

# High Frequency Monitor

## Rates hurt

### Last week, global equities fell for the sixth week in nine

Last week, the MSCI AC World Index fell -1.0% as the [US 10-year bond yield](#) jumped 14bp on expectations the Fed may keep rates higher for longer. The MSCI AC World Index has now fallen in six of the last nine weeks. All [regions](#) posted negative returns with Japan (-3.1%) falling the most. The global [Semis](#) sector staged a small bounce (+1.9%) and Energy continued to rally (+0.7%) on a higher oil price. Despite lower equity markets, defensive sectors underperformed, including Utilities (-5.4%) and Consumer Staples (-2.2%). Equity investors are patiently waiting for evidence that inflation has been contained and for a globally-synchronized earnings upturn to begin.

### Identifying themes using Triple Momentum

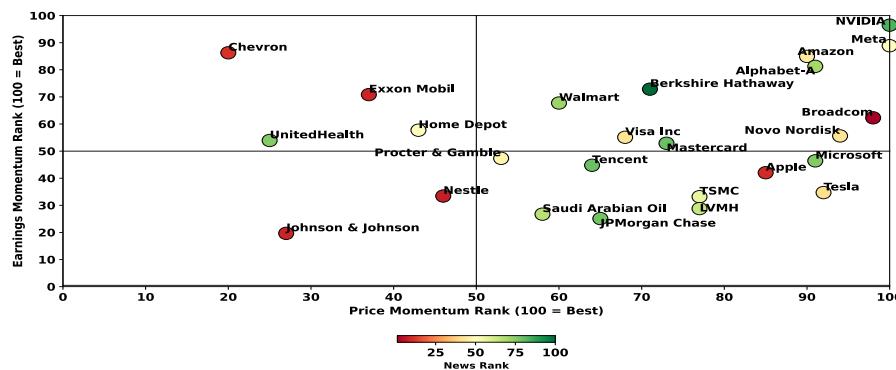
An alternative to implementing a macro view is to identify themes using a bottom-up screen such as [Triple Momentum](#) (which is based on earnings, price, and news). By regional-sector, the average stock-level Triple Momentum Rank is highest for Emerging ex-Asia Software (where the highest ranked stock is Elm Co). Triple Momentum is next highest for Japan Utilities (Kansai Electric), Europe Semis (NXP Semiconductor), Japan Diversified Financials (Japan Exchange), and Europe Software (SAP).

### Global Earnings Revision Ratio dipped last week

Last week, the Global [Earnings Revision Ratio](#) moderated from 0.93 to 0.85 but remains above the cycle low of 0.59 (Nov-22). By [region](#), the Ratio remains highest in Japan (1.17), and by global [sector](#) the Ratio is highest for Energy (1.40) and Insurance (1.21).

#### Chart 1: Triple Momentum for the 25 largest stocks globally by market cap

Triple Momentum is most positive for NVIDIA, Berkshire Hathaway, and Alphabet-A



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

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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](#)
- [Word Cloud](#)
- [Tactical Indicators](#)
- [Volatility](#)
- [Rates](#)
- [Triple Momentum](#)

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Refer to important disclosures on page 43 to 45.

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# Contents

Notice to Readers:	3
Market Performance	4
Product Performance	6
Style Performance	8
Earnings Revision Ratio	9
Quantessential Styles: Earnings Revision Ratio	11
NewsAlpha	12
Tactical Indicators	14
Commodities	16
Volatility	17
Rates	18
Valuation	21
Triple Momentum	22
Global Regions: Triple Momentum Charts	26
Global Sectors: Triple Momentum Charts	29
Countries: Triple Momentum Charts	37
Global Triple Momentum screens	39
Asia Pace ex-Japan Triple Momentum screens	41

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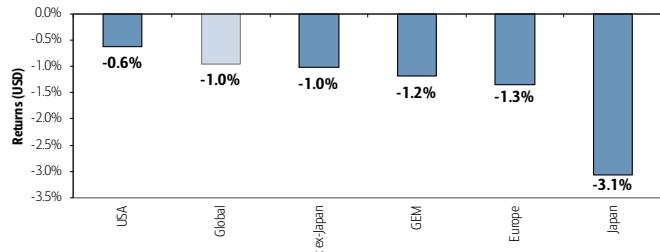
The Global News Pulse (and the regional and sectors versions of it) is intended to be an indicative metric only and may not be used for reference purposes or as a measure of performance for any financial instrument or contract, or otherwise relied upon by third parties for any other purpose, without 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: USA performed the best

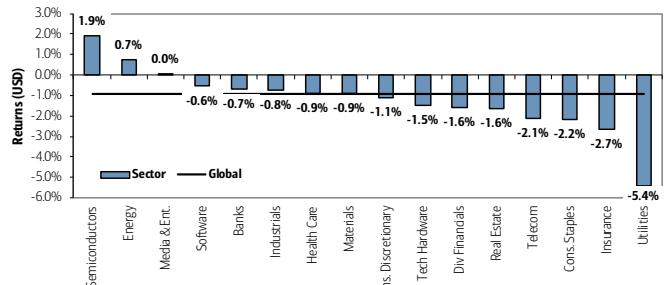


Source : BofA Global Quantitative Strategy, MSCI

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## Chart 3: Global Sectors Performance: Last Week

Semiconductors was the best performing sector last week

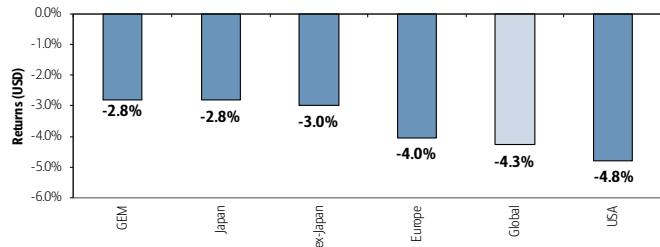


Source : BofA Global Quantitative Strategy, MSCI

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## Chart 4: Global Regions Performance: MTD

GEM is the best performing region this month

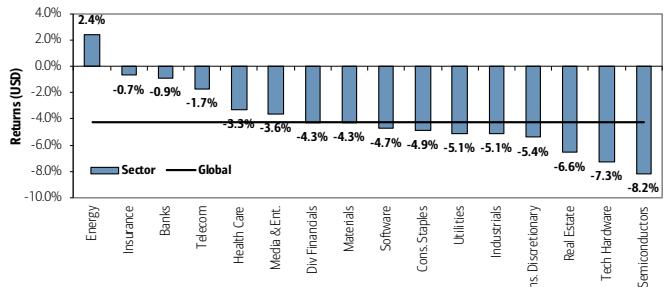


Source : BofA Global Quantitative Strategy, MSCI

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## Chart 5: Global Sectors Performance: MTD

Best performing sector MTD is Energy

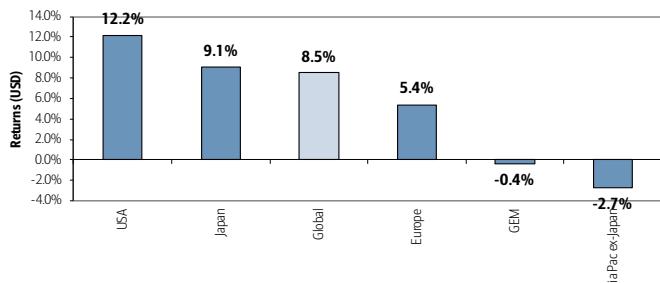


Source : BofA Global Quantitative Strategy, MSCI

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## Chart 6: Global Regions Performance: YTD

Best performing region this year is the USA

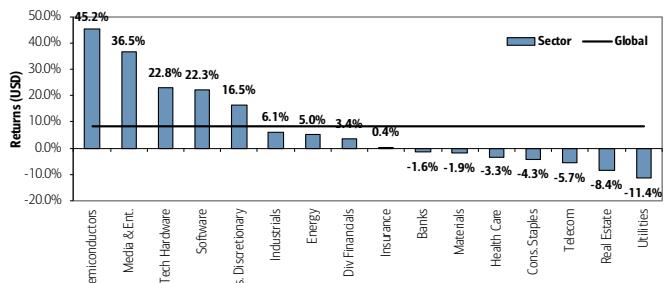


Source : BofA Global Quantitative Strategy, MSCI

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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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**Table 1: Global Region Country Sector Performance: Last week**

Semiconductors was the best performing sector last week

	<b>Energy</b>	<b>Materials</b>	<b>Industrials</b>	<b>Cons. Discretionary</b>	<b>Cons. Staples</b>	<b>Health Care</b>	<b>Banks</b>	<b>Div Financials</b>	<b>Insurance</b>	<b>Software</b>	<b>Tech Hardware</b>	<b>Semiconductors</b>	<b>Telecom</b>	<b>Media &amp; Ent.</b>	<b>Utilities</b>	<b>Real Estate</b>	<b>Country</b>
<b>Canada</b>	0.7%	-2.9%	-1.7%	-0.3%	-1.7%	n/a	-1.8%	-3.4%	-3.2%	2.4%	n/a	n/a	-4.4%	n/a	-6.5%	-3.9%	-1.5%
<b>USA</b>	1.3%	0.3%	-0.2%	-0.2%	-2.1%	-1.0%	-0.3%	-1.7%	-2.3%	-0.4%	-1.5%	2.8%	-1.3%	0.2%	-6.9%	-1.7%	-0.6%
<b>Belgium</b>	n/a	-1.2%	n/a	-0.7%	-1.6%	-4.7%	-2.9%	-2.5%	-1.3%	n/a	n/a	n/a	n/a	n/a	-8.5%	-2.2%	-2.7%
<b>Finland</b>	-9.9%	1.8%	-2.0%	n/a	-5.0%	1.4%	n/a	n/a	-0.5%	n/a	-3.0%	n/a	-3.0%	n/a	-8.0%	n/a	-2.5%
<b>France</b>	0.0%	-0.6%	0.5%	-3.3%	-2.7%	-1.6%	-0.8%	-1.3%	-2.9%	-0.6%	n/a	1.1%	-2.8%	-0.9%	-3.9%	-2.9%	-1.4%
<b>Germany</b>	n/a	-0.6%	-0.3%	-3.2%	-3.2%	-2.7%	11.0%	0.6%	-3.0%	-2.3%	n/a	-0.8%	-4.0%	-1.5%	-4.0%	-5.4%	-2.1%
<b>Italy</b>	-0.2%	n/a	0.5%	-0.5%	-2.7%	-2.5%	-2.0%	-5.8%	-2.1%	n/a	n/a	n/a	-5.8%	n/a	-4.4%	n/a	-1.9%
<b>Netherlands</b>	n/a	-0.4%	0.2%	-3.2%	-3.0%	-2.9%	1.2%	4.6%	-11.8%	n/a	n/a	0.2%	-1.8%	2.0%	n/a	n/a	-0.8%
<b>Norway</b>	1.4%	4.6%	-1.1%	n/a	-1.5%	n/a	-0.2%	n/a	-1.3%	n/a	n/a	n/a	-0.9%	-1.7%	n/a	n/a	0.7%
<b>Spain</b>	-1.0%	n/a	-1.2%	-3.5%	n/a	-1.1%	2.9%	n/a	n/a	n/a	n/a	n/a	-6.2%	n/a	-3.7%	n/a	-1.5%
<b>Sweden</b>	n/a	4.6%	3.1%	0.9%	3.6%	1.0%	0.5%	0.6%	n/a	n/a	-0.9%	n/a	-1.4%	n/a	n/a	-0.4%	1.8%
<b>Switzerland</b>	n/a	-0.9%	-0.3%	-5.0%	-3.7%	-0.1%	-1.5%	-1.9%	-2.0%	-2.1%	-2.2%	n/a	-2.4%	n/a	-2.7%	-1.7%	-1.7%
<b>UK</b>	-0.2%	1.1%	-1.0%	-2.6%	-3.1%	-0.8%	-0.3%	-1.3%	-2.7%	-3.9%	-1.0%	n/a	-4.8%	-1.5%	-4.8%	-3.5%	-1.4%
<b>Australia</b>	1.3%	-0.8%	-1.2%	-0.5%	0.2%	-0.8%	0.5%	-1.2%	-1.0%	-2.4%	n/a	n/a	0.2%	0.0%	-1.3%	-0.8%	-0.4%
<b>Hong Kong</b>	n/a	n/a	-1.9%	-7.3%	-4.0%	n/a	0.2%	-1.3%	-2.4%	n/a	n/a	n/a	-1.8%	n/a	-2.2%	1.4%	-1.6%
<b>Japan</b>	-3.1%	-4.8%	-4.3%	-3.4%	-1.2%	-0.4%	-5.9%	-3.7%	-4.6%	-2.2%	-1.5%	1.2%	-2.3%	-0.1%	-5.5%	-2.3%	-3.1%
<b>Singapore</b>	n/a	n/a	0.7%	-0.7%	1.3%	n/a	1.2%	0.0%	n/a	n/a	n/a	n/a	-0.5%	n/a	-0.3%	-0.6%	1.9%
<b>China</b>	-0.3%	-3.1%	-1.0%	-1.4%	-1.3%	1.8%	-0.8%	-2.9%	-3.1%	-1.5%	-0.3%	1.9%	-1.0%	-1.7%	-0.3%	-4.0%	-1.3%
<b>India</b>	-0.2%	-0.5%	1.0%	-0.7%	-0.3%	2.4%	0.0%	2.4%	-1.9%	-3.5%	n/a	n/a	1.5%	-3.3%	0.9%	2.0%	-0.3%
<b>Korea</b>	-4.1%	-5.5%	-4.5%	-0.9%	-0.5%	-1.2%	-4.7%	-4.1%	-4.0%	-2.2%	-1.8%	-2.9%	-0.5%	-2.5%	-0.7%	n/a	-2.8%
<b>Taiwan</b>	0.0%	-2.3%	-0.7%	-1.5%	-0.3%	0.2%	-0.2%	0.5%	-0.6%	n/a	0.0%	n/a	-0.6%	n/a	-6.9%	-0.6%	-0.6%
<b>Brazil</b>	-0.5%	-2.5%	0.0%	-3.2%	-1.9%	1.4%	-0.8%	-1.9%	-3.4%	0.4%	n/a	n/a	-3.1%	n/a	-1.8%	n/a	-1.3%
<b>Mexico</b>	n/a	-2.2%	-5.7%	n/a	-2.0%	n/a	-2.7%	n/a	n/a	n/a	n/a	n/a	-2.6%	-5.8%	n/a	n/a	-2.6%
<b>South Africa</b>	-3.1%	-4.8%	-1.4%	-3.2%	-1.4%	n/a	-1.1%	-2.8%	-3.9%	n/a	n/a	n/a	-0.9%	n/a	n/a	n/a	-2.8%
<b>Global Sector</b>	0.7%	-0.9%	-0.8%	-1.1%	-2.2%	-0.9%	-0.7%	-1.6%	-2.7%	-0.6%	-1.5%	1.9%	-2.1%	0.0%	-5.4%	-1.6%	-1.0%
<b>Europe Sector</b>	-0.4%	0.2%	0.3%	-2.9%	-3.1%	-0.9%	0.2%	-0.7%	-2.9%	-2.0%	-1.7%	0.2%	-4.0%	-0.5%	0.0%	-3.4%	-1.3%
<b>APxJ Sector</b>	-0.1%	-2.0%	-1.2%	-1.4%	-0.7%	0.5%	-0.3%	-0.5%	-2.2%	-3.2%	-1.4%	-0.7%	-0.6%	-1.1%	-1.0%	-0.9%	-1.0%
<b>GEM Sector</b>	-0.3%	-2.5%	-1.3%	-1.4%	-1.2%	1.1%	-0.7%	-0.6%	-2.2%	-2.8%	-1.4%	-0.7%	-1.0%	-1.9%	-0.7%	-1.8%	-1.2%

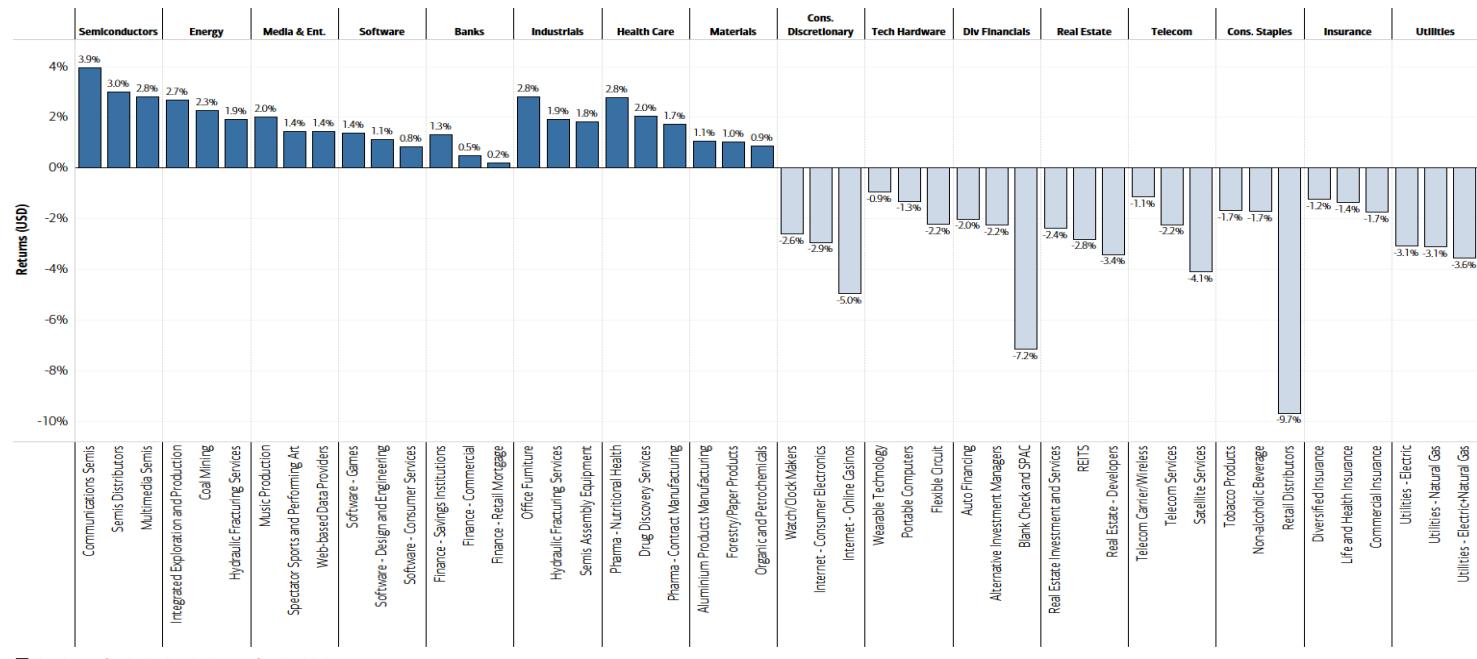
Source : BofA Global Quantitative Strategy, MSCI



# Product Performance

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

Last week, Communication Semis performed the best and Retail Distributors performed the worst.

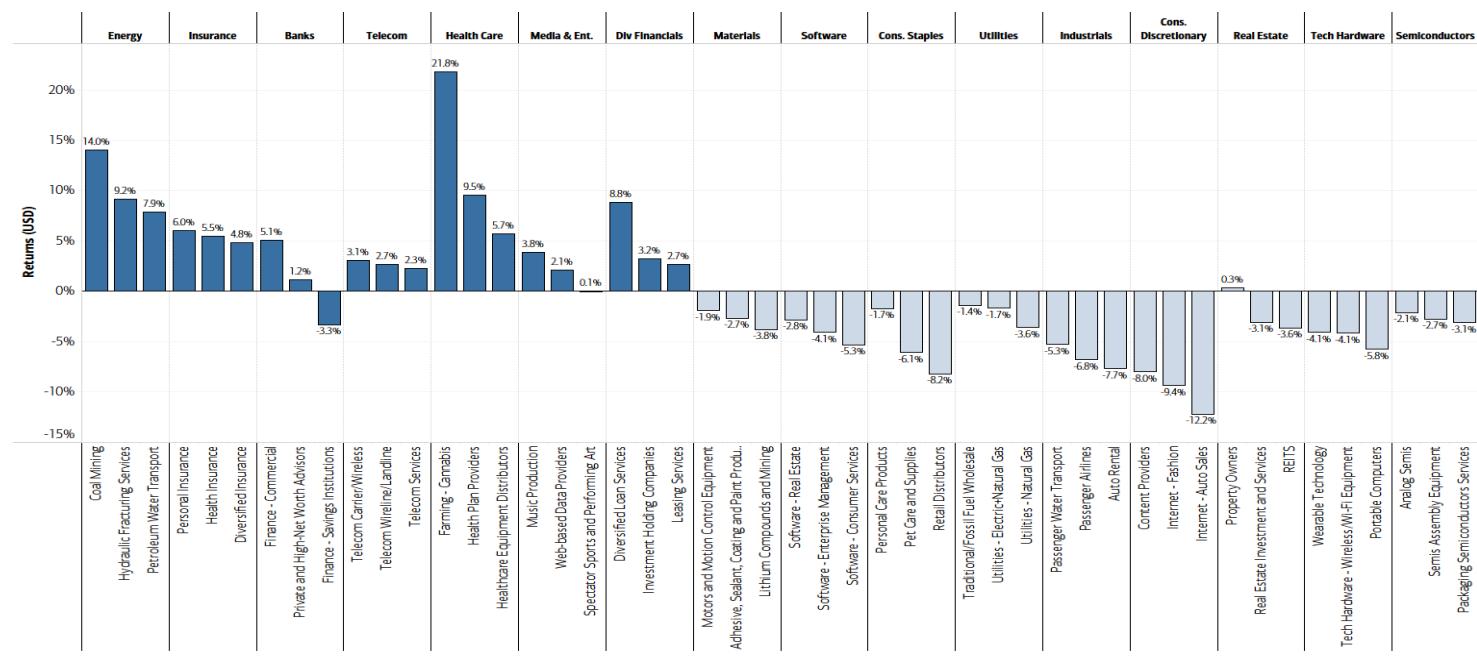


Source : BofA Global Quantitative Strategy, MSCI, IBES, Factset

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

Month-to-date, the best performing product is Farming - Cannabis and the worst performing product is Internet - Auto Sales.

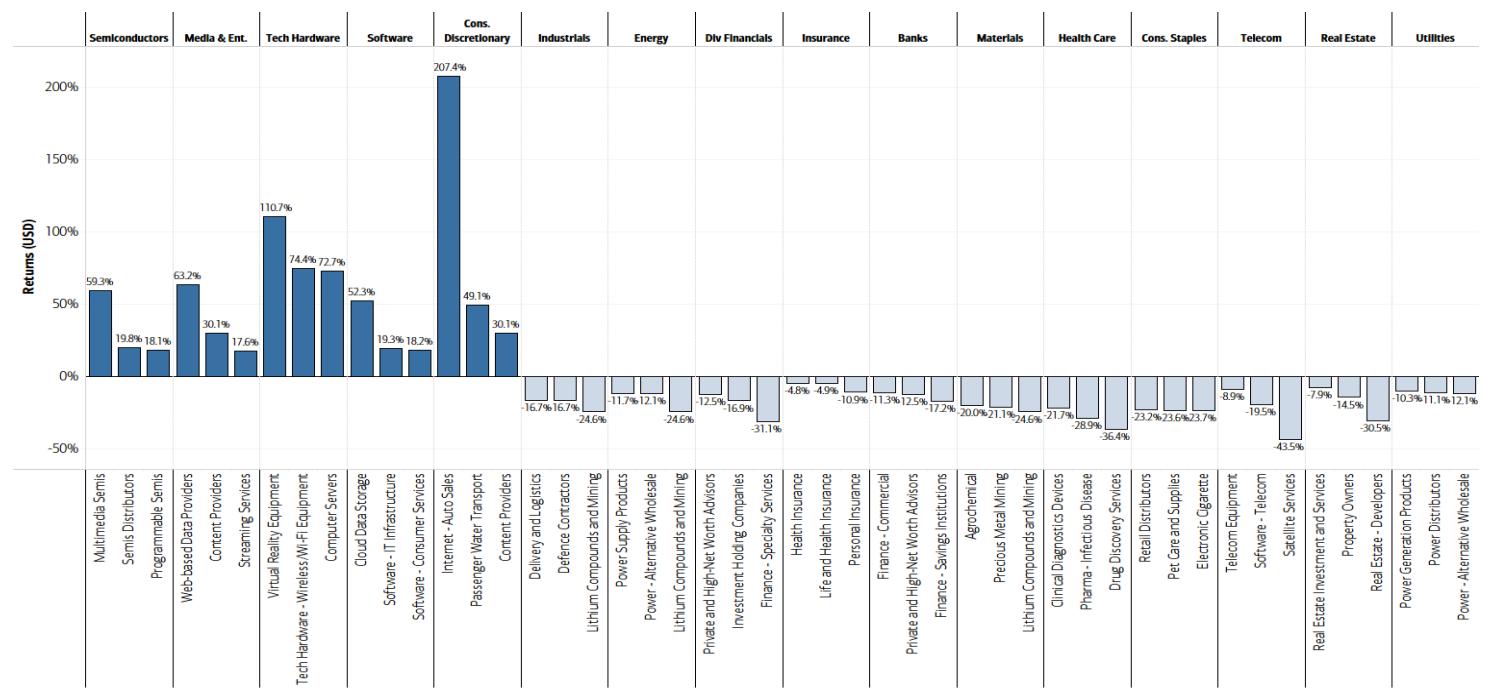


Source : BofA Global Quantitative Strategy, MSCI, IBES, Factset

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

Year-to-date, the best performing product is Internet - Auto Sales and the worst performing product is Satellite Services.



█ Three best performing Products In the outperforming global sectors

█ Three worst performing Products In the underperforming global sectors

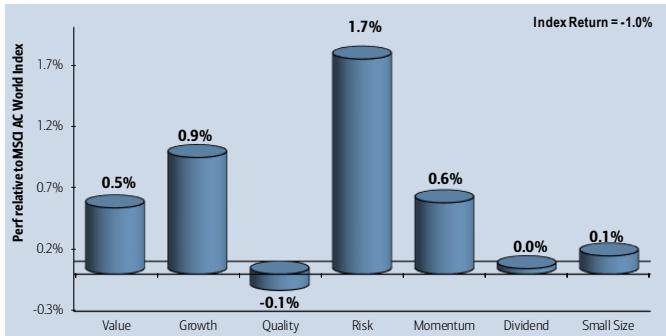
Source : BofA Global Quantitative Strategy, MSCI, IBES, Factset

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# Style Performance

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

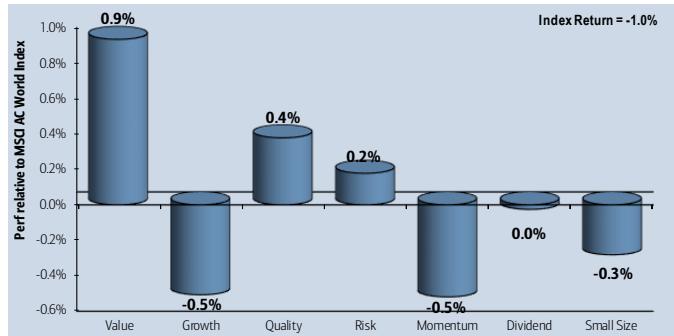
Risk was the best performing style last week



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

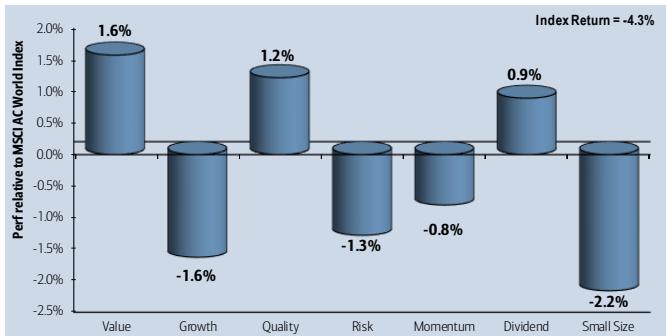
Last week the best performing style was Value



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

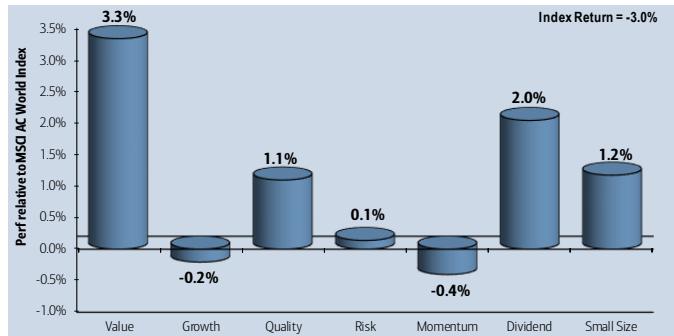
This month the best performing style is Value



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

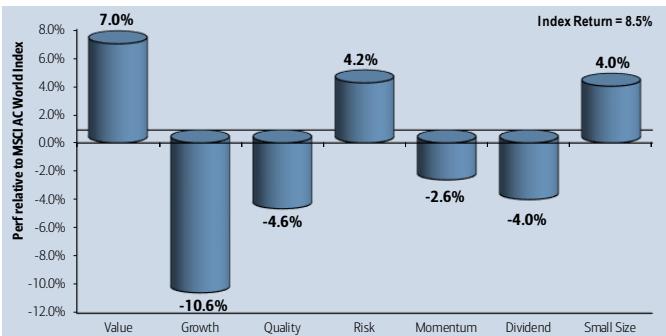
MTD: Value has performed the best



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

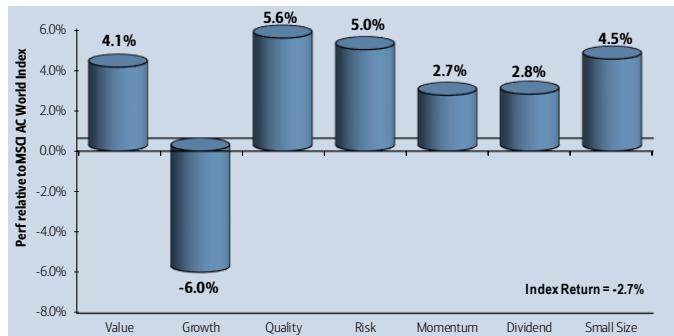
This year the best performing style is Value



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

YTD: Value has performed the best

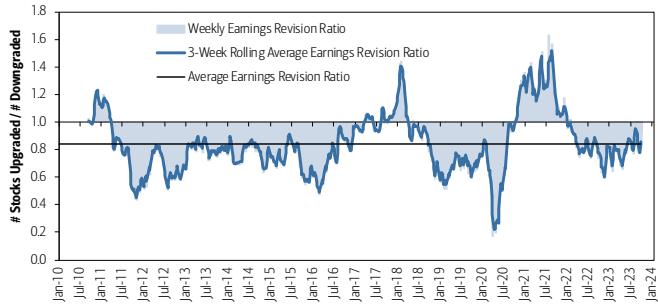


Source : BofA Global Quantitative Strategy, MSCI, IBES, S&P, Worldscope, Bloomberg  
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# Earnings Revision Ratio

## Chart 17: Global Earnings Revision Ratio - Weekly

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

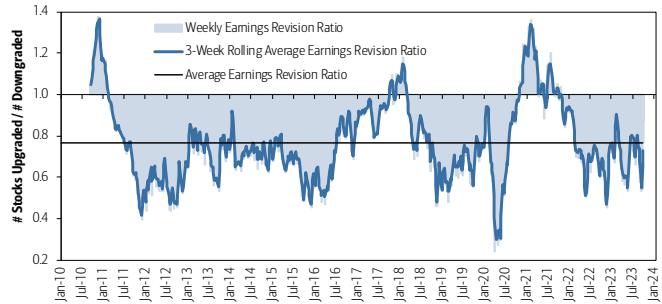


Source : BofA Global Quantitative Strategy, MSCI, IBES

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

Earnings revisions fell in Asia Pac ex-Japan last week

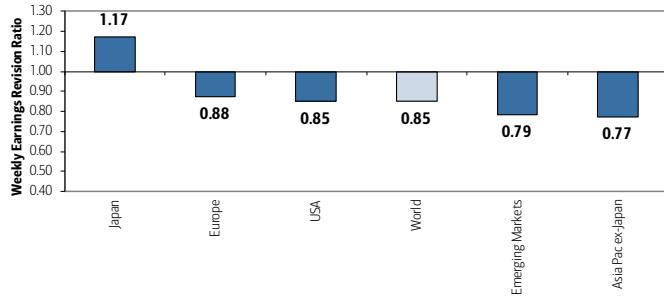


Source : BofA Global Quantitative Strategy, MSCI, IBES

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

Earnings trends are strongest in Japan

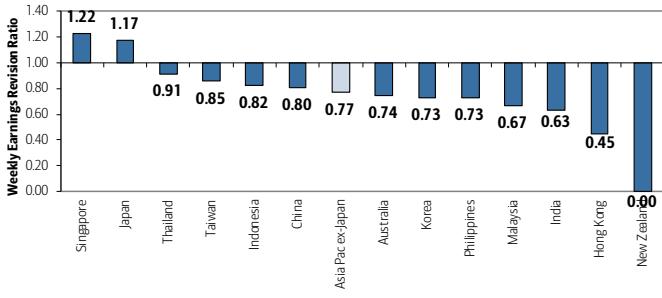


Source : BofA Global Quantitative Strategy, MSCI, IBES

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

Earnings trend is strongest in Singapore and weakest in New Zealand

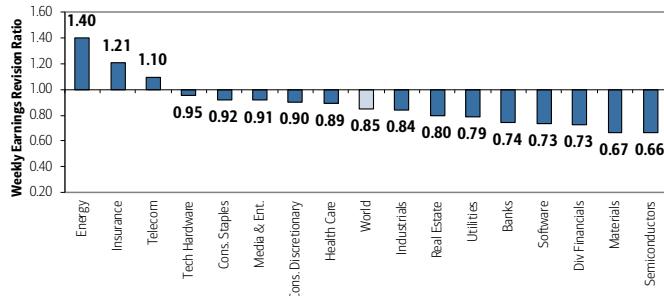


Source : BofA Global Quantitative Strategy, MSCI, IBES

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

3 out of 16 sectors have a ratio above 1.0

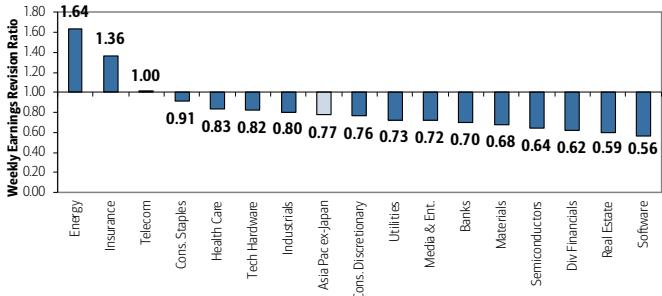


Source : BofA Global Quantitative Strategy, MSCI, IBES

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

3 out of 16 sectors have a ratio above 1.0



Source : BofA Global Quantitative Strategy, MSCI, IBES

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**Table 2: Global Region/Sector/Style - Earnings Revision Ratio**  
 Earnings revisions fell in World last week, but the trend remains strong

Regions/Sectors	Jul-23	Aug-23	Sep-23	Oct-23 - Wk1	Oct-23 - Wk2
World	0.77	0.90	0.78	0.93	0.85
USA	0.82	1.37	0.93	0.95	0.85
Europe	0.98	1.05	0.94	0.91	0.88
Japan	0.99	1.36	1.46	1.11	1.17
Asia Pac ex-Japan	0.66	0.68	0.54	0.87	0.77
Emerging Markets	0.68	0.72	0.59	0.90	0.79
Global - Banks	0.81	1.09	1.19	0.94	0.74
Global - Cons. Discretionary	0.98	1.15	0.87	0.93	0.90
Global - Cons. Staples	0.79	0.82	0.57	0.96	0.92
Global - Div Financials	0.78	1.05	0.85	0.81	0.73
Global - Energy	0.42	0.72	1.30	1.48	1.40
Global - Health Care	0.74	0.88	0.68	1.09	0.89
Global - Industrials	0.89	1.09	0.87	0.92	0.84
Global - Insurance	0.81	1.16	1.05	1.31	1.21
Global - Materials	0.40	0.57	0.48	0.74	0.67
Global - Media & Ent.	0.75	0.89	0.76	0.93	0.91
Global - Real Estate	1.02	0.89	0.67	0.83	0.80
Global - Semiconductors	0.71	0.69	0.67	0.96	0.66
Global - Software	0.83	0.95	1.05	0.79	0.73
Global - Tech Hardware	0.85	0.74	0.69	1.02	0.95
Global - Telecom	0.90	0.85	0.86	1.21	1.10
Global - Utilities	1.03	1.06	0.85	0.73	0.79
Global - Value	0.67	0.81	1.01	1.09	0.96
Global - Growth	0.94	1.38	1.28	1.20	1.11
Global - Quality	0.79	1.34	0.92	0.92	0.85
Global - Risk	0.81	1.13	1.02	1.01	0.86
Global - Momentum	1.17	1.54	1.36	1.25	1.14
Global - Dividend	0.56	0.68	0.89	1.03	0.89
Global - Small Size	0.60	0.70	0.81	0.86	0.73

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

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# Quantessential Styles: Earnings Revision Ratio

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

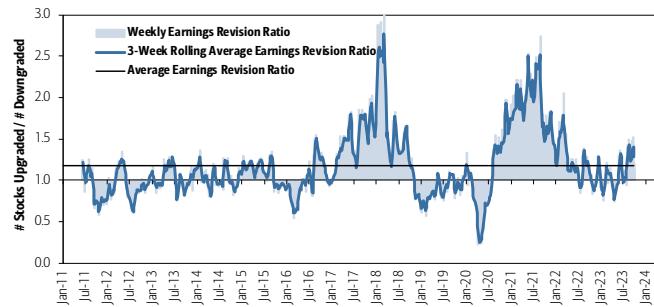
Earnings revisions fell in Value last week, but the trend remains strong



**Source :** BofA Global Quantitative Strategy, MSCI, IBES, S&P, Worldscope, Bloomberg  
BofA GLOBAL RESEARCH

## Chart 24: Global Growth Earnings Revision Ratio - Weekly

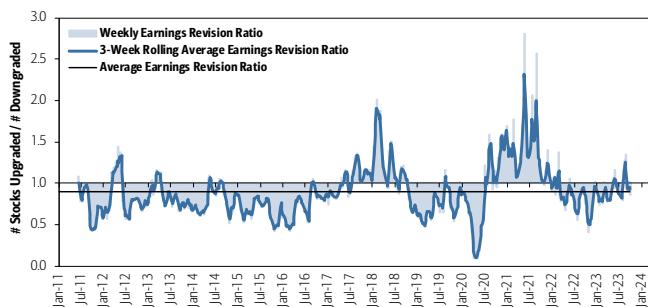
Earnings revisions fell in Growth last week but remains above 1.0



**Source :** BofA Global Quantitative Strategy, MSCI, IBES, S&P, Worldscope, Bloomberg  
BofA GLOBAL RESEARCH

## Chart 25: Global Quality Earnings Revision Ratio - Weekly

Earnings revisions fell in Quality last week



**Source :** BofA Global Quantitative Strategy, MSCI, IBES, S&P, Worldscope, Bloomberg  
BofA GLOBAL RESEARCH

## 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 fell in Momentum last week but remains above 1.0



**Source :** BofA Global Quantitative Strategy, MSCI, IBES, S&P, Worldscope, Bloomberg  
BofA GLOBAL RESEARCH

## Chart 28: Global Dividend Earnings Revision Ratio - Weekly

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



**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



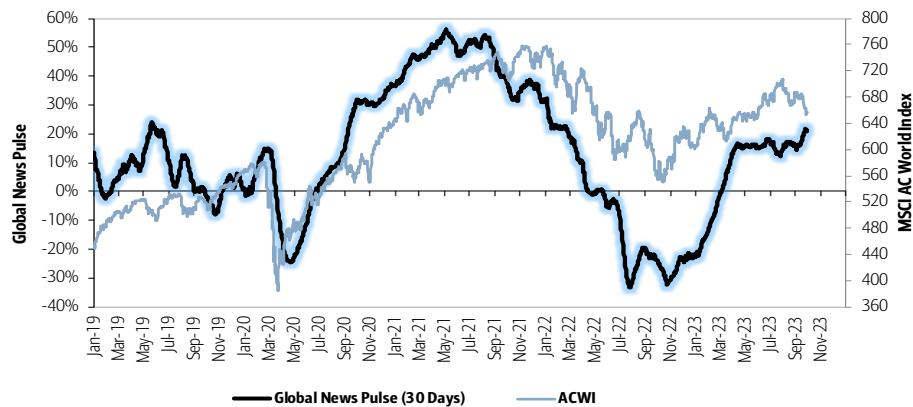
**Source :** BofA Global Quantitative Strategy, MSCI, IBES, S&P, Worldscope, Bloomberg  
BofA GLOBAL RESEARCH



# NewsAlpha

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

Global News Pulse improved last week

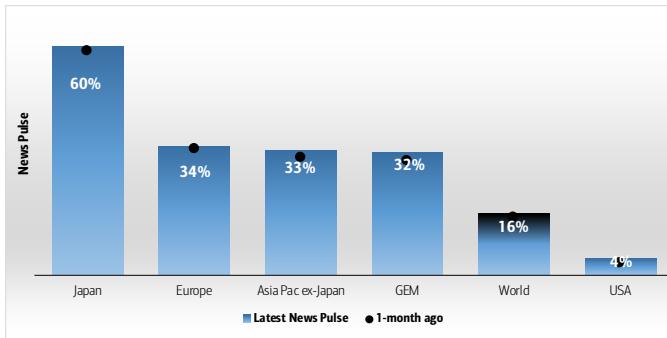


Source : BofA Global Quantitative Strategy, MSCI, Ravenpack

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## Chart 31: Global Regions: Latest News Pulse

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

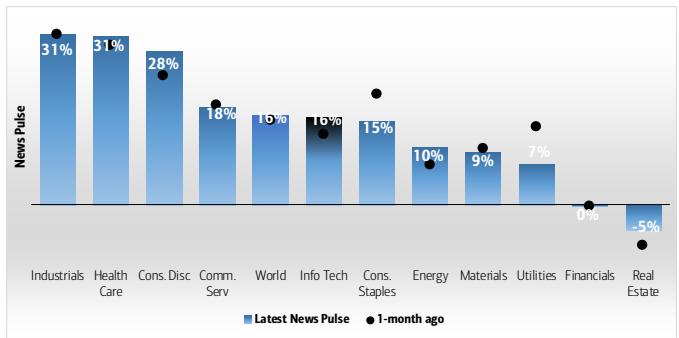


Source : BofA Global Quantitative Strategy, MSCI, Ravenpack

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## Chart 32: Global Sectors: Latest News Pulse

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

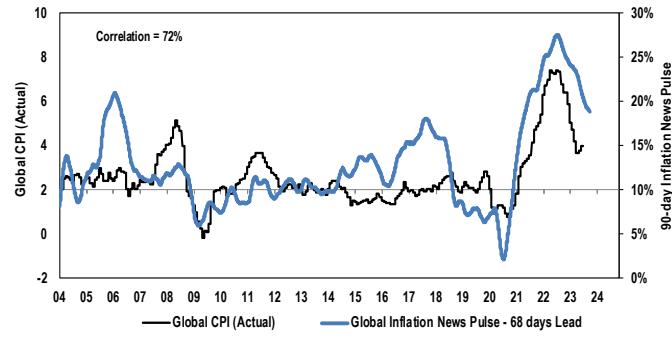


Source : BofA Global Quantitative Strategy, MSCI, Ravenpack

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

Inflation News Pulse leads Global CPI by 68 days with correlation of 72%

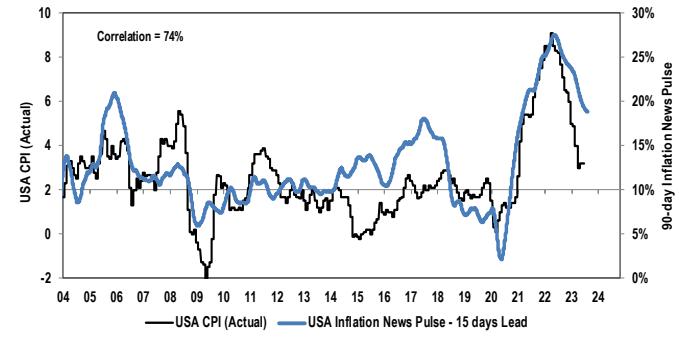


Source : BofA Global Quantitative Strategy, MSCI, Ravenpack

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

Inflation News Pulse leads USA CPI by 15 days with correlation of 74%



Source : BofA Global Quantitative Strategy, MSCI, Ravenpack

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**Chart 35: Top News Mentions (last 30 days)**

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

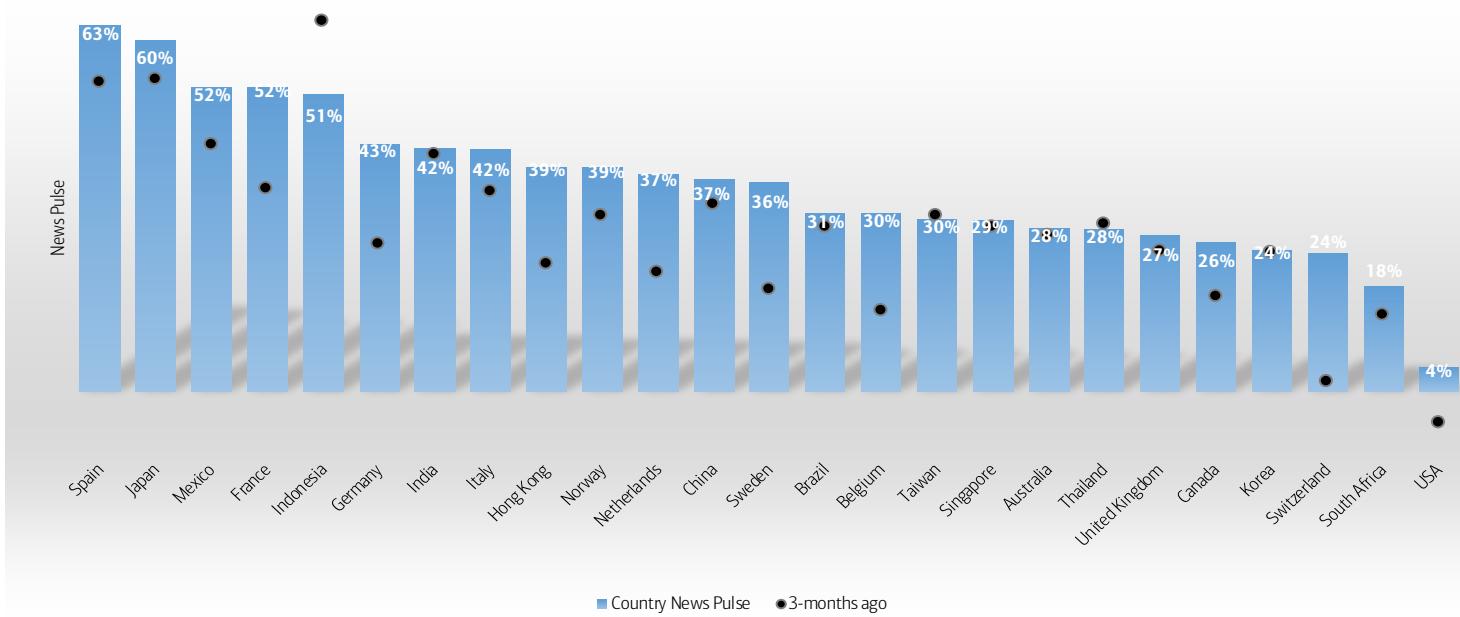


Source : BofA Global Quantitative Strategy, RavenPack

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**Chart 36: Current News Pulse by Global Countries**

News aggregate is highest in Spain and Japan



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

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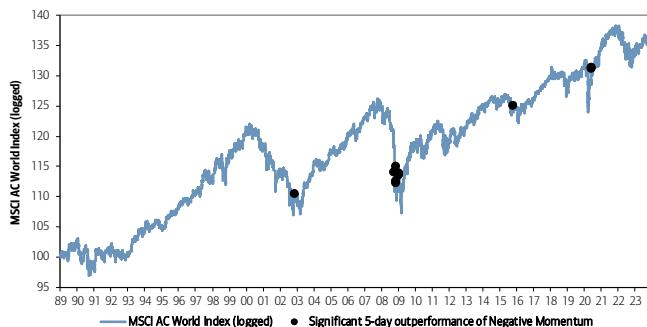


# Tactical Indicators

## 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

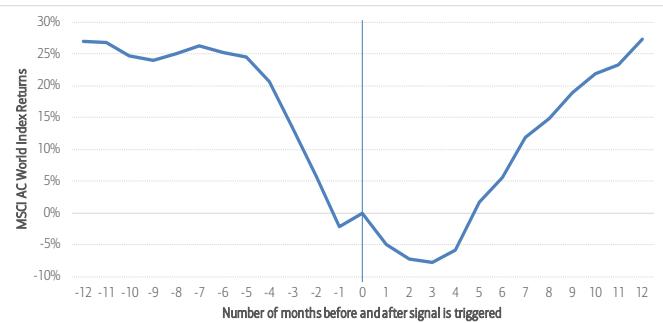


**Source :** BofA Global Quantitative Strategy, MSCI, IBES

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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

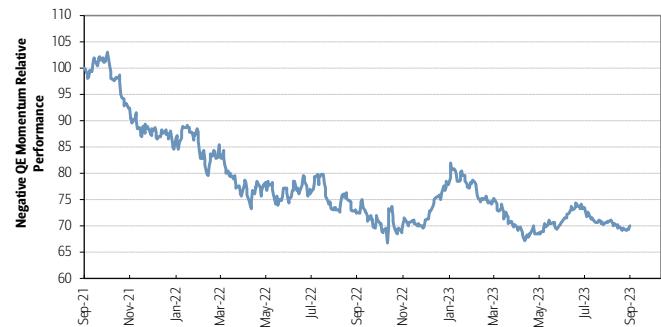


**Source :** BofA Global Quantitative Strategy, MSCI, IBES

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

Last week, Negative QE Momentum outperformed by 1.2%



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

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## Table 3: 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

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

Copper price increased (+0.6%)

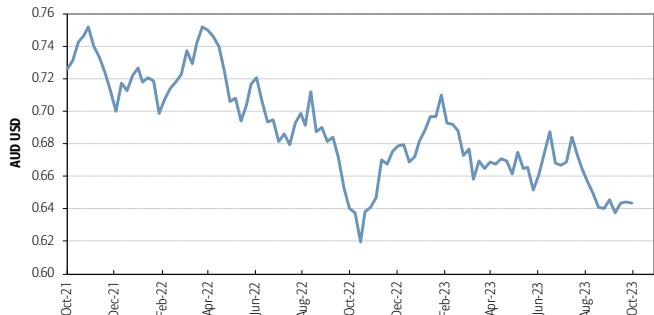


Source : BofA Global Quantitative Strategy, Bloomberg

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

AUD depreciated (-0.1%)

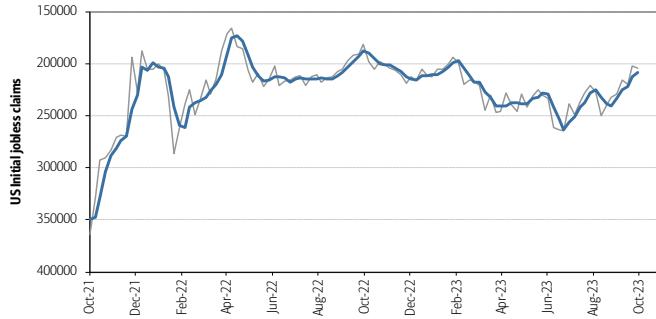


Source : BofA Global Quantitative Strategy, Bloomberg

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

US initial jobless claims increased by +2,000 to 204,000

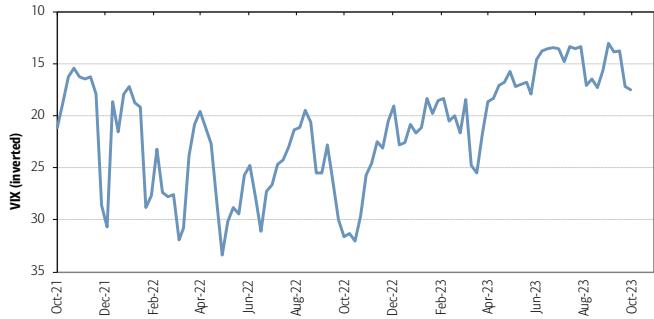


Source : BofA Global Quantitative Strategy, Bloomberg

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

VIX moved from 17.2 to 17.5



Source : BofA Global Quantitative Strategy, Bloomberg

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

Global credit spreads widened(+10 bps)



Source : BofA Global Quantitative Strategy, Bloomberg

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

Global Cycle Sensitives underperformed (-0.7%)



Source : BofA Global Quantitative Strategy, Bloomberg

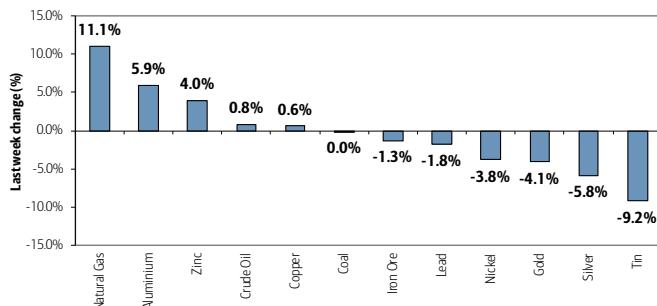
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# Commodities

## Chart 46: Hard Commodities - Last week change

Tin fell the most last week

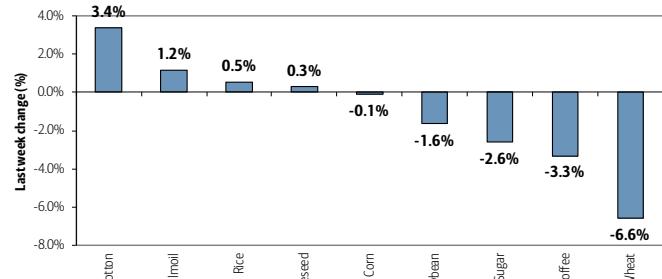


Source : BofA Global Quantitative Strategy, Bloomberg

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## Chart 47: Soft Commodities - Last week change

Cotton increased the most last week

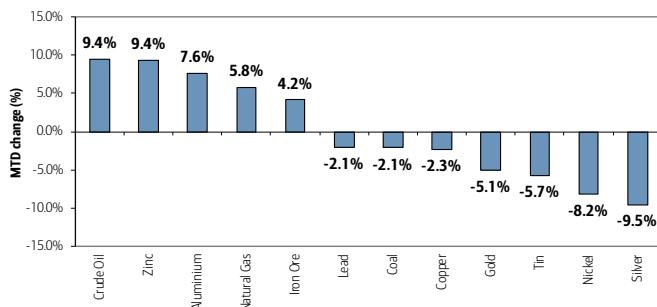


Source : BofA Global Quantitative Strategy, Bloomberg

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## Chart 48: Hard Commodities - MTD change

Crude Oil increased the most MTD

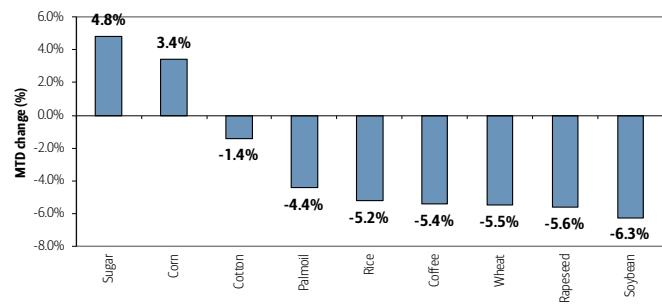


Source : BofA Global Quantitative Strategy, Bloomberg

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## Chart 49: Soft Commodities - MTD change

Sugar increased the most MTD

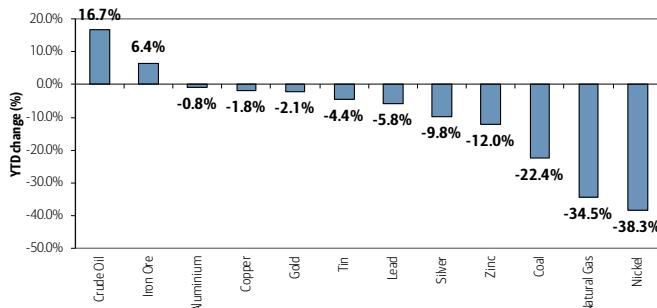


Source : BofA Global Quantitative Strategy, Bloomberg

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## Chart 50: Hard Commodities - YTD change

Crude Oil increased the most YTD

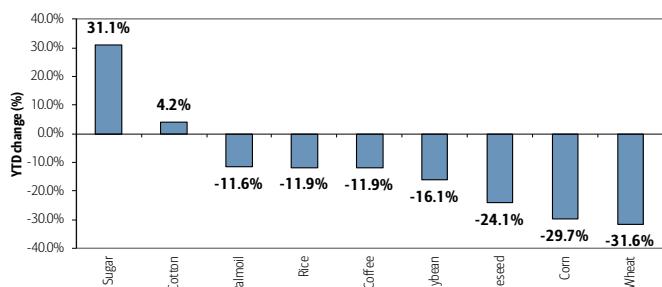


Source : BofA Global Quantitative Strategy, Bloomberg

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## Chart 51: Soft Commodities - YTD change

Sugar increased the most YTD



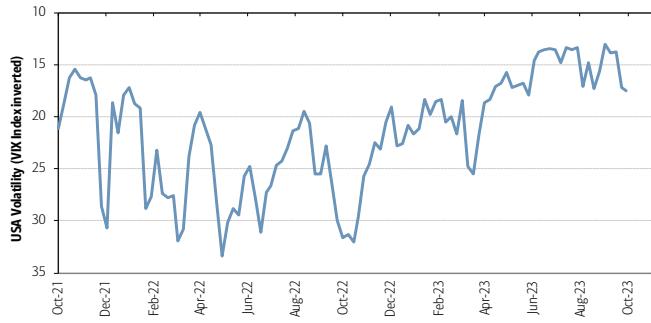
Source : BofA Global Quantitative Strategy, Bloomberg

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# Volatility

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

VIX Index moved from 17.2 to 17.5

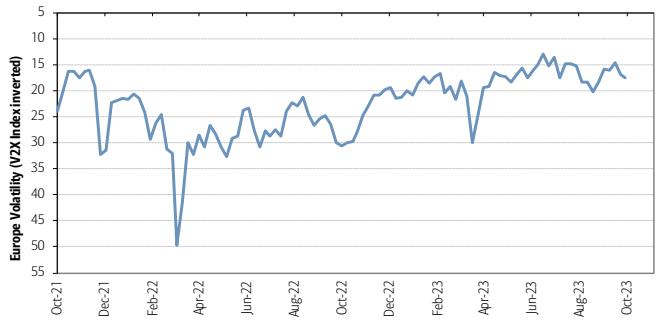


Source : BofA Global Quantitative Strategy, Bloomberg

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

V2X Index moved from 17.0 to 17.5

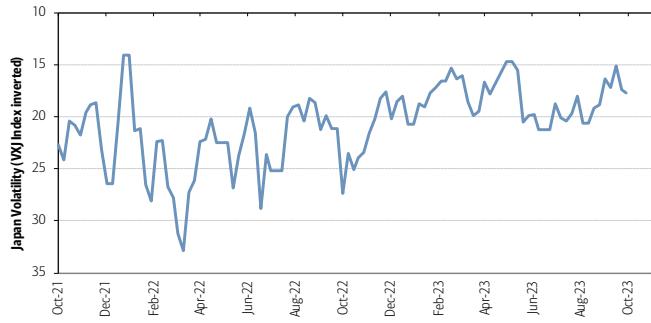


Source : BofA Global Quantitative Strategy, Bloomberg

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

VXJ Index moved from 17.4 to 17.7



Source : BofA Global Quantitative Strategy, Bloomberg

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

VXEEM Index moved from 17.7 to 18.7



Source : BofA Global Quantitative Strategy, Bloomberg

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

VHSI Index moved from 22.4 to 23.1

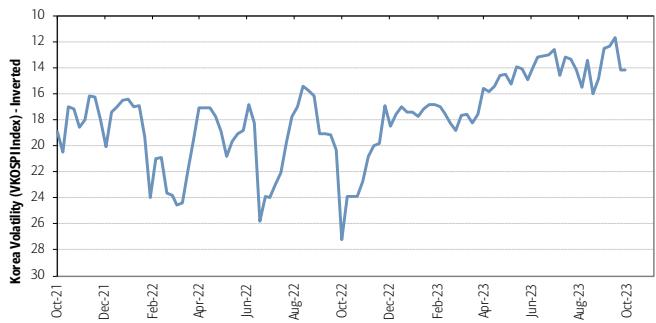


Source : BofA Global Quantitative Strategy, Bloomberg

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

VKOSPI Index moved from 14.2 to 14.2



Source : BofA Global Quantitative Strategy, Bloomberg

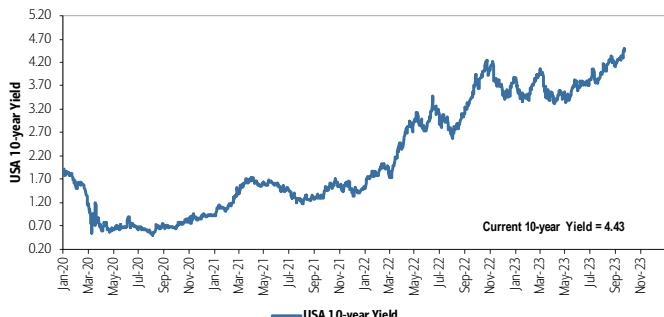
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# Rates

## Chart 58: USA 10-year Bond Yield

US 10-year yield up by 14 bps to 4.57%

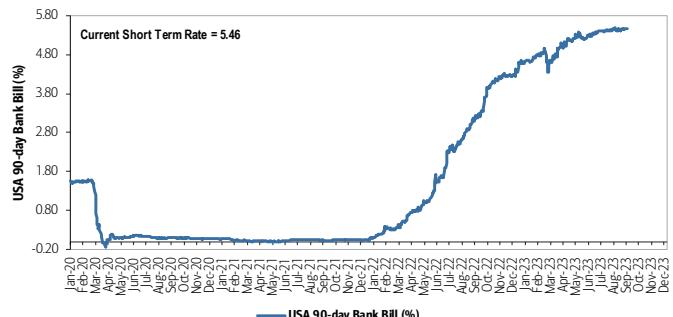


Source : BofA Global Quantitative Strategy, Bloomberg

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## Chart 59: USA 90-day Bank Bill

US 90-day yield fell by -2 bps to 5.45%

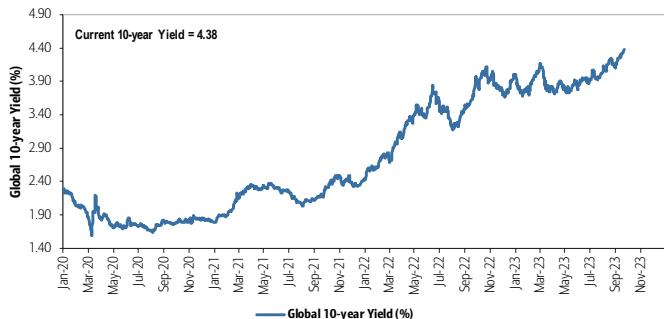


Source : BofA Global Quantitative Strategy, Bloomberg

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## Chart 60: Global 10-year Bond Yield

Current 10-yr Global GDP weighted bond yield is 4.38%

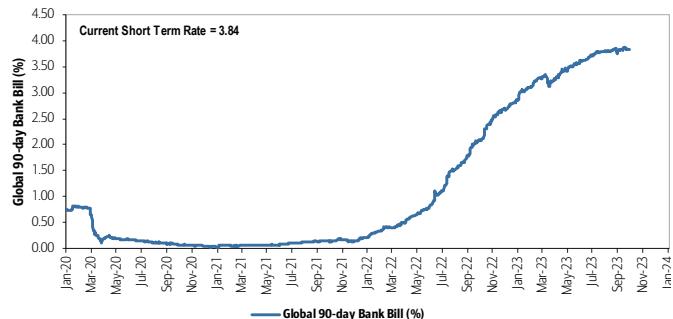


Source : BofA Global Quantitative Strategy, Bloomberg

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## Chart 61: Global 90-day Bank Bill

Current 90d Global GDP weighted bond yield is 3.84%

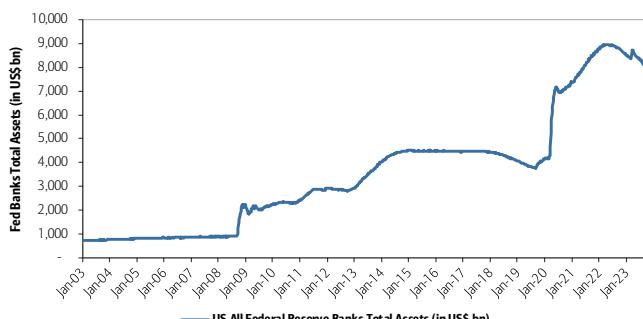


Source : BofA Global Quantitative Strategy, Bloomberg

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

Last week, Fed Reserve's balance sheet reduced by US\$-97bn

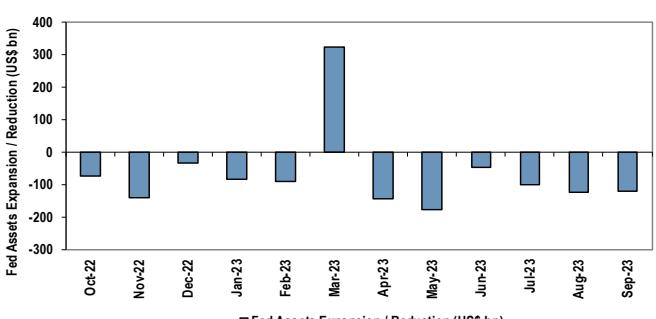


Source : BofA Global Quantitative Strategy, Bloomberg

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

Last month, Fed reduced the balance sheet by US\$ -119bn

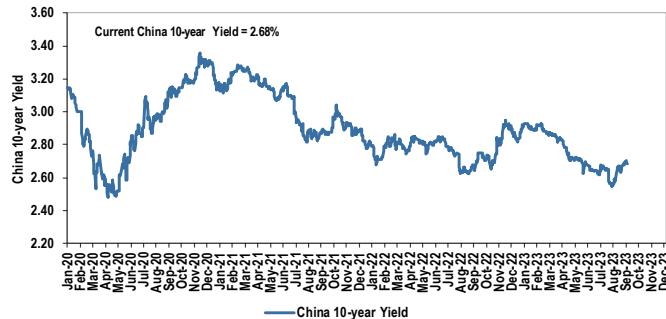


Source : BofA Global Quantitative Strategy, Bloomberg

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

Current China 10-year Yield = 2.68%



Source : BofA Global Quantitative Strategy, Bloomberg

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

Current China 90-day Rate = 2.19%



Source : BofA Global Quantitative Strategy, Bloomberg

BofA GLOBAL RESEARCH

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

Current 10-year Asia Pac GDP weighted bond yield is 3.67%



Source : BofA Global Quantitative Strategy, Bloomberg

BofA GLOBAL RESEARCH

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

Current 90d Asia Pac GDP weighted bond yield is 3.14%



Source : BofA Global Quantitative Strategy, Bloomberg

BofA GLOBAL RESEARCH



**Table 4: USA Yield Curve slope and subsequent Global Regions & Sectors relative returns (median 12m)**

Various US Yield Curve Slope ranges and subsequent 12-months Global Sector Performance (median)

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	22.5%	4.4%	-0.5%	3.0%	4.7%	-6.5%	9.0%	5.8%	3.2%	3.2%	-4.4%	-2.6%	4.3%	-4.0%
Energy	19.5%	14.0%	-2.4%	-3.0%	10.9%	0.3%	3.5%	-2.5%	-3.7%	-3.0%	-5.0%	-3.0%	-6.8%	1.9%
Health Care	19.2%	-5.8%	2.0%	10.6%	14.3%	1.6%	3.6%	7.2%	5.4%	1.1%	-8.1%	-3.1%	5.0%	-11.0%
Real Estate	18.2%	-1.8%	-7.7%	-8.1%	-4.0%	-8.2%	-3.5%	-3.1%	5.9%	0.3%	4.2%	4.5%	4.1%	2.9%
Banks	17.9%	-6.1%	-10.5%	-4.1%	1.4%	4.1%	1.9%	-0.9%	-4.4%	3.0%	3.5%	-1.1%	-10.0%	-9.5%
Materials	16.3%	15.1%	-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	15.5%	-0.2%	-1.6%	1.6%	2.5%	-4.7%	1.1%	2.1%	1.5%	-6.1%	-1.1%	-2.2%	-5.9%	-7.8%
Div Financials	14.9%	-6.3%	-1.4%	2.6%	0.0%	3.8%	-1.4%	0.2%	1.4%	0.4%	4.0%	-7.5%	-12.3%	-8.5%
Utilities	14.1%	7.6%	-0.7%	-6.7%	-7.3%	-5.2%	-3.0%	-1.9%	-6.3%	-3.2%	-3.2%	-2.7%	-7.4%	-13.9%
Industrials	7.8%	2.7%	-1.4%	-2.1%	-4.9%	-1.8%	-1.2%	1.1%	1.2%	-0.7%	1.4%	4.0%	-0.8%	5.4%
Cons. Discretionary	3.7%	-1.3%	-0.5%	-0.3%	-4.6%	-1.7%	-4.1%	3.5%	2.2%	3.9%	3.5%	1.6%	4.8%	6.0%
Media & Ent.	-1.4%	-2.9%	5.1%	8.4%	-4.9%	-4.8%	-14.3%	0.6%	1.2%	2.0%	1.7%	1.8%	4.4%	6.7%
Telecom	-19.0%	14.0%	1.9%	-0.8%	-9.7%	-14.2%	-7.8%	-3.7%	-4.4%	-2.4%	-3.1%	-1.9%	-0.6%	-2.1%
Software	-19.8%	2.1%	18.4%	20.1%	8.8%	13.3%	9.0%	10.5%	14.2%	4.3%	1.0%	1.2%	6.9%	-1.8%
Semiconductors	-31.2%	-6.6%	16.9%	5.9%	18.6%	10.5%	12.5%	4.8%	2.6%	0.9%	13.7%	11.0%	7.5%	2.0%
Tech Hardware	-36.1%	3.5%	18.9%	5.1%	3.0%	8.4%	6.2%	1.2%	-4.5%	1.6%	10.9%	2.7%	6.3%	-0.5%
World	-17.5%	6.0%	9.5%	11.6%	12.2%	11.3%	5.1%	2.8%	7.5%	2.0%	11.2%	11.8%	3.6%	14.5%
USA	-16.3%	10.0%	11.5%	17.7%	24.5%	15.4%	10.1%	7.5%	2.7%	3.6%	9.1%	11.2%	9.1%	16.9%
Europe	-18.4%	13.6%	5.2%	14.2%	17.8%	7.6%	6.1%	5.1%	7.8%	0.0%	15.2%	12.8%	-7.0%	10.5%
Japan	-27.6%	-5.4%	1.6%	-0.8%	-12.1%	7.6%	-7.7%	-5.4%	4.8%	-0.5%	17.2%	10.0%	-1.0%	5.4%
GEM	-27.4%	22.3%	4.0%	4.1%	2.4%	19.4%	2.5%	0.3%	-3.9%	5.1%	20.6%	17.5%	5.2%	17.1%
Asia Pac ex-Japan	-26.6%	15.5%	3.7%	6.2%	-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



# Valuation

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

The latest Global Price-to-Book ratio is 2.66



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

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## Chart 69: Global Prospective PE

The latest Global Prospective PE is 16.2x

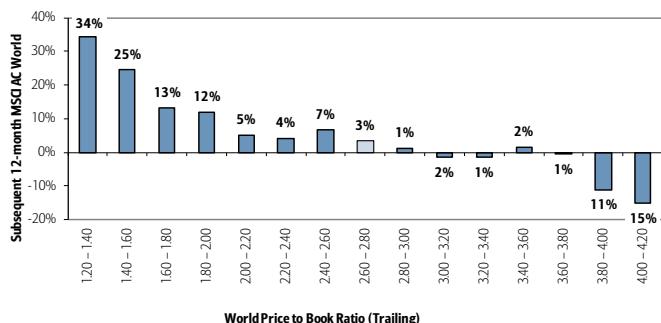


Source : BofA Global Quantitative Strategy, MSCI, IBES, Worldscope

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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

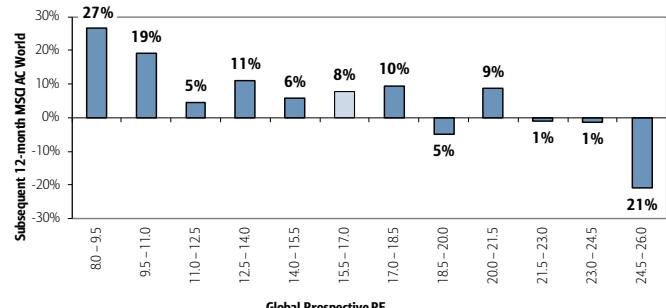


Source : BofA Global Quantitative Strategy, MSCI, IBES, Worldscope

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

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

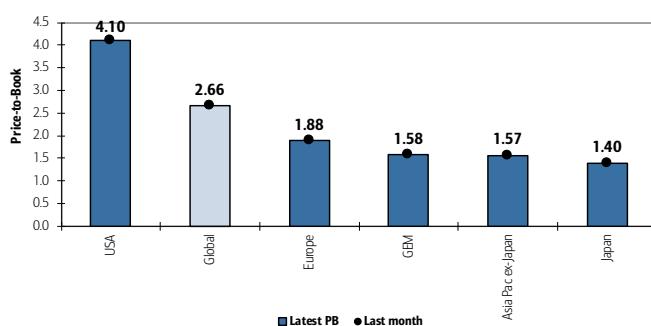


Source : BofA Global Quantitative Strategy, MSCI, IBES, Worldscope

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

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

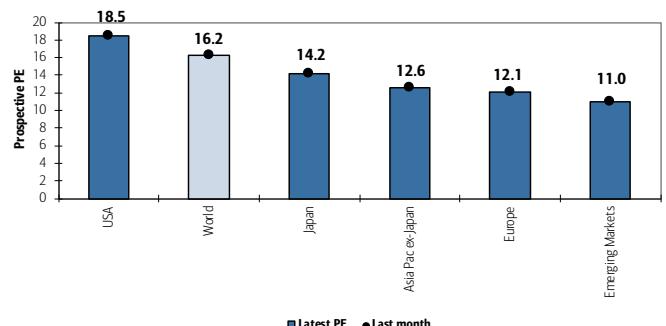


Source : BofA Global Quantitative Strategy, MSCI, IBES, Worldscope

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## Chart 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”](#).

**Table 5: Global Region-Sectors - Triple Momentum**

Triple Momentum highest for Japan - Utilities and lowest for USA - Telecom

Average Triple Momentum Rank	Banks	Cons. Discretionary	Cons. Staples	Div Financials	Energy	Health Care	Industrials	Insurance	Materials	Media & Ent.	Real Estate	Semiconductors	Software	Tech Hardware	Telecom	Utilities	Region
Asia Pac ex-Japan	46	56	40	49	47	46	51	62	34	47	32	40	47	52	42	48	46
Emerging ex-Asia	67	47	53	29	45	60	67	72	38	22	57		100		60	71	57
Europe	68	59	42	64	45	53	54	54	41	50	28	74	72	29	45	50	53
Japan	61	68	45	73	60	53	59	64	37	44	49	61	50	59	43	78	56
United States	27	55	43	51	51	48	58	59	47	51	38	60	68	51	15	25	51
Global	55	57	43	53	49	49	56	60	39	47	36	55	64	51	45	43	

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

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**Table 6: Asia Pac ex-Japan Country-Sectors - Triple Momentum**

Triple Momentum highest for India - Energy and lowest for China - Div Financials

Average Triple Momentum Rank	Banks	Cons. Discretionary	Cons. Staples	Div Financials	Energy	Health Care	Industrials	Insurance	Materials	Media & Ent.	Real Estate	Semiconductors	Software	Tech Hardware	Telecom	Utilities	Country
Australia	32	65	34	39	58	30	37	77	41	62	36		14		39	85	44
China	27	60	40	17	38	49	41	49	41	61	25	11	22	40		41	43
Hong Kong	49	76	13	32		84	30	22			36	19	65			40	40
India	65	71	54	79	86	63	74	64	53	59	87		75			63	67
Indonesia	81	32	86		55	12	33		52						24		57
Malaysia	49	50	43		68	38	81		37			37			52	36	51
New Zealand						7	42						70		48	61	46
Philippines	80	30	50				65				70				54	65	65
Singapore	74	47	11	39			62			3	38				53	54	47
South Korea	47	69	67	70	76	56	65	95	35	23			56	27	72	76	54
Taiwan	59	35	64		22		38	79	24			45		59	50		49
Thailand	60	51	47		34		88		12		24			97	41	38	45
Asia Pac ex-Japan	53	60	48	52	57	49	54	62	40	43	36	37	64	50	50	49	

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

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## Chart 74: Regional-Sectors with the highest average (green) and lowest average (red) Triple Momentum Rank

Triple Momentum highest for Japan - Utilities and lowest for USA - Telecom



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

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### Chart 75: Asia Pac ex-Japan Country-Sectors with the highest average (green) and lowest average (red) Triple Momentum Rank

Triple Momentum highest for India - Energy and lowest for China - Div Financials



© 2023 Mapbox © OpenStreetMap

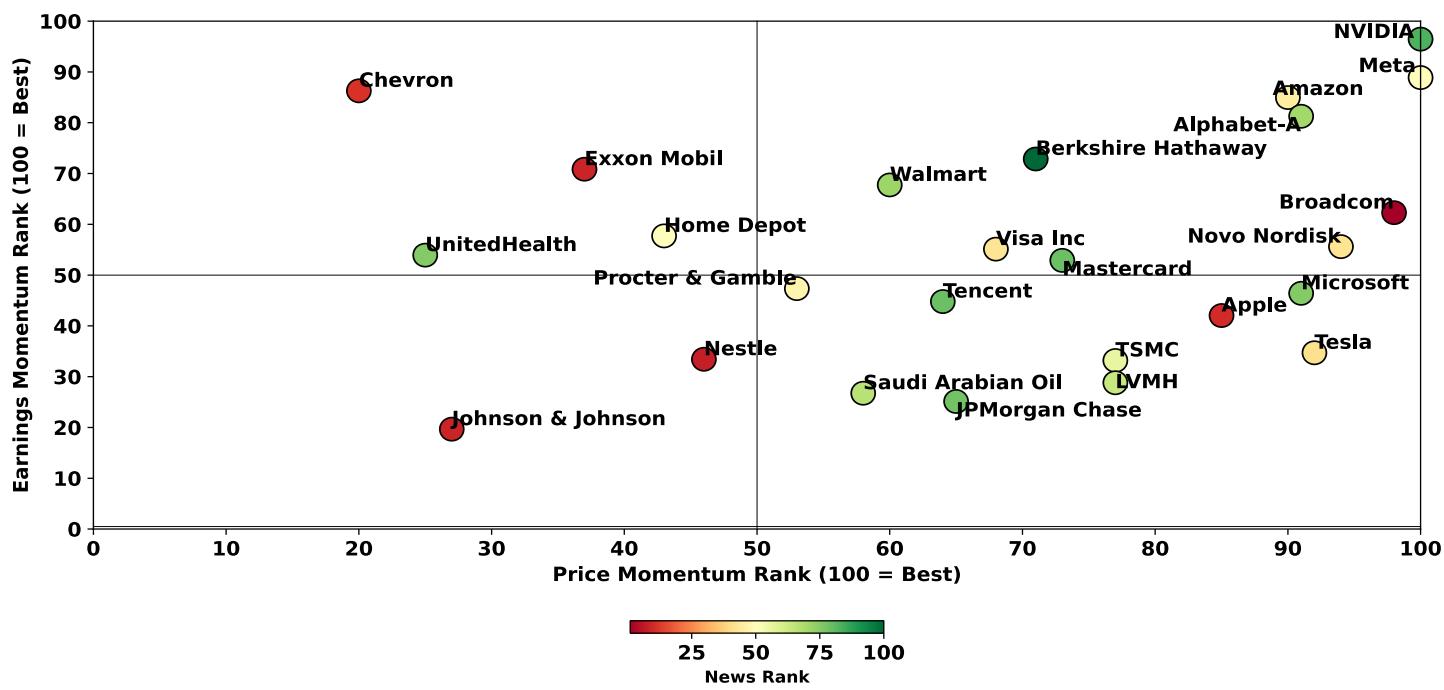
**Source :** BofA Global Quantitative Strategy, MSCI, IBES, FactSet, RavenPack

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## Global Regions: Triple Momentum Charts

**Chart 76: Global: Earnings Momentum (vertical axis), Price Momentum (horizontal axis), News Momentum (colour)**

Triple Momentum is most positive for NVIDIA, Berkshire Hathaway and Alphabet-A

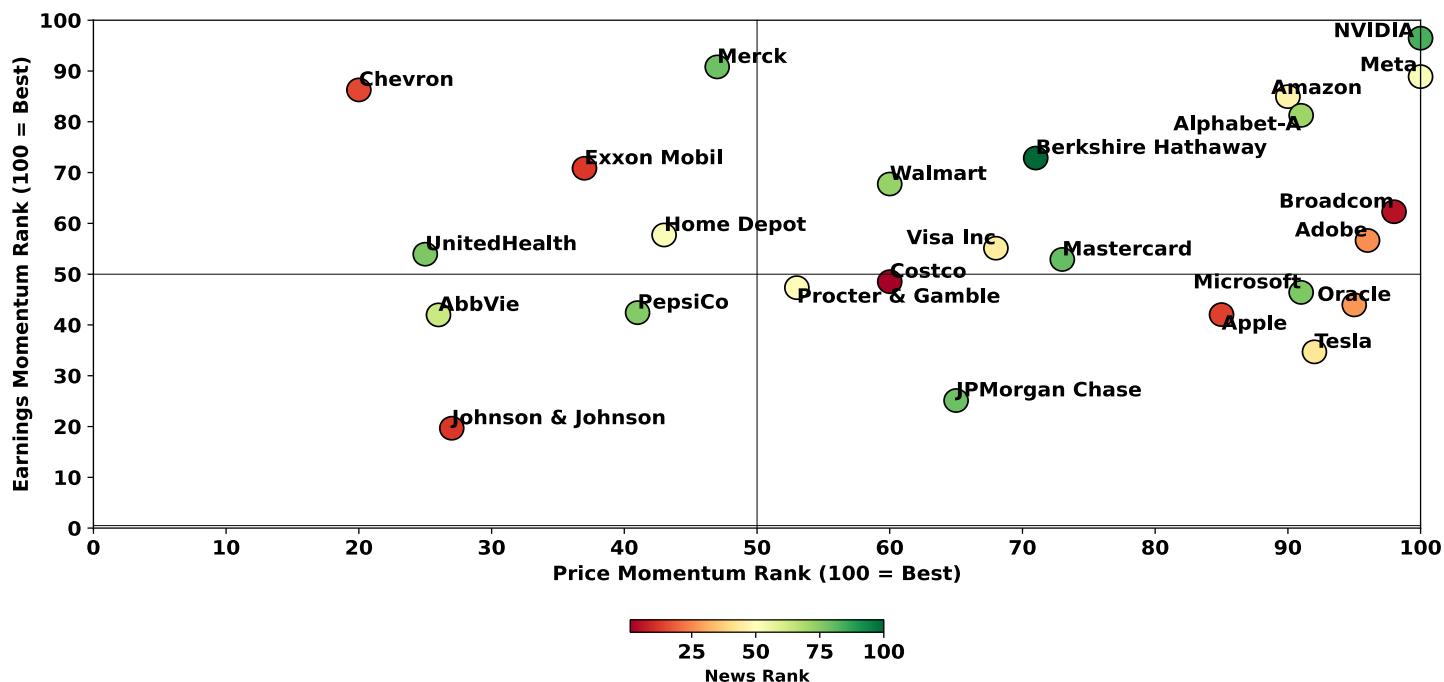


Source : BofA Global Quantitative Strategy, MSCI, IBES, FactSet, RavenPack

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**Chart 77: USA: Earnings Momentum (vertical axis), Price Momentum (horizontal axis), News Momentum (colour)**

Triple Momentum is most positive for NVIDIA, Berkshire Hathaway and Alphabet-A

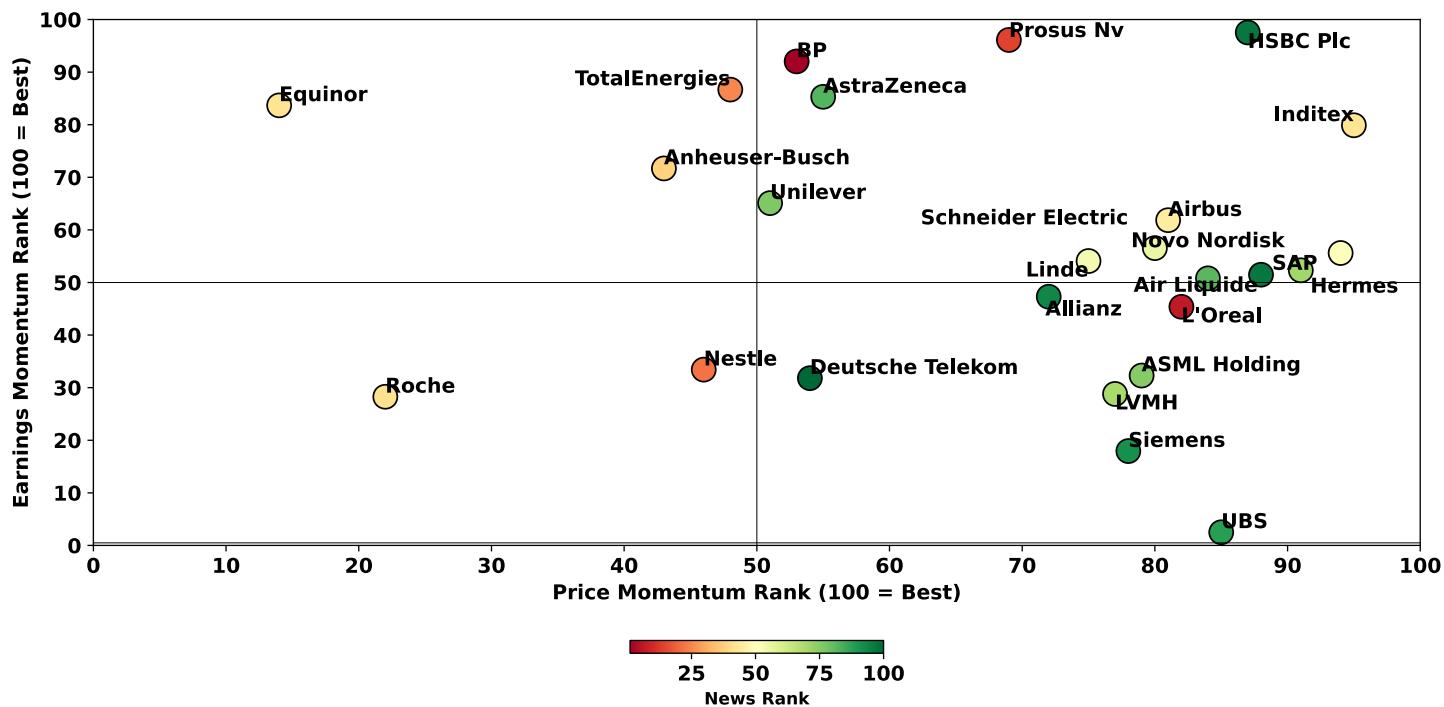


Source : BofA Global Quantitative Strategy, MSCI, IBES, FactSet, RavenPack

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**Chart 78: Europe: Earnings Momentum (vertical axis), Price Momentum (horizontal axis), News Momentum (colour)**

Triple Momentum is most positive for HSBC Plc, SAP and AstraZeneca

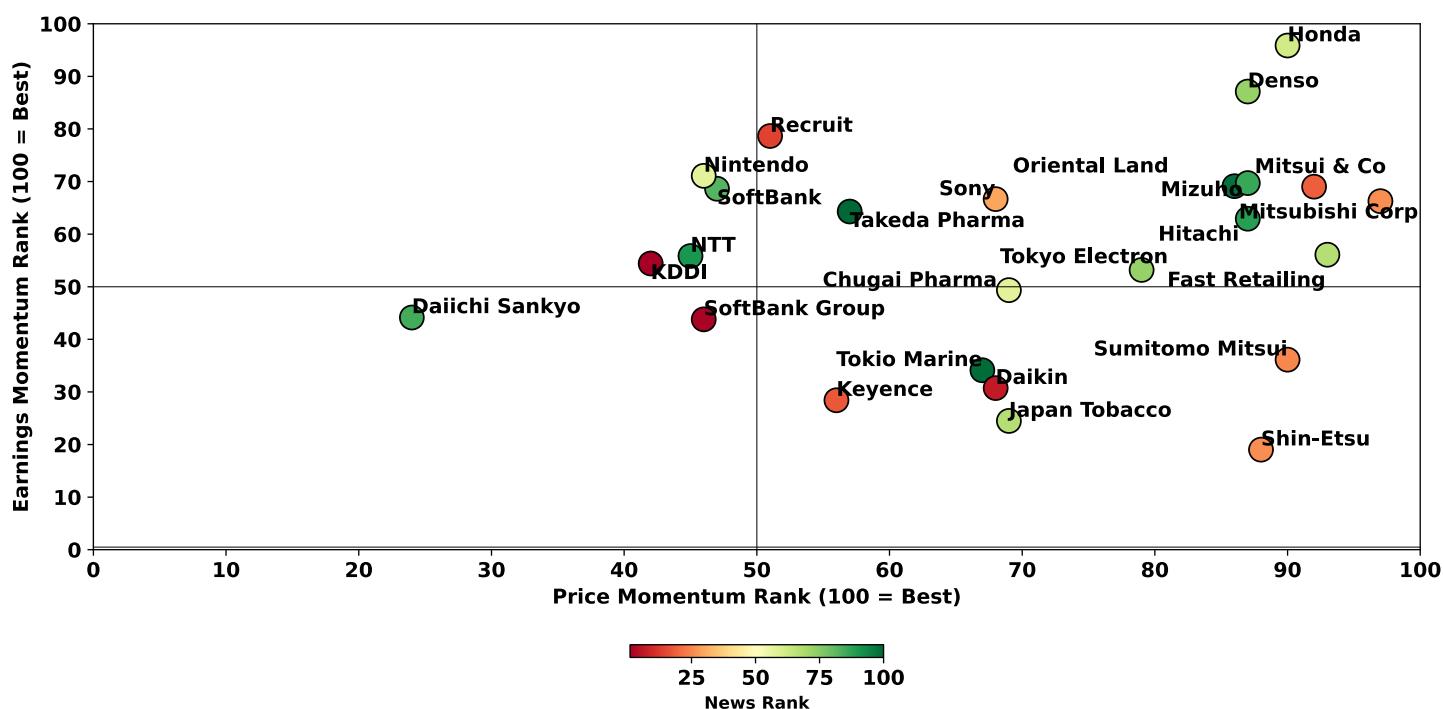


Source : BofA Global Quantitative Strategy, MSCI, IBES, FactSet, RavenPack

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**Chart 79: Japan: Earnings Momentum (vertical axis), Price Momentum (horizontal axis), News Momentum (colour)**

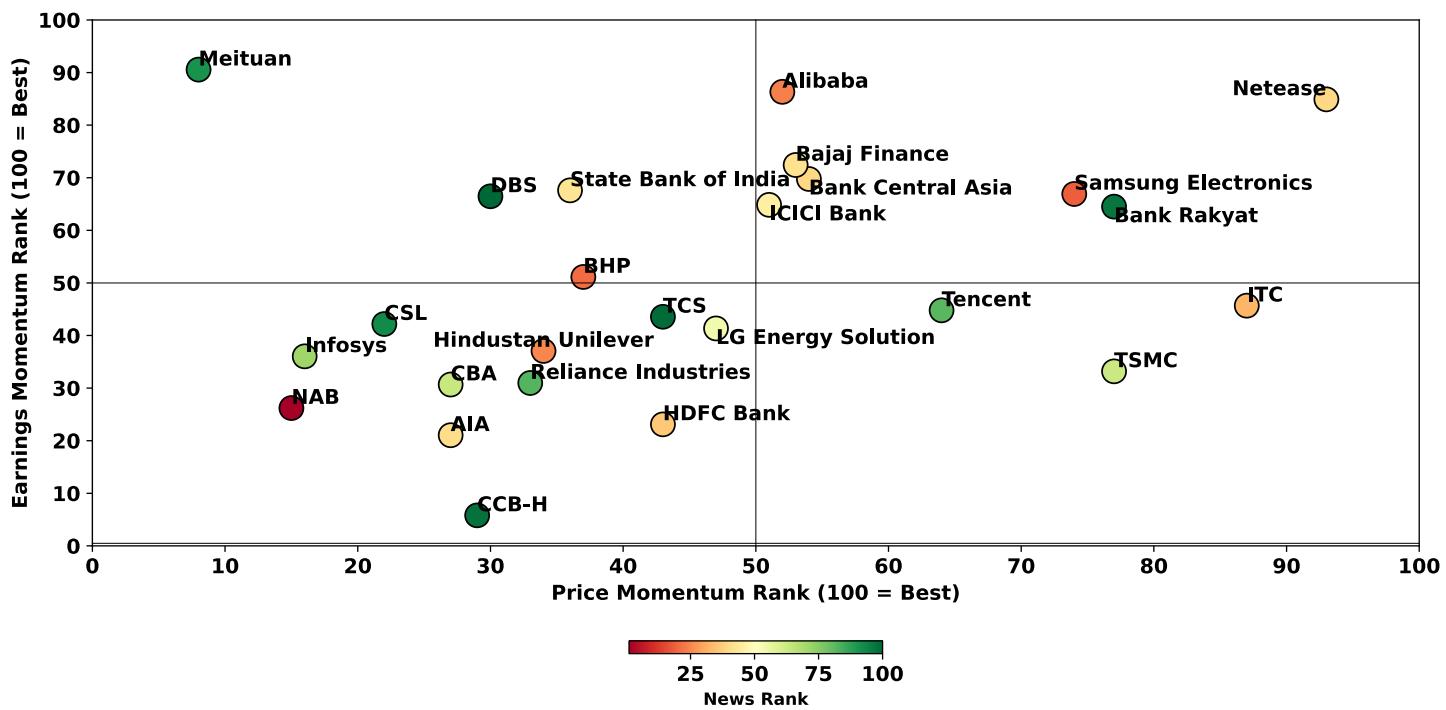
Triple Momentum is most positive for Oriental Land, Mizuho and Hitachi



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

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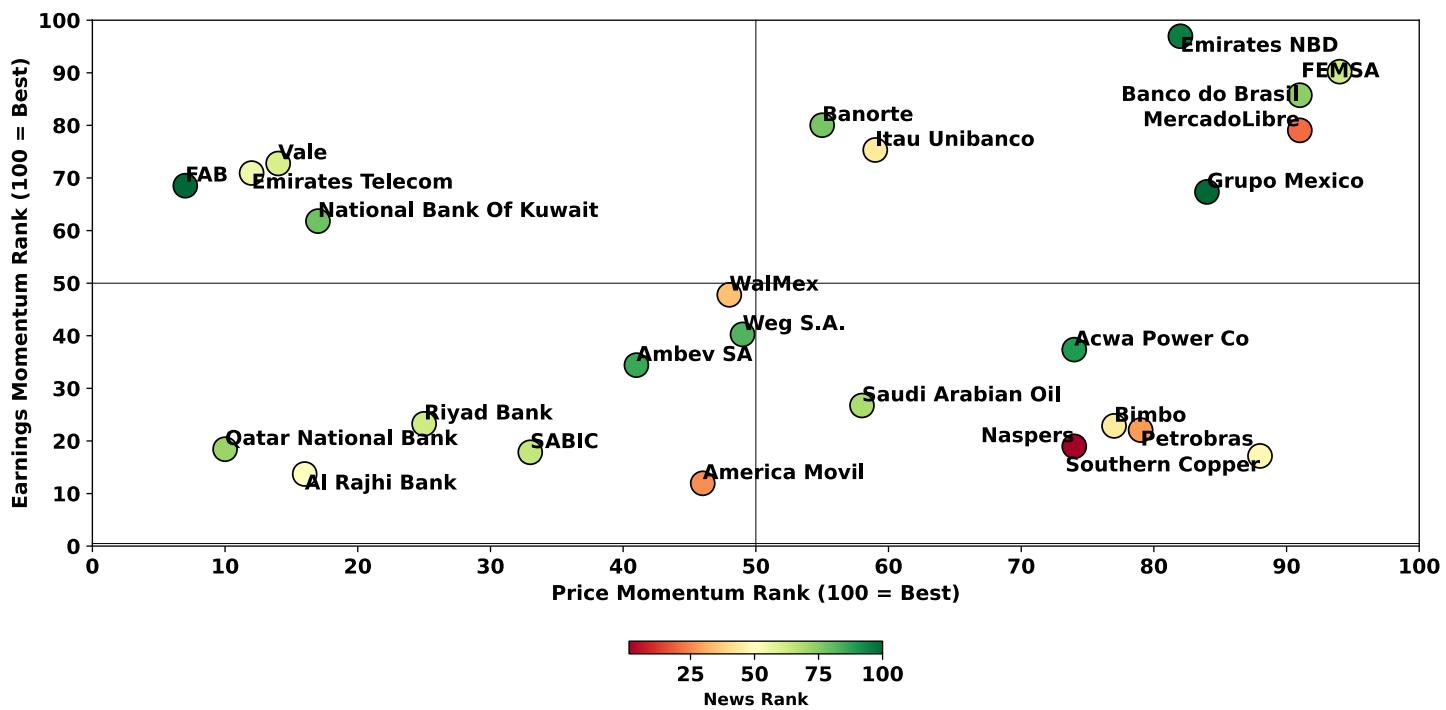
**Chart 80: Asia Pac ex-Japan: Earnings Momentum (vertical axis), Price Momentum (horizontal axis), News Momentum (colour)**  
Triple Momentum is most positive for Bank Rakyat



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

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**Chart 81: Emerging ex-Asia: Earnings Momentum (vertical axis), Price Momentum (horizontal axis), News Momentum (colour)**  
Triple Momentum is most positive for Emirates NBD, Grupo Mexico and Banco do Brasil



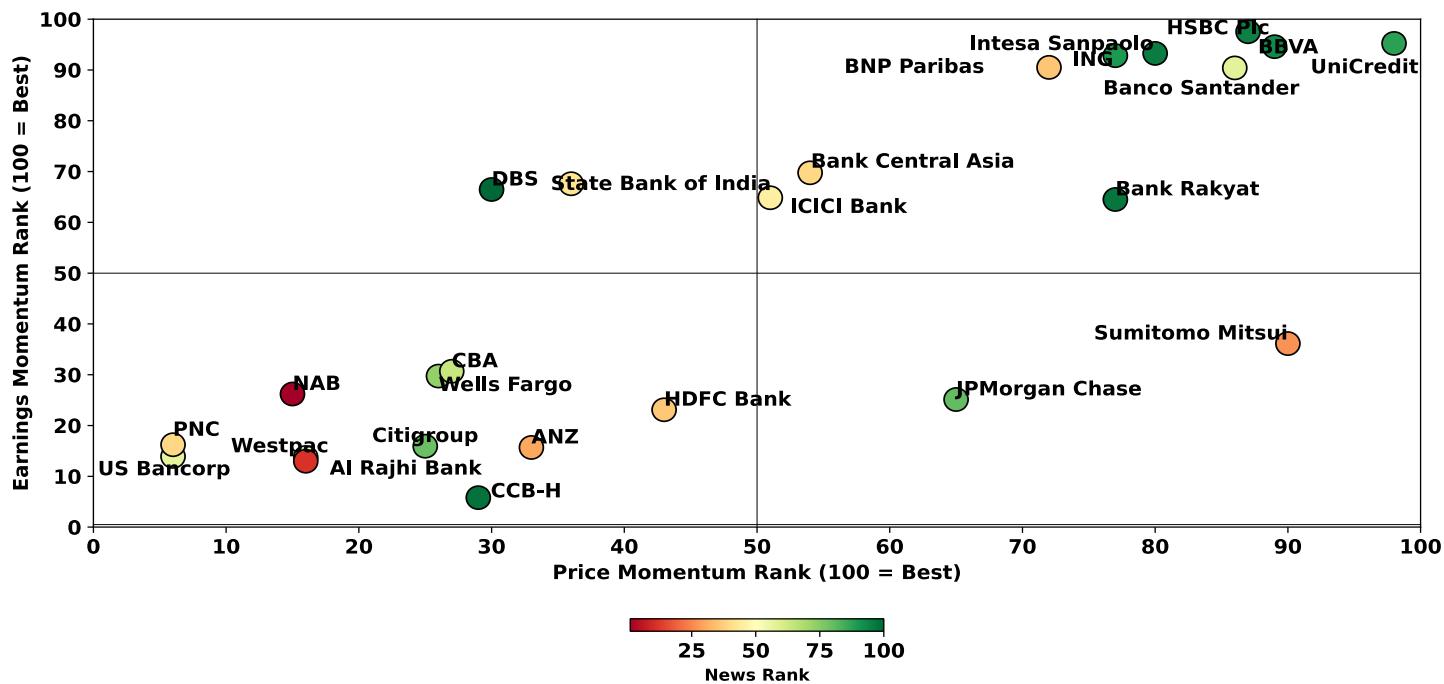
Source : BofA Global Quantitative Strategy, MSCI, IBES, FactSet, RavenPack

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## Global Sectors: Triple Momentum Charts

**Chart 82: Banks: Earnings Momentum (vertical axis), Price Momentum (horizontal axis), News Momentum (colour)**

Triple Momentum is most positive for HSBC Plc, UniCredit and BBVA

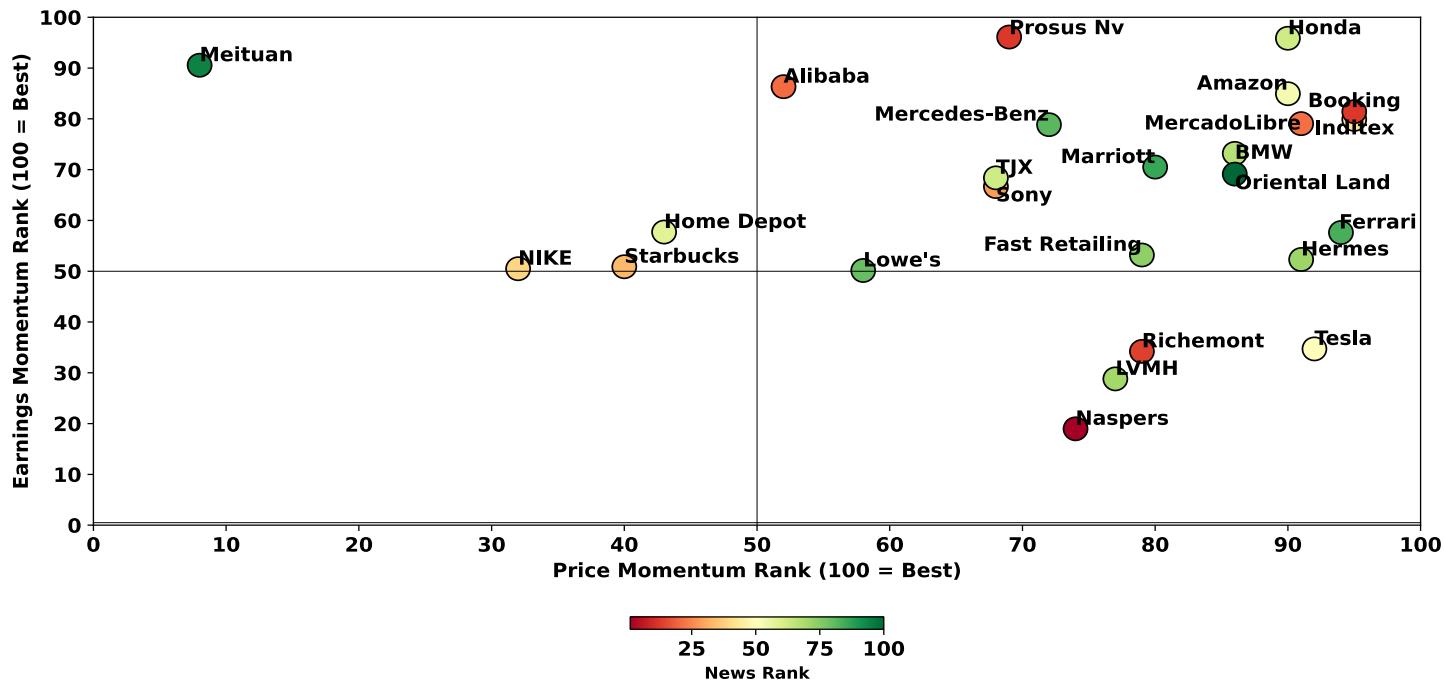


Source : BofA Global Quantitative Strategy, MSCI, IBES, FactSet, RavenPack

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**Chart 83: Consumer Discretionary: Earnings Momentum (vertical axis), Price Momentum (horizontal axis), News Momentum (colour)**

Triple Momentum is most positive for Oriental Land, Ferrari and Mercedes-Benz



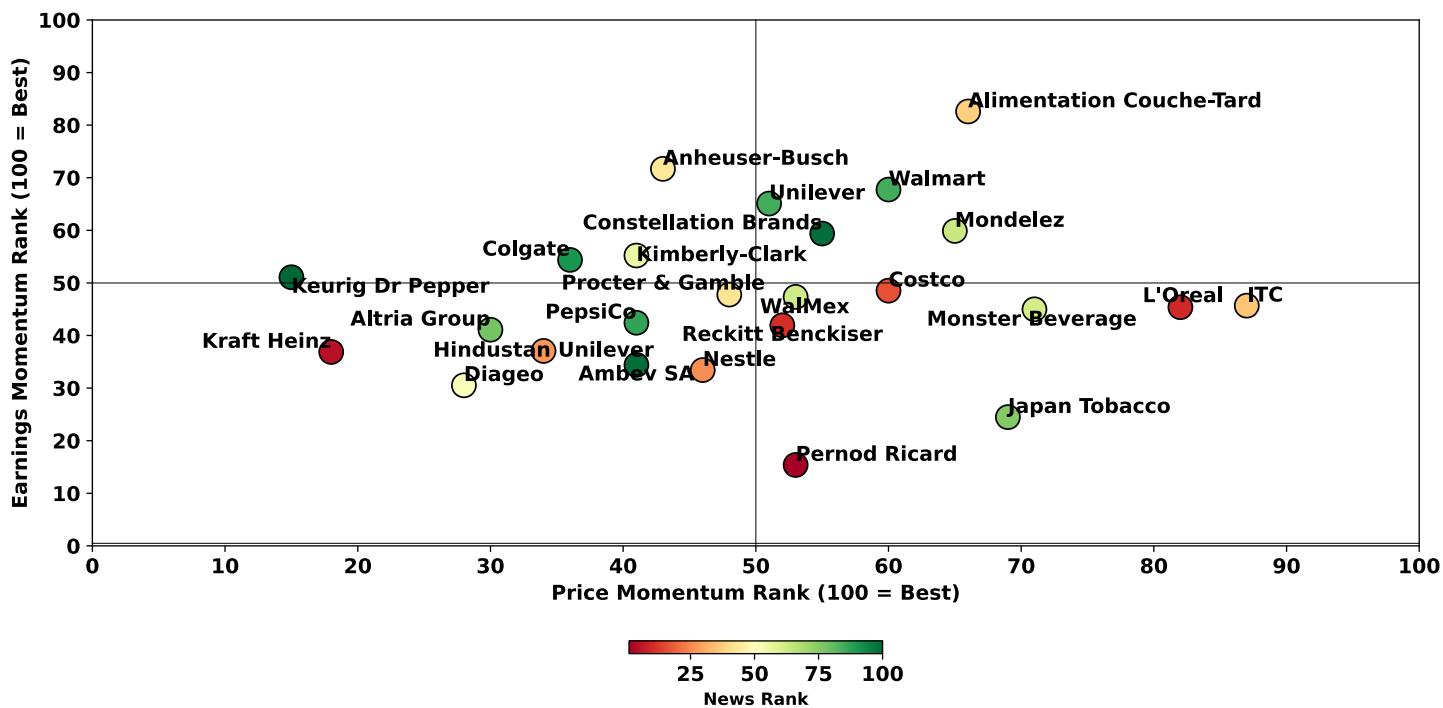
Source : BofA Global Quantitative Strategy, MSCI, IBES, FactSet, RavenPack

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### Chart 84: Consumer Staples: Earnings Momentum (vertical axis), Price Momentum (horizontal axis), News Momentum (colour)

Triple Momentum is most positive for Constellation Brands, Unilever and Walmart

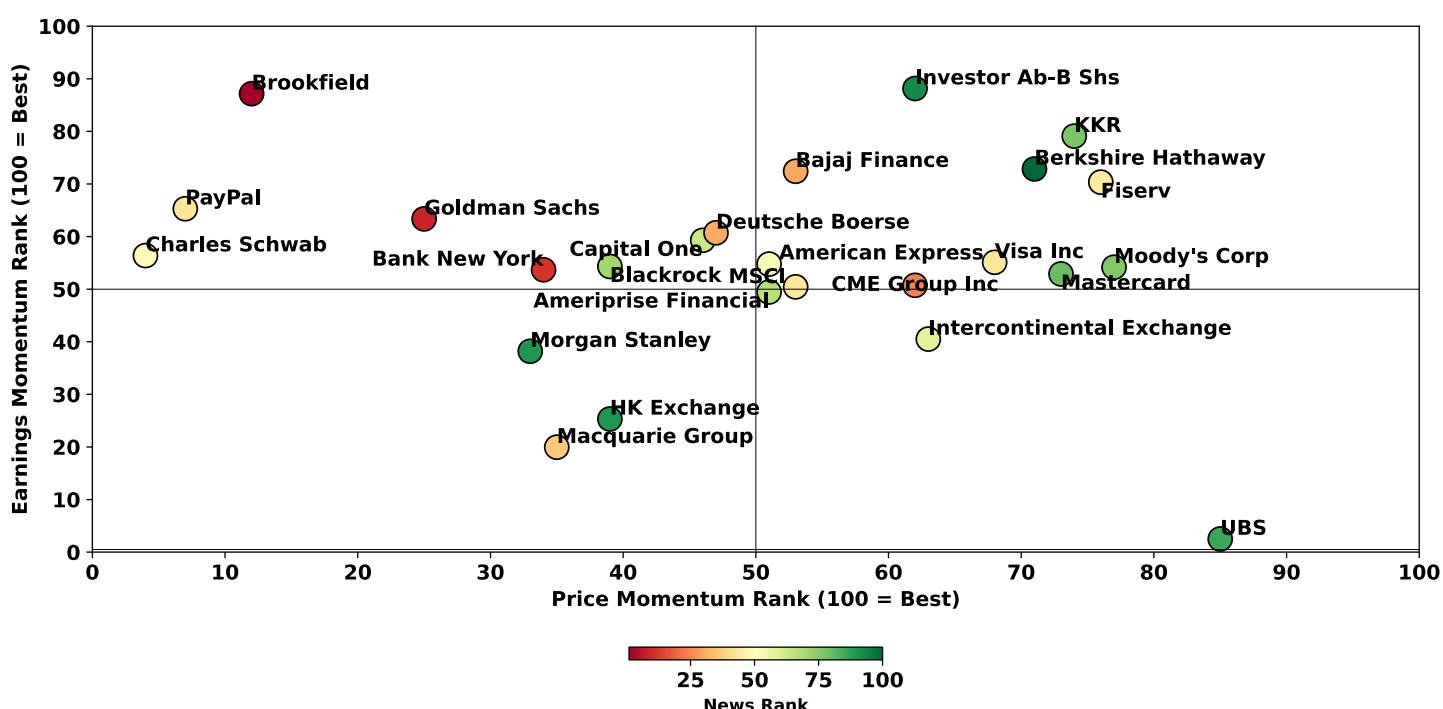


Source : BofA Global Quantitative Strategy, MSCI, IBES, FactSet, RavenPack

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### Chart 85: Diversified Financials: Earnings Momentum (vertical axis), Price Momentum (horizontal axis), News Momentum (colour)

Triple Momentum is most positive for Berkshire Hathaway, Investor Ab-B Shs and KKR

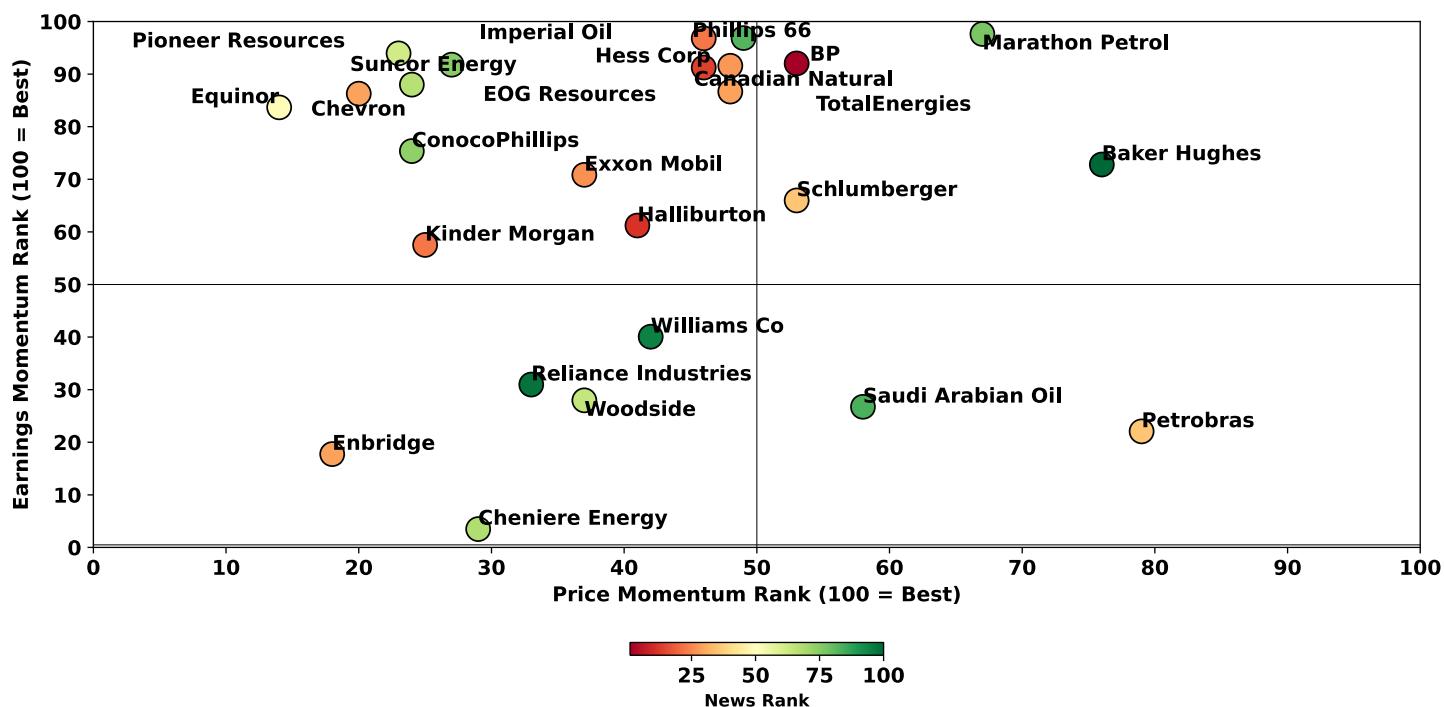


Source : BofA Global Quantitative Strategy, MSCI, IBES, FactSet, RavenPack

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**Chart 86: Energy: Earnings Momentum (vertical axis), Price Momentum (horizontal axis), News Momentum (colour)**

Triple Momentum is most positive for Baker Hughes and Marathon Petrol

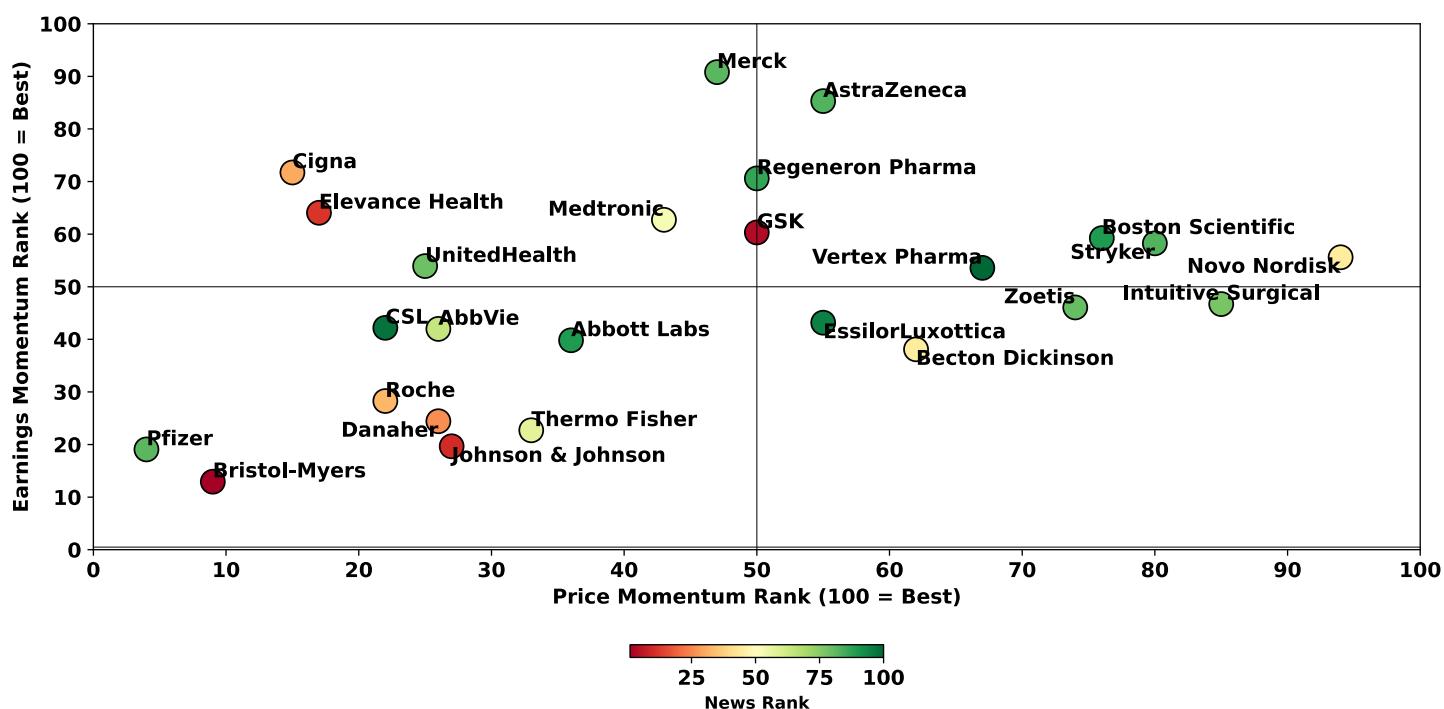


Source : BofA Global Quantitative Strategy, MSCI, IBES, FactSet, RavenPack

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**Chart 87: Health Care: Earnings Momentum (vertical axis), Price Momentum (horizontal axis), News Momentum (colour)**

Triple Momentum is most positive for Boston Scientific, AstraZeneca and Vertex Pharma



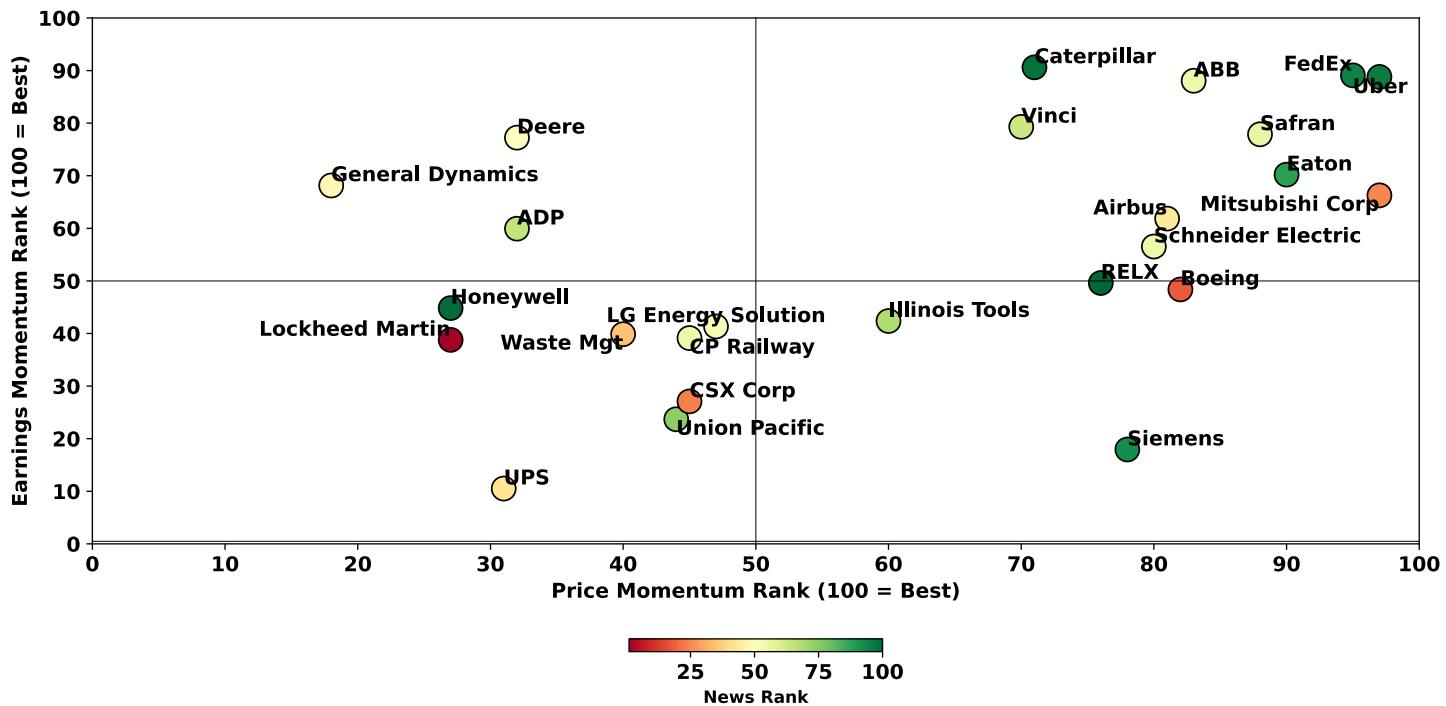
Source : BofA Global Quantitative Strategy, MSCI, IBES, FactSet, RavenPack

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### Chart 88: Industrials: Earnings Momentum (vertical axis), Price Momentum (horizontal axis), News Momentum (colour)

Triple Momentum is most positive for Uber, FedEx and Caterpillar

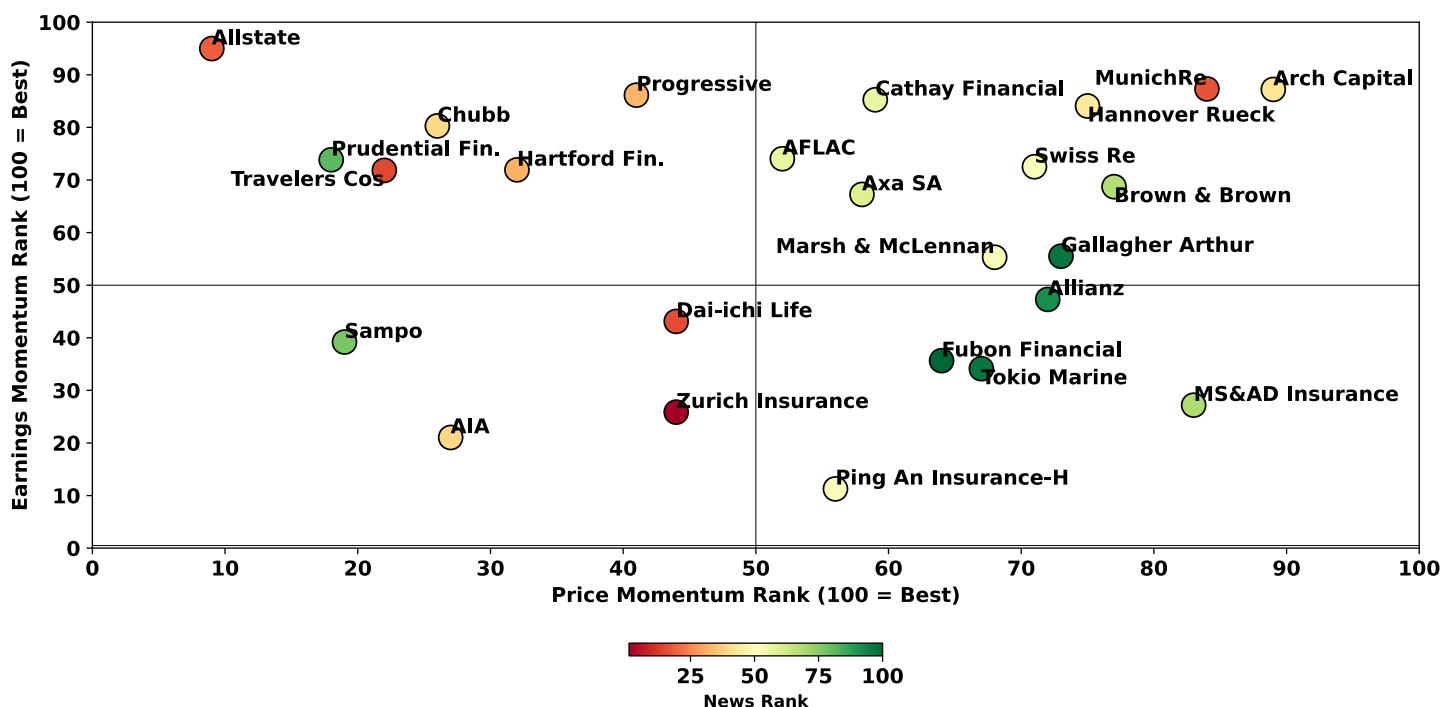


Source : BofA Global Quantitative Strategy, MSCI, IBES, FactSet, RavenPack

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### Chart 89: Insurance: Earnings Momentum (vertical axis), Price Momentum (horizontal axis), News Momentum (colour)

Triple Momentum is most positive for Gallagher Arthur, Brown & Brown and Cathay Financial

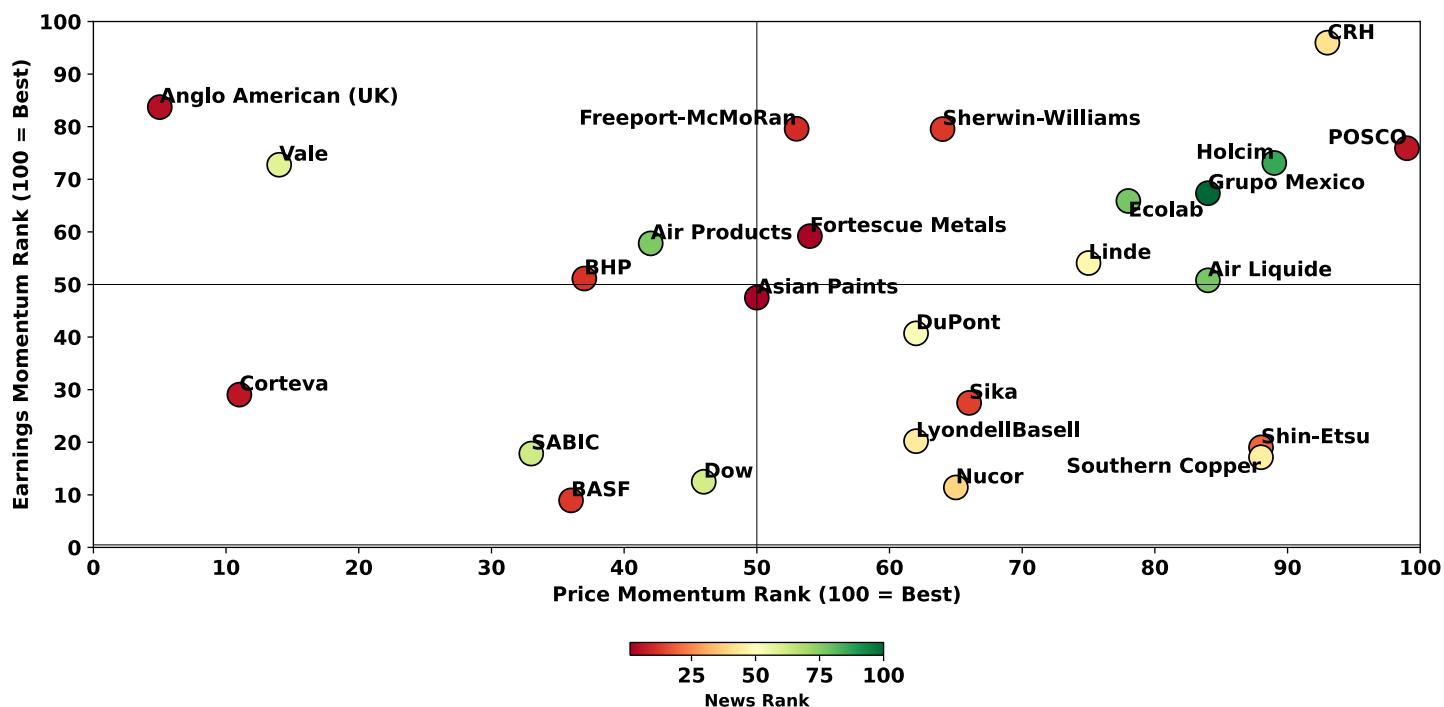


Source : BofA Global Quantitative Strategy, MSCI, IBES, FactSet, RavenPack

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**Chart 90: Materials: Earnings Momentum (vertical axis), Price Momentum (horizontal axis), News Momentum (colour)**

Triple Momentum is most positive for Grupo Mexico, Holcim and Ecolab

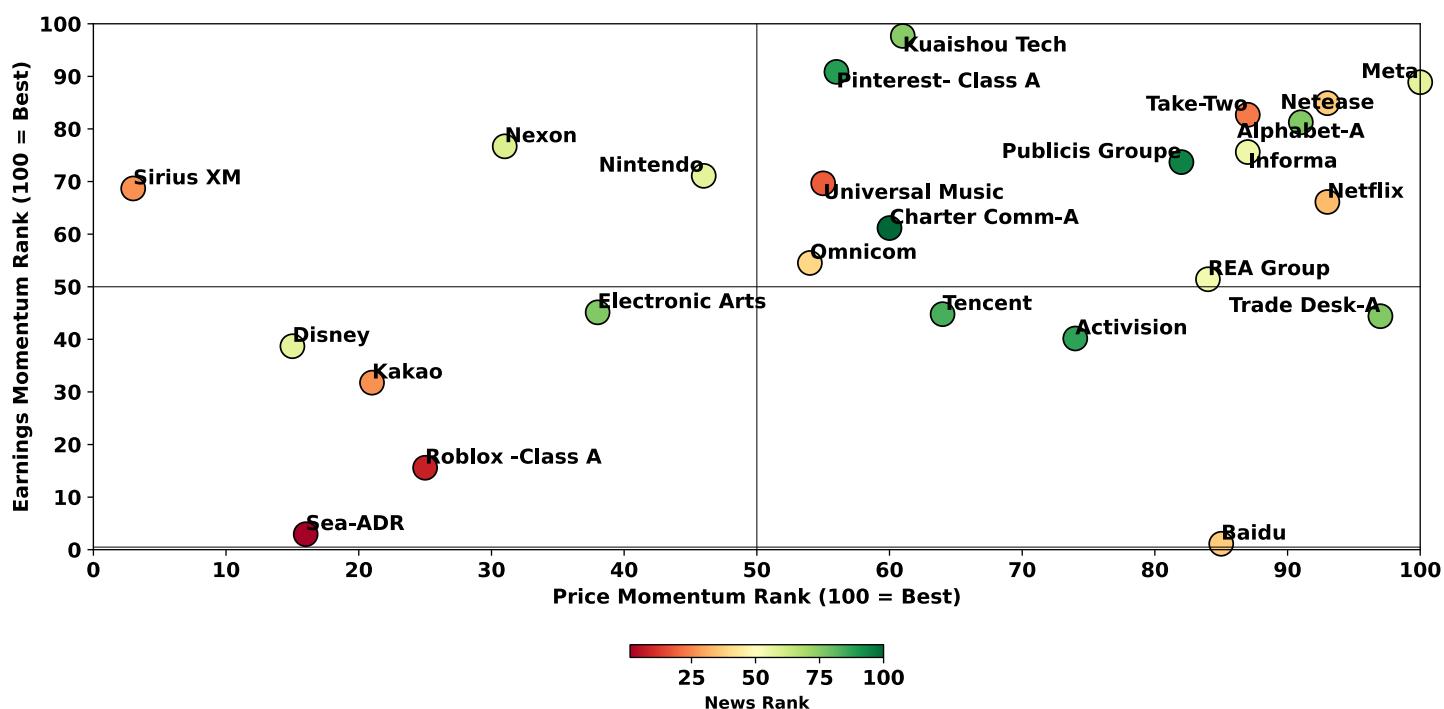


Source : BofA Global Quantitative Strategy, MSCI, IBES, FactSet, RavenPack

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**Chart 91: Media & Entertainment: Earnings Momentum (vertical axis), Price Momentum (horizontal axis), News Momentum (colour)**

Triple Momentum is most positive for Publicis Groupe, Pinterest- Class A and Charter Comm-A

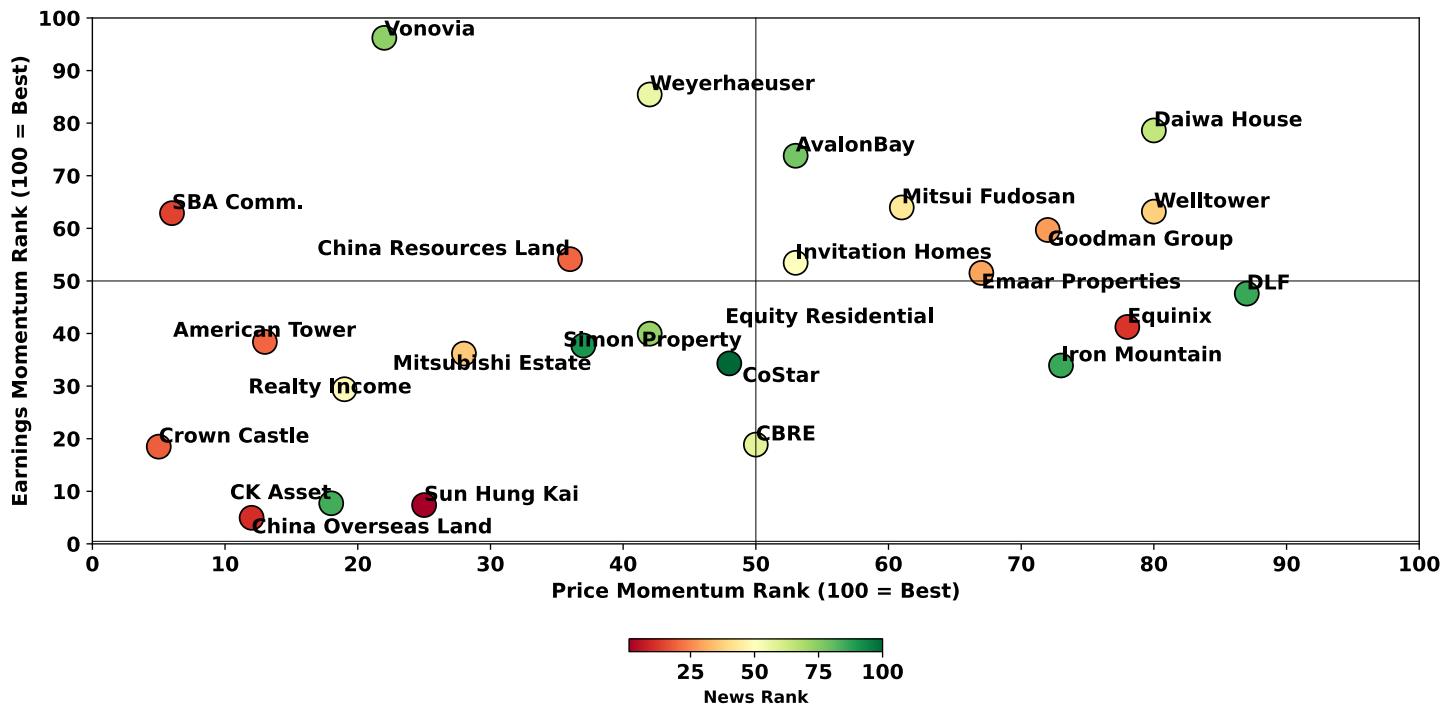


Source : BofA Global Quantitative Strategy, MSCI, IBES, FactSet, RavenPack

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### Chart 92: Real Estate: Earnings Momentum (vertical axis), Price Momentum (horizontal axis), News Momentum (colour)

Triple Momentum is most positive for Daiwa House and AvalonBay

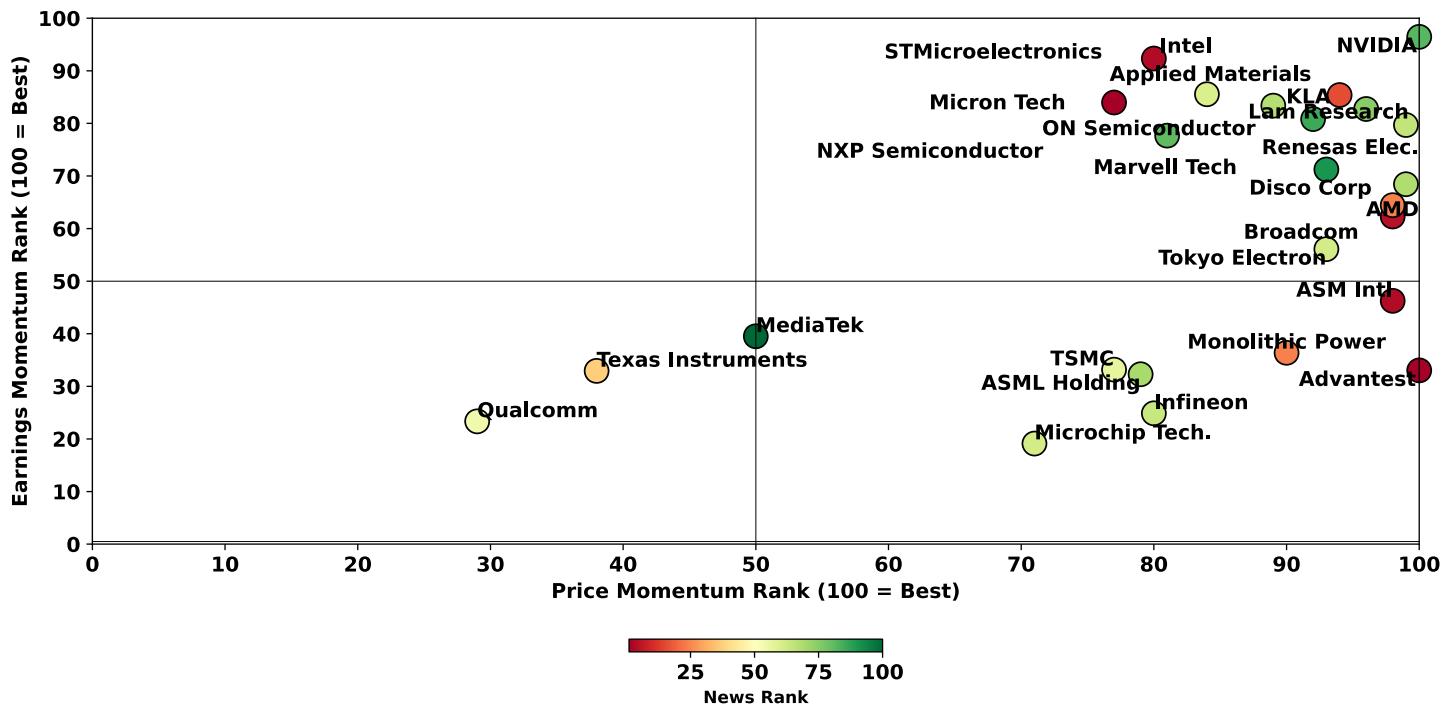


Source : BofA Global Quantitative Strategy, MSCI, IBES, FactSet, RavenPack

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### Chart 93: Semiconductors: Earnings Momentum (vertical axis), Price Momentum (horizontal axis), News Momentum (colour)

Triple Momentum is most positive for NVIDIA, ON Semiconductor and Marvell Tech

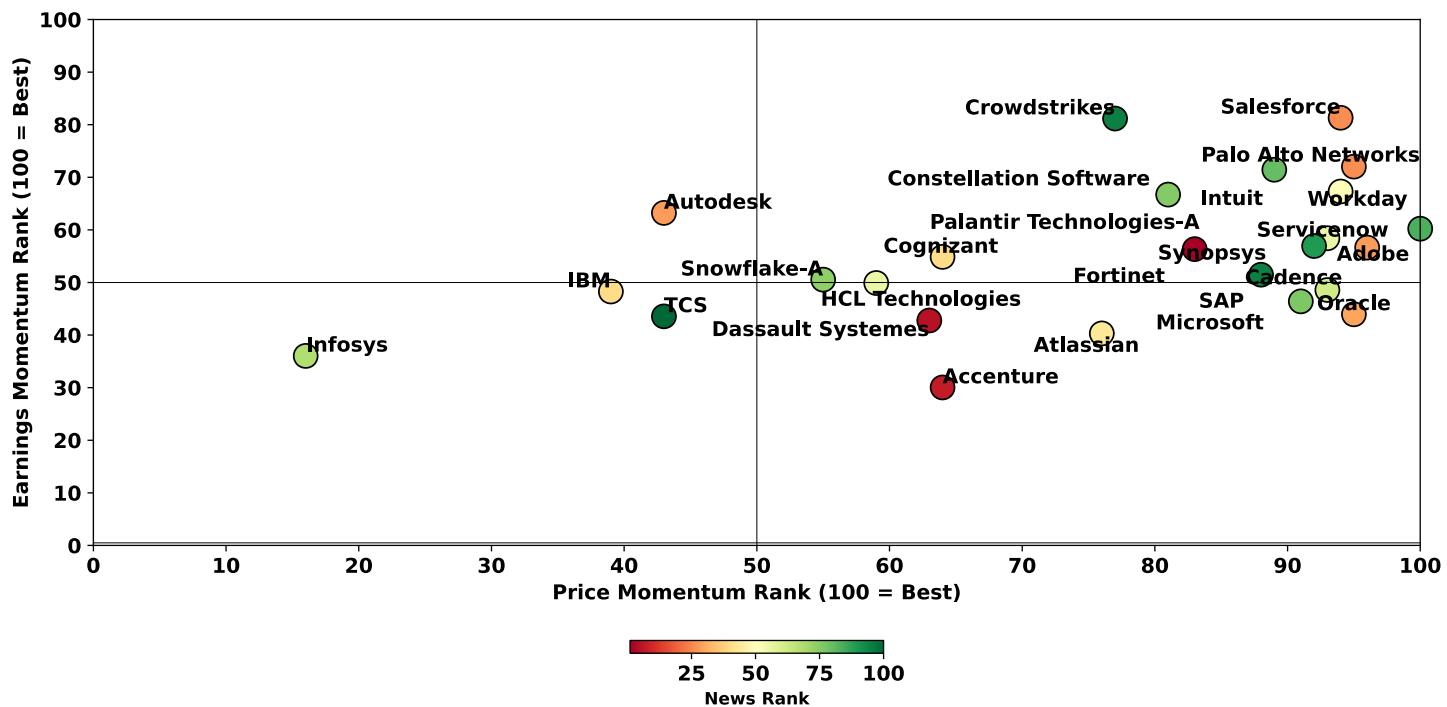


Source : BofA Global Quantitative Strategy, MSCI, IBES, FactSet, RavenPack

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**Chart 94: Software: Earnings Momentum (vertical axis), Price Momentum (horizontal axis), News Momentum (colour)**

Triple Momentum is most positive for Crowdstrike, Palantir Technologies-A and Constellation Software

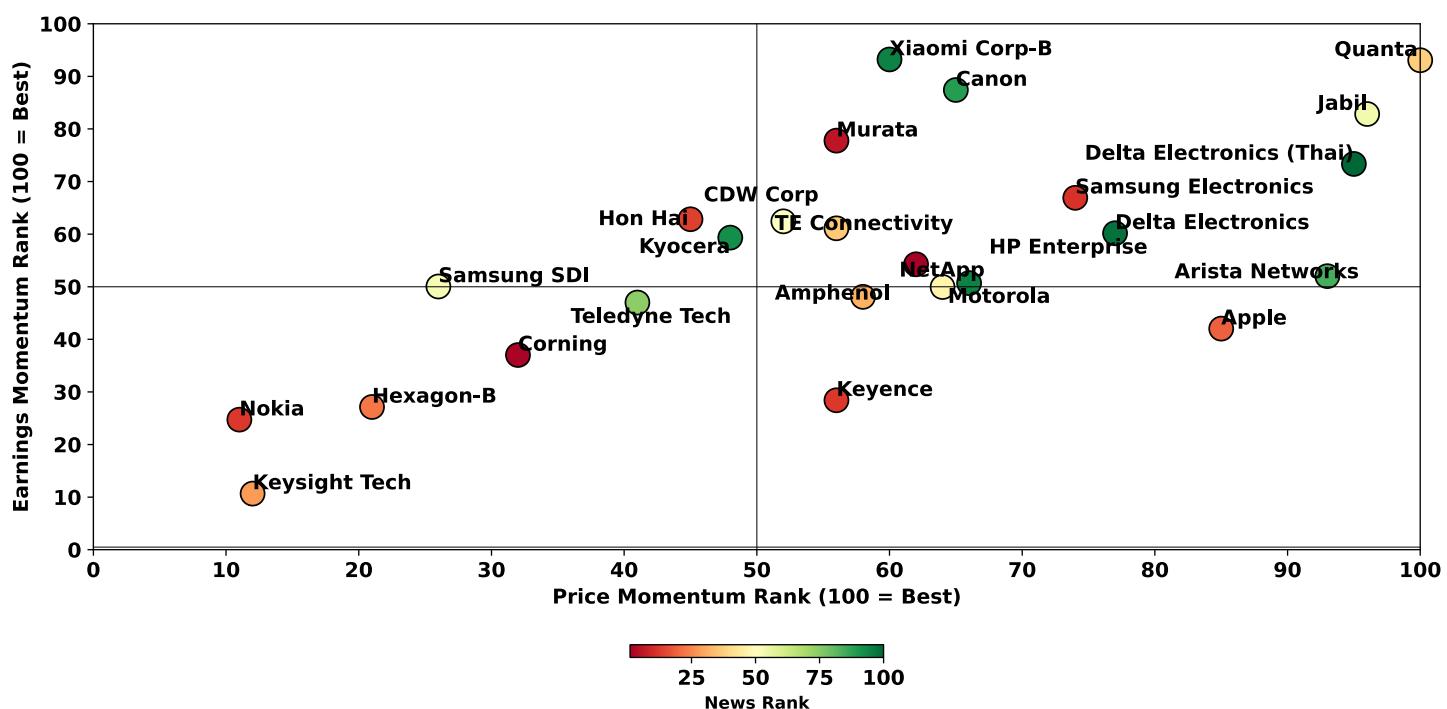


Source : BofA Global Quantitative Strategy, MSCI, IBES, FactSet, RavenPack

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**Chart 95: Tech Hardware: Earnings Momentum (vertical axis), Price Momentum (horizontal axis), News Momentum (colour)**

Triple Momentum is most positive for Delta Electronics (Thai), Xiaomi Corp-B and Delta Electronics



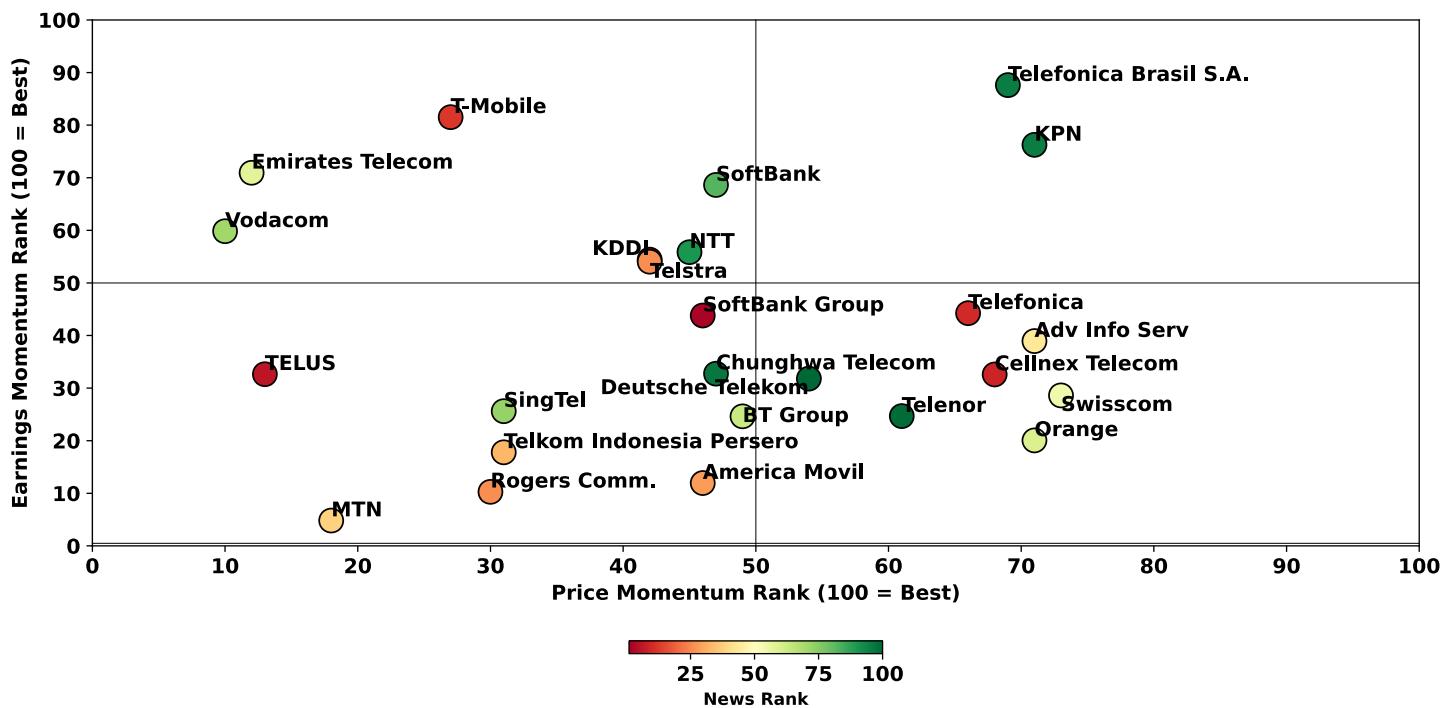
Source : BofA Global Quantitative Strategy, MSCI, IBES, FactSet, RavenPack

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### Chart 96: Telecom: Earnings Momentum (vertical axis), Price Momentum (horizontal axis), News Momentum (colour)

Triple Momentum is most positive for Telefonica Brasil S.A. and KPN

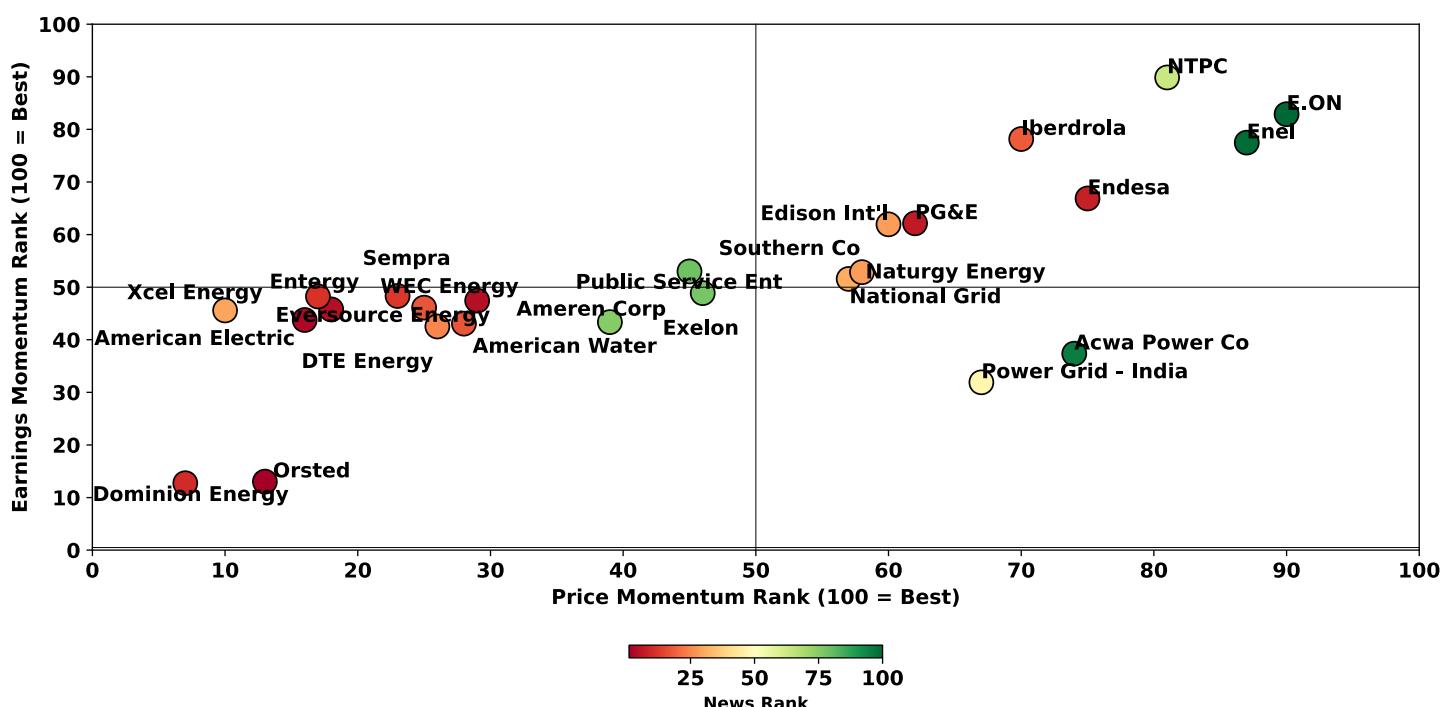


Source : BofA Global Quantitative Strategy, MSCI, IBES, FactSet, RavenPack

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### Chart 97: Utilities: Earnings Momentum (vertical axis), Price Momentum (horizontal axis), News Momentum (colour)

Triple Momentum is most positive for E.ON, ING and NTPC



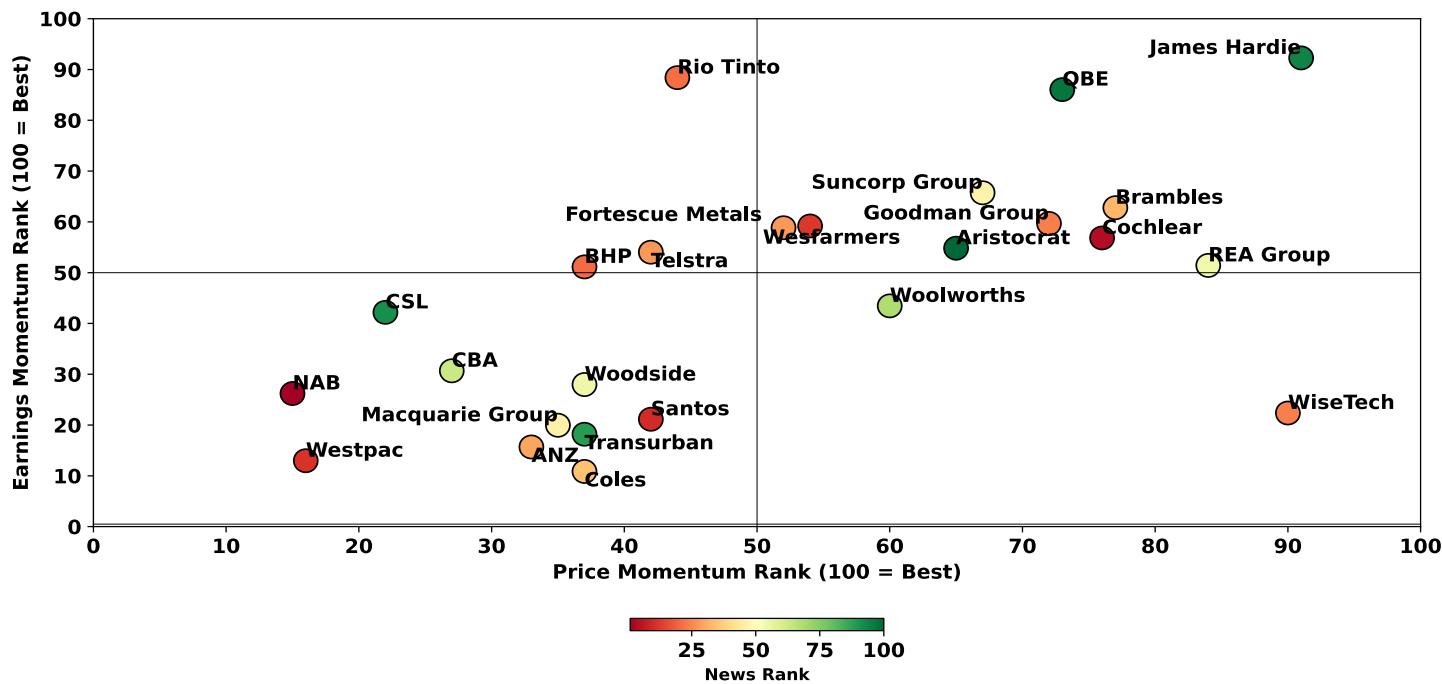
Source : BofA Global Quantitative Strategy, MSCI, IBES, FactSet, RavenPack

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## Countries: Triple Momentum Charts

**Chart 98: Australia: Earnings Momentum (vertical axis), Price Momentum (horizontal axis), News Momentum (colour)**

Triple Momentum is most positive for James Hardie, QBE and Aristocrat

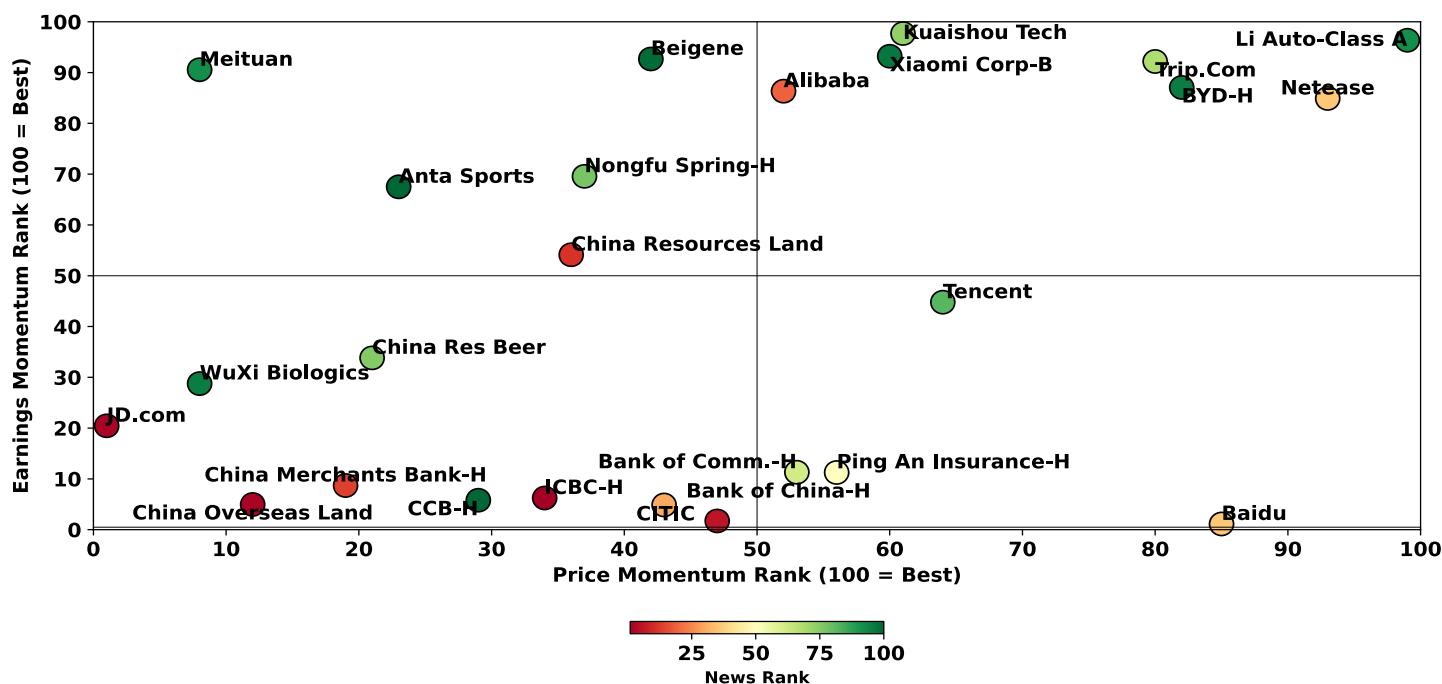


Source : BofA Global Quantitative Strategy, MSCI, IBES, FactSet, RavenPack

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**Chart 99: China: Earnings Momentum (vertical axis), Price Momentum (horizontal axis), News Momentum (colour)**

Triple Momentum is most positive for Li Auto-Class A, BYD-H and Xiaomi Corp-B



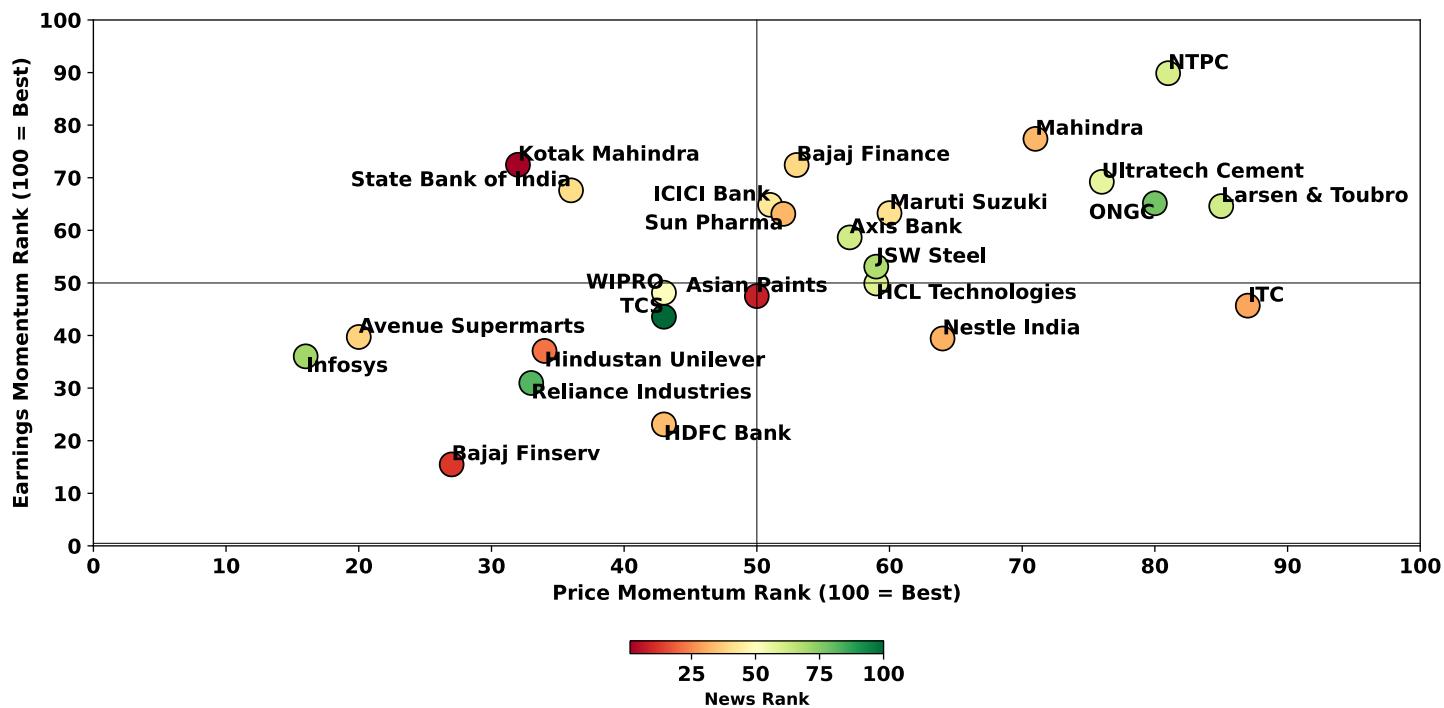
Source : BofA Global Quantitative Strategy, MSCI, IBES, FactSet, RavenPack

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### Chart 100: India: Earnings Momentum (vertical axis), Price Momentum (horizontal axis), News Momentum (colour)

Triple Momentum is most positive for ONGC, NTPC and Larsen & Toubro



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

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## Global Triple Momentum screens

**Table 7: Global Positive Triple Momentum - Top stocks by Triple Momentum rank**

Top Global stocks with Triple Momentum ranks

Company Name	BBG Code	Country	Sector	MCAP (Total \$USm)	Avg Daily TO (6m \$US m)
QBE	QBE AU	Australia	Insurance	15,129	42.6
James Hardie	JHX AU	Australia	Materials	11,587	45.3
Li Auto-Class A	2015 HK	China	Cons. Discretionary	30,528	117.3
Pop Mart International	9992 HK	China	Cons. Discretionary	4,009	15.1
Huaneng Power-H	902 HK	China	Utilities	2,281	20.7
Danske Bank	DANSKE DC	Denmark	Banks	20,119	35.5
SEB SA	SK FP	France	Cons. Discretionary	5,194	6.3
Fresenius Medical	FME GR	Germany	Health Care	12,687	24.2
Talanx	TLX GR	Germany	Insurance	16,094	11.6
Piraeus Financial	TPEIR GA	Greece	Banks	3,720	13.9
Jumbo	BELA GA	Greece	Cons. Discretionary	3,745	6.6
Mytilineos	MYTIL GA	Greece	Industrials	5,277	7.8
Richter Gedeon	RICHT HB	Hungary	Health Care	4,530	5.1
IDFC First Bank	IDFCFB IN	India	Banks	7,623	33.5
Power Finance	POWF IN	India	Div Financials	10,011	28.6
REC	RECL IN	India	Div Financials	9,113	27.8
Shriram Finance	SHFL IN	India	Div Financials	8,668	27.5
Intesa Sanpaolo	ISP IM	Italy	Banks	47,231	248.9
UniCredit	UCG IM	Italy	Banks	46,706	329.3
Poste Italiane	PST IM	Italy	Insurance	13,784	25.9
Yamaha Motor	7272 JP	Japan	Cons. Discretionary	9,226	44.3
MHI	7011 JP	Japan	Industrials	18,868	125.6
Toyota Tsusho	8015 JP	Japan	Industrials	20,867	39.4
Kansai Electric	9503 JP	Japan	Utilities	13,069	34.0
Grupo Mexico	GMEXICOB MM	Mexico	Materials	36,953	29.9
Elm Co	ELM AB	Saudi Arabia	Software	16,638	25.9
Sanlam	SLM SJ	South Africa	Insurance	7,679	15.2
Hyundai Mobis	012330 KS	South Korea	Cons. Discretionary	16,804	34.3
NH Investment	005940 KS	South Korea	Div Financials	2,512	3.6
Posco International	047050 KS	South Korea	Industrials	9,308	172.0
Samsung Heavy	010140 KS	South Korea	Industrials	5,113	41.9
BBVA	BBVA SM	Spain	Banks	48,696	133.0
Saab Ab-B	SAABB SS	Sweden	Industrials	6,840	22.5
China Airlines	2610 TT	Taiwan	Industrials	3,949	59.4
Accton Tech	2345 TT	Taiwan	Tech Hardware	8,555	46.8
Gigabyte Tech	2376 TT	Taiwan	Tech Hardware	5,543	176.6
Wiwynn	6669 TT	Taiwan	Tech Hardware	8,097	138.6
Delta Electronics (Thai)	DELTA TB	Thailand	Tech Hardware	28,348	47.0
Turkish Airlines	THYAO TI	Turkiye	Industrials	12,207	305.5
Emirates NBD	EMIRATES UH	UAE	Banks	30,611	10.8
HSBC Plc	HSBA LN	United Kingdom	Banks	155,597	123.0
Uber	UBER US	United States	Industrials	93,076	894.5
Confluent	CFLT US	United States	Software	6,057	118.1
MongoDB	MDB US	United States	Software	24,411	535.9

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

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**Table 8: Global Negative Triple Momentum - Bottom stocks by Triple Momentum rank**

Bottom Global stocks with Triple Momentum ranks

<b>Company Name</b>	<b>BBG Code</b>	<b>Country</b>	<b>Sector</b>	<b>MCAP (Total \$USm)</b>	<b>Avg Daily TO (6m \$US m)</b>
NAB	NAB AU	Australia	Banks	58,903	115.6
Qantas	QAN AU	Australia	Industrials	5,765	46.8
CSN	CSNA3 BZ	Brazil	Materials	3,216	24.0
Nuvei-Subordinate Vtg	NVEI CN	Canada	Div Financials	946	21.8
China Meidong Auto	1268 HK	China	Cons. Discretionary	737	5.5
Dongfeng Motor	489 HK	China	Cons. Discretionary	1,093	5.7
Guangzhou Auto-H	2238 HK	China	Cons. Discretionary	1,531	9.3
Li Ning	2331 HK	China	Cons. Discretionary	11,090	99.8
China Feihe	6186 HK	China	Cons. Staples	5,349	11.2
Yanzhou Energy-H	1171 HK	China	Energy	5,386	40.2
Sino Biopharm.	1177 HK	China	Health Care	6,797	19.4
China Conch Venture	586 HK	China	Industrials	1,546	5.2
China Resources Cement	1313 HK	China	Materials	1,792	2.8
China Jinmao	817 HK	China	Real Estate	1,717	5.7
China Overseas Land	688 HK	China	Real Estate	22,695	45.7
China Vanke-H	2202 HK	China	Real Estate	2,434	23.0
Greentown China	3900 HK	China	Real Estate	2,628	8.0
GCL Tech	3800 HK	China	Semiconductors	5,032	29.0
Sunny Optical	2382 HK	China	Tech Hardware	7,661	52.3
Henderson Land	12 HK	Hong Kong	Real Estate	12,765	8.0
Sun Hung Kai	16 HK	Hong Kong	Real Estate	31,006	35.2
Vedanta	VEDL IN	India	Materials	9,962	38.1
Cyberagent	4751 JP	Japan	Media & Ent.	2,734	37.3
Grupo Televisa	TLEVICPO MM	Mexico	Media & Ent.	1,542	4.9
Sibanye Stillwater	SSWSJ	South Africa	Materials	4,392	25.5
Hanwha Solutions	009830 KS	South Korea	Materials	3,790	60.0
Kakao Games	293490 KS	South Korea	Media & Ent.	1,555	13.5
NCSsoft	036570 KS	South Korea	Media & Ent.	3,620	31.1
Pou Chen	9904 TT	Taiwan	Cons. Discretionary	2,615	5.5
Evergreen Marine	2603 TT	Taiwan	Industrials	7,605	144.7
Far Eastern	1402 TT	Taiwan	Industrials	4,767	6.7
Wan Hai Lines	2615 TT	Taiwan	Industrials	4,199	19.5
Zhen Ding Tech	4958 TT	Taiwan	Tech Hardware	2,887	12.4
CP Food	CPF TB	Thailand	Cons. Staples	4,895	9.9
PTT Global Chem	PTTGCTB	Thailand	Materials	4,272	17.9
Erdemir	EREGL TI	Turkiye	Materials	5,684	174.8
VF Corp	VFC US	United States	Cons. Discretionary	6,869	131.6
Estee Lauder	EL US	United States	Cons. Staples	33,517	444.8
Toro	TTC US	United States	Industrials	8,635	49.4
Intl Flavors & Fragrances	IFF US	United States	Materials	17,390	172.2
Zoominfo Tech-A	ZI US	United States	Media & Ent.	6,598	138.1
WP Carey	WPC US	United States	Real Estate	11,568	74.5
Enphase Energy	ENPH US	United States	Semiconductors	16,466	671.4
Solaredge Tech	SEDG US	United States	Semiconductors	7,297	320.7
AES	AES US	United States	Utilities	10,174	117.2

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

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## Asia Pace ex-Japan Triple Momentum screens

**Table 9: APxJ Positive Triple Momentum - Top 30 stocks by Triple Momentum rank**

Top 30 APxJ stocks with Triple Momentum ranks

<b>Company Name</b>	<b>BBG Code</b>	<b>Country</b>	<b>Sector</b>	<b>MCAP (Total \$USm)</b>	<b>Avg Daily TO (6m \$US m)</b>
Aristocrat	ALL AU	Australia	Cons. Discretionary	17,236	36.3
James Hardie	JHX AU	Australia	Materials	11,587	45.3
Haidilao	6862 HK	China	Cons. Discretionary	14,946	40.4
Li Auto-Class A	2015 HK	China	Cons. Discretionary	30,528	117.3
Pop Mart International Group	9992 HK	China	Cons. Discretionary	4,009	15.1
Tal Education-ADR	TAL US	China	Cons. Discretionary	4,473	46.3
JOYY-ADR	YY US	China	Media & Ent.	2,013	15.9
Xiaomi Corp-B	1810 HK	China	Tech Hardware	32,233	94.3
Swire Pacific	19 HK	Hong Kong	Real Estate	5,782	11.7
Bank of Baroda	BOB IN	India	Banks	13,324	45.5
IDFC First Bank	IDFCFB IN	India	Banks	7,623	33.5
Samvardhana Motherson	MOTHERSO IN	India	Cons. Discretionary	7,834	16.2
Colgate (India)	CLGT IN	India	Cons. Staples	6,569	9.5
Power Finance	POWF IN	India	Div Financials	10,011	28.6
REC	RECL IN	India	Div Financials	9,113	27.8
Shriram Finance	SHFL IN	India	Div Financials	8,668	27.5
Bharat Elec	BHE IN	India	Industrials	12,174	21.4
Sime Darby	SIME MK	Malaysia	Industrials	3,208	2.4
Keppel Corp	KEP SP	Singapore	Industrials	9,070	20.1
Hyundai Mobis	012330 KS	South Korea	Cons. Discretionary	16,804	34.3
NH Investment	005940 KS	South Korea	Div Financials	2,512	3.6
HD Hyundai	267250 KS	South Korea	Energy	3,881	7.0
Hyundai Heavy Industries	329180 KS	South Korea	Industrials	7,973	15.5
Posco International	047050 KS	South Korea	Industrials	9,308	172.0
Samsung Heavy	010140 KS	South Korea	Industrials	5,113	41.9
China Airlines	2610 TT	Taiwan	Industrials	3,949	59.4
Accton Tech	2345 TT	Taiwan	Tech Hardware	8,555	46.8
Gigabyte Tech	2376 TT	Taiwan	Tech Hardware	5,543	176.6
Wiwynn	6669 TT	Taiwan	Tech Hardware	8,097	138.6
Delta Electronics (Thai)	DELTA TB	Thailand	Tech Hardware	28,348	47.0

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

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**Table 10: APxJ Negative Triple Momentum - Bottom 30 stocks by Triple Momentum rank**

Bottom 30 APxJ stocks with Triple Momentum ranks

<b>Company Name</b>	<b>BBG Code</b>	<b>Country</b>	<b>Sector</b>	<b>MCAP (Total \$USm)</b>	<b>Avg Daily TO (6m \$US m)</b>
Qantas	QAN AU	Australia	Industrials	5,765	46.8
China Meidong Auto	1268 HK	China	Cons. Discretionary	737	5.5
Dongfeng Motor	489 HK	China	Cons. Discretionary	1,093	5.7
Li Ning	2331 HK	China	Cons. Discretionary	11,090	99.8
GF Securities-H	1776 HK	China	Div Financials	2,286	4.3
Yanzhou Energy-H	1171 HK	China	Energy	5,386	40.2
Shanghai Pharma-H	2607 HK	China	Health Care	1,434	5.0
Sino Biopharm.	1177 HK	China	Health Care	6,797	19.4
China Conch Venture	586 HK	China	Industrials	1,546	5.2
CITIC	267 HK	China	Industrials	26,743	11.4
China Resources Cement	1313 HK	China	Materials	1,792	2.8
China Jinmao	817 HK	China	Real Estate	1,717	5.7
China Vanke-H	2202 HK	China	Real Estate	2,434	23.0
GCL Tech	3800 HK	China	Semiconductors	5,032	29.0
Sunny Optical	2382 HK	China	Tech Hardware	7,661	52.3
CK Hutchison	1 HK	Hong Kong	Industrials	20,491	28.6
Henderson Land	12 HK	Hong Kong	Real Estate	12,765	8.0
Sun Hung Kai	16 HK	Hong Kong	Real Estate	31,006	35.2
Sea-ADR	SE US	Singapore	Media & Ent.	22,908	376.0
Hanwha Solutions	009830 KS	South Korea	Materials	3,790	60.0
SKC Co	011790 KS	South Korea	Materials	2,130	25.4
Kakao Games	293490 KS	South Korea	Media & Ent.	1,555	13.5
NCSoft	036570 KS	South Korea	Media & Ent.	3,620	31.1
Pou Chen	9904 TT	Taiwan	Cons. Discretionary	2,615	5.5
Evergreen Marine	2603 TT	Taiwan	Industrials	7,605	144.7
Far Eastern	1402 TT	Taiwan	Industrials	4,767	6.7
Nan Ya Plastics	1303 TT	Taiwan	Materials	16,363	12.6
Vanguard Intl	5347 TT	Taiwan	Semiconductors	3,453	13.7
E Ink	8069 TT	Taiwan	Tech Hardware	6,341	77.8
Zhen Ding Tech	4958 TT	Taiwan	Tech Hardware	2,887	12.4

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

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Underperform	N/A	≥ 20%

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