

Investor Sentiment: Risk-Love

India Risk-Love now in panic zone

All at once

[Global Equity Risk-Love](#), our contrarian sentiment indicator has shifted back to a neutral position (48th percentile of its history) from euphoric levels observed at the beginning of the year (90th percentile), coinciding with significant paradigm shifts across three continents. The prevailing bearish narrative of peak US exceptionalism has been mitigated by optimism regarding a European renaissance and a belief that *this time is different* in China, leading to an overall neutral sentiment.

Diverging sentiment

[Japan](#) Risk-Love is trudging sideways within a neutral range (56th percentile).

The rebound in [China](#) Risk-Love persists (74th percentile), though it remains below euphoric levels and even further from the highs observed during the 2015 surge. This suggests that the rally has the potential for further gains following a robust start to the year, with a YTD gain of 24%.

[Korea](#) Risk-love has barely budged from the month-ago levels, perched at the threshold of the panic zone at the 13th percentile of history. A review of past panic episodes since 1995 indicates a 78% likelihood that Korean equities will achieve a positive return over the next 6 months, with median returns estimated at 17% (average 24%). Out of the 18 instances, there were three occasions when this prediction did not hold true – 1997, 2001, and the most recent when the buy signal triggered in September 2019 ended up in a COVID induced-sell off in March 2020.

[India](#) Risk-love, finally breaks into the panic zone on the back of persistent foreign selling and reallocation of capital towards China. While washed-out sentiment suggests most of the bad news may be in the price, it may be prudent to wait for the sentiment measure to break out of the panic zone to act *aggressively*. Since 1995, there has been a 73% probability that Indian equities would have posted a positive return in the ensuing 12 months once India risk-love breaks out of panic zone, with median returns of 10% (average 24%). Among the 15 occurrences, there were three instances where the signal did not perform as expected: 1977, 2011, and most recently in 2019.

Investor sentiment in [Taiwan](#) remains in a low neutral range, indicating a reluctance among investors towards AI and semiconductors investments, as observed in our [Asia fund manager survey](#).

The sentiment measure is slightly below the euphoria threshold for [Singapore](#), remains neutral for [Malaysia](#), [Indonesia](#), and the [Philippines](#), and hints mild panic for [Thailand](#).

Risk-Love metric for EEMEA continue their momentum from last month with [South Africa](#) hitting euphoric levels and [Poland](#) barometer is on the cusp of euphoria while [Türkiye](#), and the [LatAm](#) sentiment gauge remain unchanged in the neutral territory.

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Refer to important disclosures on page 16 to 18.

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Predictive Analytics
Global

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EM: Emerging markets

Unless otherwise noted, all links in this report refer to sections within the report itself.

Exhibit 1: History suggests strong returns for India once it breaks out of panic zone

Forward returns for MSCI India (USD) when the India Risk-Love comes out of panic zone

#	Start Date	1 month	3 months	6 months	9 months	12 months
Backtested						
1	4/25/1997	-3%	12%	5%	-14%	0%
2	12/26/1997	-6%	7%	-19%	-19%	-25%
3	10/16/1998	4%	13%	24%	59%	77%
4	6/23/2006	-4%	18%	35%	36%	60%
5	12/26/2008	-8%	5%	64%	88%	105%
6	3/25/2011	4%	-5%	-23%	-31%	-20%
7	1/13/2012	16%	7%	-1%	13%	16%
8	9/6/2013	10%	15%	20%	42%	48%
Out of sample						
9	9/25/2015	7%	0%	-2%	-1%	9%
10	3/4/2016	4%	7%	15%	3%	15%
11	11/23/2018	3%	2%	12%	0%	8%
12	3/8/2019	6%	6%	-4%	3%	-7%
13	10/18/2019	0%	6%	-24%	-9%	1%
14	6/5/2020	5%	16%	32%	50%	60%
15	7/22/2022	7%	1%	4%	-3%	10%
Average		3%	7%	9%	14%	24%
Median		4%	7%	5%	3%	10%
% of time up		73%	87%	60%	60%	73%

Source: BofA Predictive Analytics, FactSet. Notes: start date = when the indicator comes out of the panic zone (green dotted line in the time series charts).

This performance is back-tested and does not represent the actual performance of any account or fund. Back-tested performance depicts the theoretical (not actual) performance of a particular strategy over the time period indicated. No representation is being made that any actual portfolio is likely to have achieved returns similar to those shown herein.

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Exhibit 2: Korea rally to continue as history suggests massive gains from current sentiment levels

Forward returns for MSCI Korea (USD) when the Korea Risk-Love comes out of panic zone

#	Start Date	1 month	3 months	6 months	9 months	12 months
Backtested						
1	3/14/1997	7%	25%	7%	-68%	-42%
2	5/2/1997	7%	6%	-37%	-44%	-50%
3	4/24/1998	-14%	-7%	-2%	60%	123%
4	10/2/1998	34%	118%	141%	305%	247%
5	3/30/2001	9%	16%	-7%	44%	85%
6	8/10/2001	0%	7%	39%	61%	47%
7	5/9/2003	4%	19%	38%	51%	47%
8	5/14/2004	2%	1%	16%	34%	32%
9	1/28/2005	8%	-1%	17%	17%	55%
10	11/28/2008	16%	-7%	49%	79%	82%
11	4/10/2009	14%	14%	48%	58%	63%
12	10/7/2011	16%	6%	24%	11%	22%
13	8/3/2012	2%	6%	9%	7%	3%
Out of sample						
14	2/12/2016	9%	10%	26%	18%	29%
15	12/28/2018	8%	5%	3%	-3%	11%
16	5/31/2019	8%	-3%	6%	2%	-1%
17	9/27/2019	5%	14%	-13%	6%	16%
18	7/17/2020	11%	12%	59%	59%	54%
Average		8%	13%	24%	39%	46%
Median		8%	7%	17%	26%	40%
% of time up		89%	78%	78%	83%	83%

Source: BofA Predictive Analytics, FactSet. Notes: start date = when the indicator comes out of the panic zone (green dotted line in the time series charts).

This performance is back-tested and does not represent the actual performance of any account or fund. Back-tested performance depicts the theoretical (not actual) performance of a particular strategy over the time period indicated. No representation is being made that any actual portfolio is likely to have achieved returns similar to those shown herein.

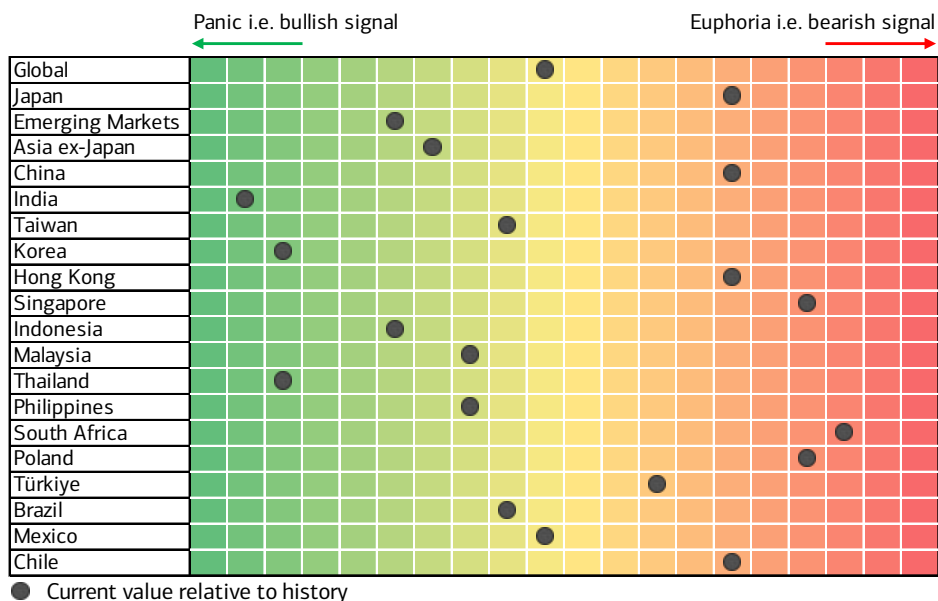
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Risk-Love Summary

Exhibit 3: Risk-Love Indicator (Equity sentiment) Summary: today vis-à-vis history

On a scale of -100 (most pessimistic/bullish signal) to +100 (most euphoric/bearish signal), our Risk-Love Indicator shows the following - Global: 48, Japan: 71, Emerging Markets: 25, Asia ex-Japan: 30, China: 74, India: 8, Taiwan: 42, Korea: 13, Hong Kong: 75, Singapore: 82, Indonesia: 29, Malaysia: 37, Thailand: 13, Philippines: 35, South Africa: 86, Poland: 82, Türkiye: 63, Brazil: 42, Mexico: 49, Chile: 72



Source: BofA Predictive Analytics

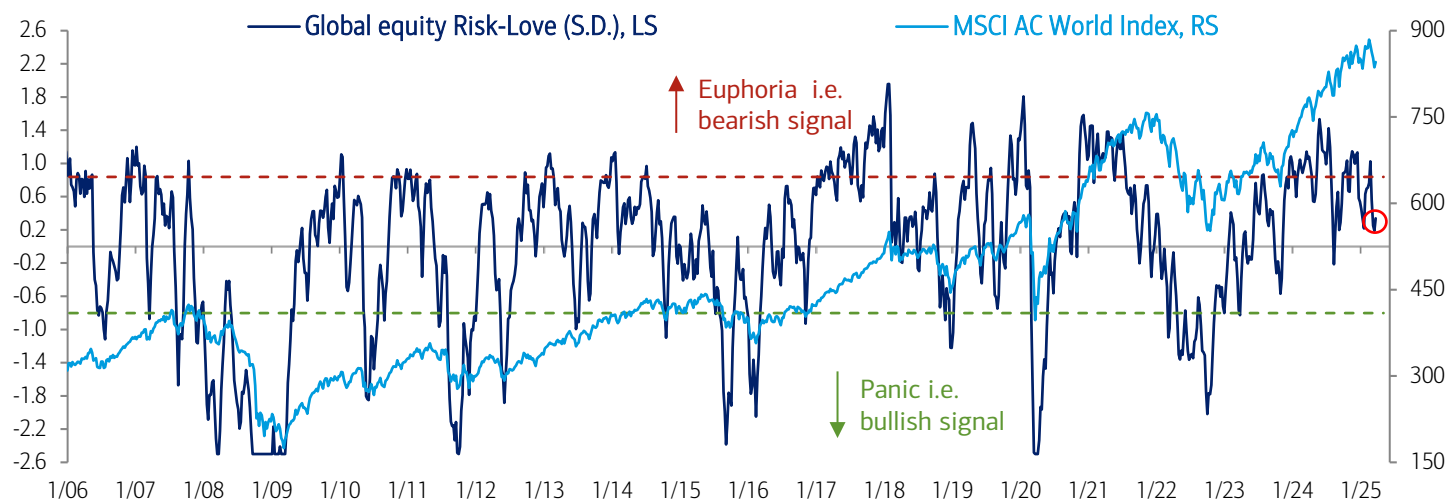
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Global Equity Risk-Love

Exhibit 4 shows our global equity Risk-Love indicator and Exhibits 5 shows 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 4: Global Equity Risk-Love whiplashed to neutral zone after hitting mild euphoric levels last month

Global Risk-Love is at the 48th percentile of its history since 1987



Source: BofA Predictive Analytics, Bloomberg

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Exhibit 5: Global Equity Risk-Love indicator components heatmap: today versus last month

Caution in US components broadly outweigh optimism in Europe & EMs-related inputs



Source: BofA Predictive Analytics, LSEG Data & Analytics, 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.



Our Global Equity Risk-Love indicator components heatmap above indicates the following changes today versus last month for the underlying constituents (on a scale of -100 (most pessimistic/bullish signal) to +100 (most euphoric/bearish signal)):

Positioning

1. Broker optimism - Consensus stock rating for MSCI EM universe move from 88 to 87
2. MSCI Emerging Markets ETF premium/discount to NAV move from 31 to 69
3. Asia ex-Japan fund cash holdings move from 96 to 98
4. Investors' exposure to EMs - Global Fund Manager Survey - asset allocation move from 23 to 49
5. Investors' exposure to China - Global Fund Manager Survey - asset allocation move from 33 to 38
6. Commitment of commercial traders - S&P 500 Index futures longs to shorts move from 81 to 97

Put call ratios

7. Put / call ratio at market open (ISE Sentiment Index) move from 94 to 79
8. CBOE put/call ratio move from 89 to 89
9. Euro Stoxx 50 put/call ratio move from 45 to 18
10. Nikkei put/call volume ratio move from 24 to 32
11. MSCI Emerging Markets ETF put/call volume ratio move from 29 to 74
12. S&P 500 options put/call skew (delta 25, 3month) move from 67 to 36

Surveys

13. American Association of Individual Investors - bull less bearish ratio move from 10 to 1
14. National Association of Active Investment Managers Exposure index move from 58 to 48
15. Small retail trader sentiment (Daily sentiment index) for S&P 500 move from 70 to 23
16. Major professional brokerage firms and advisors sentiment (Consensus Bullish Sentiment) move from 68 to 40
17. Emerging markets economic surprises Index move from 48 to 49
18. University of Michigan Survey of Consumer Confidence Sentiment move from 7 to 2
19. Commodity sentiment (Daily Sentiment index) move from 86 to 88

Technicals

20. Emerging markets cyclicals/defensives (3m change) move from 39 to 63
21. Emerging market turnover, % MSCI market cap move from 73 to 68
22. MSCI Emerging Markets - distance from 200D moving average move from 53 to 54

Volatility/spreads/correlations

23. CBOE S&P500 VIX Index move from 65 to 30
24. Eurozone volatility index VSTOXX move from 79 to 63
25. CBOE Emerging Markets ETF volatility index move from 85 to 43
26. Nikkei volatility index move from 65 to 46
27. SPDR S&P 500 ETF short interest ratio move from 62 to 49
28. Hong Kong short interest, % total turnover move from 3 to 22
29. Asia Pac ex-Japan stock-to-stock correlations move from 90 to 72
30. EM stock less bond returns (6m change) move from 40 to 45
31. BofA option volatility estimate (MOVE) index (bond volatility) move from 61 to 45
32. Global FX volatility index move from 82 to 78
33. Asia ex-Japan CDS spread move from 60 to 76
34. US 2Y swap spread move from 81 to 86
35. BAA spread (Moody's corporate bond yields less US 10Y govt bond yield) move from 97 to 83

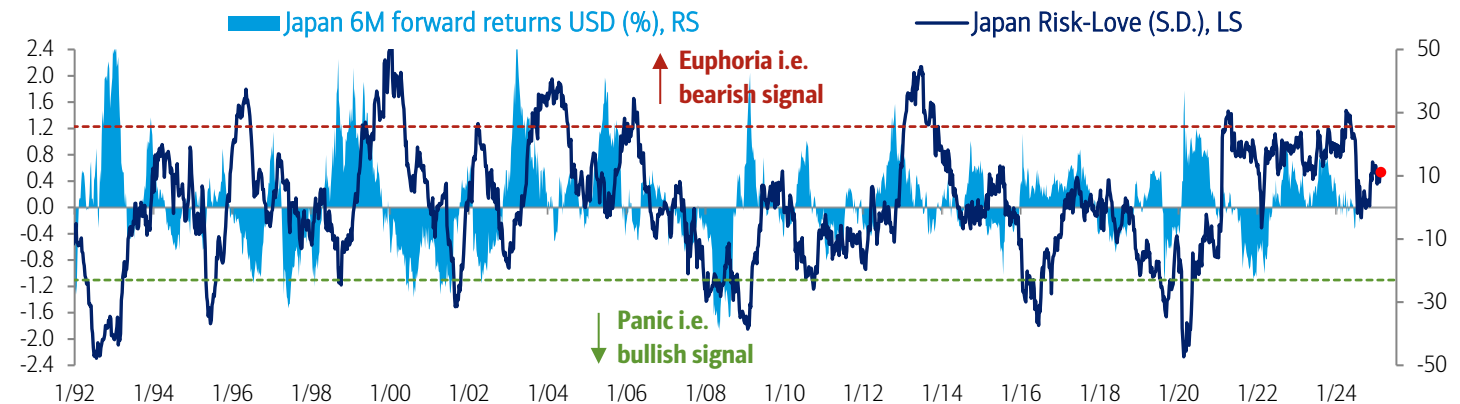
Overall, the Global Risk-Love indicator moved from 76th to 48th percentile of its history in last one month.

Risk-Love by market

Exhibits 6-24 show Risk-Love measures for Asia and emerging markets.

Exhibit 6: Japan Risk-Love continues to be in the neutral zone

Japan Risk-Love is at the 71st percentile of its history since 1992

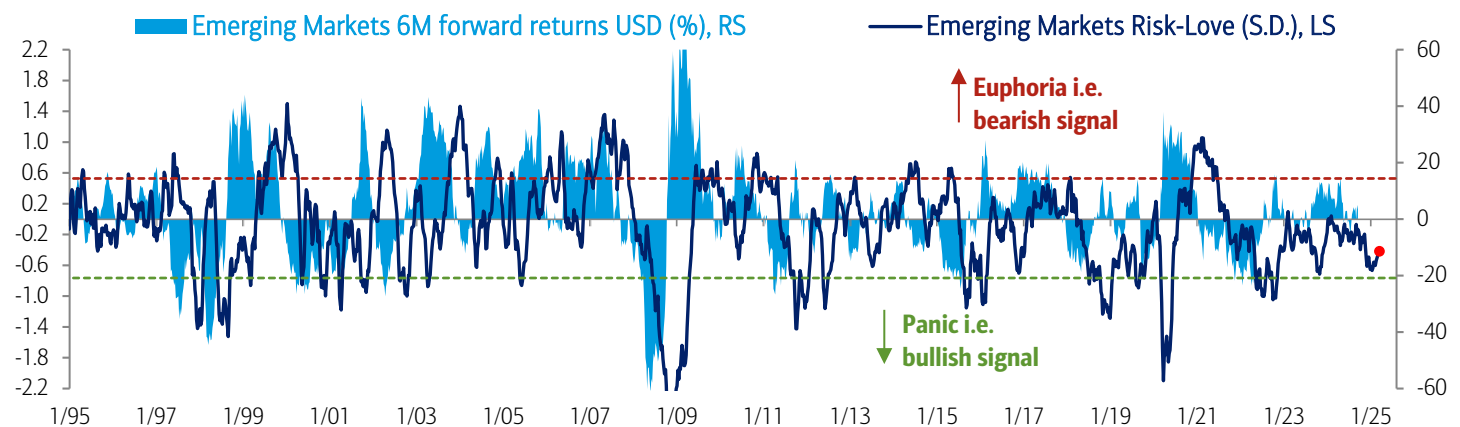


Source: BofA Predictive Analytics, FactSet

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Exhibit 7: Emerging markets Risk-Love moves further away from the panic zone threshold

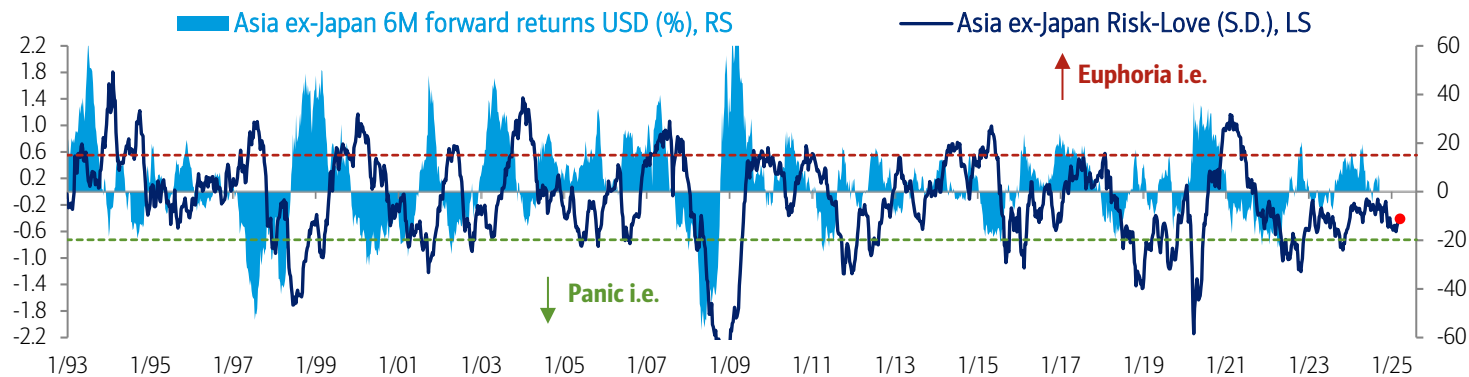
Emerging Markets Risk-Love is at the 25th percentile of its history since 1995



Source: BofA Predictive Analytics, FactSet

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Exhibit 8: Asia ex-Japan Risk- is in the neutral zoneAsia ex-Japan Risk-Love is at the 30th percentile of its history since 1993

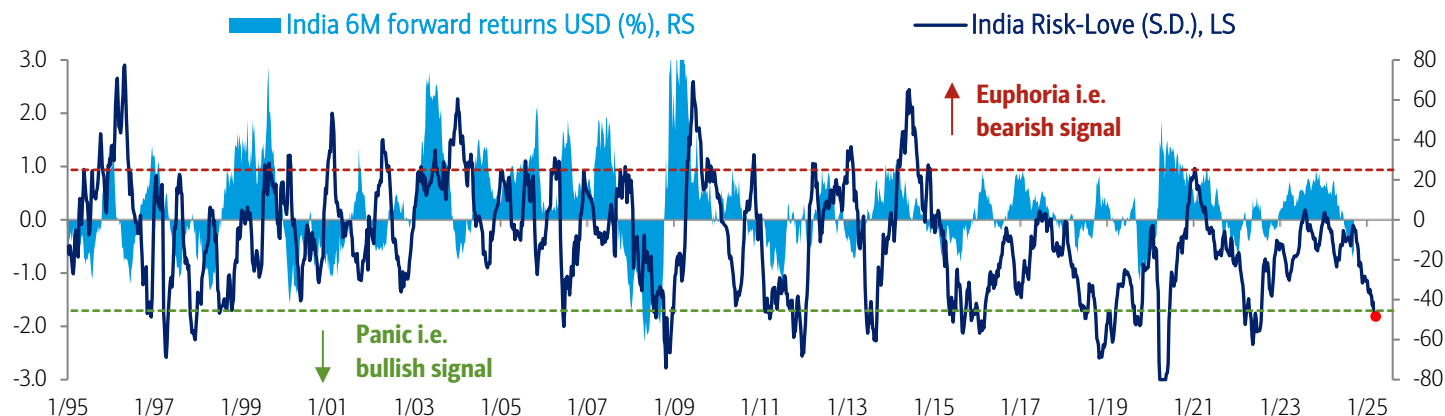
Source: BofA Predictive Analytics, FactSet

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Exhibit 9: China Risk-Love is in the neutral zoneChina Risk-Love is at the 74th percentile of its history since 1998

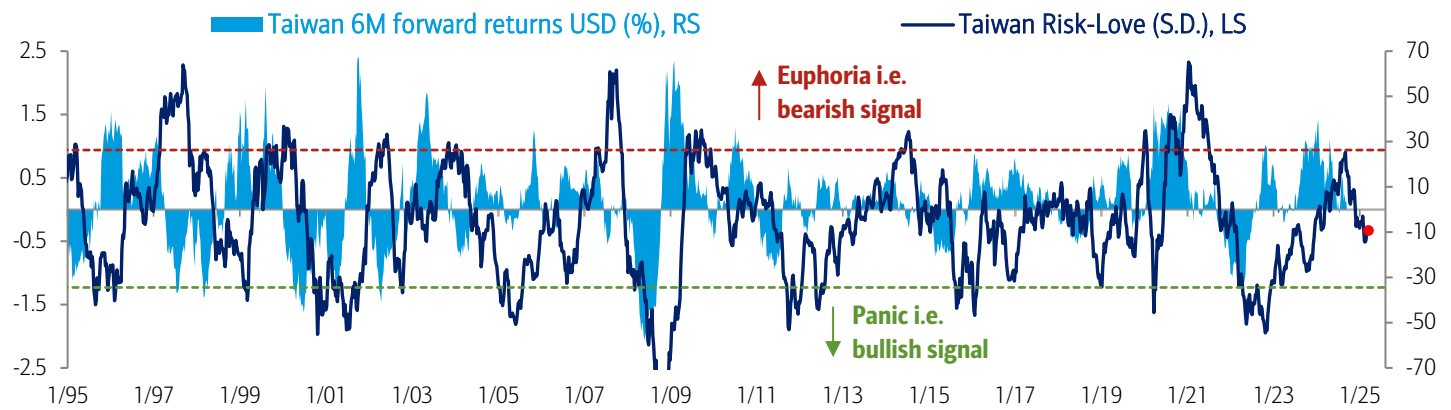
Source: BofA Predictive Analytics, FactSet

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Exhibit 10: India Risk-Love indicator has fallen below the threshold of the panic zone – a contrarian bullish signalIndia Risk-Love is at the 8th percentile of its history since 1995

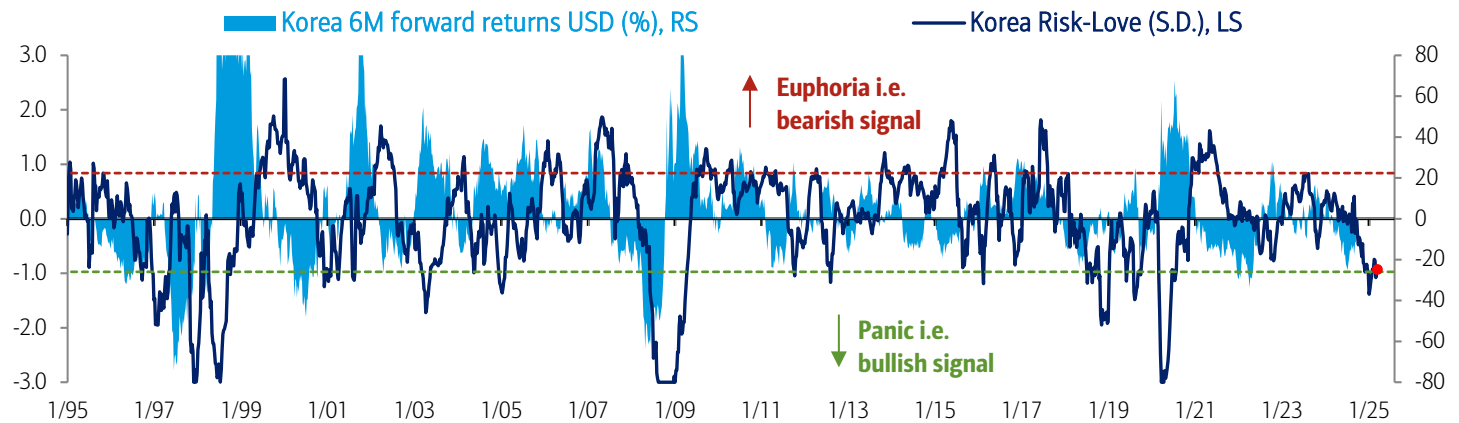
Source: BofA Predictive Analytics, FactSet

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Exhibit 11: Taiwan Risk-Love is in the neutral zoneTaiwan Risk-Love is at the 42nd percentile of its history since 1995

Source: BofA Predictive Analytics, FactSet

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Exhibit 12: Korea Risk-Love is marginally above the panic thresholdKorea Risk-Love is at the 13th percentile of its history since 1995

Source: BofA Predictive Analytics, FactSet

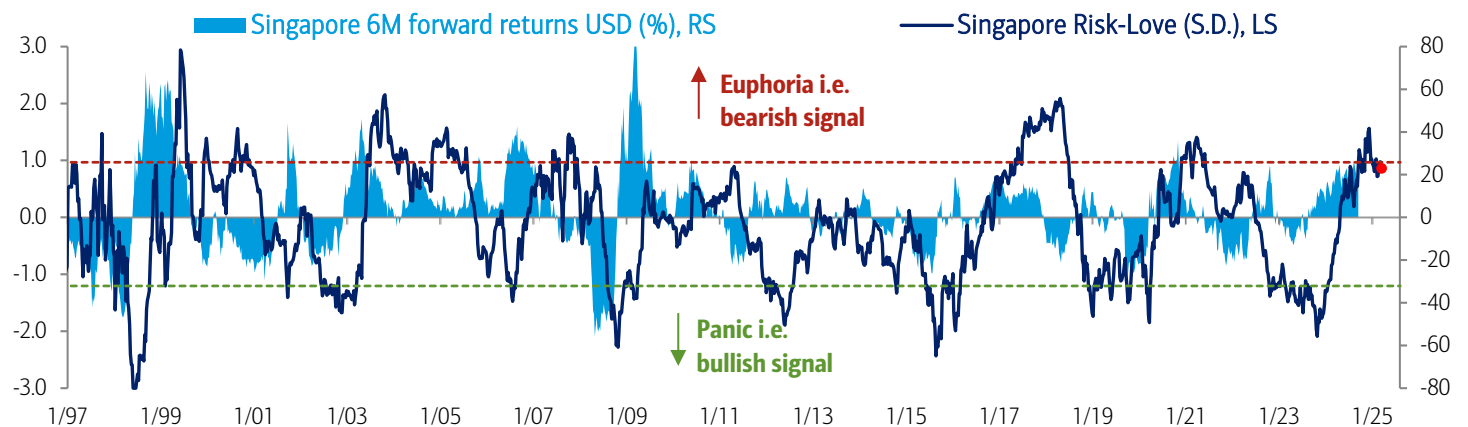
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Exhibit 13: Hong Kong Risk-Love is in the neutral zoneHong Kong Risk-Love is at the 75th percentile of its history since 1995

Source: BofA Predictive Analytics, FactSet

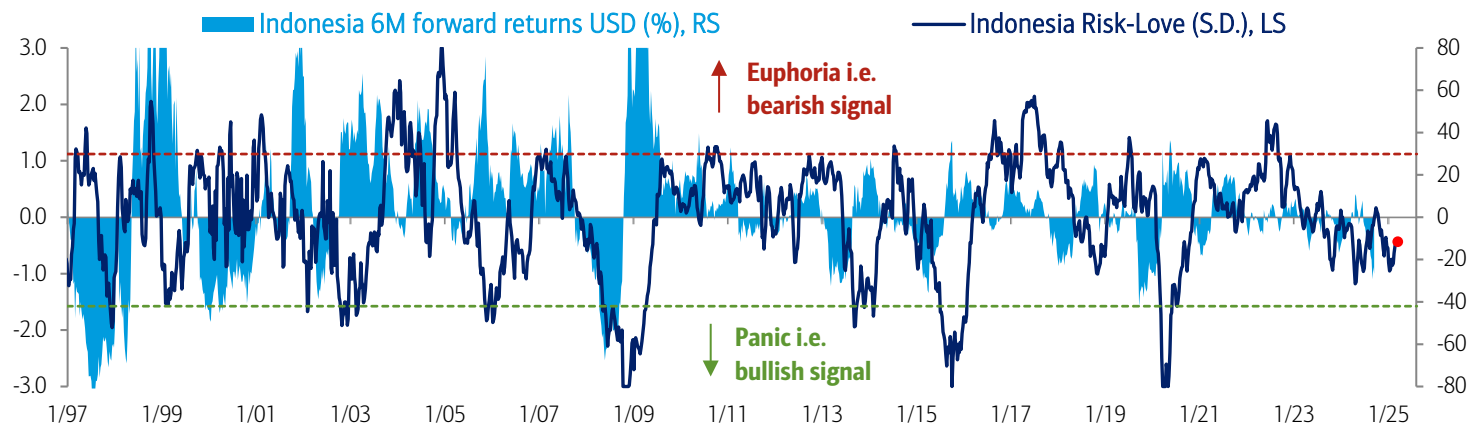
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Exhibit 14: Singapore Risk-Love is just a notch below euphoriaSingapore Risk-Love is at the 82nd percentile of its history since 1997

Source: BofA Predictive Analytics, FactSet

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Exhibit 15: Indonesia Risk-Love is firmly in neutral zoneIndonesia Risk-Love is at the 29th percentile of its history since 1997

Source: BofA Predictive Analytics, FactSet

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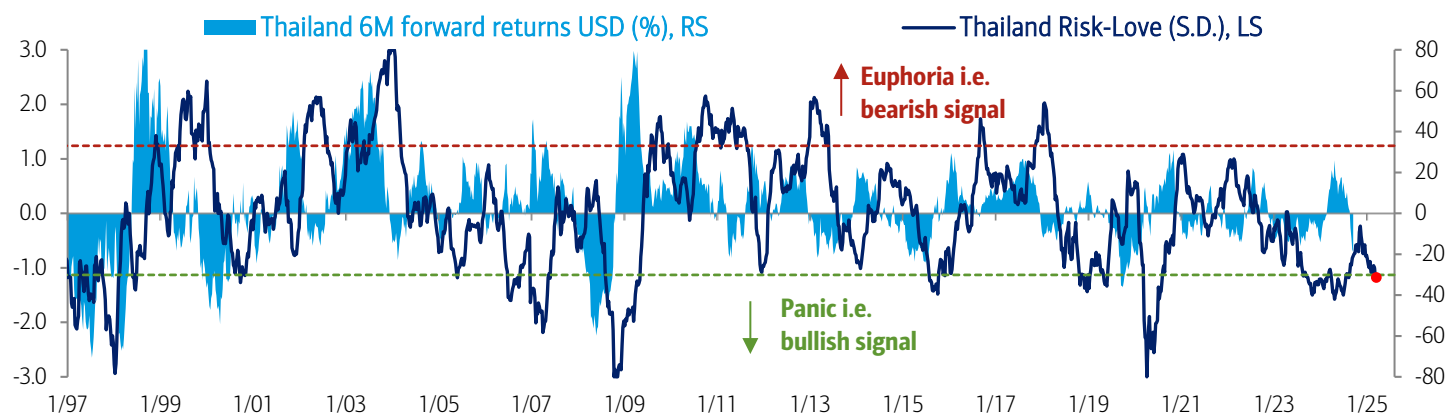
Exhibit 16: Malaysia Risk-Love is in the neutral zoneMalaysia Risk-Love is at the 37th percentile of its history since 1997

Source: BofA Predictive Analytics, FactSet

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Exhibit 17: Thailand Risk-Love falls into panic zone

Thailand Risk-Love is at the 13th percentile of its history since 1997

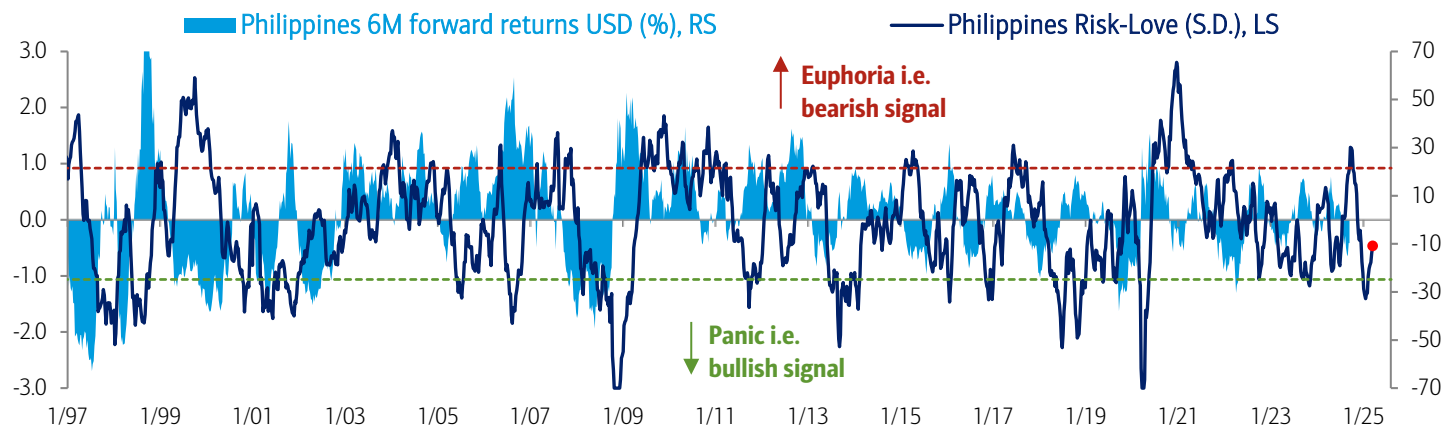


Source: BofA Predictive Analytics, FactSet

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Exhibit 18: The Philippines Risk-Love now firmly out of the panic zone

The Philippines Risk-Love is at the 35th percentile of its history since 1997

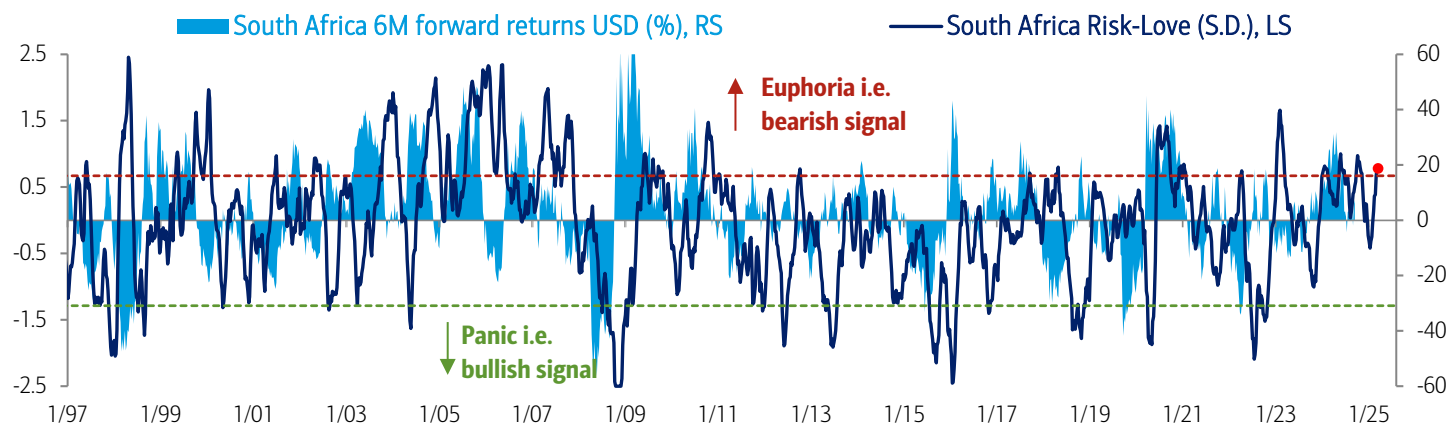


Source: BofA Predictive Analytics, FactSet

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Exhibit 19: South Africa Risk-Love is in euphoria

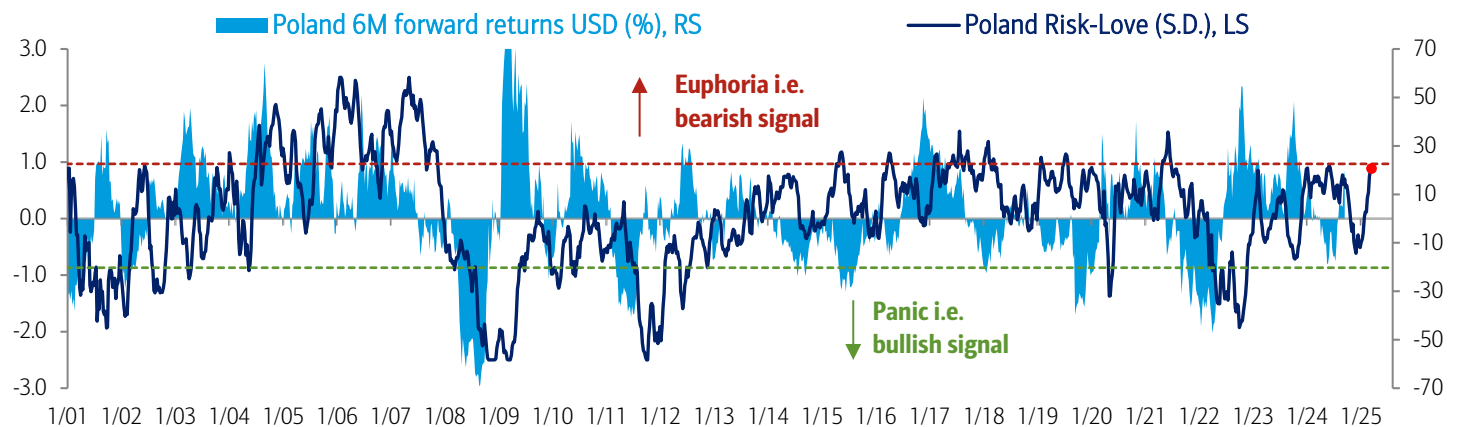
South Africa Risk-Love is at the 85th percentile of its history since 1997



Source: BofA Predictive Analytics, FactSet

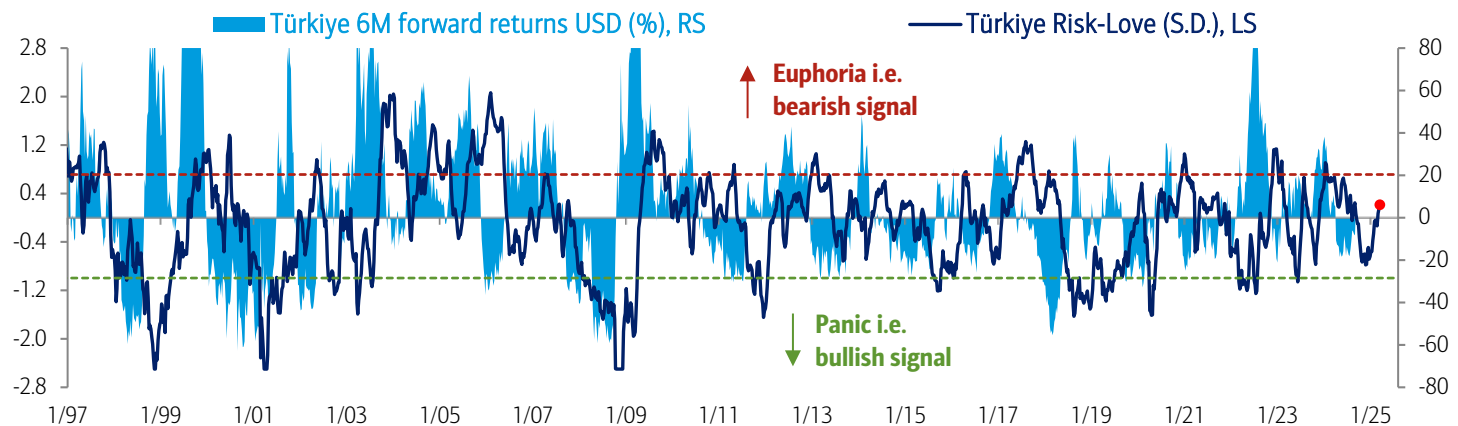
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Exhibit 20: Poland Risk-Love is in touching distance of the Panic zonePoland Risk-Love is at the 82nd percentile of its history since 2001

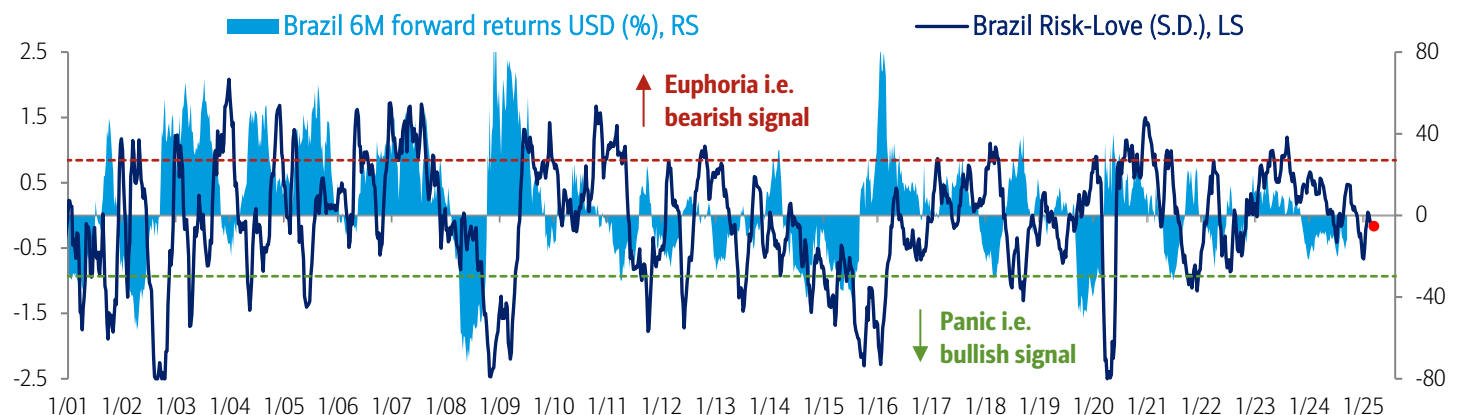
Source: BofA Predictive Analytics, FactSet

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Exhibit 21: Türkiye Risk-Love recovers now firmly in upper strata of the neutral zoneTürkiye Risk-Love is at the 63rd percentile of its history since 1997

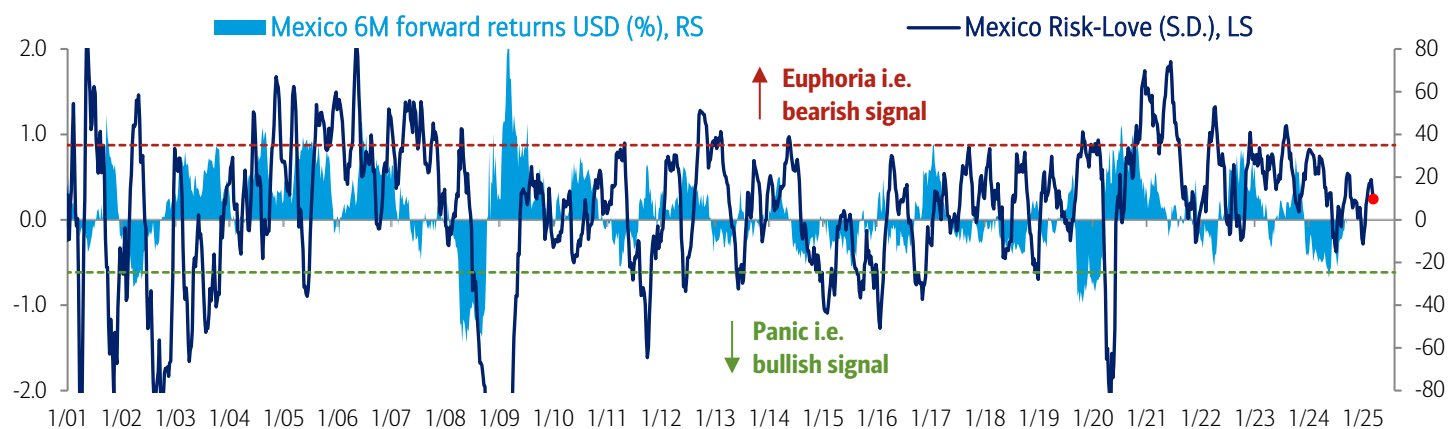
Source: BofA Predictive Analytics, FactSet

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Exhibit 22: Brazil Risk-Love is in the neutral zoneBrazil Risk-Love is at the 42nd percentile of its history since 2001

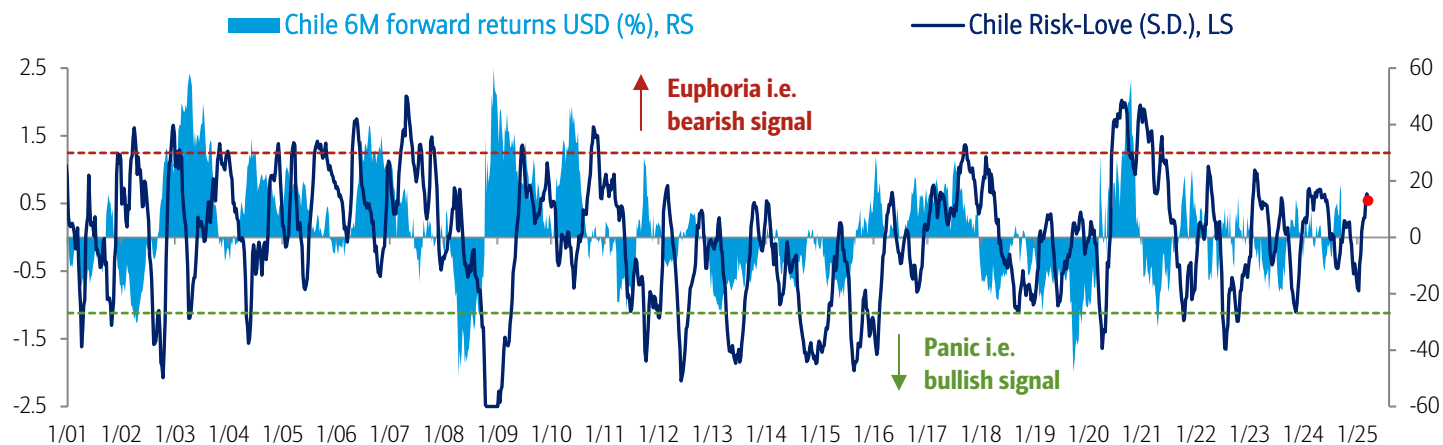
Source: BofA Predictive Analytics, FactSet

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Exhibit 23: Mexico Risk-Love is in the neutral zoneMexico Risk-Love is at the 49th percentile of its history since 2001

Source: BofA Predictive Analytics, FactSet

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Exhibit 24: Chile Risk-Love is now in the upper rungs of the neutral zoneChile Risk-Love is at the 72nd percentile of its history since 2001

Source: BofA Predictive Analytics, FactSet

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Glossary

Global Equity Risk-Love

Risk-Love is a contrary investor sentiment indicator. It tries to quantify investor emotions and helps us understand swings in investor psychology based on data on positioning, investor surveys, volatility, spreads, correlations, hedging and market technicals measures. We have constructed Risk-Love indicators for major Asian / emerging markets as well as for the world as a whole. When at extremes, the indicator is valuable in anticipating reversals in investor mindset, and thus markets.

The Global Risk-Love indicator has 35 factors. It signals buy when it is low and sell when it is extremely high. See [Investor Sentiment: Risk-Love: The brain, bulls and bears 08 July 2015](#) for more information.

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 the following:

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.

Technicals

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.



Disclosures

Important Disclosures

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

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

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

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