Investor Sentiment: Risk-Love

Are we there?

Pessimism, not panic

Global Equity Risk-Love, our contrarian sentiment indicator for equities, has descended to the lower rungs of the neutral zone (25th percentile of history) from borderline euphoria (81st percentile) in July. Put simply, the froth has been ingested, but it is not depressed enough to generate a tactically bullish capitulation signal. Investor survey opinions, put-call ratios and market technicals lean on the pessimistic end of the scale, but volatilities and spreads are not agitated to levels typical of panicked episodes.

The burden of global synchronized tightening

Asia ex-Japan and Emerging Markets Risk-Love are starker, standing on the cusp of panic, as higher rates and stronger USD (up 7% from the July-lows) sap investor appetite for higher risk assets. China/Hong Kong Risk-Love stay near panic as fatigued investors look to either playing a wait-and-watch game or building risk gradually (see note). Korea, and India swooped down the neutral zone, while ASEAN is reeling from panicked sentiment in Singapore, Thailand, and the Philippines. Sentiment in EEMEA/LatAm also moderated, herding in the mid-to-low neutral zone.

In a league of its own

Japan, the investor favorite in the region as per the Asia FMS, is the sole exception with Risk-Love standing resolutely near euphoria (81st percentile of history). Investors are encouraged by the prospects of an end to deflation as well as a decent growth outlook, as evident from the strongest earnings revisions and news sentiment across regions.

Sooner or later, liquidity will get you

Sentiment is an essential component of any market framework, but it typically needs the support of other drivers (policy/growth) for inflections to sustain. Today's setup reflects none of those – global growth outlook is tepid, and policy is expected to remain tight.

In addition, quantitative tightening may have taken a backseat lately, but it is still very much in vogue. A simplistic market timing tool using the major central banks' balance sheet (0.97 correlation with global equity prices since GFC) suggests that equities are fairly valued. Deep undershot levels that scream a buy signal are still some distance to go, bearing in mind that central banks are busy normalizing their balance sheets.

Trendless

under the FINRA rules.

The rates sell-off, the primary trigger behind the summer correction in our view, has slowed down around 5.00%. Our house-view suggests the rate top is near (see note) even though the capacity for a significant downside is limited. Together with a stabilization in bond volatility, this may set the backdrop for range-bound markets in the coming months .

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.

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Refer to important disclosures on page 18 to 20.

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Predictive Analytics Global

Data Analytics



Ritesh Samadhiya, CFA >> Equity Strategist Merrill Lynch (Hong Kong) +852 3508 7907 ritesh.samadhiya@bofa.com

Aritra Baksi, CFA >> Equity Strategist Merrill Lynch (Hong Kong) +852 3508 7914 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.

Are we there?

Exhibit 1: QT is still very much in vogue

Major economies central banks' balance sheet vs global equity markets

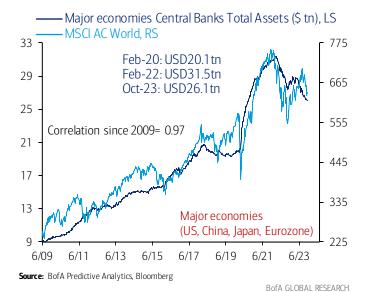
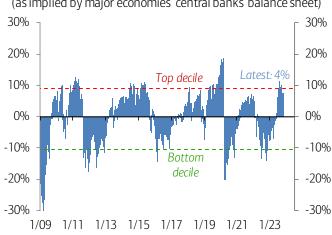


Exhibit 2: Global equities is converging to what's implied by liquidity MSCI AC World Overvaluation/Undervaluation

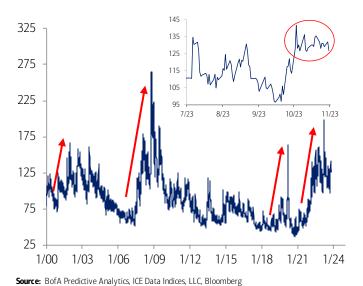
MSCI AC World Overvaluation/Undervaluation (as implied by major economies central banks' balance sheet)



Source: BofA Predictive Analytics, Bloomberg

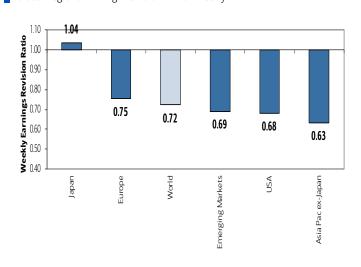
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Exhibit 3: Keep a close tab on bond volatility to see if it is rising Bond volatility: ICE BofA MOVE Index



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Exhibit 4: Japan has the strongest ERR across regions Global Regions Earnings Revision Ratio - Weekly

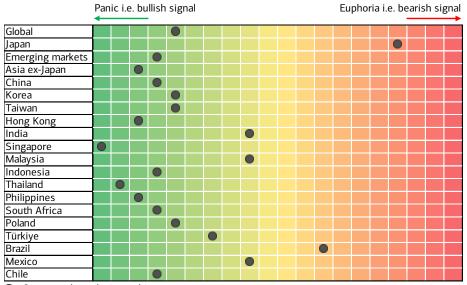


Source : BofA Global Quantitative Strategy, MSCI, IBES

Risk-Love Summary

Exhibit 5: Risk-Love Indicator (Equity sentiment) Summary

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



Current value relative to history

Source: BofA Predictive Analytics

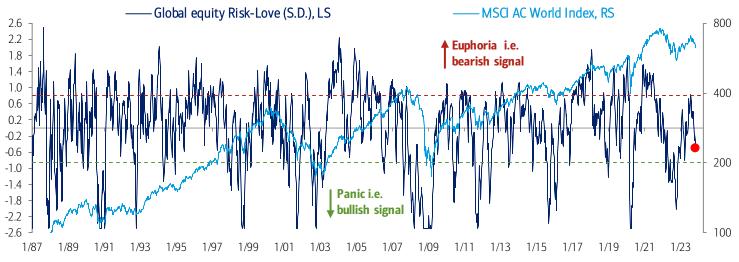
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Global Equity Risk-Love

Exhibit 6 shows our global equity Risk-Love indicator and Exhibits 7-10 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 6: Global Equity Risk-Love

Global Risk-Love is at the 25th percentile of its history since 1987



Source: BofA Predictive Analytics, Bloomberg

Exhibit 7: Global Equity Risk-Love indicator components heatmap

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

			Optimism
	Indicator	Pessimism i.e. bullish signal	i.e. bearish signal
	Positioning	i.e. bullish signal	i.e. bearisti signai
1	Broker optimism - Consensus stock rating for MSCI EM universe (W)		
2	MSCI Emerging Markets ETF premium/discount to NAV (D)		
3	Asia ex-Japan fund cash holdings (M)		
4	Investors' exposure to EMs - Global Fund Manager Survey - asset allocation (M)		
5	Investors' exposure to China - Global Fund Manager Survey - asset allocation (M)		
	Commitment of commercial traders - S&P 500 Index futures longs to shorts (D)		
	Put call ratios		
6	Put / call ratio at market open (ISE Sentiment Index) (D)		
7	CBOE put/call ratio (D)		
8	Euro Stoxx 50 put/call ratio (D)		
9	Nikkei put/call volume ratio (D)		
	MSCI Emerging Markets ETF put/call volume ratio (D)		
	S&P 500 options put/call skew (delta 25, 3month) (D)		
	Surveys		
12	American Association of Individual Investors - bull less bearish ratio (W)		
	National Association of Active Investment Managers Exposure index (W)		
	Small retail trader sentiment (Daily sentiment index) for S&P 500 (D)		
	Major professional brokerage firms and advisors sentiment (Consensus Bullish Sentiment Index) (W)		
	Emerging markets economic surprises Index (D)		
	University of Michigan Survey of Consumer Confidence Sentiment (M)		
	Commodity sentiment (Daily Sentiment index) (D)		
10	Technicals		
19	Emerging markets cyclicals/defensives (3m change) (D)		
	Emerging market turnover, % MSCI market cap (D)		
	MSCI Emerging Markets - distance from 200D moving average (D)		
۷.	Volatility/spreads/correlations		
22	CBOE S&P500 VIX Index (D)		
	Eurozone volatility index VSTOXX (D)		
	CBOE Emerging Markets ETF volatility index (D)		
	Nikkei volatility index (D)		
	SPDR S&P 500 ETF short interest ratio		
	Hong Kong short interest, % total turnover (D)		
	Asia Pac ex-Japan stock-to-stock correlations (M)		
	EM stock less bond returns (6m change) (D)		
	BofA option volatility estimate (MOVE) index (bond volatility) (D)		
	Global FX volatility index (D)		
	Asia ex-Japan CDS spread (D)		
	US 2Y swap spread (D)		
	BAA spread (Moody's corporate bond yields less US 10Y govt bond yield) (D)		
	Global equity Risk-Love		
	•		

Current value 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.



Exhibit 8: Global Equity Risk-Love indicator components trends

Recent trends in positioning and put-call ratios factors



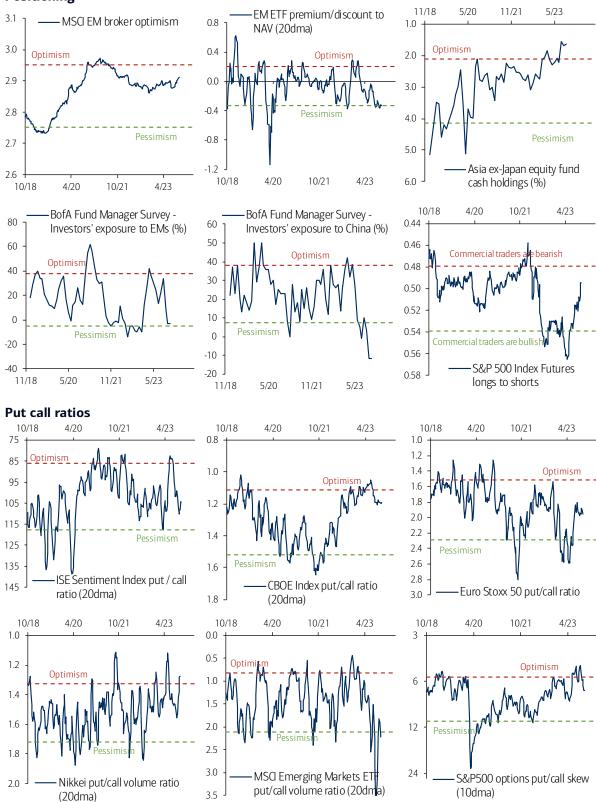
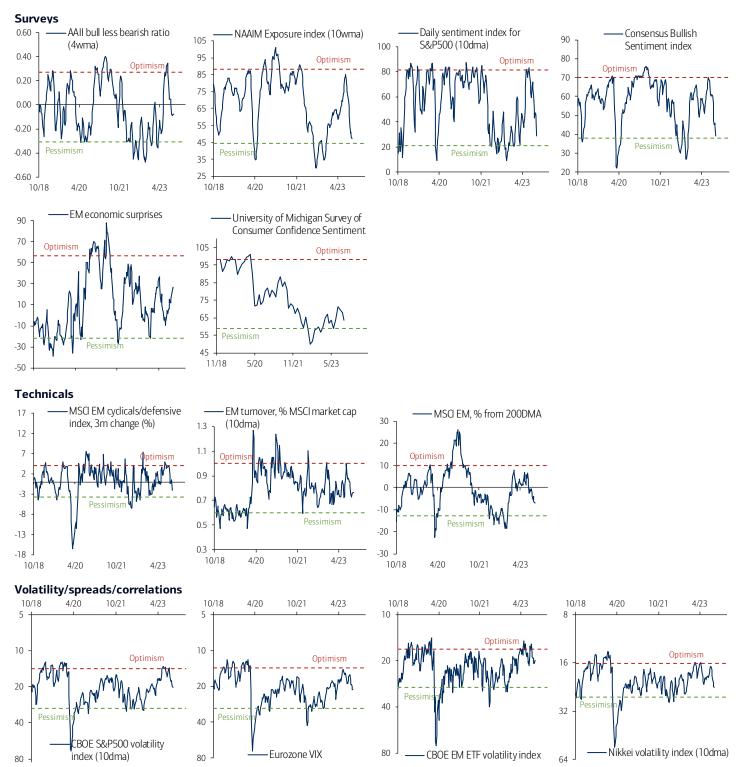




Exhibit 9: Global Equity Risk-Love indicator components trends cont'd

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



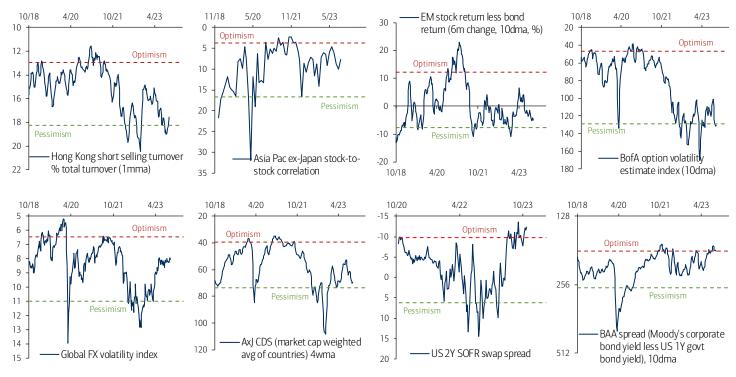
Source: BofA Predictive Analytics, Eikon Refinitiv, Bloomberg, CEIC, Factset, Trade Futures, Consensus Inc



Exhibit 10: Global Equity Risk-Love indicator components trends cont'd

Recent trends in volatility/spreads/correlations factors

Volatility/spreads/correlations contd...



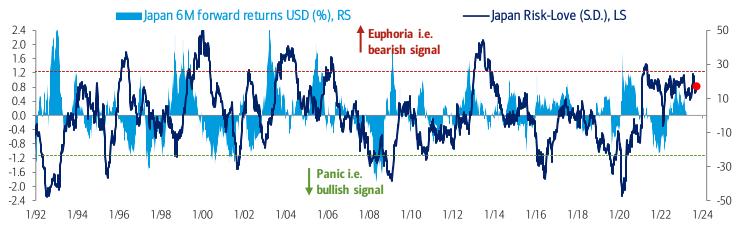
Source: BofA Predictive Analytics, Eikon Refinitiv, Bloomberg, CEIC, Factset, Trade Futures, Consensus In, BofA Asia Pac Quantitative Strategy

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Risk-Love by market

Exhibits 11-29 show Risk-Love measures for Asia and emerging markets.

Exhibit 11: Japan Risk-Love Japan Risk-Love is still near-euphoria



Source: BofA Predictive Analytics, FactSet

Exhibit 12: Emerging Markets Risk-Love

Emerging Markets Risk-Love is closing in on the panic zone

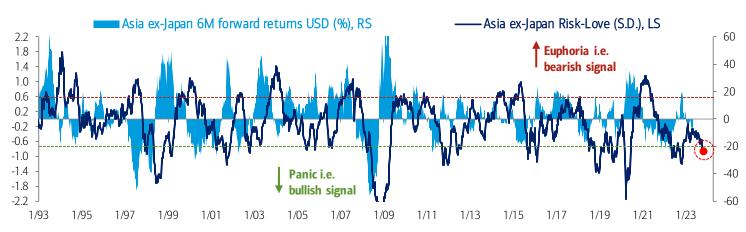


Source: BofA Predictive Analytics, FactSet

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Exhibit 13: Asia ex-Japan Risk-Love

Asia ex-Japan Risk-Love has broken into the panic zone



Source: BofA Predictive Analytics, FactSet

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Exhibit 14: China Risk-Love

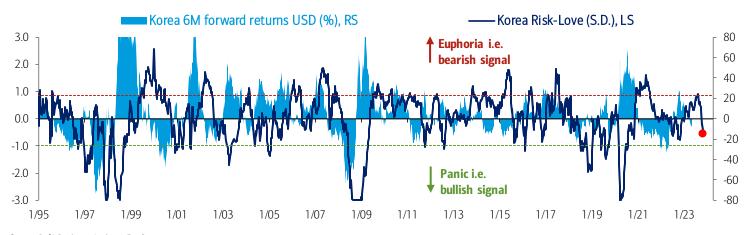
China Risk-Love is in the lower rungs of the neutral zone



Source: BofA Predictive Analytics, FactSet

Exhibit 15: Korea Risk-Love

Korea Risk-Love in the neutral zone



Source: BofA Predictive Analytics, FactSet

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Exhibit 16: Taiwan Risk-Love

Taiwan Risk-Love is in the neutral zone



Source: BofA Predictive Analytics, FactSet

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Exhibit 17: Hong Kong Risk-Love

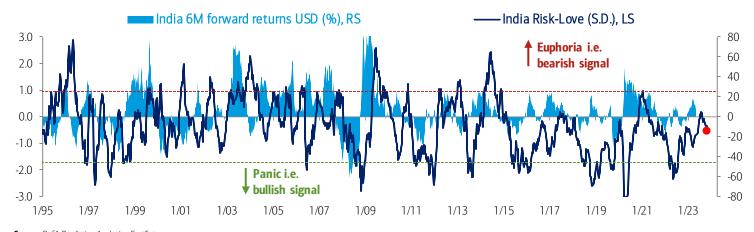
Hong Kong Risk-Love is in the panic zone



Source: BofA Predictive Analytics, FactSet

Exhibit 18: India Risk-Love

India Risk-Love is in the neutral zone



Source: BofA Predictive Analytics, FactSet

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Exhibit 19: Singapore Risk-Love

Singapore Risk-Love is in the panic zone



Exhibit 20: Malaysia Risk-Love

Malaysia Risk-Love is in the neutral zone



Source: BofA Predictive Analytics, FactSet

Exhibit 21: Indonesia Risk-Love

Indonesia Risk-Love is in the neutral zone

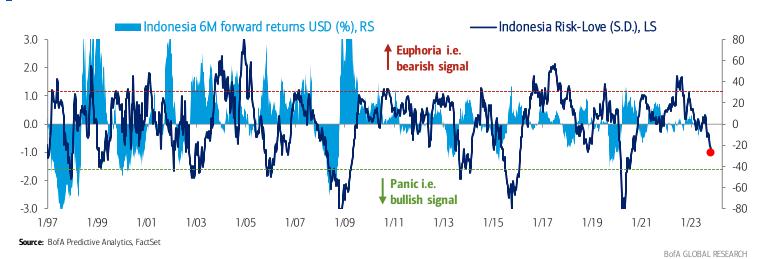


Exhibit 22: Thailand Risk-Love

Thailand Risk-Love is in the panic zone



Exhibit 23: The Philippines Risk-Love

The Philippines Risk-Love has broken into the panic zone



Source: BofA Predictive Analytics, FactSet

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Exhibit 24: South Africa Risk-Love

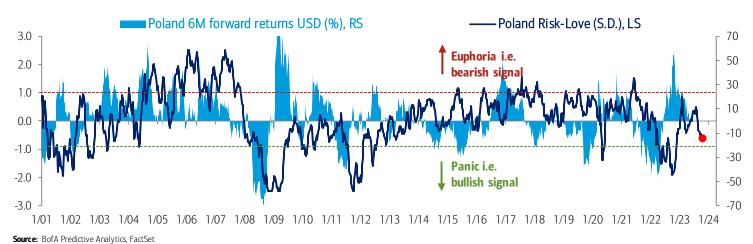
South Africa Risk-Love is in the neutral zone



Source: BofA Predictive Analytics, FactSet

Exhibit 25: Poland Risk-Love

Poland Risk-Love is in the neutral zone



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Exhibit 26: Türkiye Risk-Love

Türkiye Risk-Love is in the neutral zone

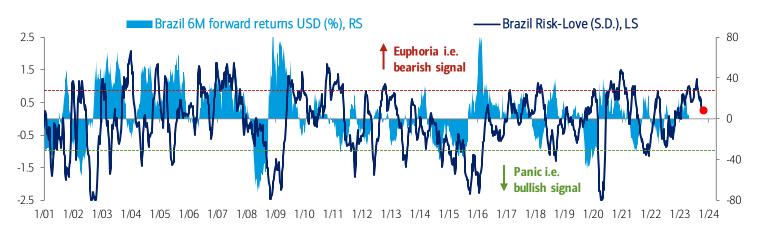


Source: BofA Predictive Analytics, FactSet

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Exhibit 27: Brazil Risk-Love

Brazil Risk-Love is in the neutral zone

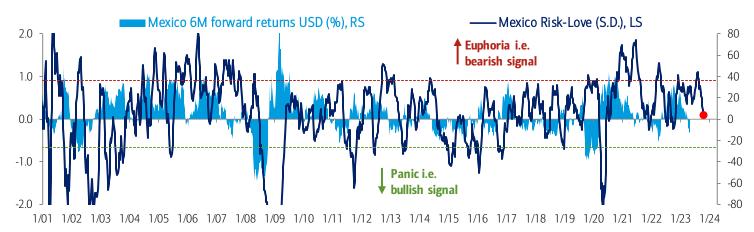


Source: BofA Predictive Analytics, FactSet

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Exhibit 28: Mexico Risk-Love

Mexico Risk-Love is in the neutral zone

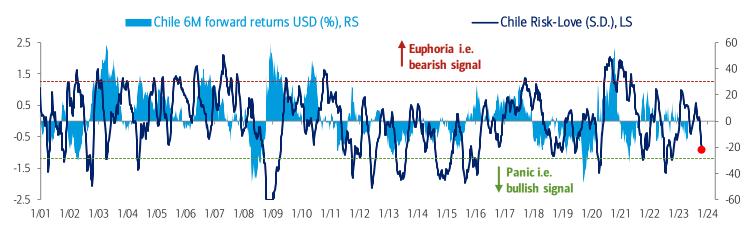


Source: BofA Predictive Analytics, FactSet

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Exhibit 29: Chile Risk-Love

Chile Risk-Love is closing in on the panic zone



Source: BofA Predictive Analytics, FactSet

Exhibit 30: Market intelligence as of 31 October 2023

Performance, valuation and growth information by country/region

Finland (12)	31-Oct-2023		US	D perf (%)				1	12m forward					EPS grov	wth^ (%)
Surfamerical(14)	Region/Country (# Co)		2022	VTD	1	DE ()		DD ()					DOE (0/.)	101/	0/2022	0/2024
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Netherlands (26)	Ireland (6)	74	-27.2	8.3	-6.4	11.8	-30.6	1.4	-17.1	0.5	3.0	-44.5	12.2	10.3	39.9	5.3
Nonway (12)	Italy (23)	379	-17.5	16.2	-1.2	7.6	-35.8	1.1	1.1	0.6	6.1	-32.0	15.1	9.9	9.2	0.2
Portugal (4) 32 -23 -80 06 14/3 -13.1 19 59 12 3.9 5.9 13.5 11.1 30.5 8.2 Spain (19) 371 -9.3 9.7 -4.8 9.4 -25.9 1.1 -8.4 1.0 5.5 -20.8 11.5 9.4 9.5 2.1 Sweden (43) 435 -30.0 -6.1 -6.2 12.5 -21.0 2.0 -7.2 1.1 4.1 -10.5 15.7 13.4 18.0 2.4 Switzerland (45) 1,400 -19.8 -1.8 -4.6 15.4 -10.7 2.8 7.6 1.4 3.4 -8.7 18.4 15.2 3.7 10.0 10.0 10.8 3.4 -2.7 11.1 4.7 -7.6 14.8 15.2 3.7 10.0 10.0 10.0 11.8 5.4 -4.2 9.9 -2.45 1.5 -11.7 1.1 4.7 -7.6 14.8 12.8 -11.8 5.4 5.5 5.2 5.1 5.1 1.1 1.1 4.7 -7.6 14.8 12.8 -11.8 5.4 5.2 5.1 5.1 5.1 1.1 1.1 4.7 -7.6 14.8 12.8 -11.8 5.4 5.2 5.1	Netherlands (26)	624	-29.1	2.1	-1.3	15.3	-11.3	2.3	7.5	1.1	2.6	2.1	15.3	12.7	19.6	8.7
Spaint S	Norway (12)	101	-10.8	-7.7	-5.3	10.0	-21.3	1.6	1.0	0.9	6.5	-32.5	16.3	13.1	-38.5	12.2
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Asia Pac (1545)																
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		52,795			-3.0			2.5								10.1
		6,266			-3.9		-7.4		-6.9					12.2	-4.2	18.6
						14.9		2.3	6.9					13.6		11.3

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.



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.

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.

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.

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



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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%

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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