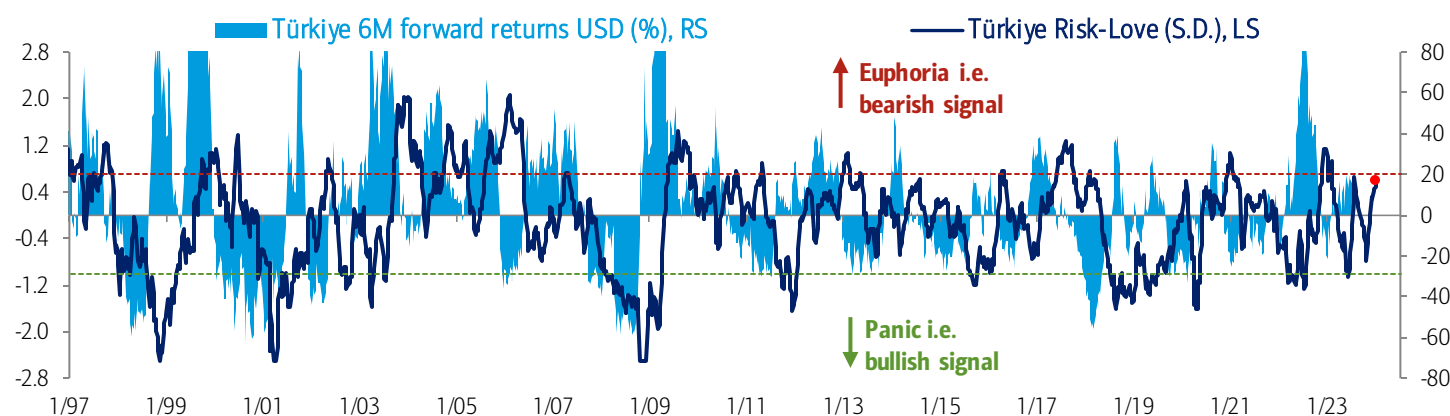
Poland Risk-Love



BofA GLOBAL RESEARCH

**Exhibit 32: Türkiye Risk-Love is close to euphoria**

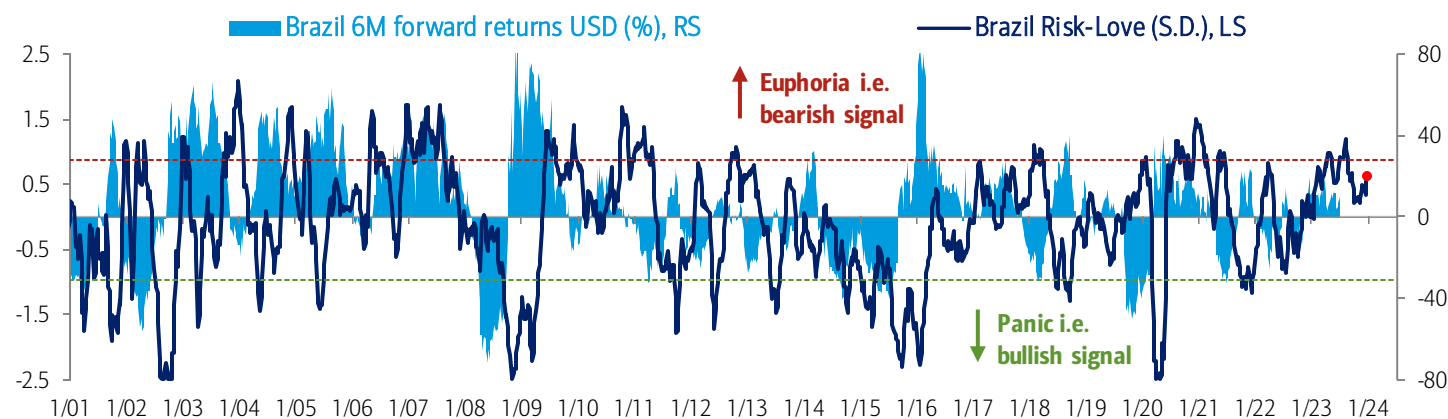
Türkiye Risk-Love



BofA GLOBAL RESEARCH

**Exhibit 33: Brazil Risk-Love is in the neutral zone**

Brazil Risk-Love

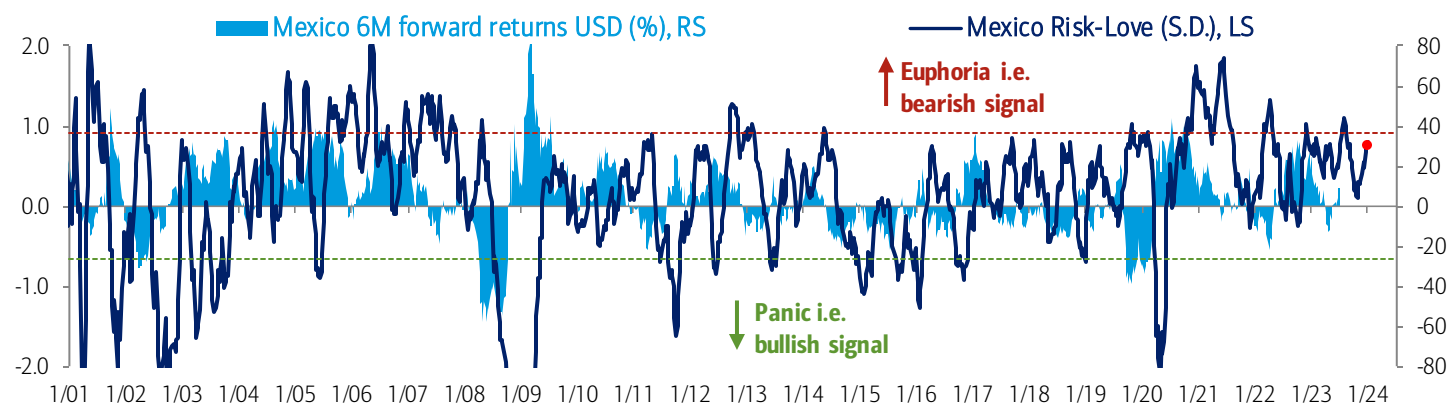


Source: BofA Predictive Analytics, FactSet

BofA GLOBAL RESEARCH

**Exhibit 34: Mexico Risk-Love is in the neutral zone**

Mexico Risk-Love

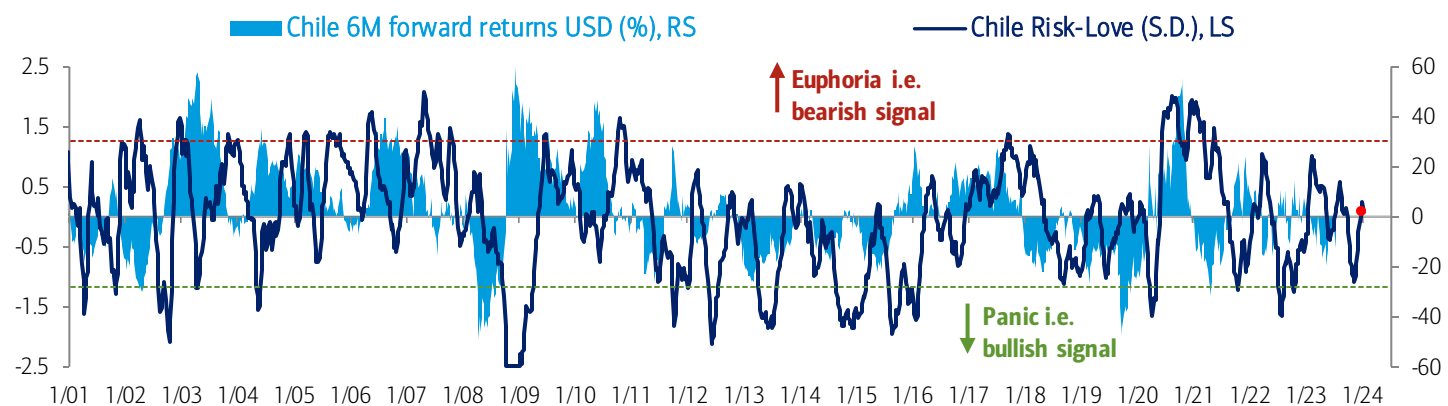


Source: BofA Predictive Analytics, FactSet

BofA GLOBAL RESEARCH

**Exhibit 35: Chile Risk-Love is in the neutral zone**

Chile Risk-Love



Source: BofA Predictive Analytics, FactSet

BofA GLOBAL RESEARCH

**Exhibit 36: Market intelligence as of 5 January 2024**

Performance, valuation and growth information by country/region

5-Jan-2024		USD perf (%)			12m forward									EPS growth^ (%)		
Region/Country (# Co)	Mkt cap* (US\$bn)				% dev		% dev		PB at 2008-09-lows	Div yld (%)#	% dev		ROE (%)	10Y avg	CY2023	CY2024
		2023	YTD	1m	PE (x)	10Y avg	PB (x)	10Y avg			10Y avg	10Y avg				
North America (697)	43,308	24.5	-1.6	2.9	19.4	8.7	3.7	23.3	1.4	1.6	18.3	19.2	16.9	1.2	10.5	
Canada (88)	1,914	12.6	-1.0	4.8	14.0	-4.2	1.7	0.8	1.1	3.3	-5.1	12.4	11.9	-8.5	6.8	
US (609)	41,393	25.0	-1.7	2.8	19.8	9.3	3.9	24.3	1.4	1.5	19.7	19.8	17.3	2.0	10.8	
Europe (425)	10,479	16.7	-1.1	3.5	12.9	-10.1	1.8	5.2	1.0	3.6	0.1	14.1	12.1	-2.5	5.4	
Austria (4)	31	12.8	0.9	3.0	6.9	-31.3	0.8	-12.2	0.5	6.6	-58.8	11.9	9.7	-9.6	-5.8	
Belgium (13)	154	4.1	0.3	1.5	16.5	-5.9	1.6	-12.6	0.6	2.8	11.6	9.5	10.3	30.3	4.9	
Denmark (16)	553	29.7	2.3	7.6	27.5	36.7	5.4	42.8	1.2	1.7	22.8	19.7	18.9	-31.3	17.0	
Finland (13)	178	-8.2	1.9	7.9	14.7	-10.8	1.8	-13.6	1.2	4.4	-4.5	12.1	12.6	-25.5	11.3	
France (61)	1,906	18.8	-2.2	2.2	13.2	-7.9	1.7	14.0	0.9	3.3	3.7	13.2	10.8	0.3	3.6	
Germany (58)	1,365	19.9	-1.8	1.5	11.2	-13.4	1.3	-10.8	0.9	3.6	-10.2	11.9	11.6	0.3	7.7	
Ireland (6)	84	22.9	-1.6	4.9	12.9	-23.3	1.5	-11.8	0.5	3.0	-40.0	11.9	10.4	42.3	1.2	
Italy (24)	427	31.7	0.2	3.2	8.3	-29.5	1.2	7.5	0.6	5.8	-24.9	14.8	10.1	11.0	-0.3	
Netherlands (26)	723	23.7	-3.6	2.3	17.0	-1.8	2.6	17.8	1.1	2.3	11.7	15.2	12.8	22.6	6.5	
Norway (12)	110	-0.4	0.7	7.9	10.3	-18.8	1.7	3.1	0.9	6.0	-22.0	16.2	13.2	-37.8	11.6	
Portugal (4)	36	5.1	-0.7	3.3	15.4	-6.3	2.1	12.0	1.2	3.7	11.9	13.3	11.2	33.0	7.5	
Spain (19)	433	28.2	0.3	1.1	10.3	-19.0	1.2	1.9	1.0	5.1	-10.8	11.8	9.5	12.2	3.0	
Sweden (42)	497	21.0	-4.2	5.6	14.2	-10.0	2.2	5.4	1.1	3.7	1.5	15.7	13.5	20.2	0.3	
Switzerland (45)	1,608	13.3	-0.4	4.9	17.2	-0.6	3.1	18.7	1.4	3.2	-0.3	18.3	15.3	1.5	9.2	
UK (82)	2,376	9.5	-0.4	3.9	10.7	-17.6	1.6	-3.5	1.1	4.3	0.5	14.8	12.9	-13.0	5.0	
Israel (14)	110.6	9.3	-0.9	5.0	10.5	-3.2	2.2	56.9	1.0	2.0	15.1	20.9	13.0	-6.9	2.5	
Asia Pac (1538)	10,756	8.8	-2.0	3.9	13.2	-2.5	1.4	0.4	0.9	2.8	-0.4	10.6	10.3	2.4	14.0	
Japan (225)	3,594	17.8	-1.1	4.1	14.2	1.5	1.3	7.9	0.8	2.4	-3.1	9.3	8.8	9.4	8.2	
Australia (58)	1,204	9.9	-2.4	9.3	16.3	4.0	2.1	10.2	1.3	4.1	10.8	13.0	12.3	-3.8	-1.7	
New Zealand (6)	33	3.4	-1.3	5.3	31.4	18.3	2.8	4.9	1.3	3.0	16.8	8.8	10.1	14.5	12.9	
Asia ex-Japan (1249)	5,925	3.6	-2.5	2.6	12.2	-4.4	1.4	-5.6	1.0	2.8	-1.2	11.1	11.3	0.2	20.4	
ASEAN (127)	613	-3.1	-1.1	3.5	13.2	-9.6	1.4	-9.5	1.1	4.2	-22.4	10.9	10.9	18.6	6.9	
China (766)	1,825	-13.3	-2.7	-0.7	8.9	-22.3	1.0	-28.4	1.1	2.9	-12.3	11.5	12.5	13.8	14.9	
Hong Kong (33)	338	-17.8	-3.9	4.7	11.4	-23.2	0.8	-25.6	0.8	4.5	-34.9	7.4	7.7	3.5	12.6	
India (131)	1,190	19.6	0.6	5.3	22.0	16.8	3.5	24.9	1.4	1.4	15.4	15.8	14.8	24.1	13.9	
Indonesia (22)	134	3.3	0.4	3.5	14.0	-4.8	2.2	-10.2	1.4	4.1	-36.0	15.4	16.3	36.4	7.9	
Korea (102)	872	21.6	-4.8	4.6	11.2	7.9	1.0	0.3	0.9	2.2	-3.3	8.8	9.7	-33.9	68.3	
Malaysia (31)	94	-7.2	0.4	2.5	13.6	-10.3	1.2	-19.7	1.3	4.3	-19.9	9.2	10.2	7.7	8.9	
Philippines (14)	44	1.7	2.2	4.5	12.3	-26.2	1.6	-22.0	1.3	2.7	-37.5	12.8	12.0	25.7	8.3	
Singapore (22)	218	0.4	-2.8	4.2	11.6	-12.8	1.2	-0.5	0.9	5.0	-20.1	10.3	9.1	38.3	2.2	
Taiwan (90)	1,088	26.9	-3.9	3.0	15.4	10.0	2.2	15.7	1.0	3.2	19.0	14.0	13.3	-18.9	18.1	
Thailand (38)	122	-12.6	-1.8	2.9	16.3	6.4	1.6	-12.7	0.9	3.1	0.7	9.6	12.0	-21.4	16.3	
EMEA (157)	891	4.6	-0.6	4.4	10.6	5.9	1.6	24.3	0.7	4.2	2.9	14.8	12.6	3.1	6.0	
Czech Republic (3)	11	22.4	1.6	1.6	12.2	-6.8	1.8	26.4	1.3	6.6	-4.9	14.4	10.8	-41.2	-1.8	
Egypt (3)	8	37.7	3.8	-1.6	7.0	-21.9	2.1	20.6	1.1	4.1	-16.7	30.7	20.1	84.9	20.5	
Greece (10)	34	44.2	0.9	4.4	9.4	-26.7	1.8	9.7	0.7	5.5	-19.8	19.4	13.5	4.0	-2.3	
Hungary (3)	18	45.5	1.8	8.1	5.2	-43.3	0.9	-18.0	0.6	5.2	-54.5	17.3	12.3	4.1	-6.8	
Kuwait (7)	55	-10.4	2.3	5.7	10.2	-38.5	1.8	-9.9	na	4.8	-33.4	17.3	12.7	13.8	9.4	
Poland (15)	66	45.0	-3.3	0.6	9.0	-19.6	1.1	-1.0	0.8	4.7	-25.2	12.3	10.1	8.1	-11.9	
Qatar (13)	62	-2.9	-1.0	4.8	11.0	-12.1	1.4	-17.3	na	4.8	-11.9	13.2	13.9	-0.3	8.0	
Saudi Arabia (42)	300	7.2	2.3	10.0	17.8	3.8	2.2	5.8	na	3.4	6.6	12.4	12.3	-15.0	16.4	
South Africa (32)	205	-1.6	-5.4	2.0	9.4	-24.9	1.4	-25.4	0.9	4.4	-17.4	14.9	15.3	4.2	8.2	
Türkiye (18)	44	-8.9	1.1	-7.2	4.5	-35.8	1.1	6.2	0.7	5.0	-2.6	25.0	15.8	15.4	18.5	
UAE (11)	88	-3.0	-0.8	0.4	9.9	-13.3	1.3	-3.9	na	4.4	1.0	13.4	12.2	24.4	-6.2	
Latin America (90)	657	25.1	-1.7	6.7	9.0	-23.6	1.5	-9.3	1.2	5.6	-34.6	16.3	14.2	-21.5	7.8	
Brazil (48)	404	23.4	-1.5	6.0	8.1	-23.1	1.3	-13.0	1.1	6.1	-25.0	16.4	15.0	-25.2	8.6	
Chile (12)	34	-1.2	-5.3	0.6	7.7	-44.7	1.1	-17.0	1.1	7.7	-63.0	14.7	10.0	-50.1	16.9	
Colombia (3)	8	2.3	10.2	20.0	6.1	-44.4	0.9	-26.3	na	6.2	-57.0	14.2	11.4	-7.4	0.5	
Mexico (24)	190	36.2	-1.9	7.7	12.6	-16.6	2.2	3.5	1.5	4.4	-47.3	17.2	14.0	10.0	3.4	
Peru (3)	20	30.2	-2.6	20.3	12.0	-4.5	1.7	-4.4	0.5	4.1	-38.3	14.3	14.3	-20.4	13.7	
Developed Markets (1480)	59,284	21.8	-1.5	3.2	17.3	4.4	2.8	20.4	1.2	2.1	14.1	16.0	13.9	0.8	8.8	
Emerging Markets (1441)	6,917	7.0	-2.1	3.1	11.6	-3.1	1.4	-1.6	1.0	3.1	-2.4	12.4	12.2	-4.0	17.6	
World (2921)	66,202	20.1	-1.6	3.2	16.5	3.7	2.5	17.1	1.1	2.2	12.2	15.4	13.6	0.1	10.0	

Source: BofA Predictive Analytics, MSCI, IBES estimates. Note: numbers in red text indicate that the valuation metric is 2 standard deviations above its 10-year average. Numbers in green indicate the valuation metric is 2 standard deviations below its 10-year average. #Positive deviation for dividend yield implies current dividend is LOWER than the 10yr average and vice-versa. \*Market caps shown are free float. ^Currency for EPS growth estimates: (a) UK: GBP; (b) Eurozone country and regional indices: EUR; (c) Other regional indices, Russia, Peru: USD; (d) Other individual countries: Local currency.

BofA GLOBAL RESEARCH



# Glossary

## Global Equity Risk-Love factors

### Positioning

#### 1. Commitment of traders - S&P 500 Index futures: longs to shorts

Measures open interest for all traded S&P500 commercial futures, broken down into long and short positions.

#### 2. MSCI EM broker optimism

Market cap-weighted consensus (IBES) stock rating for the MSCI EM universe.

#### 3. MSCI Emerging Markets ETF premium/discount to NAV

The difference between the closing price of the fund/ETF and that day's NAV.

#### 4. Asia ex-Japan fund cash holdings

The fund-weighted average of percentage of cash relative to total asset held by active funds that have dedicated geographic exposure to Asia ex-Japan.

#### 5. Investors' exposure to EMs - Global FMS - asset allocation

Based on the BofA Global Fund Manager Survey, this measures the net percentage of global asset allocators saying they are overweight Emerging Market equities.

#### 6. Investors' exposure to China - Global FMS - asset allocation

Based on the BofA Global Fund Manager Survey, this measures the net percentage of global asset allocators saying they would overweight China equities.

### Put/call ratios

The Put/Call ratio shows put option volume relative to call option volume. Sentiment is deemed excessively bearish when the ratio is at relatively high levels, and excessively bullish when at relatively low levels.

Indicators used include:

#### 1. Put/Call ratio at market open (ISE Sentiment Index)

#### 2. CBOE Put/Call ratio

#### 3. Euro Stoxx 50 put/call ratio

#### 4. Nikkei put/call volume ratio

#### 5. MSCI Emerging Markets ETF put/call volume ratio

#### 6. S&P 500 options put/call skew (delta 25, 3-month)

### Surveys

#### 1. American Association of Individual Investors - bull less bearish ratio

This ratio reflects the sentiment of individual investors towards the stock market over the next six months – either bullishness or bearishness in the stock market. The question asked is "I feel that the direction of the stock market over the next six months will be". High bullish readings in the poll usually are signs of market tops; lows ones, market bottoms.

#### 2. National Association of Active Investment Managers Exposure index

The index represents the average exposure to US equity markets reported by members of the Association of Active Investment Managers. It provides insight into the actual adjustments active risk managers have made to client accounts over the past two weeks.



**3. Small retail trader sentiment (Daily sentiment index) for S&P 500**

This is a contrary opinion indicator. High % bullish readings suggest that a short-term top is developing or has been made. Low % bullish readings suggest that a short term bottom is developing or has been made.

**4. Major professional brokerage firms and advisors sentiment (Consensus Bullish Sentiment Index)**

A gauge of positions and attitudes of major professional brokers and advisors, which provides an indication of potential market directions. When a predominant number of market analysts are bearish, it is quite likely that the market is approaching an oversold condition, and that a reversal in trend may be forthcoming.

**5. Emerging markets economic surprises Index**

The Citi Economic Surprise Index measure data surprises relative to market expectations. A positive reading means that data releases have been stronger than expected and a negative reading means that data releases have been worse than expected.

**6. University of Michigan Survey of Consumer Confidence Sentiment**

This Index is comprised of measures of attitudes toward personal finances, general business conditions, and market conditions or prices.

**7. Small retail trader sentiment (Daily sentiment index) for commodities**

This is a contrary opinion indicator. High % bullish readings suggest that a short-term top is developing or has been made. Low % bullish readings suggest that a short term bottom is developing or has been made.

**Technical****1. Emerging Markets cyclicals/defensives (3m change)**

The 3-month change in the MSCI EM cyclicals/defensives index, where cyclicals comprise energy, materials, consumer discretionary and industrials sectors and defensives comprise consumer staples, healthcare, utilities and telecom sectors.

**2. Emerging Market turnover, % MSCI market cap**

Turnover of MSCI Emerging markets as a percentage of MSCI market cap.

**3. MSCI Emerging Markets - distance from 200D moving average**

The higher the index is from its 200-day moving average, the more bullish the market is becoming.

**Volatility/spreads/correlations****Volatility indices**

Measures the implied volatility of options on the underlying index or ETF. Lower readings indicate complacency in the market and higher readings represent greater uncertainty/fear.

**1. CBOE S&P500 VIX Index****2. Eurozone volatility index VSTOXX****3. CBOE Emerging Markets ETF volatility index****4. Nikkei stock average volatility index****5. Hong Kong short interest, % total turnover**

Hong Kong Main Board short selling turnover value as a percentage of total turnover



**6. Asia Pac ex-Japan stock-to-stock correlations**

This is calculated as the 3-month rolling stock-to-stock correlation of daily price returns of all the stocks in the region. The lower the correlation, the higher the opportunities for investors to add alpha from stock selection.

**7. EM stock less bond returns**

Calculated as the difference between 6-month total returns of the MSCI EM index and BofA Global EM sovereign and credit index.

**8. BofA option volatility estimate (MOVE) index**

This is a yield curve weighted index of the normalized implied volatility on 1-month Treasury options.

**9. Global FX volatility index****10. Asia ex-Japan CDS spread**

Market cap-weighted CDS spread of 8 Asia ex-Japan markets.

**11. US 2Y swap spread**

The spread between the rate on a two-year interest-rate swap and U.S. Treasury yields.

**12. BAA spread**

This is calculated as Moody's corporate (BAA) bond yield less the US 10Y government bond yield.

**Options Risk Statement****Potential Risk at Expiry & Options Limited Duration Risk**

**Unlike owning or shorting a stock, employing any listed options strategy is by definition governed by a finite duration. The most severe risks associated with general options trading are total loss of capital invested and delivery/assignment risk... all of which can occur in a short period.**

**Investor suitability**

The use of standardized options and other related derivatives instruments are considered unsuitable for many investors. Investors considering such strategies are encouraged to become familiar with the "Characteristics and Risks of Standardized Options" (an OCC authored white paper on options risks). U.S. investors should consult with a FINRA Registered Options Principal.

For detailed information regarding the risks involved with investing in listed options: <http://www.theocc.com/about/publications/character-risks.jsp>

# 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 <sup>R1</sup>
Buy	≥ 10%	≤ 70%
Neutral	≥ 0%	≤ 30%
Underperform	N/A	≥ 20%

<sup>R1</sup> 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.

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 Service Board; 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](http://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; Merrill Lynch (Argentina): Merrill Lynch Argentina SA, regulated by Comisión Nacional de Valores; BofAS 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; BofAS 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 (DFS); 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 or 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 2024 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. 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 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.