

## High Frequency Monitor

### Muted macro

## Global equities fell last week on fresh bank concerns

Global equities [fell](#) -0.4% last week as the US Fed hiked rates and fresh US bank concerns emerged. The US (-0.8%) and Europe (-0.6%) were the worst performing [regions](#) while Japan (+1.9%), Asia Pac ex-Japan (+0.5%), and Emerging Markets (+0.5%) all rallied. Global [sector](#) performance was led by Tech Hardware (+1.4%) and Semis (+0.9%). In contrast, Diversified Financials fell -2.6% and a falling [oil price](#) (-7.1%) weighed on the Energy sector (-4.1%). As indicators of the global cycle remain muted, our analysis suggests investors tilt towards defensive assets.

## Earnings Revision Ratio: Down globally. Up in the US

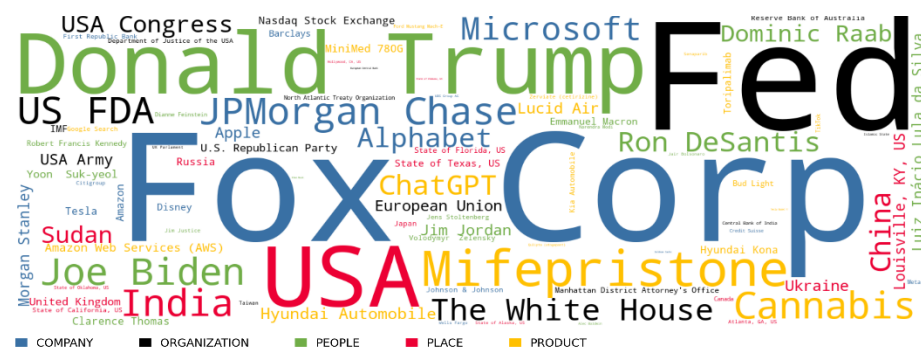
The [Global Earnings Revision Ratio](#) moderated slightly last week from 0.82 to 0.80. The Ratio is now highest in [Europe](#) (1.29) and Japan (1.02), and lowest in Asia (0.58) and Emerging Markets (0.60). Despite the weakness in the US equity market, the US Earnings Revision Ratio has improved during May from 0.62 to 1.00, largely as 78% of US companies surprised on the upside during the reporting season.

## Stock-related news trends have improved

In contrast to the falling Global Wave and Global Earnings Revision Ratio, the [Global News Pulse](#) has improved in recent months as trends in stock-related news have strengthened. In the last 30 days, Top News Mentions globally have included Fox Corp, the Fed, Donald Trump, the USA, Mifepristone, and JP Morgan.

### Chart 1: Top News Mentions (last 30 days)

Top 100 entities mentioned in news (companies, organization, people, place, and products)



**Source :** BofA Global Quantitative Strategy, RavenPack

BoFA GLOBAL RESEARCH

08 May 2023

Quant Strategy  
Global

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Unless otherwise noted all links on the front page of this report refer to sections in this research report.

- [Market Performance](#)
- [Product Performance](#)
- [Style Performance](#)
- [Earnings Revision Ratio](#)
- [Earnings Revision Ratio by Style](#)
- [NewsAlpha](#)
- [Tactical Indicators](#)
- [Volatility](#)
- [Rates](#)
- [Triple Momentum](#)

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Timestamp: 08 May 2023 03:16AM EDT

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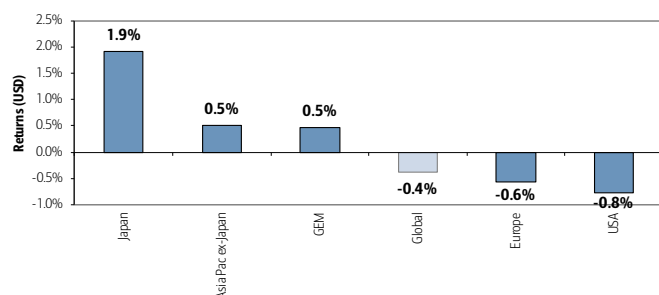
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The Global News Pulse (and the regional and sectors versions of it) is intended to be an indicative metric only and may not be used for reference purposes or as a measure of performance for any financial instrument or contract, or otherwise relied upon by third parties for any other purpose, without the prior written consent of BofA Global Research. This News Pulse was not created to act as a benchmark.

# Market Performance

**Chart 2: Global Regions Performance: Last Week**

Last week: Japan performed the best

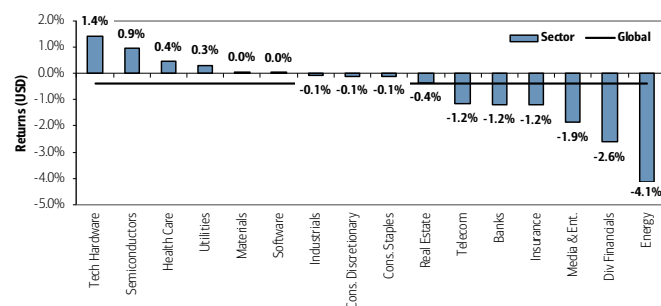


Source : BofA Global Quantitative Strategy, MSCI

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**Chart 3: Global Sectors Performance: Last Week**

Best performing sector last week was Tech Hardware

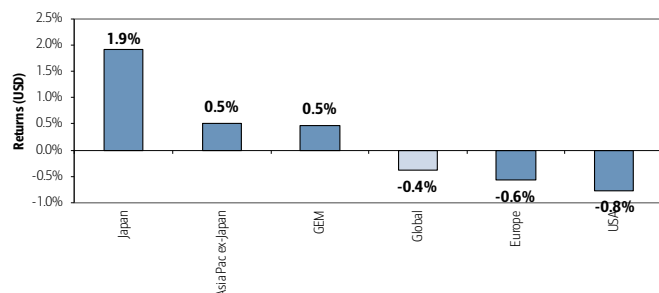


Source : BofA Global Quantitative Strategy, MSCI

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**Chart 4: Global Regions Performance: MTD**

MTD: Japan performed the best

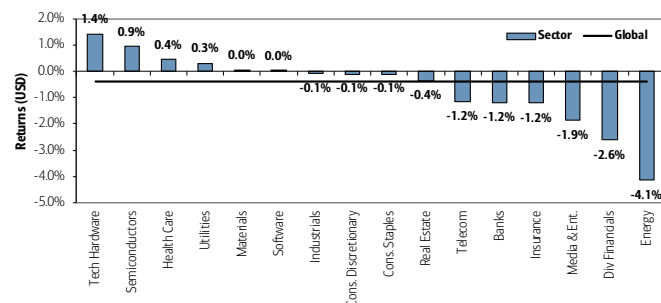


Source : BofA Global Quantitative Strategy, MSCI

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**Chart 5: Global Sectors Performance: MTD**

Best performing sector MTD is Tech Hardware

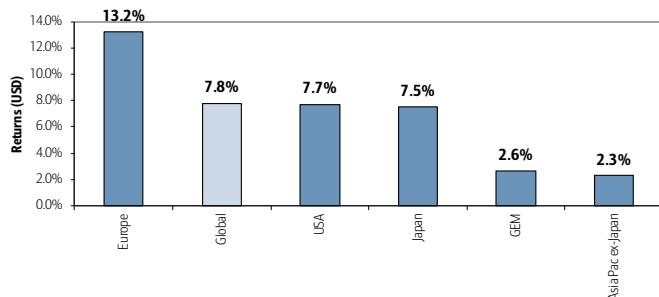


Source : BofA Global Quantitative Strategy, MSCI

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**Chart 6: Global Regions Performance: YTD**

Best performing region this year is Europe

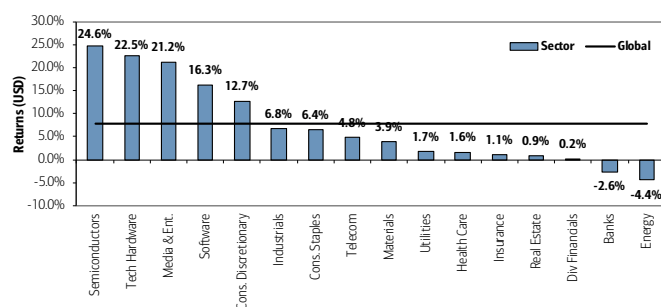


Source : BofA Global Quantitative Strategy, MSCI

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**Chart 7: Global Sectors Performance: YTD**

Best performing sector YTD is Semiconductors



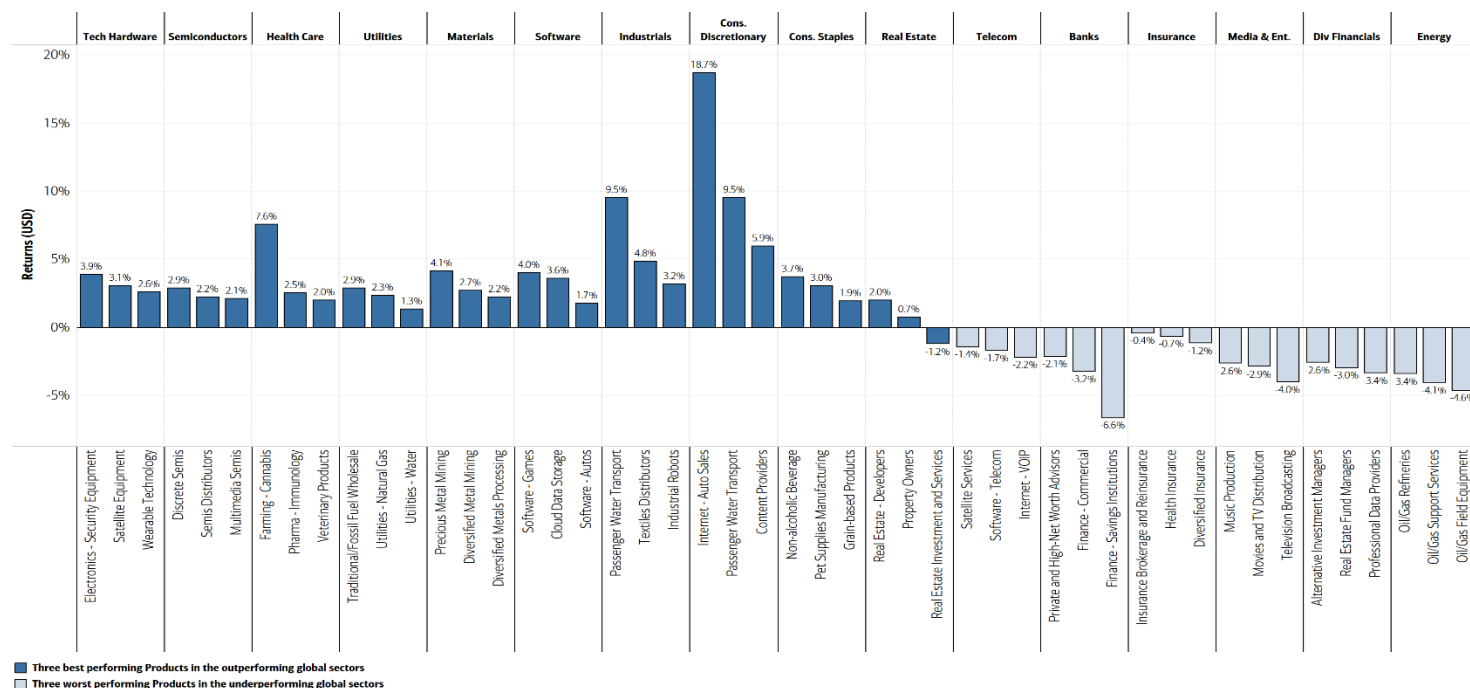
Source : BofA Global Quantitative Strategy, MSCI

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# Product Performance

**Chart 8: Best & Worst Performing Products - Last Week**

Last week, Internet - Auto Sales performed the best and Finance - Savings Institutions performed the worst.

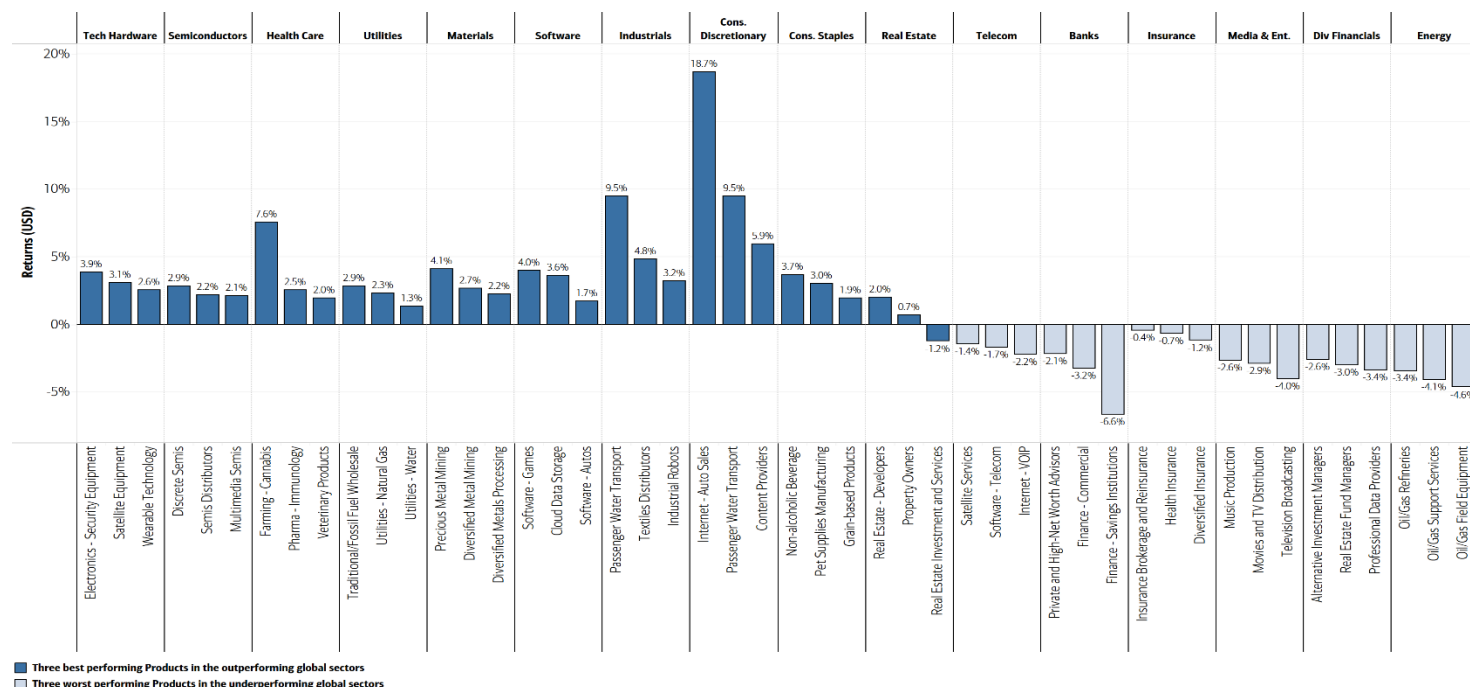


Source : BoFA Global Quantitative Strategy, MSCI, IBES, Factset

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**Chart 9: Best & Worst Performing Products - MTD**

Month-to-date, the best performing product is Internet - Auto Sales and the worst performing product is Finance - Savings Institutions.

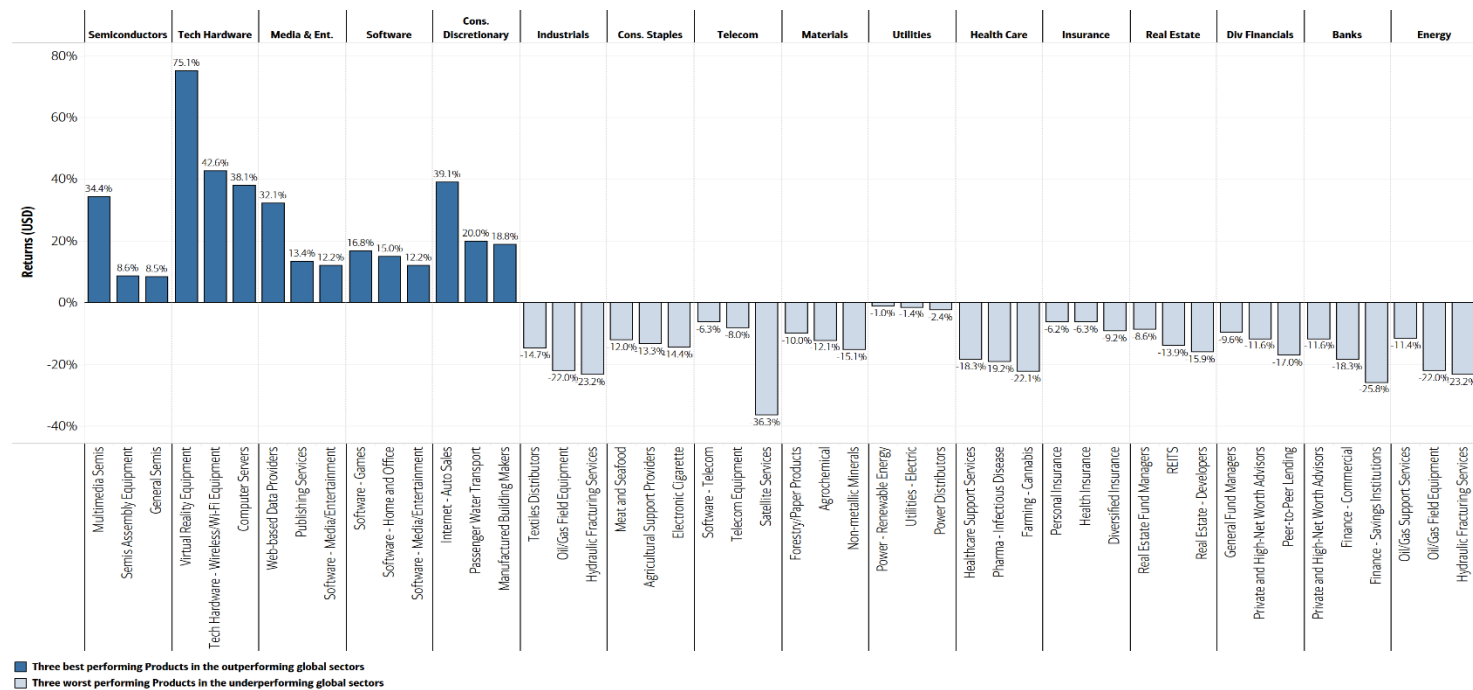


Source : BoFA Global Quantitative Strategy, MSCI, IBES, Factset

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## Chart 10: Best & Worst Performing Products - YTD

Year-to-date, the best performing product is Virtual Reality Equipment and the worst performing product is Satellite Services.



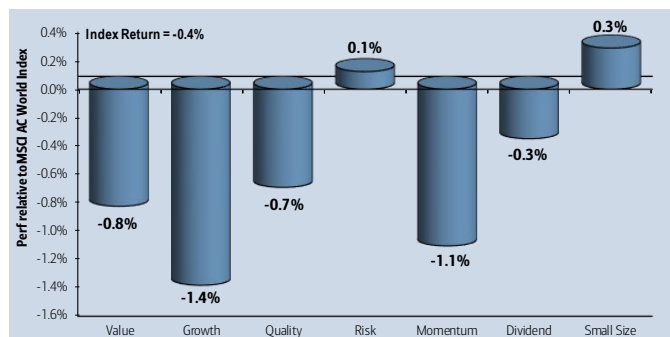
Source : BofA Global Quantitative Strategy, MSCI, IBES, Factset

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# Style Performance

**Chart 11: Global Quantessential Style Rel Performance: Last Week**

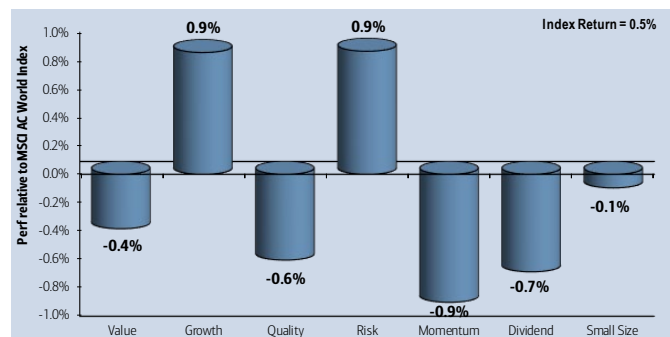
Last week the best performing style was Small Size



Source : BofA Global Quantitative Strategy, MSCI, IBES, S&P, Worldscope, Bloomberg  
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**Chart 12: Asia Pac Quantessential Style Rel Performance: Last Week**

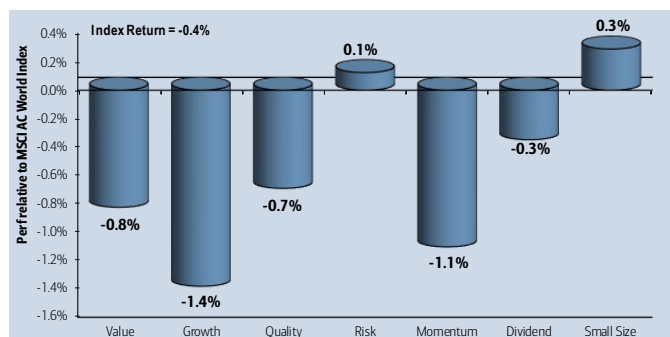
Risk was the best performing style last week



Source : BofA Global Quantitative Strategy, MSCI, IBES, S&P, Worldscope, Bloomberg  
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**Chart 13: Global Quantessential Style Relative Performance: MTD**

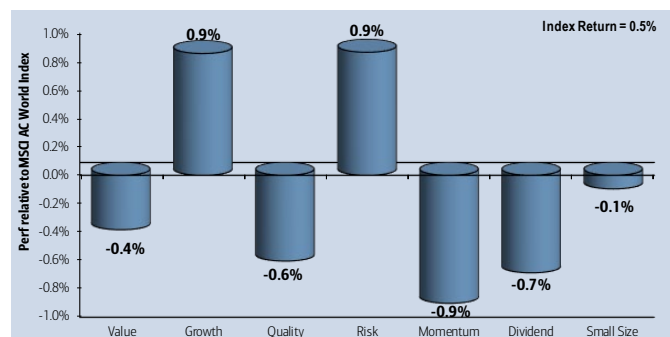
Small Size is the best performing style this month



Source : BofA Global Quantitative Strategy, MSCI, IBES, S&P, Worldscope, Bloomberg  
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**Chart 14: Asia Pac Quantessential Style Relative Performance: MTD**

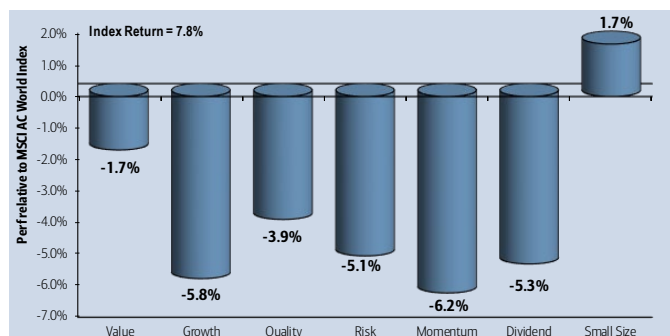
This month the best performing style is Risk



Source : BofA Global Quantitative Strategy, MSCI, IBES, S&P, Worldscope, Bloomberg  
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**Chart 15: Global Quantessential Style Relative Performance: YTD**

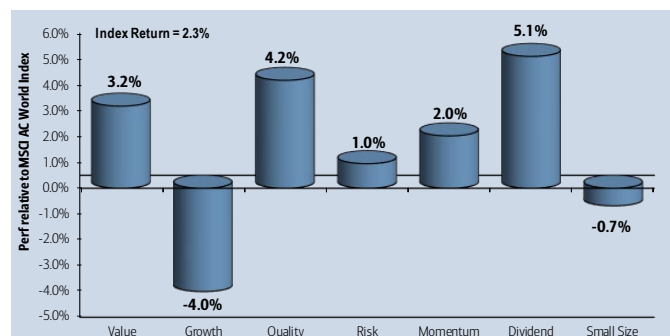
Small Size is the best performing style this year



Source : BofA Global Quantitative Strategy, MSCI, IBES, S&P, Worldscope, Bloomberg  
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**Chart 16: Asia Pac Quantessential Style Relative Performance: YTD**

This year the best performing style is Dividend

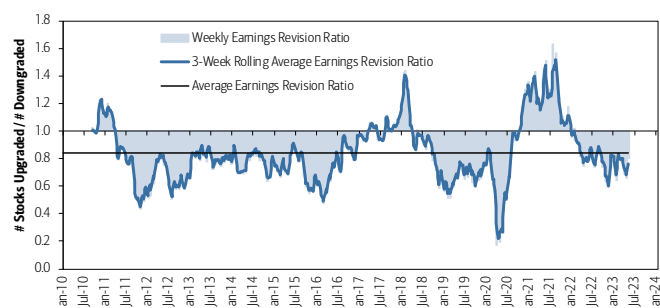


Source : BofA Global Quantitative Strategy, MSCI, IBES, S&P, Worldscope, Bloomberg  
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# Earnings Revision Ratio

**Chart 17: Global Earnings Revision Ratio - Weekly**

Earnings revisions fell in World last week

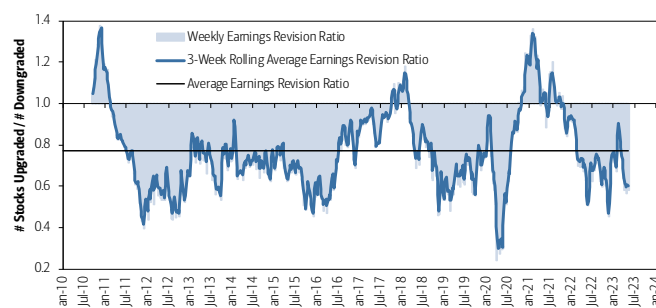


Source : BofA Global Quantitative Strategy, MSCI, IBES

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**Chart 18: Asia Pac Earnings Revision Ratio - Weekly**

Earnings revisions fell in Asia Pac ex-Japan last week

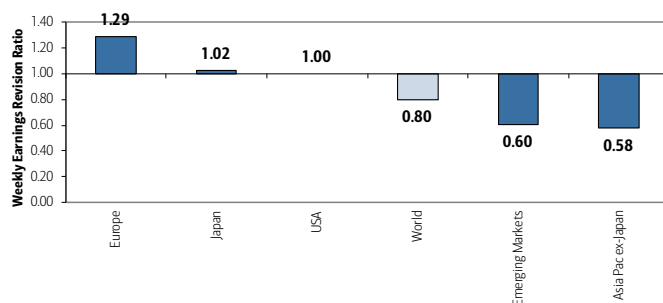


Source : BofA Global Quantitative Strategy, MSCI, IBES

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**Chart 19: Global Regions Earnings Revision Ratio - Weekly**

ERR is above 1.0 in 3 regions

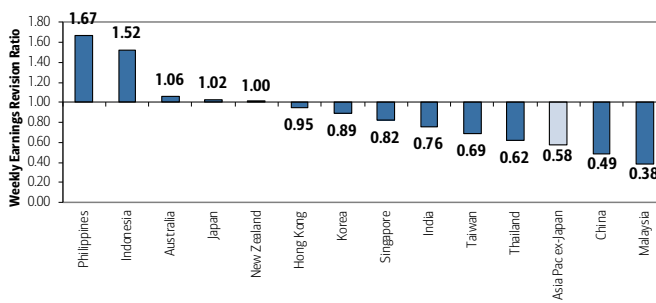


Source : BofA Global Quantitative Strategy, MSCI, IBES

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**Chart 20: Asia Pac Countries Earnings Revision Ratio - Weekly**

Earnings Revision Ratio is strongest in Philippines

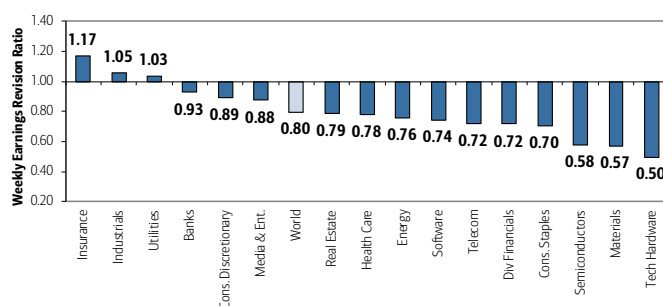


Source : BofA Global Quantitative Strategy, MSCI, IBES

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**Chart 21: Global Sectors Earnings Revision Ratio - Weekly**

There are more upgrades than downgrades in 3 out of 16 sectors

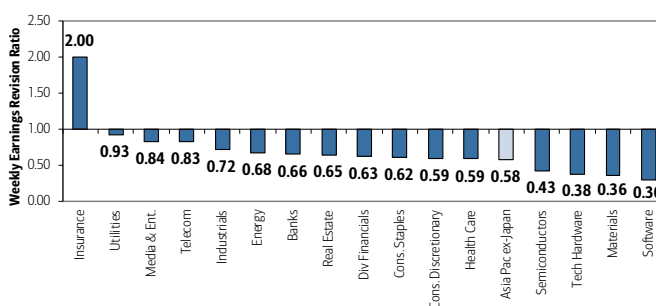


Source : BofA Global Quantitative Strategy, MSCI, IBES

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**Chart 22: Asia Pac Sectors Earnings Revision Ratio - Weekly**

1 out of 16 sectors have a ratio above 1.0



Source : BofA Global Quantitative Strategy, MSCI, IBES

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**Table 1: Global Region/Sector/Style - Earnings Revision Ratio**

Earnings revisions fell in World last week

Regions/Sectors	Feb-23	Mar-23	Apr-23	May-23 - Wk1	May-23 - Wk2
World	0.79	0.79	0.66	0.82	0.80
USA	0.67	0.79	0.62	0.93	1.00
Europe	0.83	1.12	0.85	1.12	1.29
Japan	0.63	0.69	0.77	1.02	1.02
Asia Pac ex-Japan	0.85	0.70	0.57	0.66	0.58
Emerging Markets	0.85	0.74	0.60	0.67	0.60
Global - Banks	1.19	1.22	0.79	0.92	0.93
Global - Cons. Discretionary	0.77	0.85	0.75	0.93	0.89
Global - Cons. Staples	0.89	0.76	0.72	0.73	0.70
Global - Div Financials	0.63	1.11	0.54	0.86	0.72
Global - Energy	0.94	0.71	0.42	0.69	0.76
Global - Health Care	0.67	0.59	0.60	0.84	0.78
Global - Industrials	0.78	0.87	0.82	1.13	1.05
Global - Insurance	0.80	0.85	0.74	0.85	1.17
Global - Materials	0.71	0.68	0.57	0.60	0.57
Global - Media & Ent.	0.55	0.66	0.53	1.10	0.88
Global - Real Estate	0.64	0.61	0.58	0.70	0.79
Global - Semiconductors	1.12	0.71	0.70	0.54	0.58
Global - Software	0.84	0.93	0.75	0.78	0.74
Global - Tech Hardware	0.73	0.52	0.42	0.53	0.50
Global - Telecom	0.70	0.94	0.65	0.69	0.72
Global - Utilities	0.93	0.95	0.75	0.94	1.03
Global - Value	0.61	0.75	0.64	0.82	0.84
Global - Growth	1.19	1.03	0.74	0.94	0.96
Global - Quality	0.75	0.78	0.79	0.98	1.01
Global - Risk	0.62	0.77	0.66	1.04	0.94
Global - Momentum	1.22	1.21	1.02	1.28	1.56
Global - Dividend	0.69	0.72	0.62	0.83	0.79
Global - Small Size	0.74	0.62	0.42	0.56	0.47

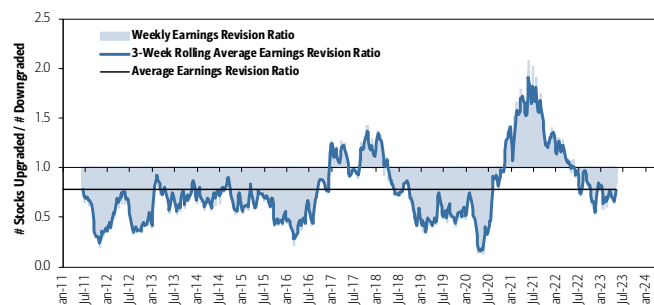
Source : BofA Global Quantitative Strategy, MSCI, IBES

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# Quantessential Styles: Earnings Revision Ratio

**Chart 23: Global Value Earnings Revision Ratio - Weekly**

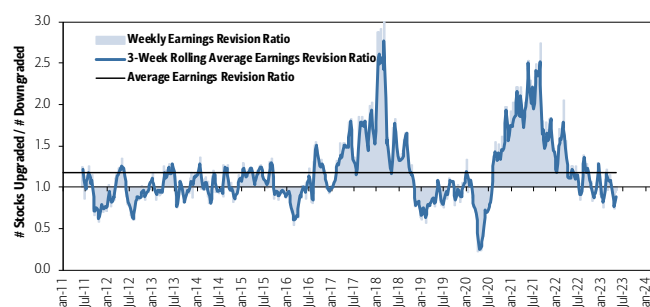
Earnings revisions improved in Value last week



Source : BoFA Global Quantitative Strategy, MSCI, IBES, S&P, Worldscope, Bloomberg  
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**Chart 24: Global Growth Earnings Revision Ratio - Weekly**

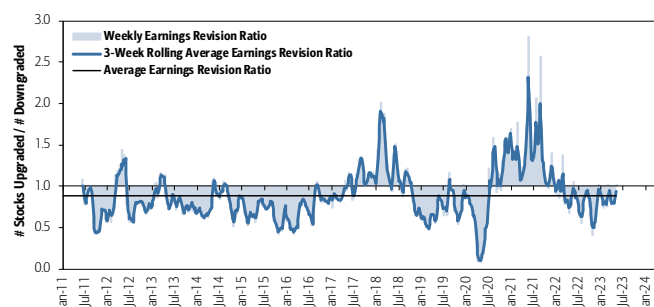
Earnings revisions improved in Growth last week but remains below long term average



Source : BoFA Global Quantitative Strategy, MSCI, IBES, S&P, Worldscope, Bloomberg  
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**Chart 25: Global Quality Earnings Revision Ratio - Weekly**

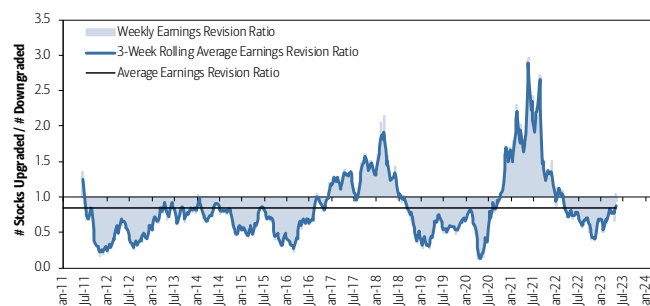
Earnings revisions improved for Quality last week and remains above long-term average



Source : BoFA Global Quantitative Strategy, MSCI, IBES, S&P, Worldscope, Bloomberg  
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**Chart 26: Global Risk Earnings Revision Ratio - Weekly**

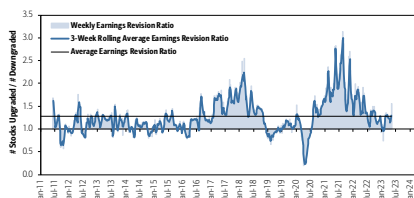
Earnings revisions fell in Risk last week



Source : BoFA Global Quantitative Strategy, MSCI, IBES, S&P, Worldscope, Bloomberg  
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**Chart 27: Global Momentum Earnings Revision Ratio - Weekly**

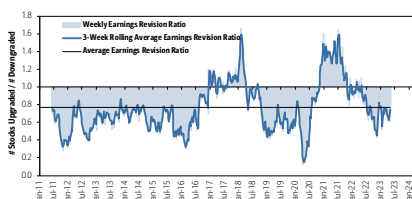
Earnings revisions improved for Momentum last week and remains above long-term average



Source : BoFA Global Quantitative Strategy, MSCI, IBES, S&P, Worldscope, Bloomberg  
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**Chart 28: Global Dividend Earnings Revision Ratio - Weekly**

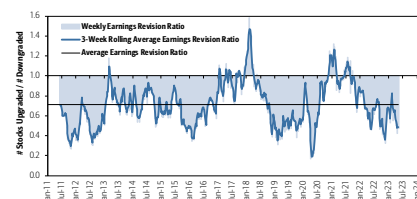
Earnings revision moderated in Dividend last week but remains above average



Source : BoFA Global Quantitative Strategy, MSCI, IBES, S&P, Worldscope, Bloomberg  
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**Chart 29: Global Small Size Earnings Revision Ratio - Weekly**

Earnings revisions fell in Small Size last week, but the trend remains strong

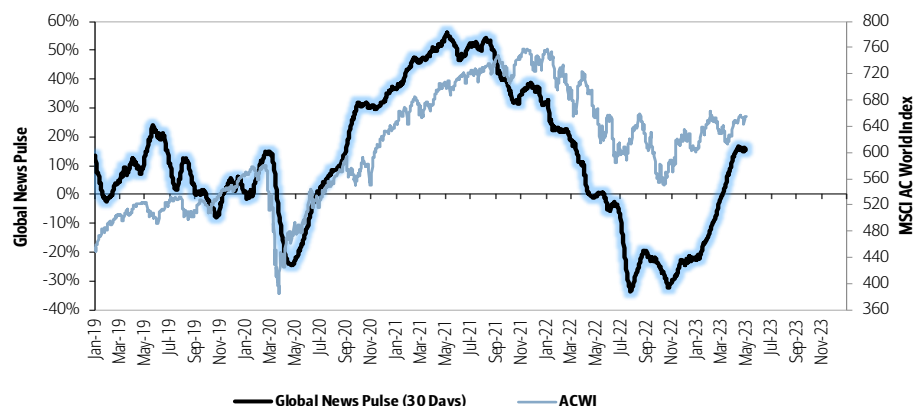


Source : BoFA Global Quantitative Strategy, MSCI, IBES, S&P, Worldscope, Bloomberg  
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# NewsAlpha

**Chart 30: Global News Pulse (last 30 days)**

Globally news pulse remains unchanged last week

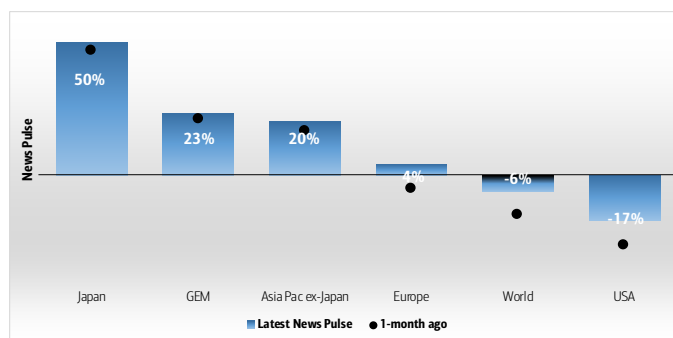


Source : BofA Global Quantitative Strategy, MSCI, Ravenpack

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**Chart 31: Global Regions: Latest News Pulse**

Japan has the strongest News Pulse, while The USA has the lowest Pulse

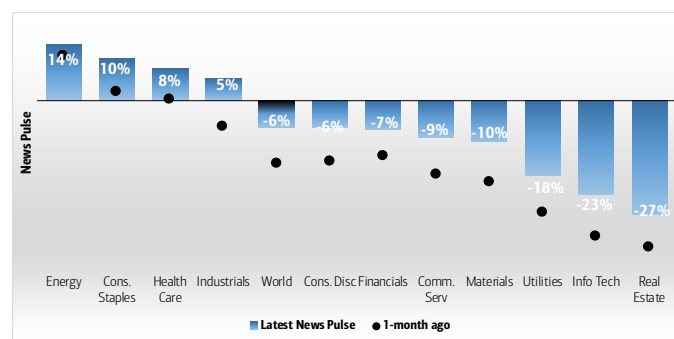


Source : BofA Global Quantitative Strategy, MSCI, Ravenpack

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**Chart 32: Global Sectors: Latest News Pulse**

Energy has the strongest News Pulse, while Real Estate has the lowest Pulse

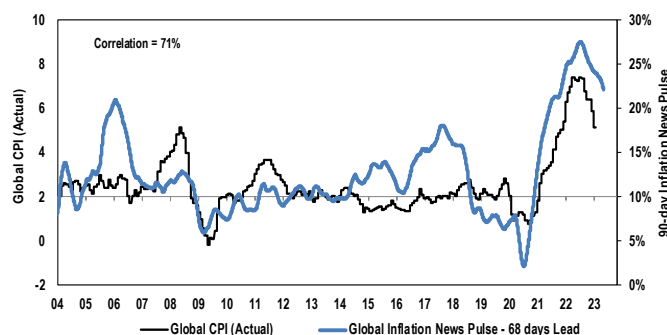


Source : BofA Global Quantitative Strategy, MSCI, Ravenpack

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**Chart 33: Inflation News Pulse vs. Global CPI**

Inflation News Pulse leads Global CPI by 68 days with correlation of 71%

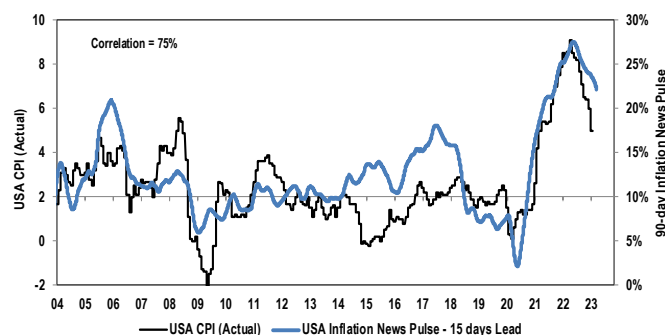


Source : BofA Global Quantitative Strategy, MSCI, Ravenpack

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**Chart 34: Inflation News Pulse vs. USA CPI**

Inflation News Pulse leads USA CPI by 15 days with correlation of 75%

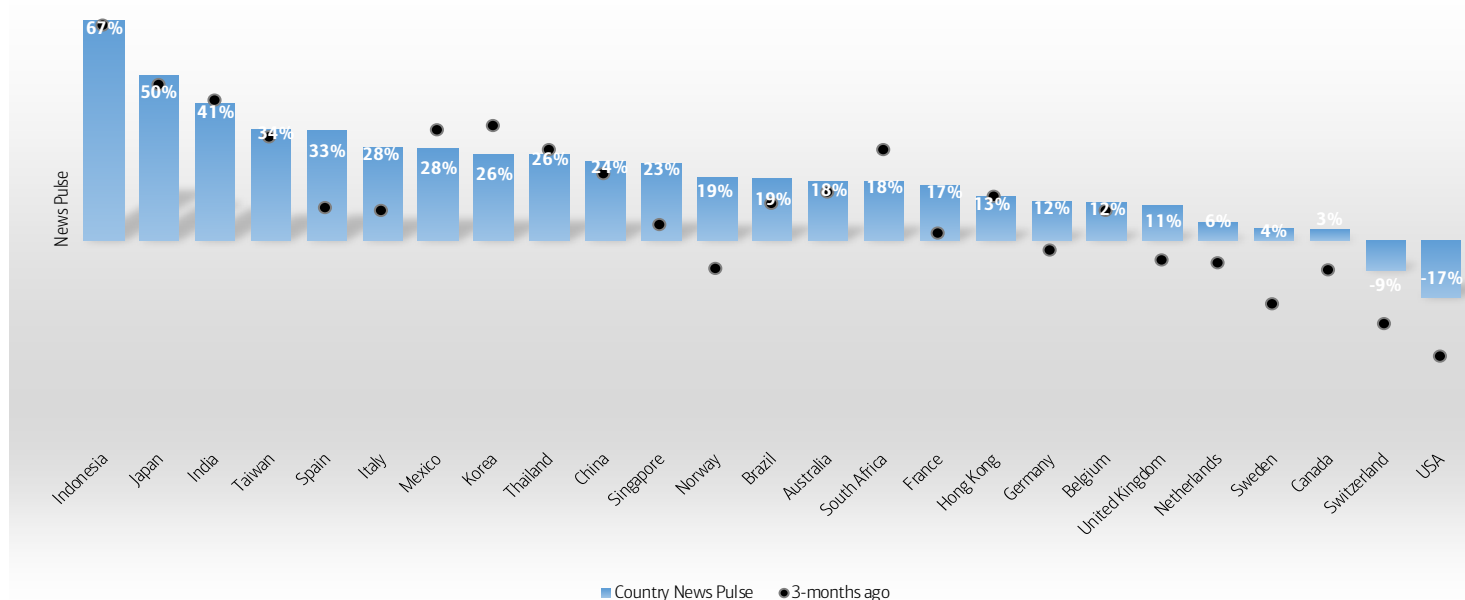


Source : BofA Global Quantitative Strategy, MSCI, Ravenpack

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**Chart 35: Current News Pulse by Global Countries**

News aggregate is highest in Indonesia and Japan

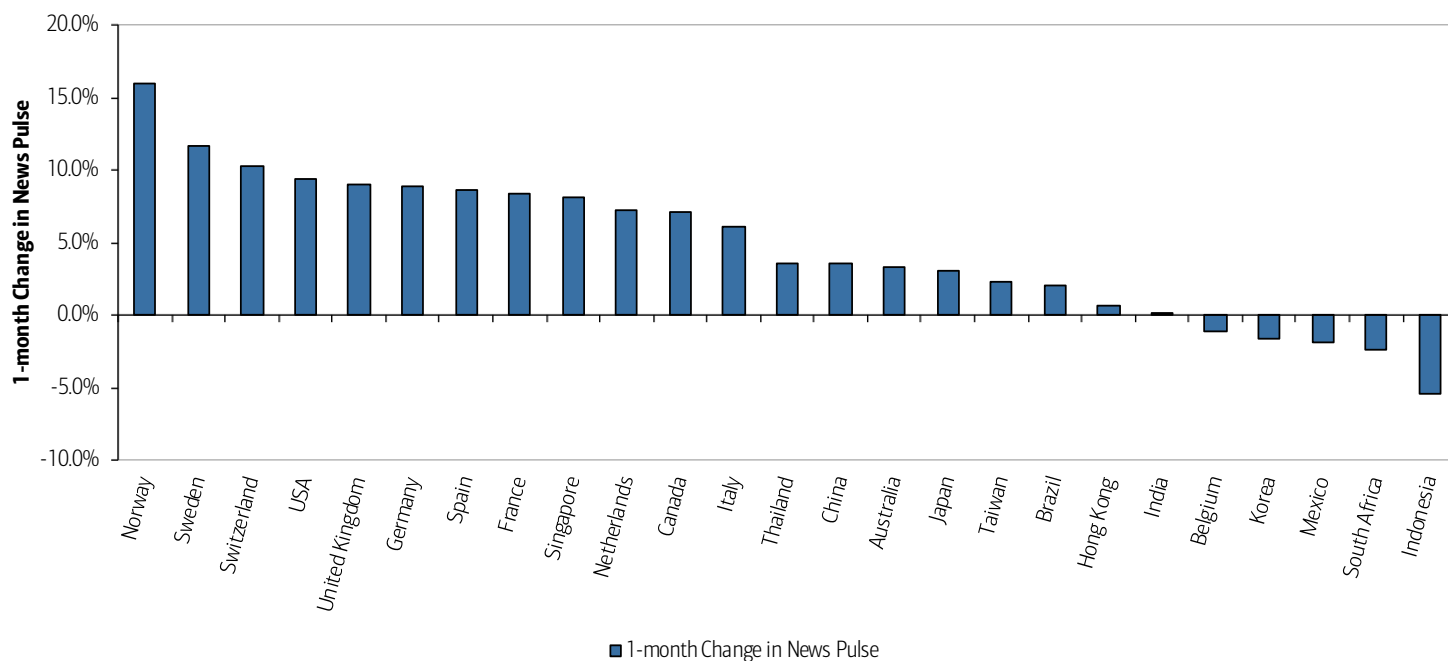


Source : BofA Global Quantitative Strategy, MSCI, ExShare, RavenPack

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**Chart 36: 1-month change in News Pulse by Global Countries**

News aggregate improved the most in Norway and Sweden



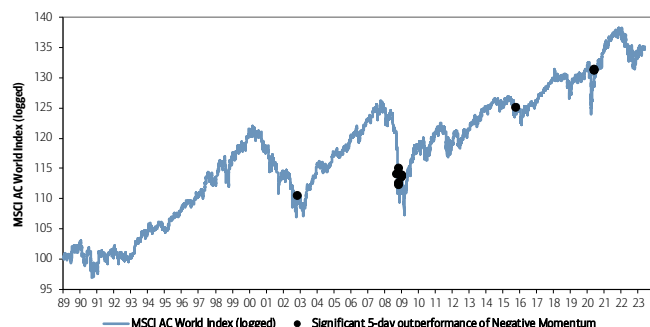
Source : BofA Global Quantitative Strategy, MSCI, ExShare, RavenPack

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# Tactical Indicators

**Chart 37: MSCI ACWI and Significant (9% in a five-day period) Negative QE Momentum Relative Performance**

Significant outperformance of Negative Price Momentum proved to be early signal for markets rally

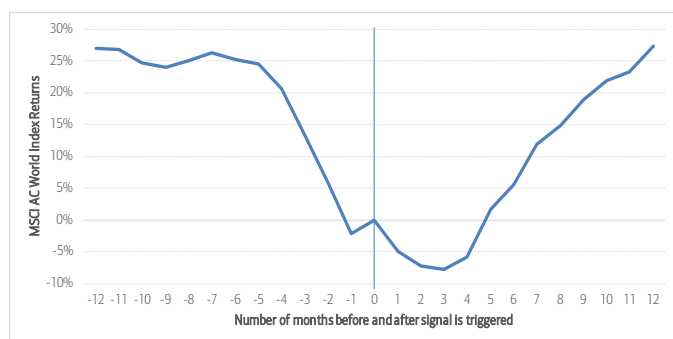


Source : BofA Global Quantitative Strategy, MSCI, IBES

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**Chart 39: MSCI ACWI Performance in 12 months before and after the significant rotation in Global Negative Momentum**

In the past, when signal triggered global equities dipped for three months before rallying 26% in the next 12 months

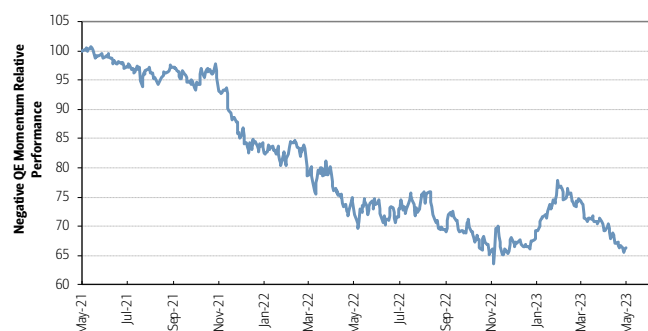


Source : BofA Global Quantitative Strategy, MSCI, IBES

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**Chart 38: Negative QE Momentum Relative Performance: Last 2 years**

Last week, Negative QE Momentum underperformed by -0.6%



Source : BofA Global Quantitative Strategy, MSCI, IBES

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**Table 2: Subsequent ACWI performance after the significant rotation in Global Negative Momentum**

In the past, after a significant rotation in Negative Momentum, global equities averaged 26% in the next 12 months with 100% hit rate

Dates	Subs 1-month ACWI returns	Subs 3-months ACWI returns	Subs 6-months ACWI returns	Subs 1-year ACWI returns
22-Nov-02	-4%	-9%	2%	16%
31-Oct-08	-12%	-13%	-1%	20%
3-Nov-08	-11%	-12%	0%	19%
4-Nov-08	-16%	-15%	-5%	13%
27-Nov-08	2%	-14%	16%	35%
28-Nov-08	3%	-19%	16%	33%
5-Jan-09	-10%	-10%	0%	30%
6-Jan-09	-10%	-11%	0%	30%
7-Jan-09	-7%	-7%	1%	31%
8-Jan-09	-6%	-6%	2%	32%
8-Oct-15	1%	-7%	-2%	4%
5-Jun-20	0%	7%	18%	33%
8-Jun-20	-1%	4%	16%	32%
9-Jun-20	-1%	5%	17%	32%
Hit Rate	21%	21%	57%	100%
Average	-5.1%	-7.8%	5.6%	25.7%

Source : BofA Global Quantitative Strategy, MSCI, IBES

BoFA GLOBAL RESEARCH

**Chart 40: Copper (Spot), weekly last 2 years**

Copper price fell (-0.2%)



Source : BofA Global Quantitative Strategy, Bloomberg

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**Chart 41: AUD-USD cross rate, weekly last 2 years**

AUD appreciated (+2.0%)



Source : BofA Global Quantitative Strategy, Bloomberg

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**Chart 42: US Initial jobless claims, weekly last 2 years**

US initial jobless claims increased by +13,000 to 242,000

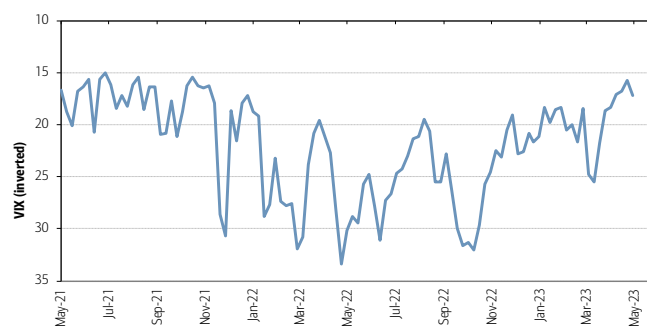


Source : BofA Global Quantitative Strategy, Bloomberg

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**Chart 43: VIX (inverted), weekly last 2 years**

VIX moved from 15.8 to 17.2



Source : BofA Global Quantitative Strategy, Bloomberg

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**Chart 44: Global Credit Spreads, weekly 2 years**

Global credit spreads widened (+22 bps)



Source : BofA Global Quantitative Strategy, Bloomberg

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**Chart 45: Global Cycle Sensitive, weekly returns 2 year**

Global Cycle Sensitive underperformed (-0.7%)



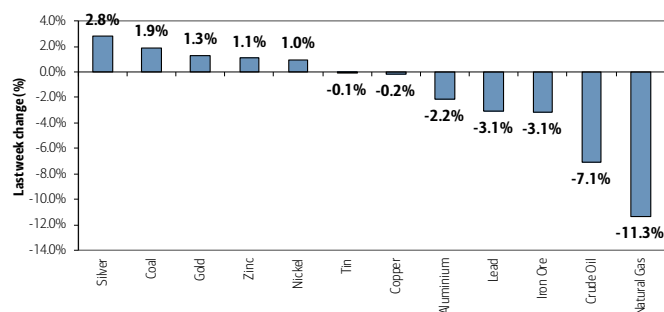
Source : BofA Global Quantitative Strategy, Bloomberg

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# Commodities

**Chart 46: Hard Commodities - Last week change**

Natural Gas fell the most last week

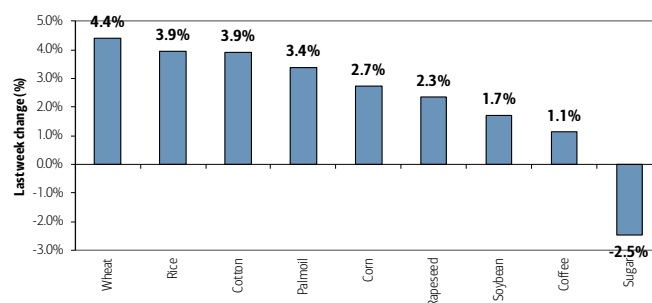


Source : BofA Global Quantitative Strategy, Bloomberg

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**Chart 47: Soft Commodities - Last week change**

Wheat increased the most last week

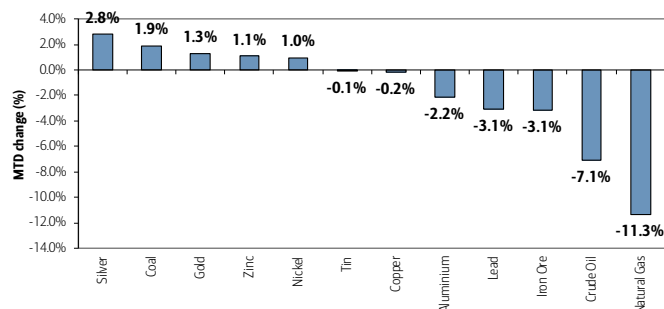


Source : BofA Global Quantitative Strategy, Bloomberg

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**Chart 48: Hard Commodities - MTD change**

Silver increased the most MTD

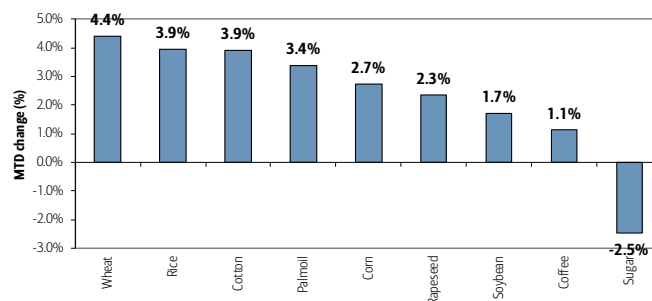


Source : BofA Global Quantitative Strategy, Bloomberg

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**Chart 49: Soft Commodities - MTD change**

Wheat increased the most MTD

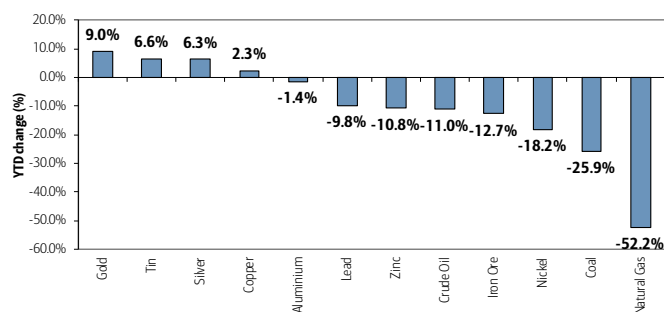


Source : BofA Global Quantitative Strategy, Bloomberg

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**Chart 50: Hard Commodities - YTD change**

Gold increased the most YTD

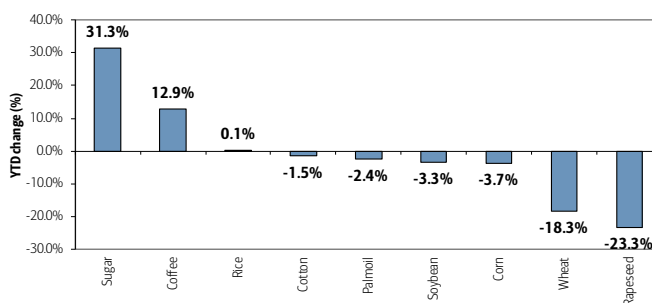


Source : BofA Global Quantitative Strategy, Bloomberg

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**Chart 51: Soft Commodities - YTD change**

Sugar increased the most YTD



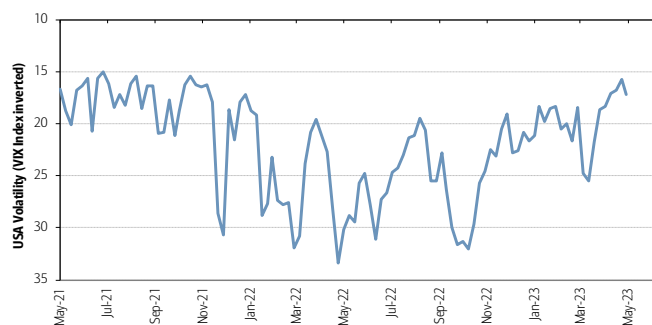
Source : BofA Global Quantitative Strategy, Bloomberg

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# Volatility

**Chart 52: USA Volatility (VIX Index) - Inverted**

VIX Index moved from 15.8 to 17.2

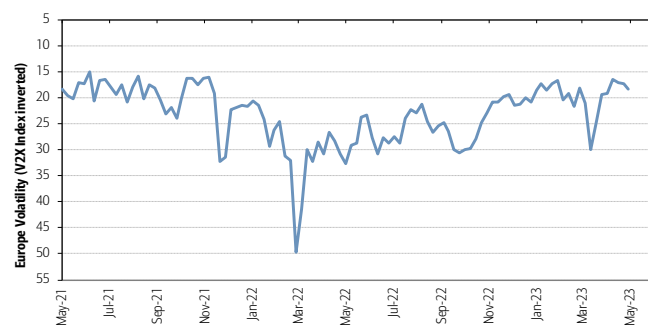


Source : BofA Global Quantitative Strategy, Bloomberg

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**Chart 53: Europe Volatility (V2X Index) - Inverted**

V2X Index moved from 17.4 to 18.3

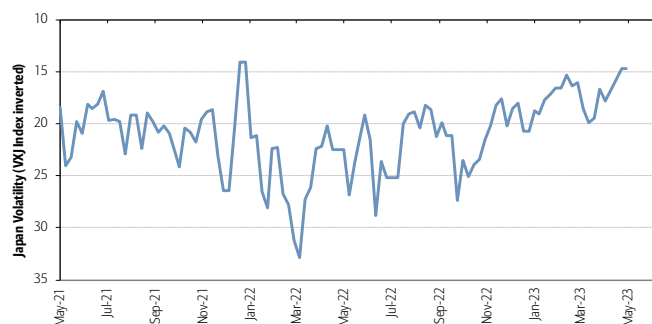


Source : BofA Global Quantitative Strategy, Bloomberg

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**Chart 54: Japan Volatility (VXJ Index) - Inverted**

VXJ Index moved from 14.7 to 14.7

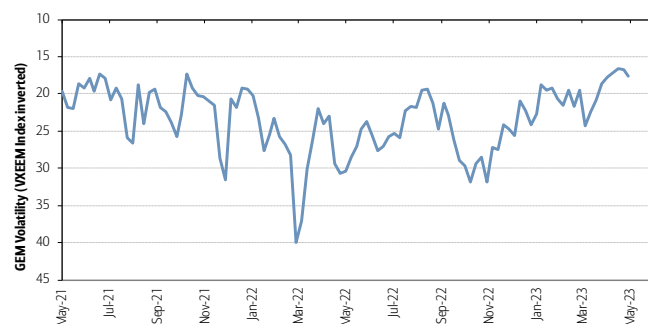


Source : BofA Global Quantitative Strategy, Bloomberg

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**Chart 55: Emerging Markets Volatility (VXEEM Index) - Inverted**

VXEEM Index moved from 16.8 to 17.6



Source : BofA Global Quantitative Strategy, Bloomberg

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**Chart 56: Hong Kong Volatility (VHSI Index) - Inverted**

VHSI Index moved from 21.9 to 23.4

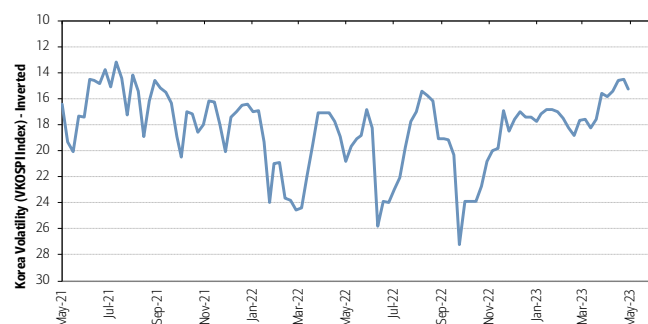


Source : BofA Global Quantitative Strategy, Bloomberg

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**Chart 57: Korea Volatility (VKOSPI Index) - Inverted**

VKOSPI Index moved from 14.5 to 15.3



Source : BofA Global Quantitative Strategy, Bloomberg

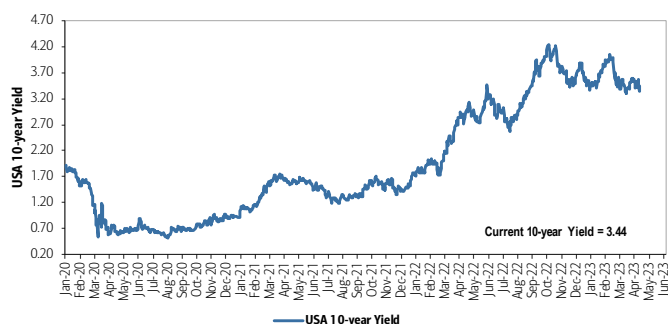
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# Rates

**Chart 58: USA 10-year Bond Yield**

US 10-year yield up by 1 bps to 3.44%

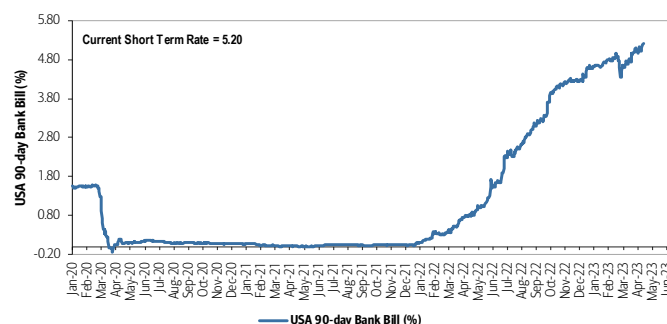


Source : BofA Global Quantitative Strategy, Bloomberg

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**Chart 59: USA 90-day Bank Bill**

US 90-day yield up by 17 bps to 5.20%

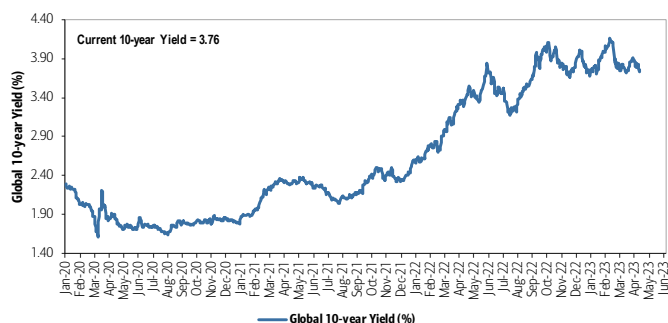


Source : BofA Global Quantitative Strategy, Bloomberg

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**Chart 60: Global 10-year Bond Yield**

Current 10-yr Global GDP weighted bond yield is 3.76%

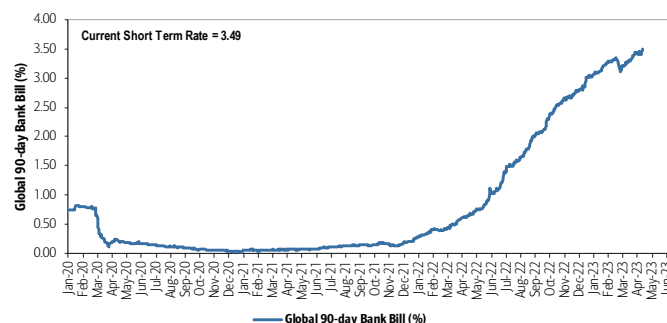


Source : BofA Global Quantitative Strategy, Bloomberg

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**Chart 61: Global 90-day Bank Bill**

Current 90d Global GDP weighted bond yield is 3.49%

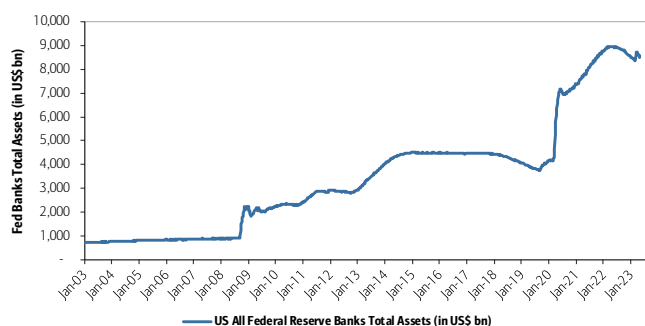


Source : BofA Global Quantitative Strategy, Bloomberg

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**Chart 62: US Federal Reserve Total Assets (in US\$ bn)**

Last week, Fed Reserve's balance sheet reduced by US\$-59bn

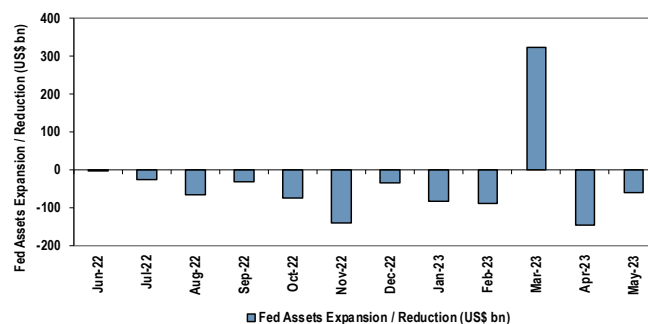


Source : BofA Global Quantitative Strategy, Bloomberg

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**Chart 63: US Federal Reserve Assets Expansion / Reduction (US\$ bn)**

Last month, Fed expanded the balance sheet by US\$ 324bn



Source : BofA Global Quantitative Strategy, Bloomberg

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**Chart 64: China 10-year Bond Yield**

Current China 10-year Yield = 2.74%



Source : BofA Global Quantitative Strategy, Bloomberg

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**Chart 65: China 90-day Bank Bill**

Current China 90-day Rate = 2.13%

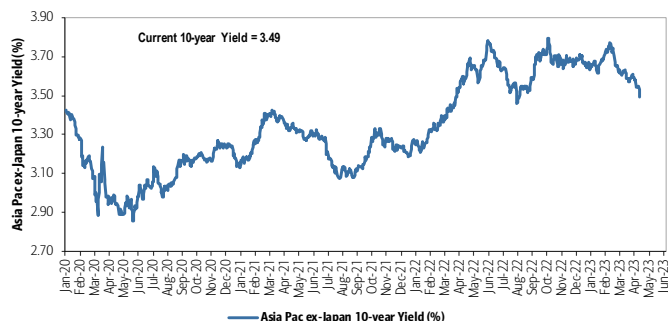


Source : BofA Global Quantitative Strategy, Bloomberg

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**Chart 66: Asia Pac ex-Japan 10-year Bond Yield**

Current 10-year Asia Pac GDP weighted bond yield is 3.49%

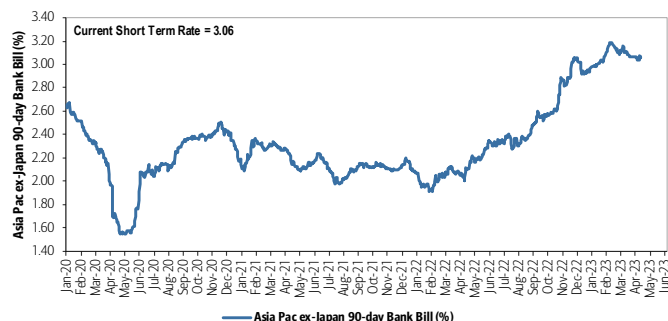


Source : BofA Global Quantitative Strategy, Bloomberg

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**Chart 67: Asia Pac ex-Japan 90-day Bank Bill**

Current 90d Asia Pac GDP weighted bond yield is 3.06%



Source : BofA Global Quantitative Strategy, Bloomberg

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**Table 3: USA Yield Curve slope and subsequent Global Regions & Sectors relative returns (median 12m)**

When the US yield curve slope was near current levels, the subsequent 12m return of ACWI has been -19.0%

Global Sector	-0.50% – -0.25%	-0.25% – 0.00%	0.00% – 0.25%	0.25% – 0.50%	0.50% – 0.75%	0.75% – 1.00%	1.00% – 1.25%	1.25% – 1.50%	1.50% – 1.75%	1.75% – 2.00%	2.00% – 2.25%	2.25% – 2.50%	2.50% – 2.75%	2.75% – 3.00%
Cons. Staples	23.4%	4.9%	0.2%	3.1%	4.7%	-6.5%	9.0%	5.8%	3.2%	3.2%	-4.4%	-2.6%	4.3%	-4.0%
Health Care	19.9%	-5.3%	2.3%	11.3%	14.3%	1.6%	3.6%	7.2%	5.4%	1.1%	-8.1%	-3.1%	5.0%	-11.0%
Energy	19.8%	14.4%	-2.1%	-2.8%	10.9%	0.3%	3.5%	-2.5%	-3.7%	-3.0%	-5.0%	-3.0%	-6.8%	1.9%
Banks	18.9%	-6.7%	-11.1%	-4.1%	1.4%	4.1%	1.9%	-0.9%	-4.4%	3.0%	3.5%	-1.1%	-10.0%	-9.5%
Real Estate	18.3%	0.2%	-7.3%	-7.1%	-4.0%	-8.2%	-3.5%	-3.1%	5.9%	0.3%	4.2%	4.5%	4.1%	2.9%
Div Financials	17.9%	-6.3%	-1.1%	3.4%	0.0%	3.8%	-1.4%	0.2%	1.4%	0.4%	4.0%	-7.5%	-12.3%	-8.5%
Materials	16.8%	16.6%	-5.4%	-8.4%	-8.9%	-1.0%	0.7%	-3.6%	-3.8%	2.1%	1.0%	4.0%	-11.5%	6.6%
Insurance	16.6%	-0.3%	-1.3%	1.7%	2.5%	-4.7%	1.1%	2.1%	1.5%	-6.1%	-1.1%	-2.2%	-5.9%	-7.8%
Utilities	15.4%	7.6%	-0.5%	-6.4%	-7.3%	-5.2%	-3.0%	-1.9%	-6.3%	-3.2%	-3.2%	-2.7%	-7.4%	-13.9%
Industrials	9.6%	2.6%	-1.4%	-2.2%	-4.9%	-1.8%	-1.2%	1.1%	1.2%	-0.7%	1.4%	4.0%	-0.8%	5.4%
Cons. Discretionary	4.2%	-1.4%	-0.6%	-0.3%	-4.6%	-1.7%	-4.1%	3.5%	2.2%	3.9%	3.5%	1.6%	4.8%	6.0%
Media & Ent.	-2.8%	-3.5%	5.1%	8.5%	-4.9%	-4.8%	-14.3%	0.6%	1.2%	2.0%	1.7%	1.8%	4.4%	6.7%
Software	-20.0%	1.7%	18.9%	20.2%	8.8%	13.3%	9.0%	10.5%	14.2%	4.3%	1.0%	1.2%	6.9%	-1.8%
Telecom	-20.4%	14.2%	2.5%	-0.6%	-9.7%	-14.2%	-7.8%	-3.7%	-4.4%	-2.4%	-3.1%	-1.9%	-0.6%	-2.1%
Semiconductors	-31.7%	-8.5%	16.6%	5.7%	18.6%	10.5%	12.5%	4.8%	2.6%	0.9%	13.7%	11.0%	7.5%	2.0%
Tech Hardware	-36.2%	3.2%	19.4%	5.0%	3.0%	8.4%	6.2%	1.2%	-4.5%	1.6%	10.9%	2.7%	6.3%	-0.5%
World	-19.0%	5.5%	9.4%	11.8%	12.2%	11.3%	5.1%	2.8%	7.5%	2.0%	11.2%	11.8%	3.6%	14.5%
USA	-16.5%	8.7%	11.4%	18.0%	24.5%	15.4%	10.1%	7.5%	2.7%	3.6%	9.1%	11.2%	9.1%	16.9%
Europe	-20.1%	12.3%	4.7%	14.9%	17.8%	7.6%	6.1%	5.1%	7.8%	0.0%	15.2%	12.8%	-7.0%	10.5%
Japan	-28.9%	-6.4%	0.8%	-1.4%	-12.1%	7.6%	-7.7%	-5.4%	4.8%	-0.5%	17.2%	10.0%	-1.0%	5.4%
GEM	-27.5%	23.8%	4.3%	4.3%	2.4%	19.4%	2.5%	0.3%	-3.9%	5.1%	20.6%	17.5%	5.2%	17.1%
Asia Pac ex-Japan	-26.8%	16.5%	3.7%	6.5%	-2.5%	14.4%	4.2%	4.9%	0.4%	8.5%	17.8%	15.4%	5.7%	16.2%

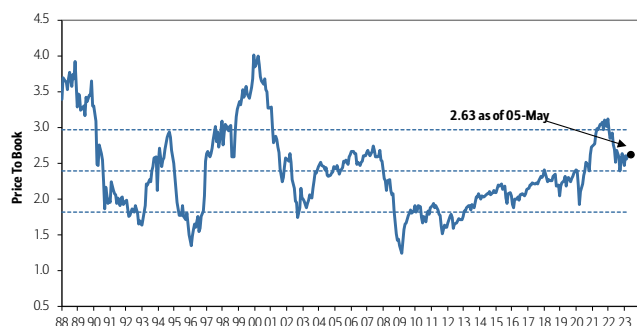
Source : BofA Global Quantitative Strategy, MSCI, Bloomberg

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# Valuation

**Chart 68: Global Price-to-Book trailing**

The latest Global Price-to-Book ratio is 2.63

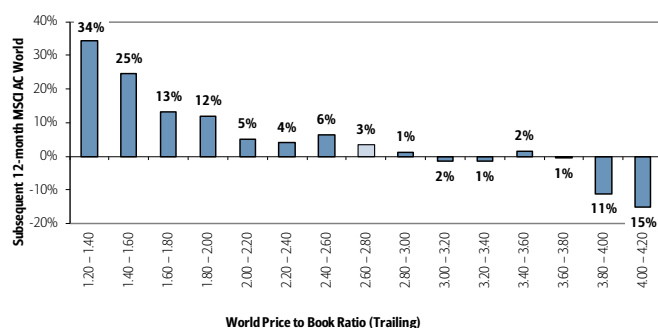


Source : BofA Global Quantitative Strategy, MSCI, IBES, Worldscope

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**Chart 70: Global Price-to-Book trailing and ACWI subsequent 12m returns**

For current PB level, MSCI ACWI returns 3% in the subsequent 12m on average

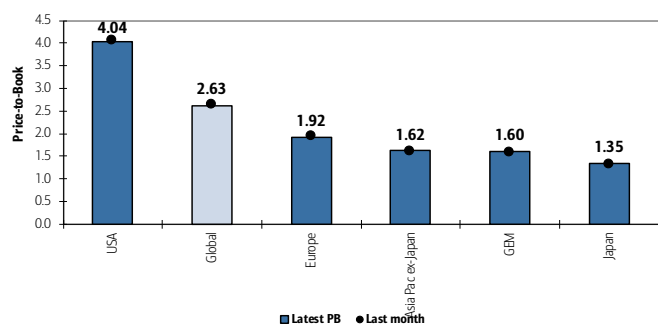


Source : BofA Global Quantitative Strategy, MSCI, IBES, Worldscope

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**Chart 72: Price-to-Book: Global Regions**

In terms of PB, the USA is the most expensive region

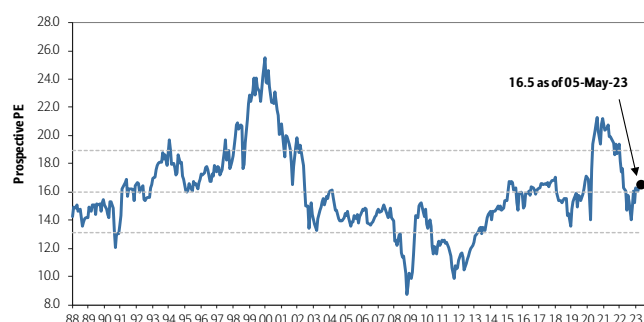


Source : BofA Global Quantitative Strategy, MSCI, IBES, Worldscope

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**Chart 69: Global Prospective PE**

The latest Global Prospective PE is 16.5

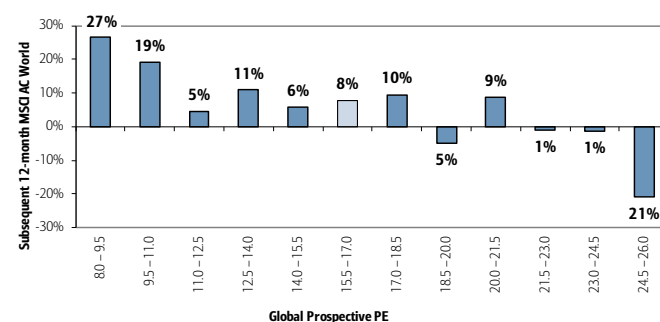


Source : BofA Global Quantitative Strategy, MSCI, IBES, Worldscope

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**Chart 71: Global Prospective PE and ACWI subsequent 12m returns**

For current PE level, MSCI ACWI returns 8% in the subsequent 12m on average

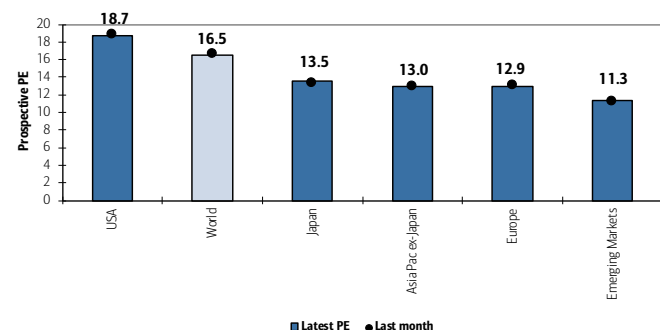


Source : BofA Global Quantitative Strategy, MSCI, IBES, Worldscope

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**Chart 73: Global Prospective PE: Global Regions**

In terms of PE, GEM is the most inexpensive region



Source : BofA Global Quantitative Strategy, MSCI, IBES, Worldscope

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# Triple Momentum

In this analysis, we highlight the power of combining three types of momentum, including Earnings Momentum, Price Momentum, and News Momentum.

**Earnings Momentum** quantifies the sentiment of sell-side analysts by monitoring changing consensus earnings estimates, and is defined as the three-month change in the consensus EPS estimate for each stock.

**Price Momentum**, which is what most investors think of when they think of “momentum”, captures the sentiment of market participants who buy and sell equities. Our Price Momentum measure is defined as the slope of the log-linear regression using daily prices over the preceding 12-months.

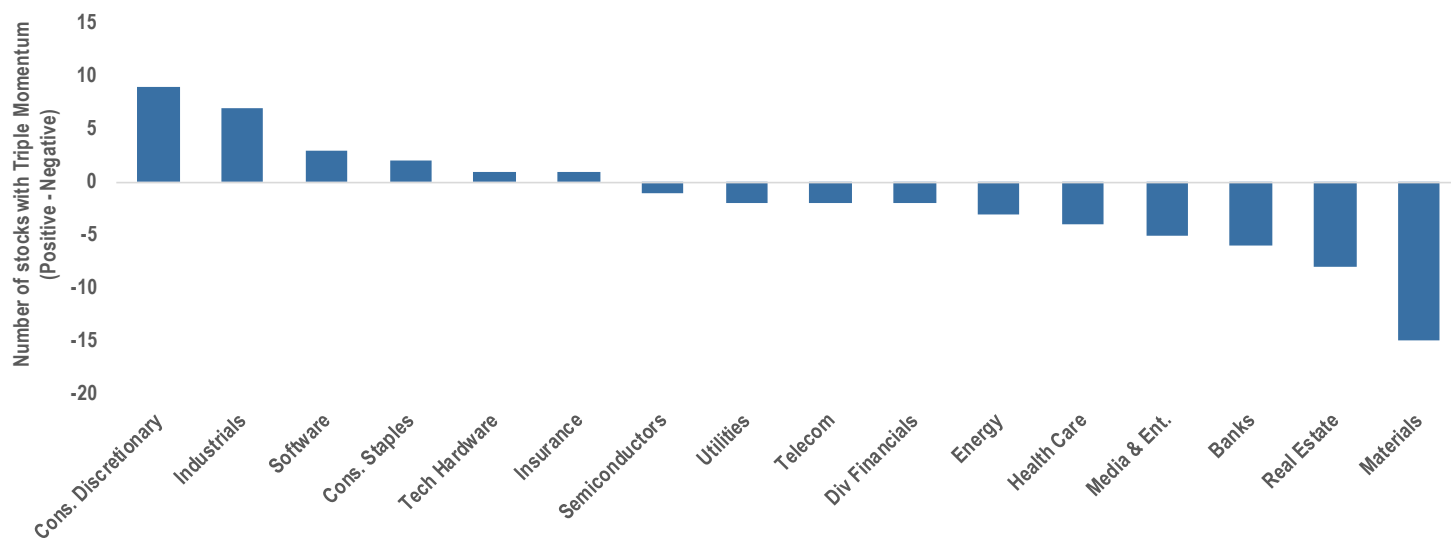
**News Momentum** captures the sentiment from all other market players including journalists, experts, regulators, corporates, and more. We calculate a News Pulse for each stock which quantifies the momentum in news using news articles from the preceding 90 days. Triple Momentum is an amalgamation of Earnings Momentum, Price Momentum and News Momentum.

We screen for Triple Momentum stocks with above-average Earnings Momentum, above-average Price Momentum, top quintile by News Momentum, and above-average one-month change in News Momentum.

For detailed methodology refer [“Signals from Triple Momentum”](#).

## Chart 74: Sector Tilts of Triple Momentum

Triple Momentum is net positive on Cons. Discretionary, Industrials and Software

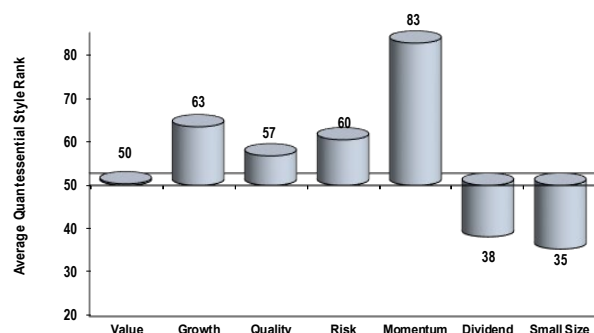


Source : BofA Global Quantitative Strategy, MSCI, IBES, FactSet, RavenPack

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**Chart 75: Positive Triple Momentum: Style Tilts**

These stocks are overweight Momentum and Growth

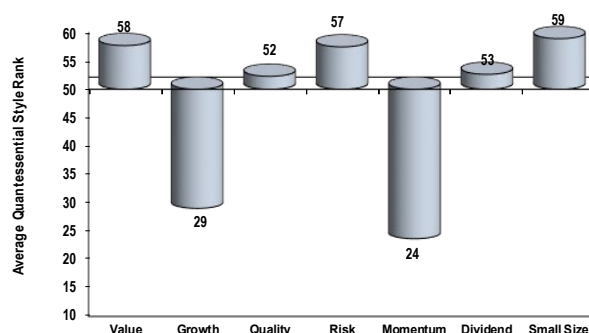


Source : BofA Global Quantitative Strategy, MSCI, IBES, FactSet, RavenPack

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**Chart 76: Negative Triple Momentum: Style Tilts**

These stocks are overweight Small Size and Value

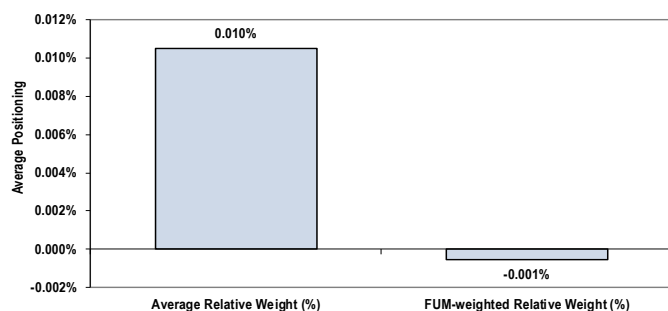


Source : BofA Global Quantitative Strategy, MSCI, IBES, FactSet, RavenPack

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**Chart 77: Positive Triple Momentum: Investor Positioning**

On average, funds in our analysis are overweight these stocks

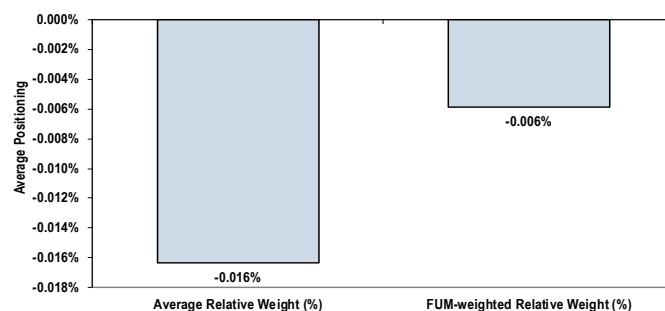


Source : BofA Global Quantitative Strategy, MSCI, IBES, FactSet, RavenPack

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**Chart 78: Negative Triple Momentum: Investor Positioning**

On average, funds in our analysis are underweight these stocks

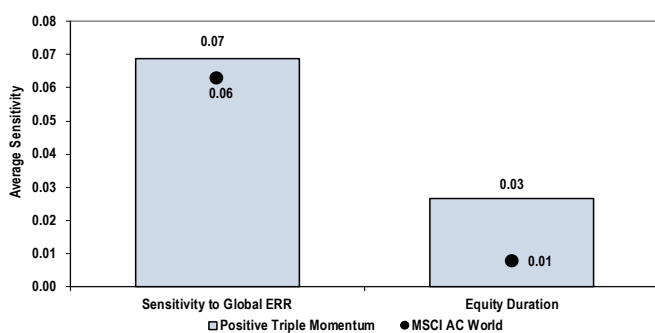


Source : BofA Global Quantitative Strategy, MSCI, IBES, FactSet, RavenPack

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**Chart 79: Positive Triple Momentum: Sensitivity to Earnings Revision & Equity Duration**

These stocks are positively sensitive to both Earnings Revision & Bond Yields

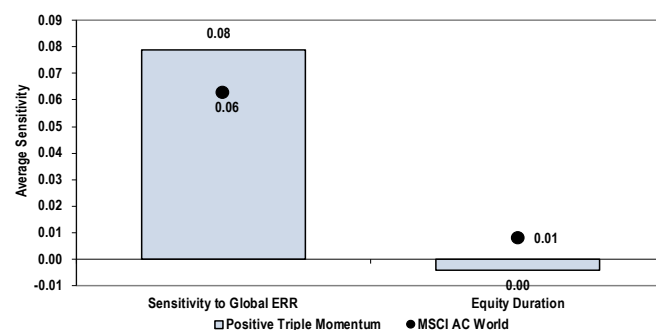


Source : BofA Global Quantitative Strategy, MSCI, IBES, FactSet, RavenPack

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**Chart 80: Negative Triple Momentum: Sensitivity to Earnings Revision & Equity Duration**

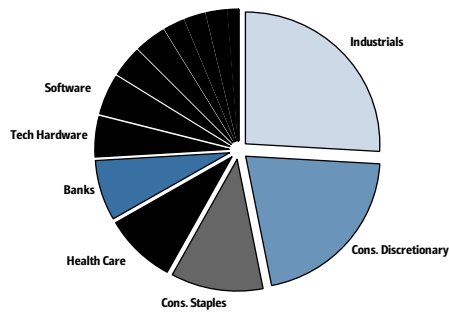
These stocks are negatively sensitive to Bond Yields



Source : BofA Global Quantitative Strategy, MSCI, IBES, FactSet, RavenPack

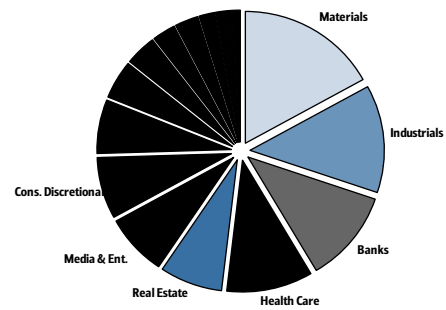
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**Chart 81: Positive Triple Momentum: Sector Tilts**  
These stocks are most Overweight on Industrials, Cons. Discretionary and Cons. Staples



Source : BofA Global Quantitative Strategy, MSCI, IBES, FactSet, RavenPack  
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**Chart 82: Negative Triple Momentum: Sector Tilts**  
These stocks are most Overweight on Materials, Industrials and Banks



Source : BofA Global Quantitative Strategy, MSCI, IBES, FactSet, RavenPack  
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**Table 4: Positive Triple Momentum - Top 30 stocks**

Top 30 stocks with Positive Triple Momentum characteristics

Company Name	BBG Code	Country	Sector	MCAP (Total \$USm)	Avg Daily TO (6m \$US m)
Element Fleet	EFN CN	Canada	Div Financials	5,104	27.3
Sinopharm Med-H	1099 HK	China	Health Care	4,711	19.8
Renault	RNO FP	France	Cons. Discretionary	10,676	59.0
Mercedes-Benz	MBG GR	Germany	Cons. Discretionary	78,517	178.6
HeidelbergCement	HEI GR	Germany	Materials	14,860	29.7
Larsen & Toubro	LT IN	India	Industrials	40,845	54.6
Moncler	MONC IM	Italy	Cons. Discretionary	20,237	40.5
Prysmian	PRY IM	Italy	Industrials	11,056	26.8
Yamaha Motor	7272 JP	Japan	Cons. Discretionary	9,100	37.1
Nissin Food	2897 JP	Japan	Cons. Staples	9,966	20.1
FEMSA	FEMSAUBD MM	Mexico	Cons. Staples	21,167	30.0
Grupo Mexico	GMEXICOB MM	Mexico	Materials	37,809	33.6
ABN AMRO Bank	ABN NA	Netherlands	Banks	13,968	45.5
Hotel Shilla	008770 KS	South Korea	Cons. Discretionary	2,495	21.5
LG Energy Solution	373220 KS	South Korea	Industrials	99,774	154.6
BBVA	BBVA SM	Spain	Banks	41,747	139.8
Banco Santander	SAN SM	Spain	Banks	58,209	193.5
Aena SME	AENA SM	Spain	Industrials	24,121	24.8
Richemont	CFR SW	Switzerland	Cons. Discretionary	86,518	135.8
Julius Baer	BAER SW	Switzerland	Div Financials	14,994	36.8
Wiiwynn	6669 TT	Taiwan	Tech Hardware	6,448	51.2
Krung Thai	KTB TB	Thailand	Banks	7,516	20.9
Bumrungrad Hospital	BHTB	Thailand	Health Care	5,677	20.4
Informa	INF LN	United Kingdom	Media & Ent.	12,493	20.7
Booking	BKNG US	United States	Cons. Discretionary	99,662	743.1
Las Vegas Sands	LVS US	United States	Cons. Discretionary	47,111	271.7
Lamb Weston	LW US	United States	Cons. Staples	16,122	141.2
Cardinal Health	CAH US	United States	Health Care	21,810	204.0
HCA	HCA US	United States	Health Care	78,612	320.2
W.W. Grainger	GWW US	United States	Industrials	34,133	183.3

Source : BofA Global Quantitative Strategy, MSCI, IBES, FactSet, RavenPack

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**Table 5: Negative Triple Momentum - Bottom 30 stocks**

Bottom 30 stocks with Negative Triple Momentum characteristics

Company Name	BBG Code	Country	Sector	MCAP (Total \$USm)	Avg Daily TO (6m \$US m)
ARC Resources	ARX CN	Canada	Energy	8,120	63.4
Tourmaline Oil	TOU CN	Canada	Energy	14,698	158.6
Great Wall Motor-H	2333 HK	China	Cons. Discretionary	3,487	66.7
Smoore Int'l	6969 HK	China	Cons. Staples	7,095	32.2
China Nat'l Building-H	3323 HK	China	Materials	3,137	20.5
China Vanke-H	2202 HK	China	Real Estate	3,425	29.5
Country Garden	2007 HK	China	Real Estate	7,396	109.8
ICL	ICL IT	srael	Materials	7,785	21.3
Diasorin	DIA IM	taly	Health Care	6,432	16.4
LIXIL	5938 JP	apan	Industrials	4,223	17.4
Sumitomo Chemical	4005 JP	apan	Materials	5,597	27.2
Konami	9766 JP	apan	Media & Ent.	7,117	26.7
Saudi National Bank	SNB AB	Saudi Arabia	Banks	58,747	50.7
Sibanye Stillwater	SSW SJ	South Africa	Materials	6,850	27.5
S-Oil	010950 KS	South Korea	Energy	6,162	21.7
Kakao Games	293490 KS	South Korea	Media & Ent.	2,482	20.7
Evergreen Marine	2603 TT	Taiwan	Industrials	10,465	146.4
Wan Hai Lines	2615 TT	Taiwan	Industrials	5,449	40.6
Fifth Third	FITB US	United States	Banks	17,105	219.1
KeyCorp	KEY US	United States	Banks	9,171	262.5
US Bancorp	USB US	United States	Banks	45,674	504.6
Webster Fin	WBS US	United States	Banks	5,906	56.8
Avantor	AVTR US	United States	Health Care	13,518	143.5
CF Industries	CF US	United States	Materials	13,663	236.5
DISH Network	DISH US	United States	Media & Ent.	2,081	71.5
Match Group	MTCH US	United States	Media & Ent.	9,279	183.5
Sirius XM	SIRI US	United States	Media & Ent.	14,508	79.2
Boston Properties	BXP US	United States	Real Estate	8,140	109.9
Medical Prop	MPW US	United States	Real Estate	5,149	159.6
Seagate Tech	STX US	United States	Tech Hardware	11,549	149.5

Source : BofA Global Quantitative Strategy, MSCI, IBES, FactSet, RavenPack

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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.

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