

High Frequency Monitor

Rate risk

Global equities fell on new concerns

Last week, global equities fell [-1.3%](#) as stronger US data raised concerns that Fed may keep interest rates higher for longer. The ISM Services index rose to a six-month high and weekly initial jobless claims fell to the lowest since March. Last week, [oil](#) prices jumped to the highest levels this year and the USD continued to strengthen. By [region](#), Japan (-0.7%) fell the least while Europe (-1.5%) fell the most. The best performing Global [sectors](#) were Energy (+1.0%) and Software (+0.9%). Our global cycle indicators remain mixed, with a negative signal from the Global Wave, but positive signals from the [Global Earnings Revision Ratio](#) and the [Global News Pulse](#).

Quality was the best performing style last week

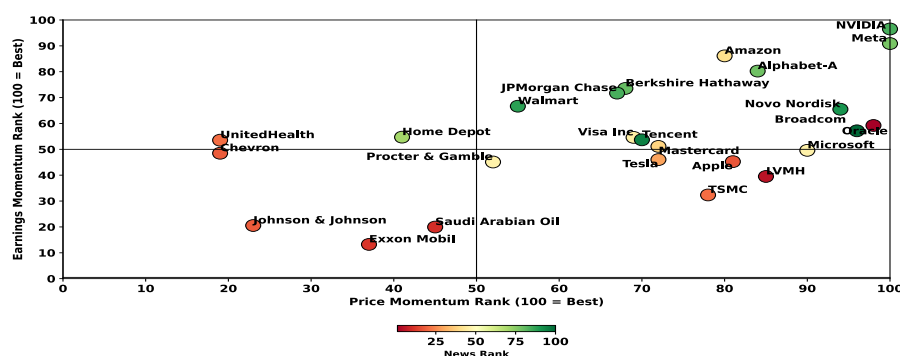
Global [Quality](#) was the best performing style last week, while Risk and Small size performed worst. Four of our six short-term [tactical indicators](#) fell last week as Copper fell, AUD depreciated, Volatility increased, and the Global Cycles Sensitives moderated.

Triple Momentum = USA Software & Europe Semis

Our Triple Momentum analysis combines signals from earnings expectations, price movements, and news trends to identify fundamentally supported themes. We visualize Triple Momentum by stock level ([region](#), [sector](#), [country](#)), [Global region-sector](#) and [APX country-sector](#). Among region-sectors, Triple Momentum is strongest for USA Software, Europe Semiconductors, Japan Utilities, APX insurance, and EM Diversified Financials.

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

The Triple Momentum Rank is most positive for NVIDIA, Novo Nordisk, Oracle, and Alphabet



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

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11 September 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.

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- [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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Notice to Readers:

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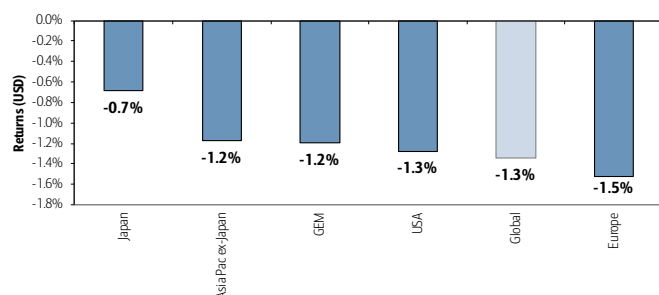
The Global News Pulse (and the regional and sectors versions of it) is intended to be an indicative metric only and may not be used for reference purposes or as a measure of performance for any financial instrument or contract, or otherwise relied upon by third parties for any other purpose, without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

Japan was the best performing region last week

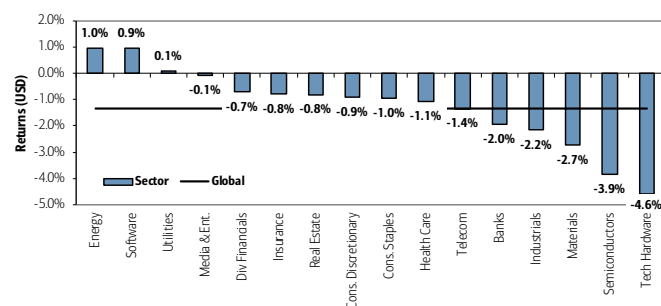


Source : BofA Global Quantitative Strategy, MSCI

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Chart 3: Global Sectors Performance: Last Week

Energy was the best performing sector last week

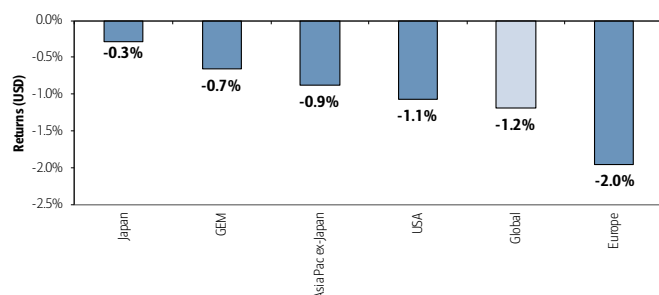


Source : BofA Global Quantitative Strategy, MSCI

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Chart 4: Global Regions Performance: MTD

Japan is the best performing region this month

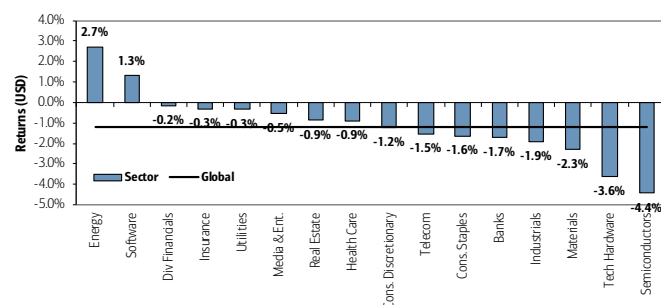


Source : BofA Global Quantitative Strategy, MSCI

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Chart 5: Global Sectors Performance: MTD

Energy is the best performing sector this month

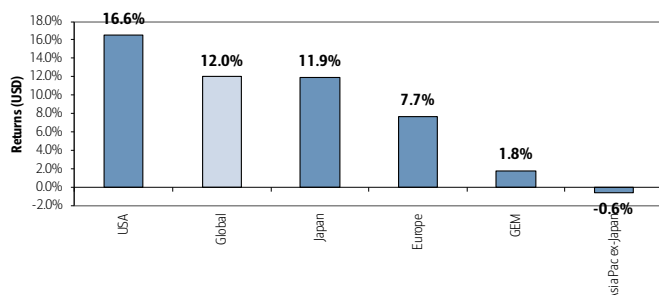


Source : BofA Global Quantitative Strategy, MSCI

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Chart 6: Global Regions Performance: YTD

The USA is the best performing region this year

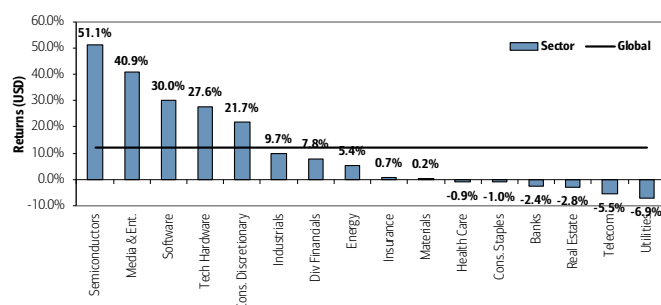


Source : BofA Global Quantitative Strategy, MSCI

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Chart 7: Global Sectors Performance: YTD

YTD: Semiconductors has performed the best



Source : BofA Global Quantitative Strategy, MSCI

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Table 1: Global Region Country Sector Performance: Last week

Energy was the best performing sector last week

	Energy	Materials	Industrials	Cons. Discretionary	Cons. Staples	Health Care	Banks	Div Financials	Insurance	Software	Tech Hardware	Semiconductors	Telecom	Media & Ent.	Utilities	Real Estate	Country
Canada	-1.4%	-3.7%	-3.2%	-3.2%	-1.2%	n/a	-3.0%	-1.4%	-1.3%	-3.2%	n/a	n/a	-4.4%	n/a	-2.4%	-1.4%	-2.6%
USA	1.3%	-2.6%	-2.9%	-0.4%	-0.5%	-1.2%	-2.4%	-0.6%	-0.7%	1.2%	-5.3%	-4.1%	-2.3%	0.2%	0.9%	-1.1%	-1.3%
Belgium	n/a	-4.7%	n/a	4.0%	0.1%	-0.1%	-5.2%	-0.9%	1.5%	n/a	n/a	n/a	n/a	n/a	-1.1%	-3.4%	-1.1%
Finland	-2.2%	-3.9%	-2.5%	n/a	-1.6%	-1.9%	n/a	n/a	-0.9%	n/a	0.4%	n/a	-2.1%	n/a	-2.2%	n/a	-1.9%
France	1.7%	-2.4%	-0.9%	-4.2%	-2.0%	-0.1%	-3.5%	-2.5%	-1.4%	-1.4%	n/a	-5.8%	2.6%	-1.2%	-0.7%	-1.1%	-1.8%
Germany	n/a	-3.8%	-2.3%	-2.2%	-1.0%	-4.1%	-8.7%	-3.0%	-0.5%	1.5%	n/a	-2.9%	1.1%	-1.7%	-1.5%	0.3%	-1.7%
Italy	0.7%	n/a	-1.4%	-2.0%	-2.0%	-2.6%	-5.3%	-5.8%	-0.9%	n/a	n/a	n/a	2.4%	n/a	0.0%	n/a	-2.0%
Netherlands	n/a	-3.5%	-0.3%	-3.2%	-4.0%	-5.2%	-3.2%	-3.9%	-3.1%	n/a	n/a	-4.7%	-0.6%	2.9%	n/a	n/a	-3.6%
Norway	2.5%	-0.1%	8.2%	n/a	-0.1%	n/a	-0.7%	n/a	-2.1%	n/a	n/a	n/a	-2.7%	-4.9%	n/a	n/a	0.7%
Spain	0.4%	n/a	0.4%	-0.9%	n/a	-5.1%	-4.4%	n/a	n/a	n/a	n/a	n/a	-2.0%	n/a	-0.3%	n/a	-1.8%
Sweden	n/a	-2.2%	-0.7%	-0.8%	-3.9%	-0.6%	-1.0%	0.0%	n/a	n/a	-1.9%	n/a	-1.5%	n/a	n/a	-1.5%	-1.0%
Switzerland	n/a	-2.8%	-2.0%	-6.2%	-1.1%	-2.2%	-1.7%	-1.9%	-0.3%	-5.8%	1.4%	n/a	0.4%	n/a	6.7%	0.7%	-2.0%
UK	1.6%	-3.5%	-0.2%	0.0%	-1.2%	0.8%	-2.2%	-1.2%	-5.3%	4.0%	0.9%	n/a	-2.3%	-1.4%	0.6%	-1.8%	-0.7%
Australia	-0.4%	-4.0%	-1.1%	-2.6%	-2.3%	-1.0%	-2.1%	-3.9%	-1.4%	-2.4%	n/a	n/a	-3.2%	-2.4%	-3.1%	-2.3%	-2.4%
Hong Kong	n/a	n/a	-2.1%	-3.5%	-0.2%	n/a	-0.1%	0.4%	-4.4%	n/a	n/a	n/a	-0.9%	n/a	-2.3%	-0.6%	-2.1%
Japan	2.9%	-1.2%	-0.9%	0.2%	-1.9%	-2.4%	1.0%	1.9%	2.3%	-0.5%	-2.2%	-3.0%	-0.5%	-1.4%	-0.1%	1.4%	-0.7%
Singapore	n/a	n/a	-2.7%	-0.3%	-4.3%	n/a	-1.4%	-0.9%	n/a	n/a	n/a	n/a	-3.4%	-0.7%	-5.1%	-2.1%	-1.9%
China	3.0%	0.4%	-2.1%	-2.0%	-1.5%	-3.6%	2.2%	-2.1%	2.6%	-2.7%	-3.7%	-3.6%	-0.3%	-1.6%	-0.5%	0.8%	-1.2%
India	2.4%	1.0%	4.2%	1.2%	0.6%	1.9%	1.0%	3.0%	1.2%	2.2%	n/a	n/a	2.0%	2.1%	4.4%	5.3%	1.9%
Korea	0.8%	-2.6%	-2.5%	-1.9%	-1.6%	0.2%	-0.2%	0.0%	2.2%	1.8%	-2.1%	-6.4%	-1.9%	-1.7%	2.2%	n/a	-2.0%
Taiwan	0.4%	-0.7%	-0.5%	-0.2%	-0.5%	4.9%	-0.7%	-2.5%	-0.7%	n/a	-1.3%	n/a	-0.4%	n/a	n/a	-5.4%	-1.4%
Brazil	0.9%	-4.4%	-4.3%	-7.6%	-2.5%	-3.2%	-4.3%	-5.0%	-0.9%	-1.5%	n/a	n/a	-1.1%	n/a	-3.5%	n/a	-3.0%
Mexico	n/a	-5.9%	-2.2%	n/a	-3.3%	n/a	-3.9%	n/a	n/a	n/a	n/a	n/a	-3.3%	-8.0%	n/a	n/a	-3.4%
South Africa	-0.2%	-4.7%	-7.2%	-3.5%	-0.1%	n/a	0.0%	-3.5%	-1.9%	n/a	n/a	n/a	-1.4%	n/a	n/a	n/a	-2.6%
Global Sector	1.0%	-2.7%	-2.2%	-0.9%	-1.0%	-1.1%	-2.0%	-0.7%	-0.8%	0.9%	-4.6%	-3.9%	-1.4%	-0.1%	0.1%	-0.8%	-1.3%
Europe Sector	1.3%	-3.2%	-1.4%	-2.8%	-1.5%	-0.5%	-3.2%	-1.8%	-1.5%	0.8%	-0.4%	-4.6%	-0.2%	-0.4%	-1.4%	-0.8%	-1.5%
APxJ Sector	1.5%	-2.2%	-1.1%	-1.6%	-1.1%	-1.4%	-0.5%	-0.5%	-0.9%	1.2%	-2.1%	-2.3%	-0.8%	-1.6%	-0.3%	-0.8%	-1.2%
GEM Sector	1.0%	-1.9%	-1.1%	-1.7%	-1.3%	-1.4%	-0.8%	-0.7%	0.9%	1.2%	-2.1%	-2.3%	-1.0%	-1.6%	-1.0%	0.8%	-1.2%

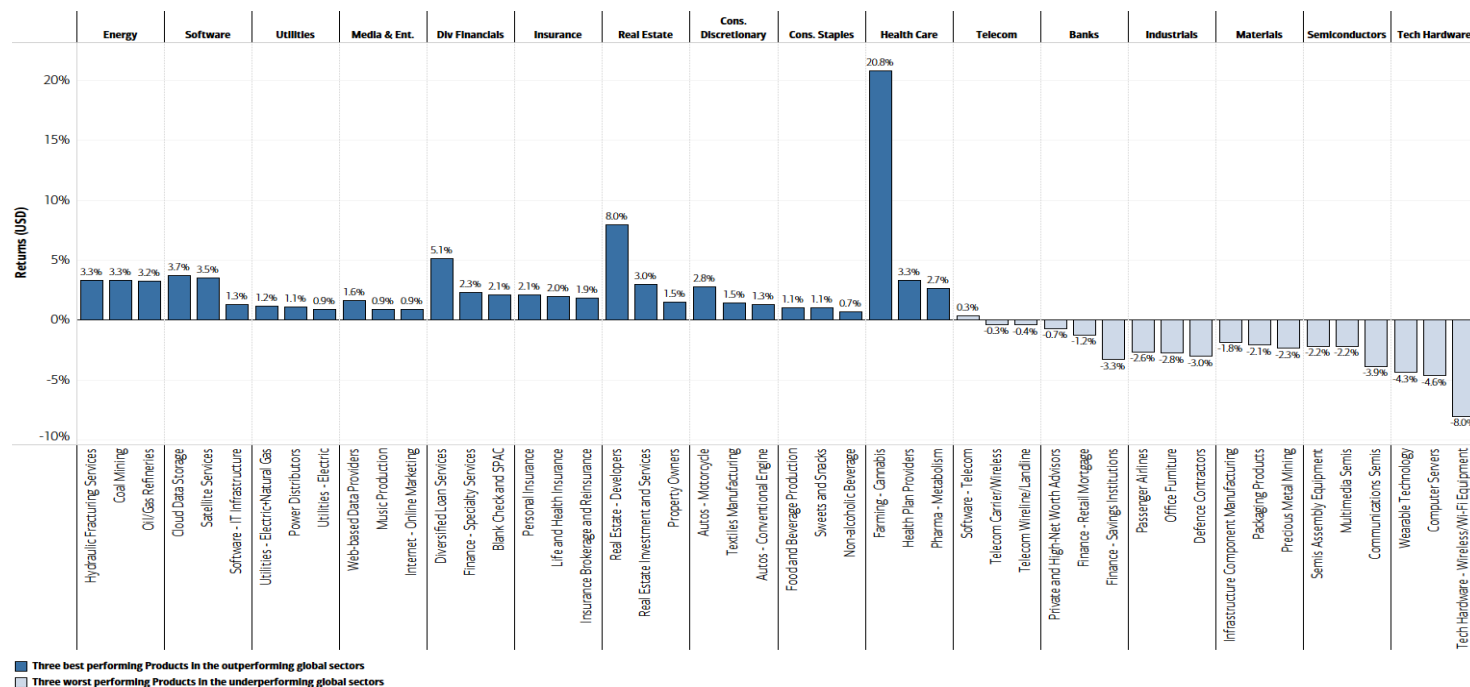
Source : BofA Global Quantitative Strategy, MSCI

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Product Performance

Chart 8: Best & Worst Performing Products - Last Week

Last week, Farming - Cannabis performed the best and Tech Hardware - Wireless/Wi-Fi Equipment performed the worst.

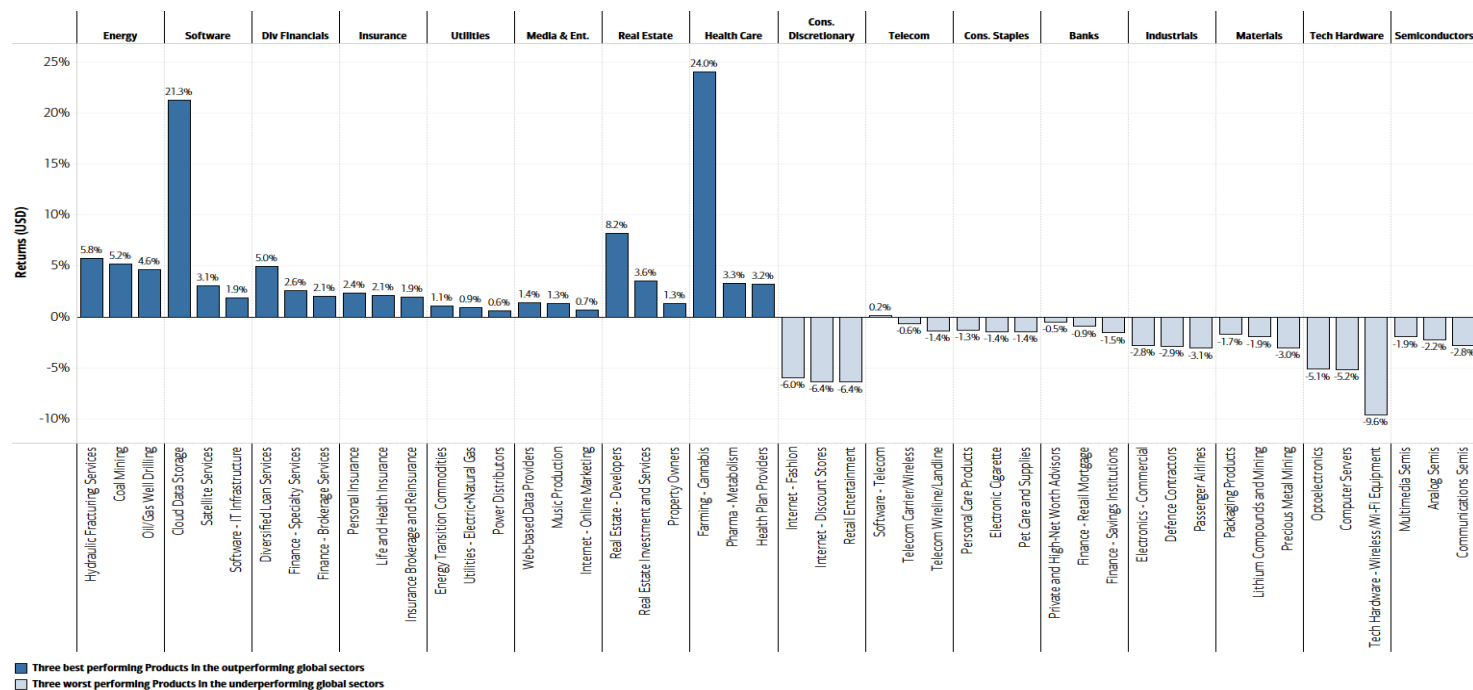


Source : BofA Global Quantitative Strategy, MSCI, IBES, Factset

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Chart 9: Best & Worst Performing Products - MTD

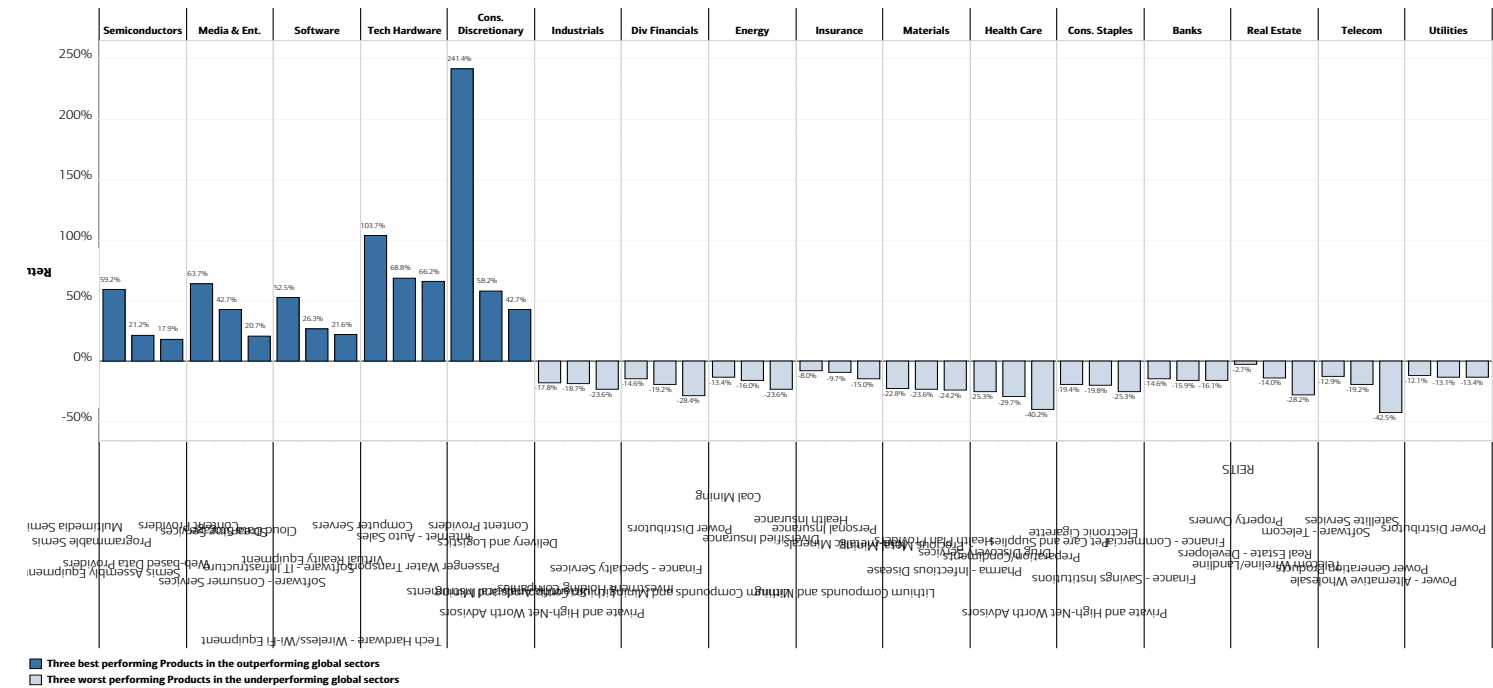
Month-to-date, the best performing product is Farming - Cannabis and the worst performing product is Tech Hardware - Wireless/Wi-Fi Equipment.



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.



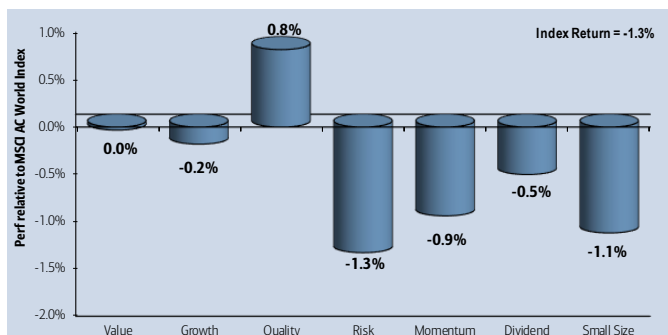
Source : BofA Global Quantitative Strategy, MSCI, IBES, Factset



Style Performance

Chart 11: Global Quantessential Style Rel Performance: Last Week

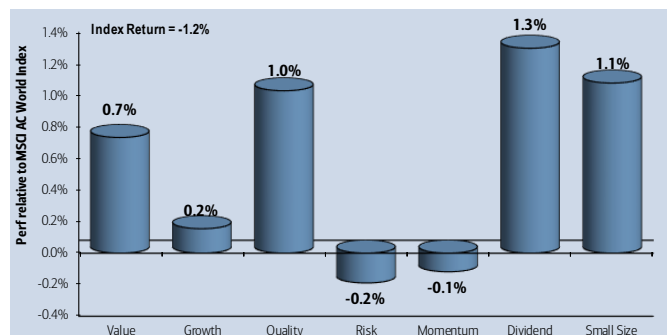
Last week the best performing style was Quality



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

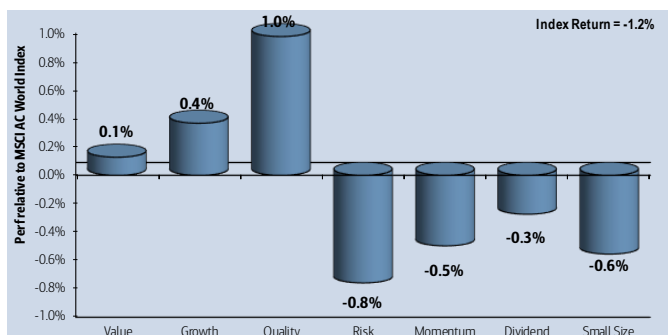
Last week: Dividend performed the best



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

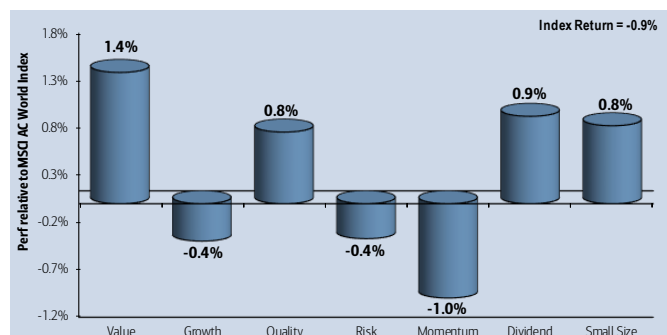
This month the best performing style is Quality



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

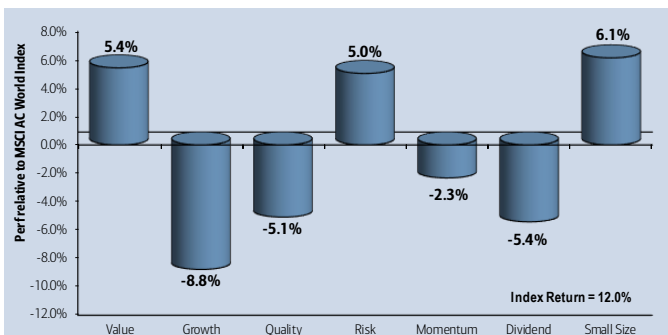
Value is the best performing style this month



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

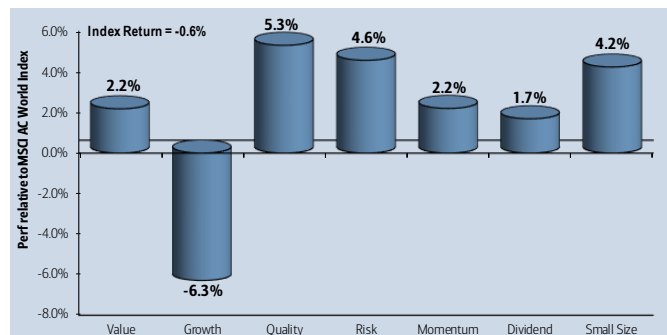
Small Size is the best performing style this year



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

YTD: Quality has performed the best

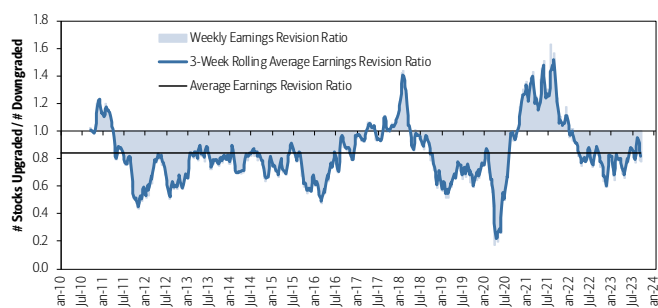


Source : BofA Global Quantitative Strategy, MSCI, IBES, S&P, Worldscope, Bloomberg
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Earnings Revision Ratio

Chart 17: Global Earnings Revision Ratio - Weekly

ERR fell in World last week and the trend moderated

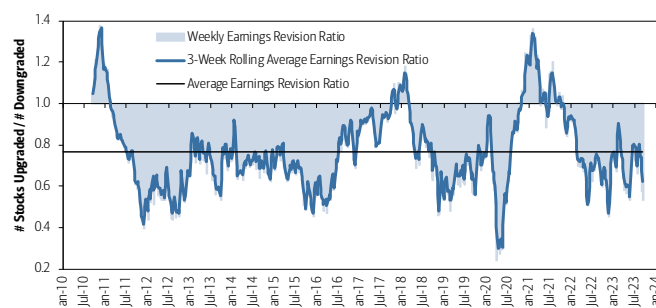


Source : BofA Global Quantitative Strategy, MSCI, IBES

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Chart 18: Asia Pac Earnings Revision Ratio - Weekly

ERR fell in Asia Pac ex-Japan last week and the trend moderated

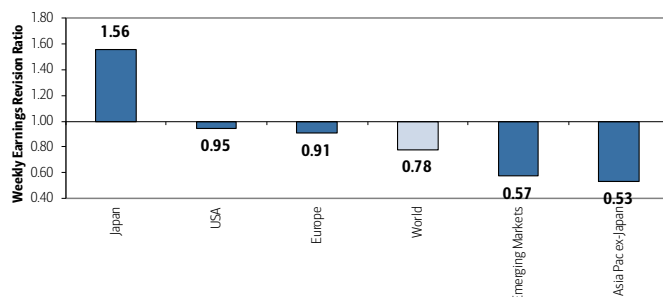


Source : BofA Global Quantitative Strategy, MSCI, IBES

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Chart 19: Global Regions Earnings Revision Ratio - Weekly

Asia Pac ex-Japan has the weakest earnings trend

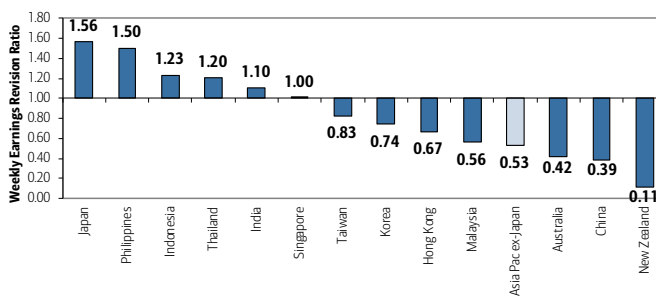


Source : BofA Global Quantitative Strategy, MSCI, IBES

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Chart 20: Asia Pac Countries Earnings Revision Ratio - Weekly

Earnings Revision Ratio is strongest in Japan

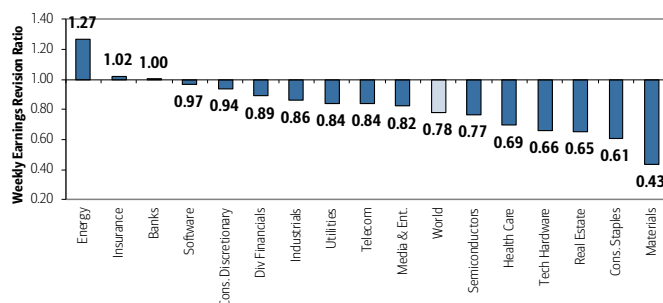


Source : BofA Global Quantitative Strategy, MSCI, IBES

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Chart 21: Global Sectors Earnings Revision Ratio - Weekly

Earnings Revision Ratio is strongest in Energy sector globally

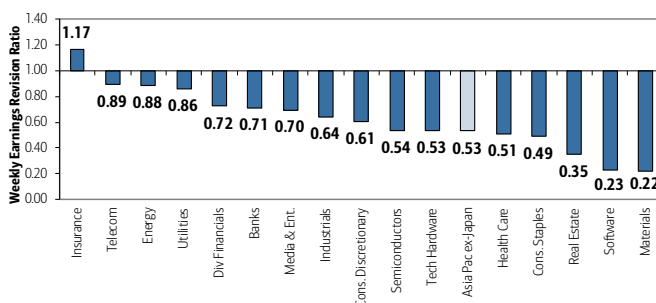


Source : BofA Global Quantitative Strategy, MSCI, IBES

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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 2: Global Region/Sector/Style - Earnings Revision Ratio

ERR fell in World last week and the trend moderated

Regions/Sectors	Jun-23	Jul-23	Aug-23	Sep-23 - Wk1	Sep-23 - Wk2	Sep-23 - Wk3
World	0.85	0.77	0.90	0.89	0.78	0.78
USA	0.87	0.82	1.37	0.98	0.95	0.95
Europe	1.16	0.98	1.05	0.89	0.91	0.91
Japan	0.93	0.99	1.36	1.22	1.35	1.56
Asia Pac ex-Japan	0.76	0.66	0.68	0.76	0.57	0.53
Emerging Markets	0.79	0.68	0.72	0.80	0.61	0.57
Global - Banks	1.03	0.81	1.09	0.91	1.05	1.00
Global - Cons. Discretionary	0.97	0.98	1.15	1.02	0.91	0.94
Global - Cons. Staples	0.90	0.79	0.82	0.69	0.64	0.61
Global - Div Financials	0.88	0.78	1.05	1.07	0.90	0.89
Global - Energy	0.54	0.42	0.72	1.11	1.15	1.27
Global - Health Care	0.68	0.74	0.88	0.92	0.69	0.69
Global - Industrials	1.05	0.89	1.09	0.94	0.84	0.86
Global - Insurance	0.90	0.81	1.16	0.98	0.89	1.02
Global - Materials	0.66	0.40	0.57	0.60	0.46	0.43
Global - Media & Ent.	0.95	0.75	0.89	0.93	0.90	0.82
Global - Real Estate	0.72	1.02	0.89	0.92	0.64	0.65
Global - Semiconductors	0.68	0.71	0.69	1.20	0.72	0.77
Global - Software	0.98	0.83	0.95	1.00	1.05	0.97
Global - Tech Hardware	0.76	0.85	0.74	0.68	0.72	0.66
Global - Telecom	1.02	0.90	0.85	0.95	1.14	0.84
Global - Utilities	0.92	1.03	1.06	0.92	0.77	0.84
Global - Value	0.85	0.67	0.81	1.15	0.95	0.91
Global - Growth	1.16	0.94	1.38	1.12	1.16	1.48
Global - Quality	0.86	0.79	1.34	0.93	0.93	0.92
Global - Risk	0.88	0.81	1.13	1.18	0.95	1.01
Global - Momentum	1.53	1.17	1.54	1.30	1.15	1.51
Global - Dividend	0.65	0.56	0.68	1.00	0.86	0.78
Global - Small Size	0.67	0.60	0.70	1.11	0.80	0.79

Source : BofA Global Quantitative Strategy, MSCI, IBES

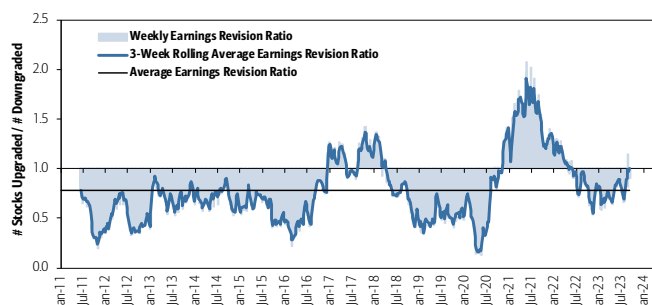
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Quantessential Styles: Earnings Revision Ratio

Chart 23: Global Value Earnings Revision Ratio - Weekly

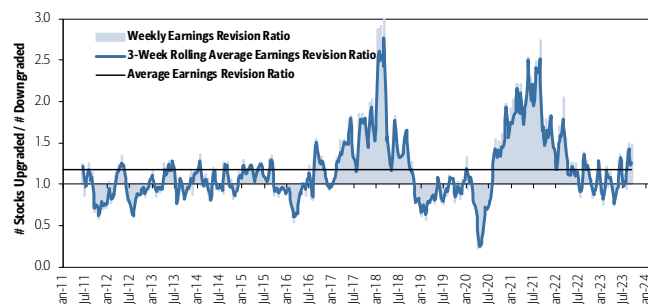
Earnings revision moderated in Value last week but remains above average



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

Chart 24: Global Growth Earnings Revision Ratio - Weekly

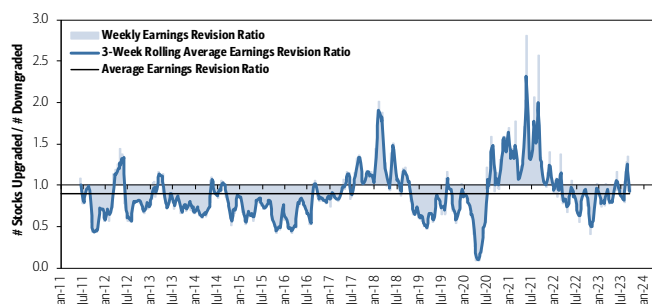
Earnings revisions improved in Growth last week



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

Chart 25: Global Quality Earnings Revision Ratio - Weekly

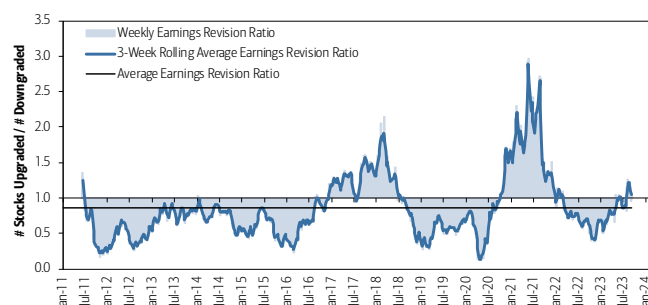
ERR fell in Quality last week and the trend moderated



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

Chart 26: Global Risk Earnings Revision Ratio - Weekly

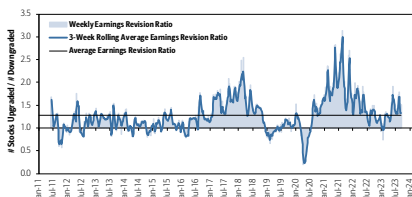
Earnings revisions improved for Risk last week and remains above long-term average



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

Chart 27: Global Momentum Earnings Revision Ratio - Weekly

Earnings revisions improved in Momentum last week



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

Chart 28: Global Dividend Earnings Revision Ratio - Weekly

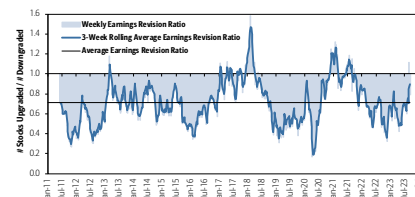
Earnings revisions fell in Dividend last week



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

Chart 29: Global Small Size Earnings Revision Ratio - Weekly

Earnings revision moderated in Small Size last week but remains above average

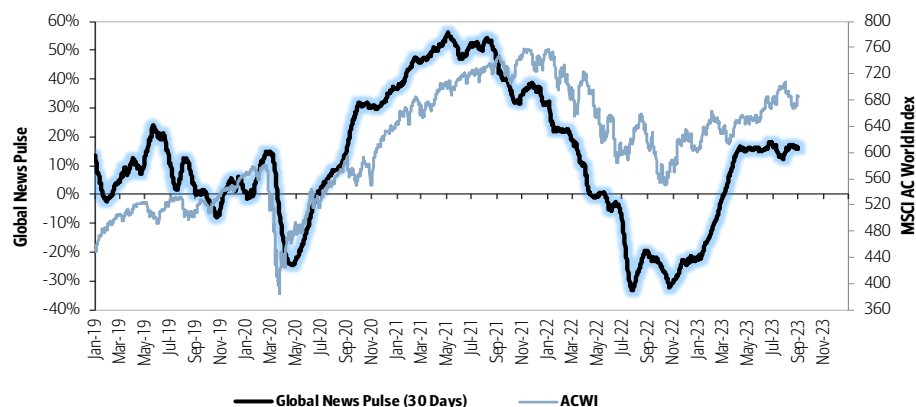


Source : BofA Global Quantitative Strategy, MSCI, IBES, S&P, Worldscope, Bloomberg
BoFA GLOBAL RESEARCH

NewsAlpha

Chart 30: Global News Pulse (last 30 days)

News has improved in the last month

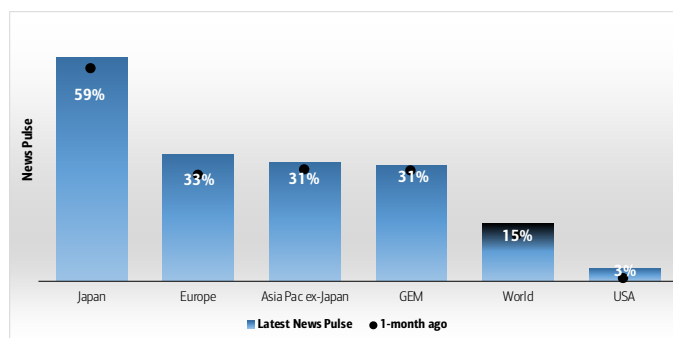


Source : BofA Global Quantitative Strategy, MSCI, Ravenpack

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Chart 31: Global Regions: Latest News Pulse

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

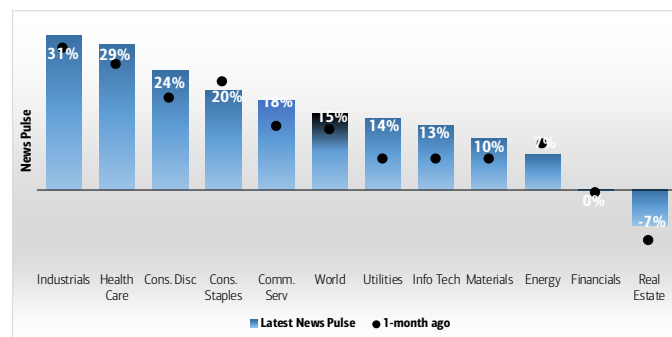


Source : BofA Global Quantitative Strategy, MSCI, Ravenpack

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Chart 32: Global Sectors: Latest News Pulse

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

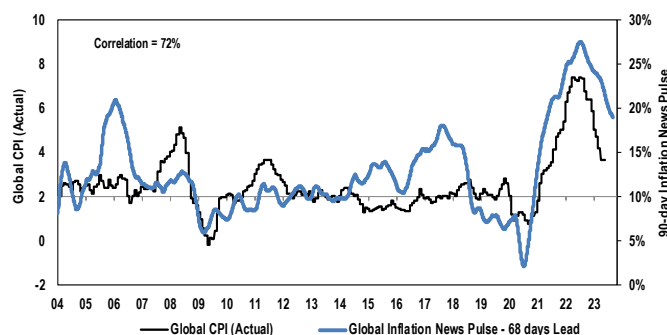


Source : BofA Global Quantitative Strategy, MSCI, Ravenpack

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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%

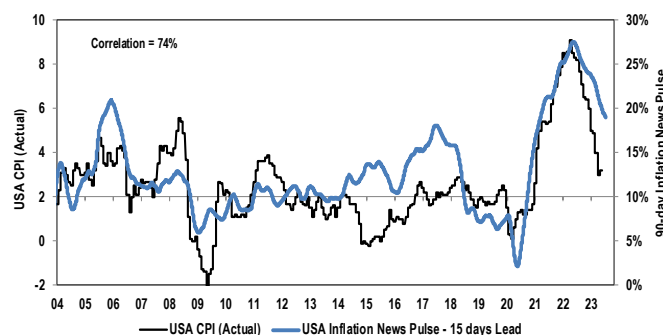


Source : BofA Global Quantitative Strategy, MSCI, Ravenpack

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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%



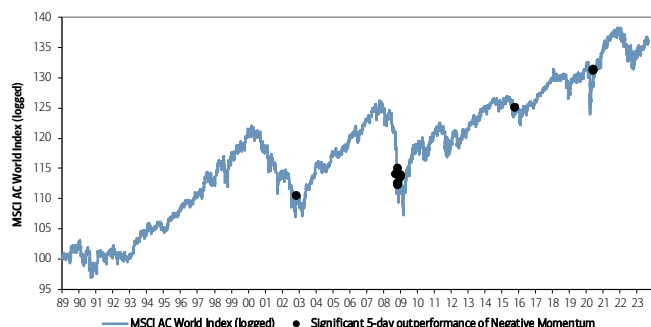
Source : BofA Global Quantitative Strategy, MSCI, Ravenpack

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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

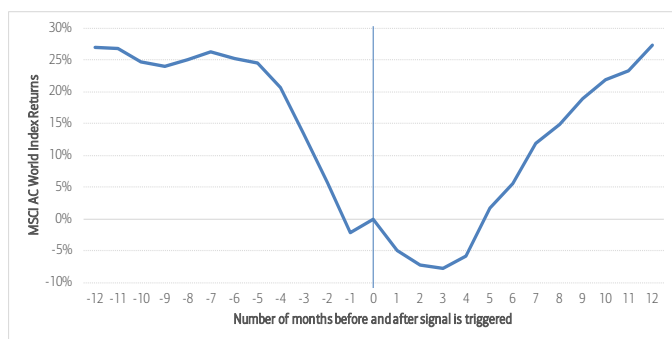


Source : BofA Global Quantitative Strategy, MSCI, IBES

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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 globalequities 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 -0.8%



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 fell (-3.0%)



Source : BofA Global Quantitative Strategy, Bloomberg

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

AUD depreciated (-1.2%)

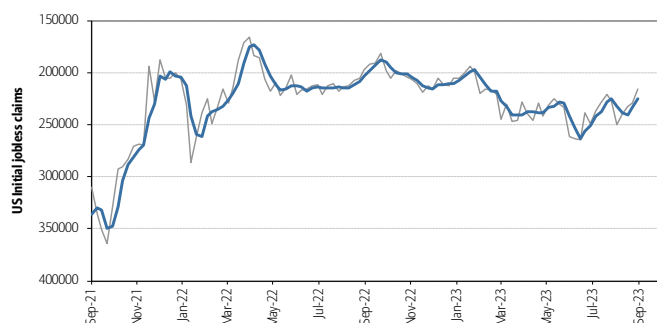


Source : BofA Global Quantitative Strategy, Bloomberg

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

US initial jobless claims fell by -13,000 to 216,000

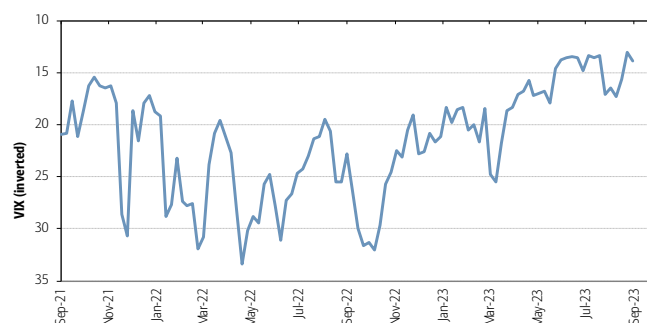


Source : BofA Global Quantitative Strategy, Bloomberg

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

VIX moved from 13.1 to 13.8



Source : BofA Global Quantitative Strategy, Bloomberg

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Chart 44: Global Credit Spreads, weekly 2 years

Global credit spreads widened (+0bps)



Source : BofA Global Quantitative Strategy, Bloomberg

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Chart 45: Global Cycle Sensitives, weekly returns 2 year

Global Cycle Sensitives underperformed (-2.8%)



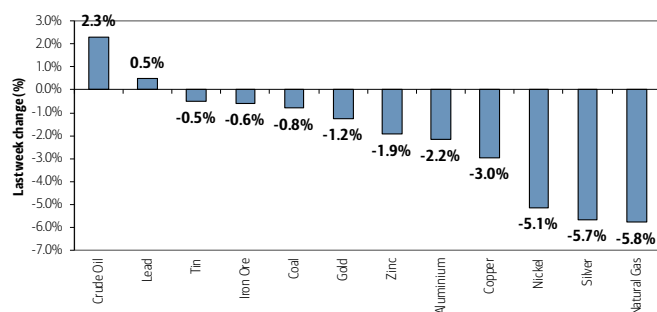
Source : BofA Global Quantitative Strategy, Bloomberg

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Commodities

Chart 46: Hard Commodities - Last week change

Natural Gas fell the most last week

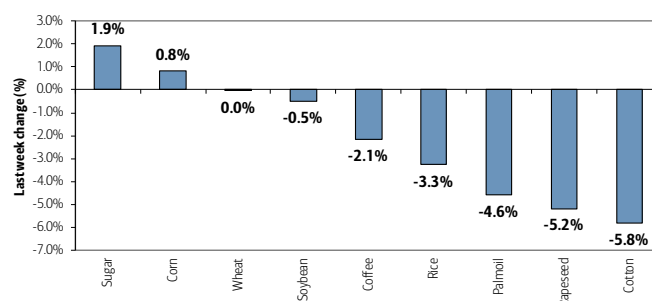


Source : BofA Global Quantitative Strategy, Bloomberg

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Chart 47: Soft Commodities - Last week change

Sugar increased the most last week

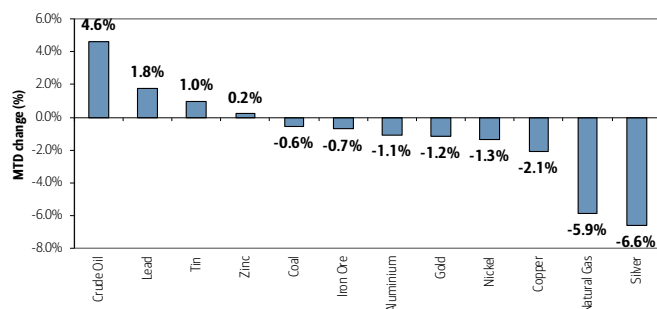


Source : BofA Global Quantitative Strategy, Bloomberg

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Chart 48: Hard Commodities - MTD change

Crude Oil increased the most MTD

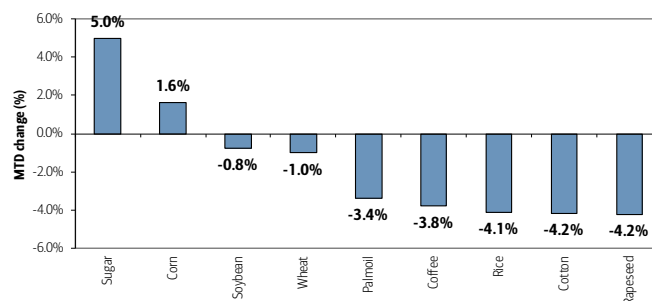


Source : BofA Global Quantitative Strategy, Bloomberg

BofA GLOBAL RESEARCH

Chart 49: Soft Commodities - MTD change

Sugar increased the most MTD

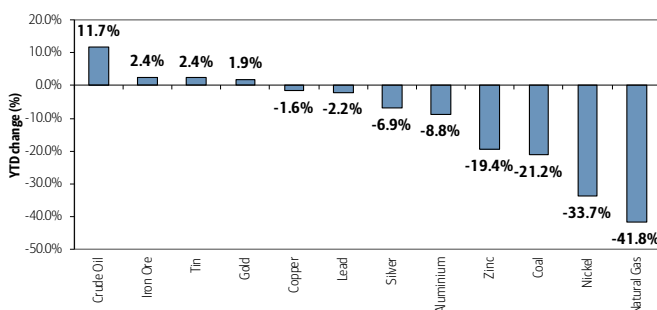


Source : BofA Global Quantitative Strategy, Bloomberg

BofA GLOBAL RESEARCH

Chart 50: Hard Commodities - YTD change

Natural Gas fell the most YTD

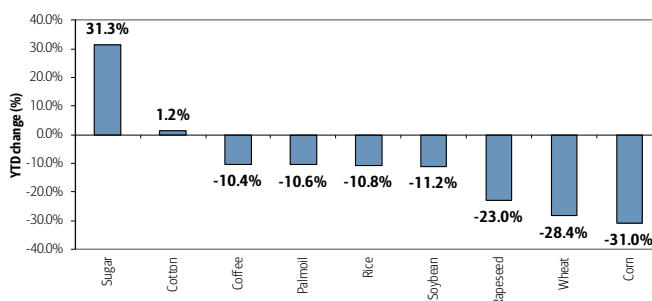


Source : BofA Global Quantitative Strategy, Bloomberg

BofA GLOBAL RESEARCH

Chart 51: Soft Commodities - YTD change

Sugar increased the most YTD



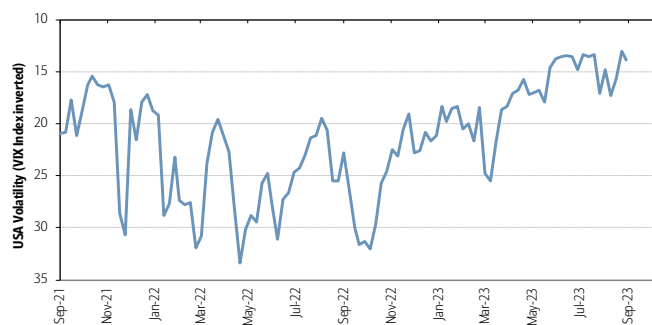
Source : BofA Global Quantitative Strategy, Bloomberg

BofA GLOBAL RESEARCH

Volatility

Chart 52: USA Volatility (VIX Index) - Inverted

VIX Index moved from 13.1 to 13.8

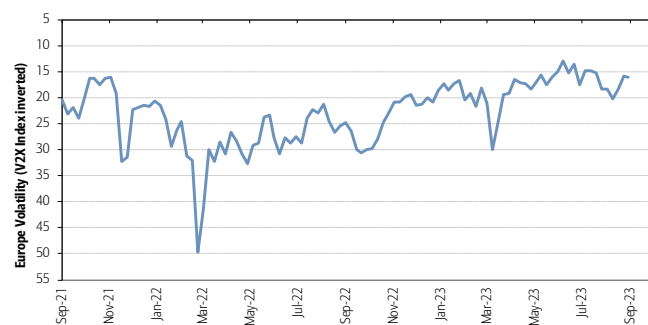


Source : BofA Global Quantitative Strategy, Bloomberg

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Chart 53: Europe Volatility (V2X Index) - Inverted

V2X Index moved from 15.9 to 16.2

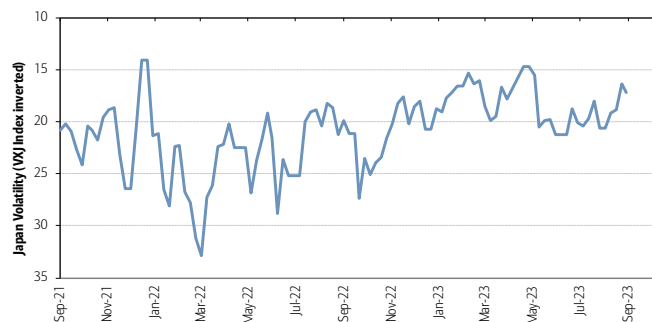


Source : BofA Global Quantitative Strategy, Bloomberg

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Chart 54: Japan Volatility (VXJ Index) - Inverted

VXJ Index moved from 16.4 to 17.2

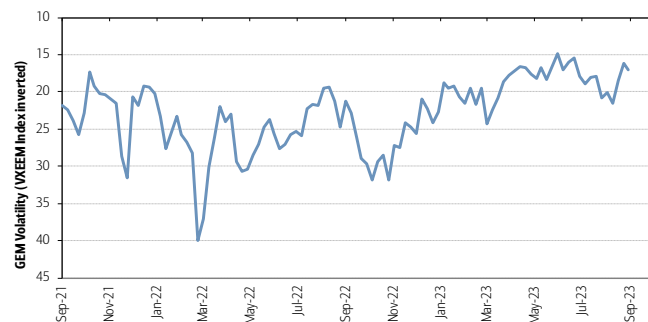


Source : BofA Global Quantitative Strategy, Bloomberg

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

VXEEM Index moved from 16.1 to 17.1

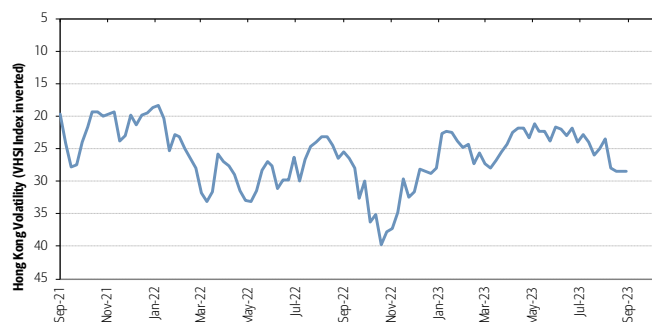


Source : BofA Global Quantitative Strategy, Bloomberg

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

VHSI Index moved from 28.5 to 28.5

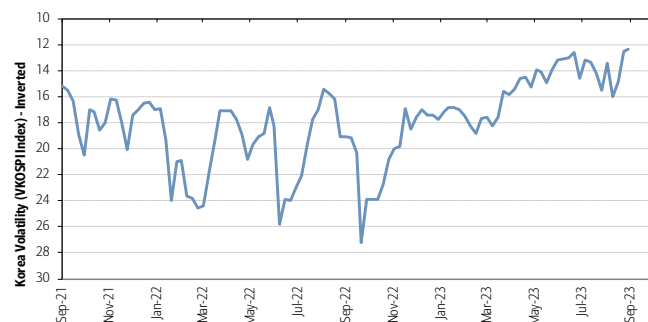


Source : BofA Global Quantitative Strategy, Bloomberg

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Chart 57: Korea Volatility (VKOSPI Index) - Inverted

VKOSPI Index moved from 12.5 to 12.4



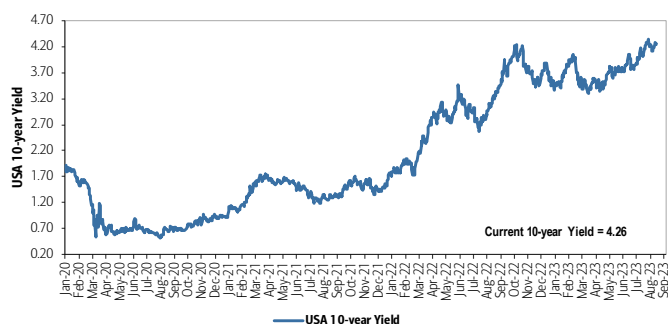
Source : BofA Global Quantitative Strategy, Bloomberg

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Rates

Chart 58: USA 10-year Bond Yield

US 10-year yield up by 9 bps to 4.26%

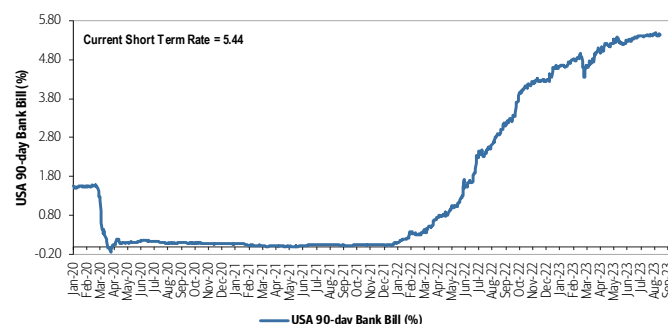


Source : BofA Global Quantitative Strategy, Bloomberg

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Chart 59: USA 90-day Bank Bill

US 90-day yield up by 3 bps to 5.44%

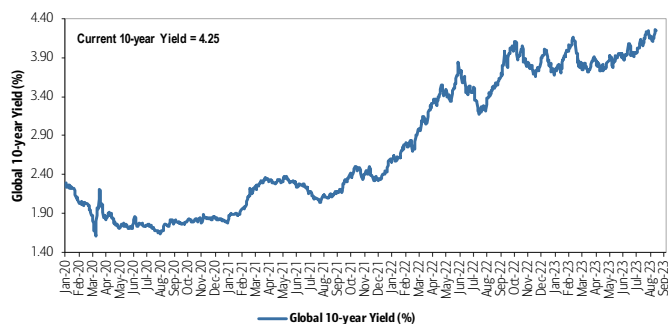


Source : BofA Global Quantitative Strategy, Bloomberg

BofA GLOBAL RESEARCH

Chart 60: Global 10-year Bond Yield

Current 10-yr Global GDP weighted bond yield is 4.25%

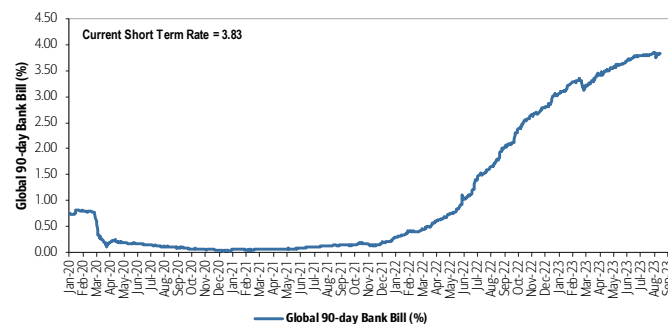


Source : BofA Global Quantitative Strategy, Bloomberg

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Chart 61: Global 90-day Bank Bill

Current 90d Global GDP weighted bond yield is 3.83%

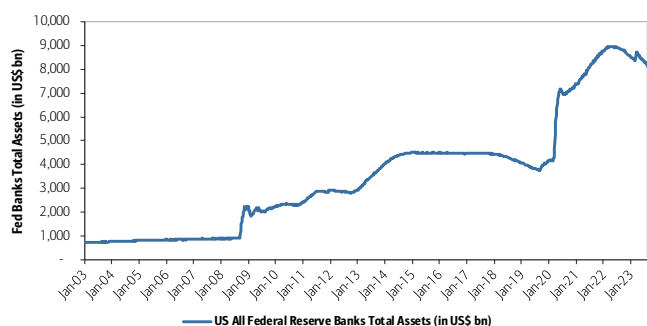


Source : BofA Global Quantitative Strategy, Bloomberg

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

Last week, Fed Reserve's balance sheet reduced by US\$-20bn

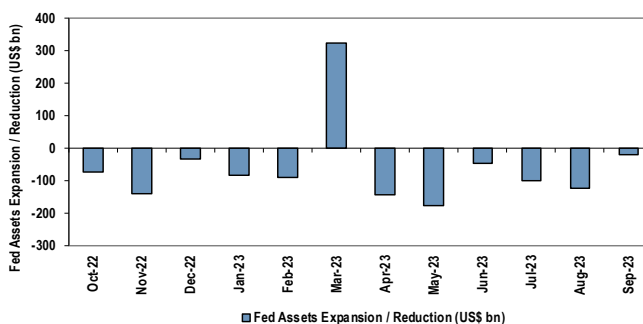


Source : BofA Global Quantitative Strategy, Bloomberg

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

Last month, Fed reduced the balance sheet by US\$ -122bn



Source : BofA Global Quantitative Strategy, Bloomberg

BofA GLOBAL RESEARCH

Chart 64: China 10-year Bond Yield

Current China 10-year Yield = 2.67%



Source : BofA Global Quantitative Strategy, Bloomberg

BofA GLOBAL RESEARCH

Chart 65: China 90-day Bank Bill

Current China 90-day Rate = 2.10%

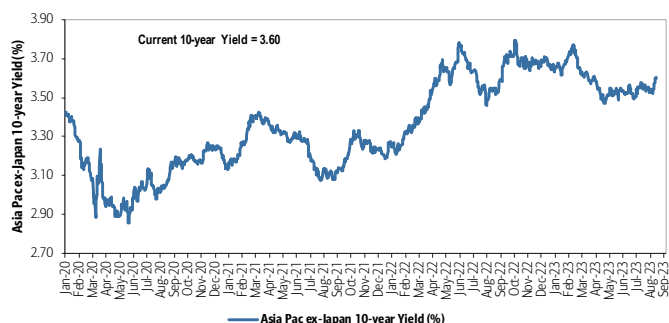


Source : BofA Global Quantitative Strategy, Bloomberg

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

Current 10-year Asia Pac GDP weighted bond yield is 3.60%

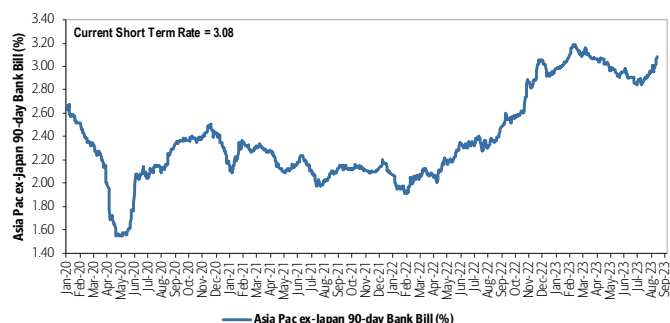


Source : BofA Global Quantitative Strategy, Bloomberg

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

Current 90d Asia Pac GDP weighted bond yield is 3.08%



Source : BofA Global Quantitative Strategy, Bloomberg

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Table 4: 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 -17.5%

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%

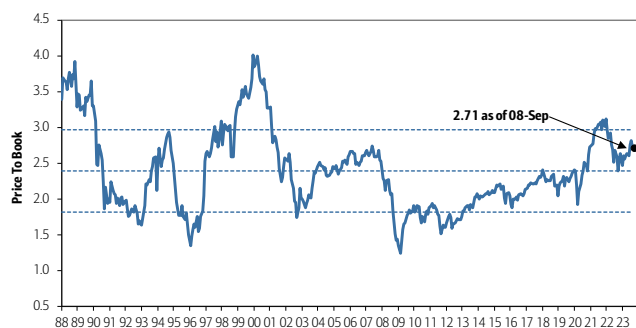
Source : BofA Global Quantitative Strategy, MSCI, Bloomberg

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Valuation

Chart 68: Global Price-to-Book trailing

The latest Global Price-to-Book ratio is 2.71

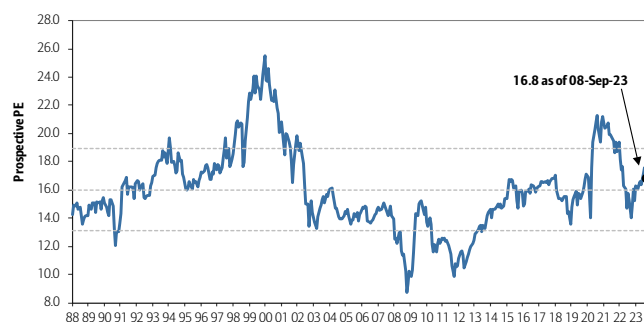


Source : BofA Global Quantitative Strategy, MSCI, IBES, Worldscope

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Chart 69: Global Prospective PE

The latest Global Prospective PE is 16.8

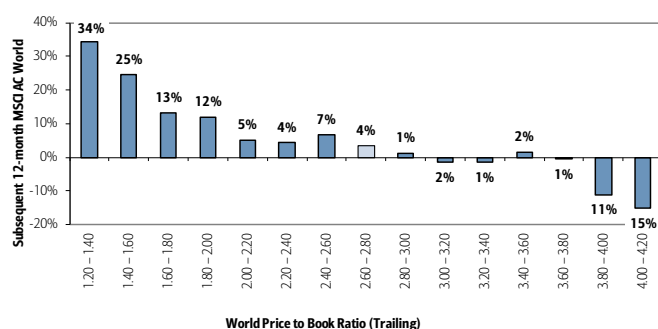


Source : BofA Global Quantitative Strategy, MSCI, IBES, Worldscope

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

For current PB level, MSCI ACWI returns 4% in the subsequent 12m on average

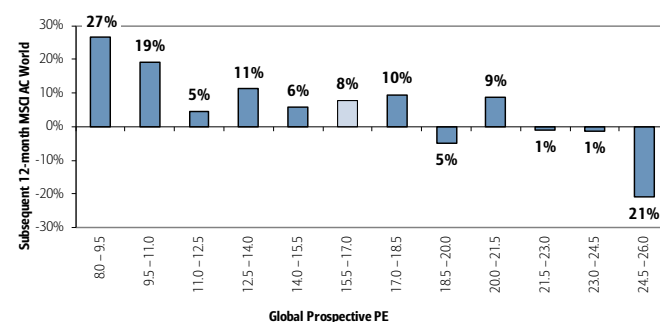


Source : BofA Global Quantitative Strategy, MSCI, IBES, Worldscope

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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

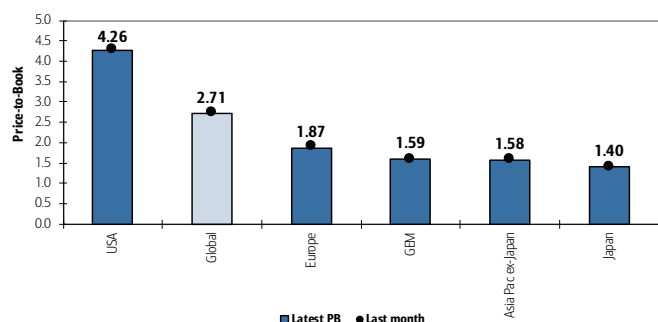


Source : BofA Global Quantitative Strategy, MSCI, IBES, Worldscope

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Chart 72: Price-to-Book: Global Regions

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

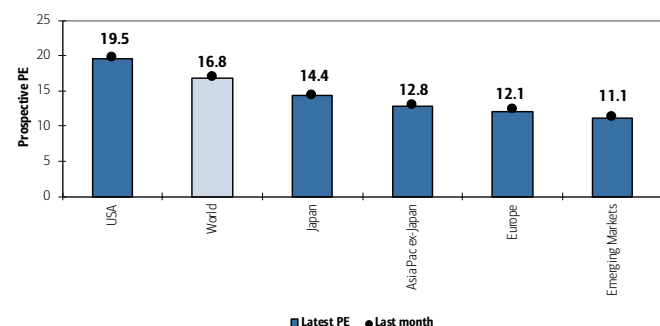


Source : BofA Global Quantitative Strategy, MSCI, IBES, Worldscope

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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 Emerging ex-Asia - Div Financials 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	49	56	40	52	43	43	54	61	36	54	31	41	38	54	40	50	47
Emerging ex-Asia	62	43	49	85	37	53	60	67	35	20	60		81		62	71	55
Europe	70	64	52	63	35	56	64	47	39	56	28	75	70	29	38	49	55
Japan	66	64	44	62	57	43	57	64	39	50	41	61	61	55	45	75	55
United States	25	59	41	49	42	46	56	59	41	52	40	57	68	48	15	26	49
Global	56	59	44	54	41	47	58	58	38	51	36	54	63	51	43	45	

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 Malaysia - Industrials and lowest for China - Real Estate

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	43	61	35	36	41	38	36	72	41	68	43		38		37	98	46
China	23	60	31	25	55	40	48	44	37	66	21	19	17	45	60	47	44
Hong Kong	33	67	23	49		63	29	51			32	10	7		43	42	37
India	60	71	64	83	82	54	71	71	61	81	87		62			64	67
Indonesia	71	37	75		26	22	69		40						54		56
Malaysia	67	64	41		47	21	92		39			48			42	40	55
New Zealand						27	42						93		69	53	57
Philippines	87	69	50				74				61				63	67	72
Singapore	70	67	17	33			77			4	30				14	79	46
South Korea	54	58	49	68	32	46	68	68	31	34		89		43	70	82	54
Taiwan	63	29	77		13		39	83	26			37		56	51		47
Thailand	72	60	32	53	37	87	49		13		54				29	29	42
Asia Pac ex-Japan	55	59	46	56	52	46	57	61	41	51	35	36	55	52	48	51	

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 Emerging ex-Asia - Div Financials and lowest for USA - Telecom



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 Malaysia - Industrials and lowest for China - Real Estate



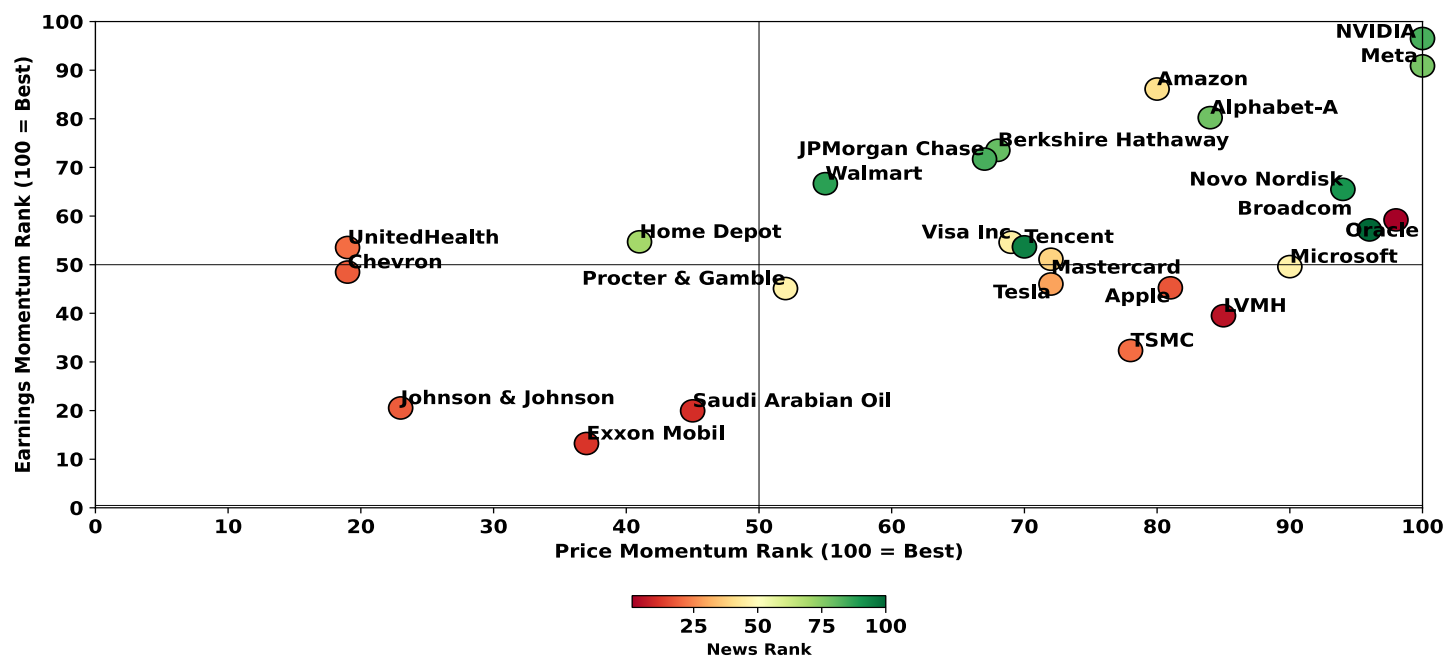
Source : BofA Global Quantitative Strategy, MSCI, IBES, FactSet, RavenPack

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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, Novo Nordisk and Oracle

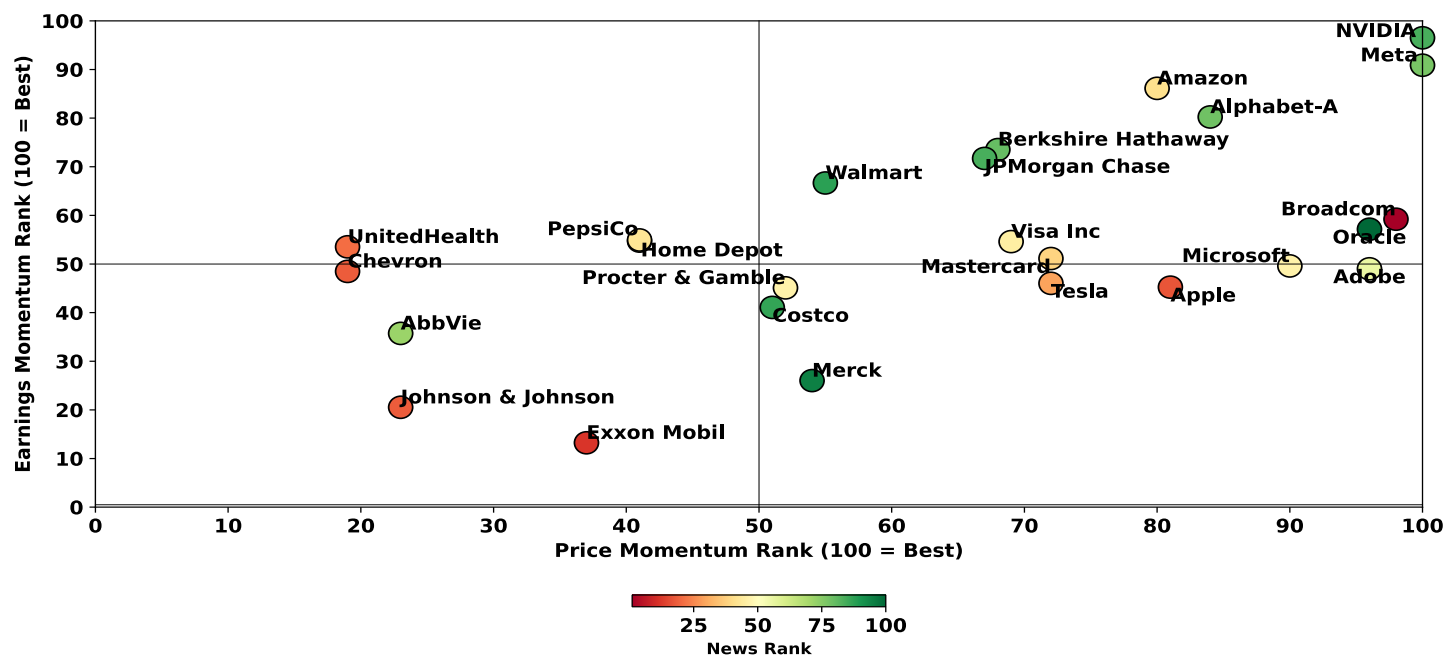


Source : BofA Global Quantitative Strategy, MSCI, IBES, FactSet, RavenPack

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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, Oracle and Alphabet-A

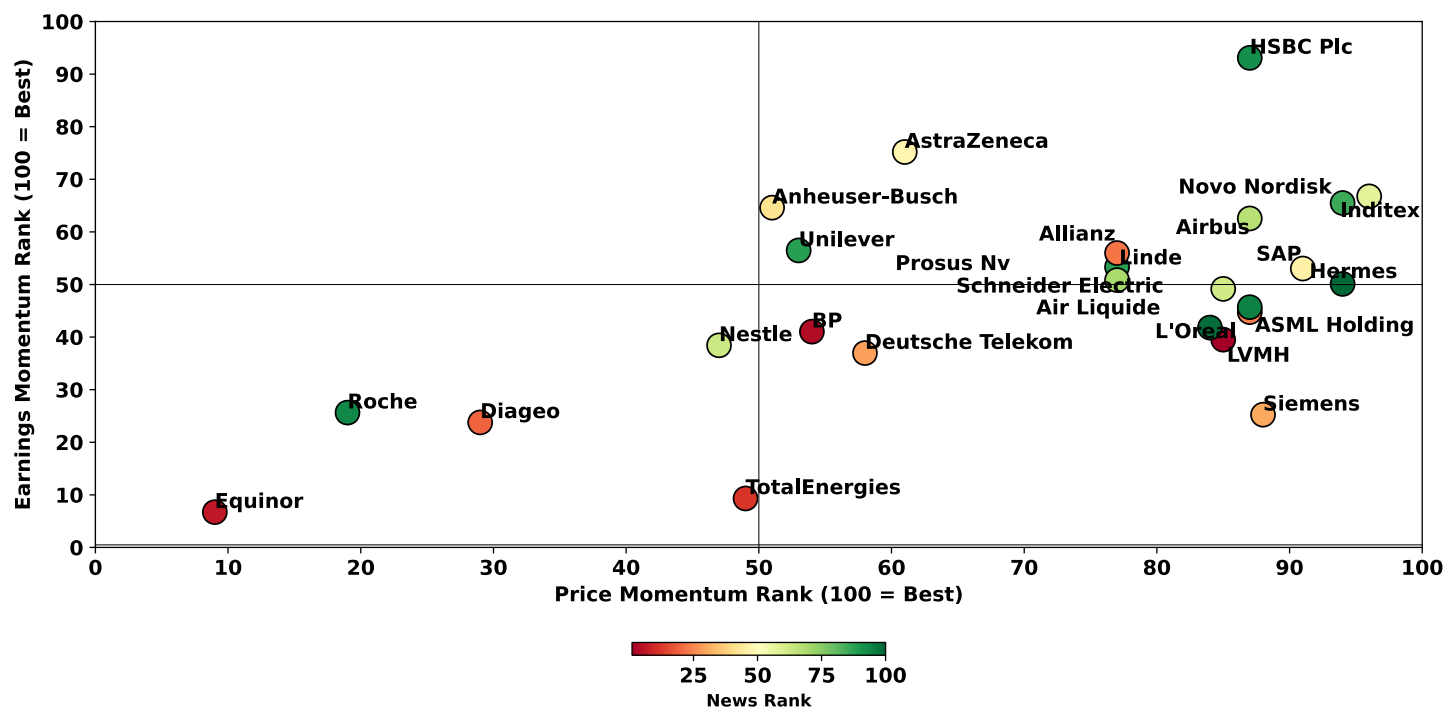


Source : BofA Global Quantitative Strategy, MSCI, IBES, FactSet, RavenPack

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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, Novo Nordisk and Hermes

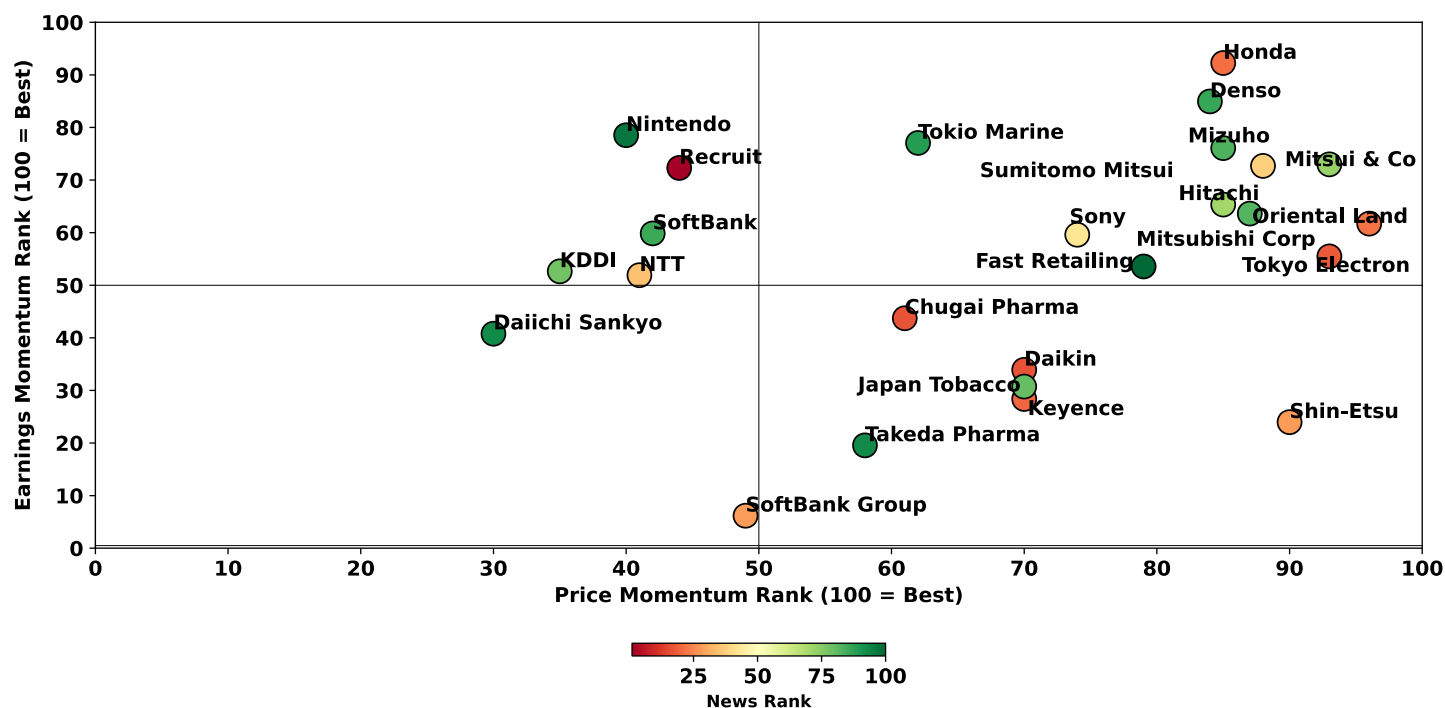


Source : BofA Global Quantitative Strategy, MSCI, IBES, FactSet, RavenPack

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

Triple Momentum is most positive for Denso, Fast Retailing and Mizuho

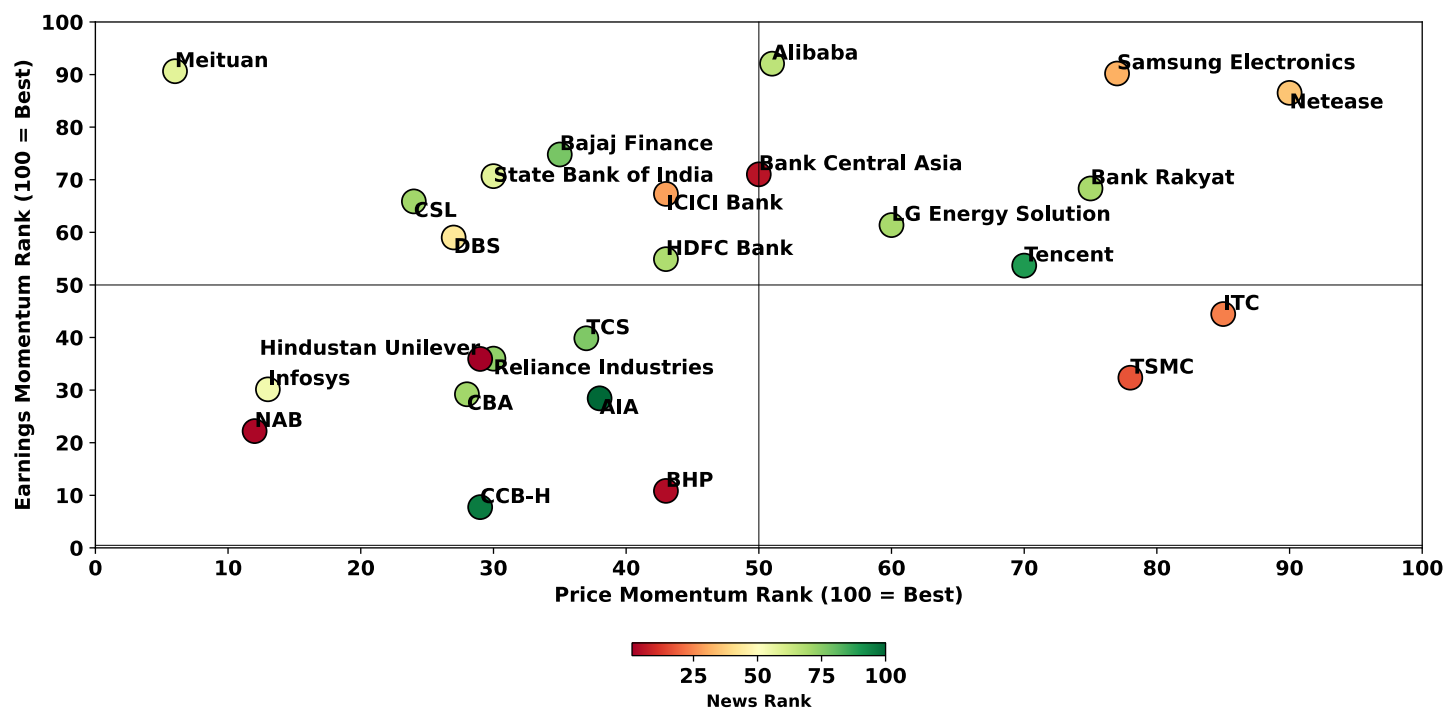


Source : BofA Global Quantitative Strategy, MSCI, IBES, FactSet, RavenPack

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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 Tencent, Bank Rakyat and Alibaba

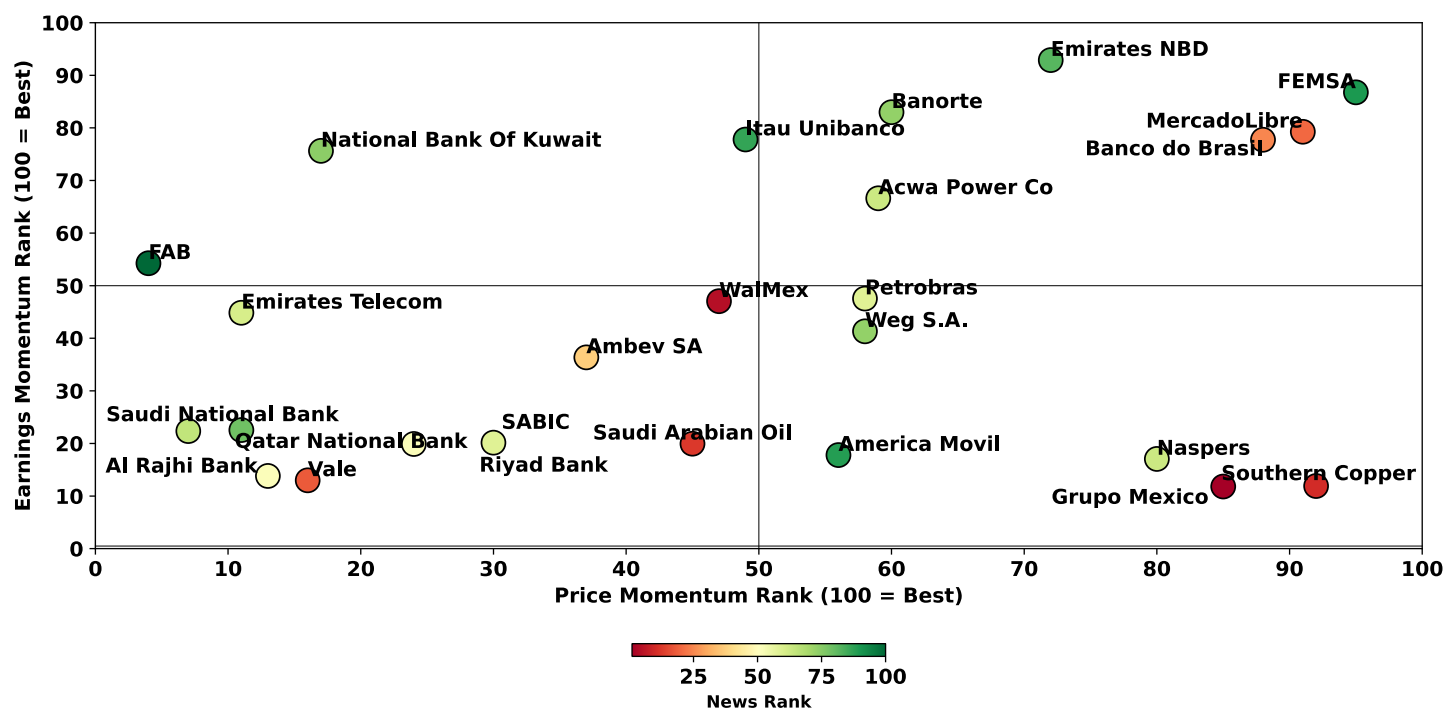


Source : BofA Global Quantitative Strategy, MSCI, IBES, FactSet, RavenPack

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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 FEMSA, Emirates NBD and Banorte



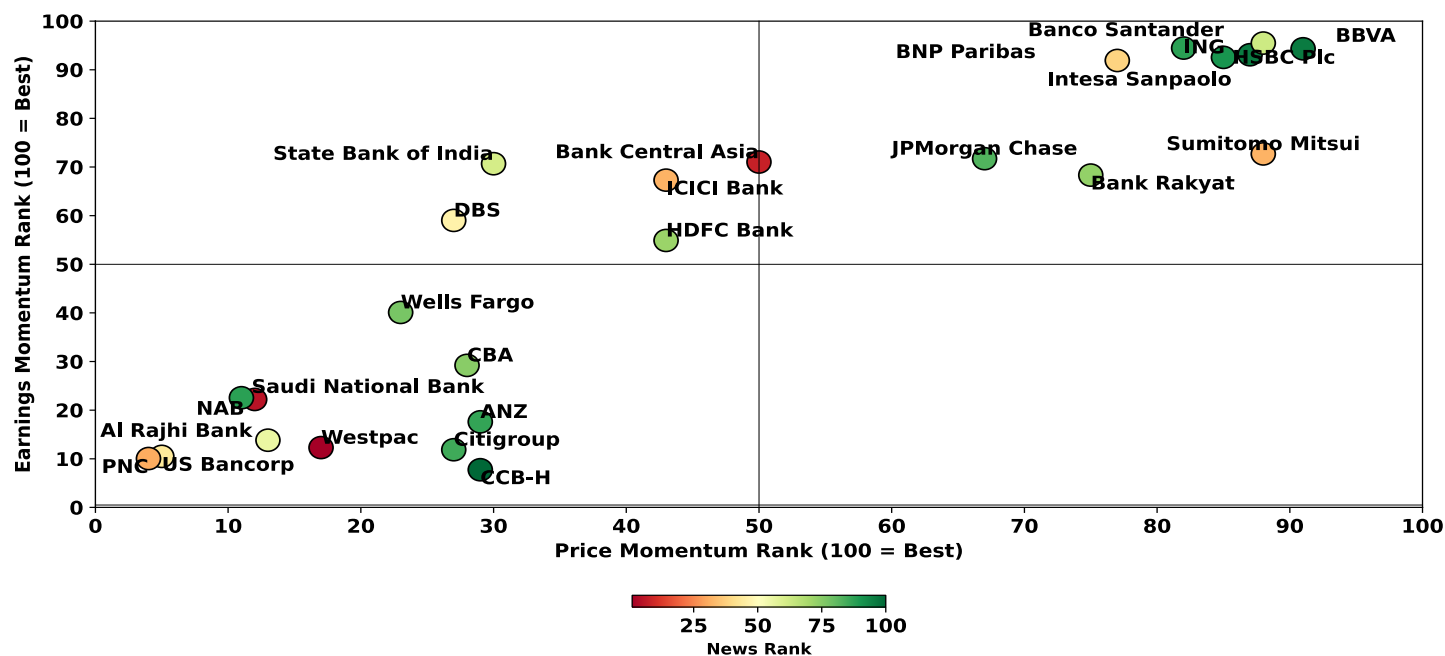
Source : BofA Global Quantitative Strategy, MSCI, IBES, FactSet, RavenPack

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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 BBVA, HSBC Plc and Intesa Sanpaolo

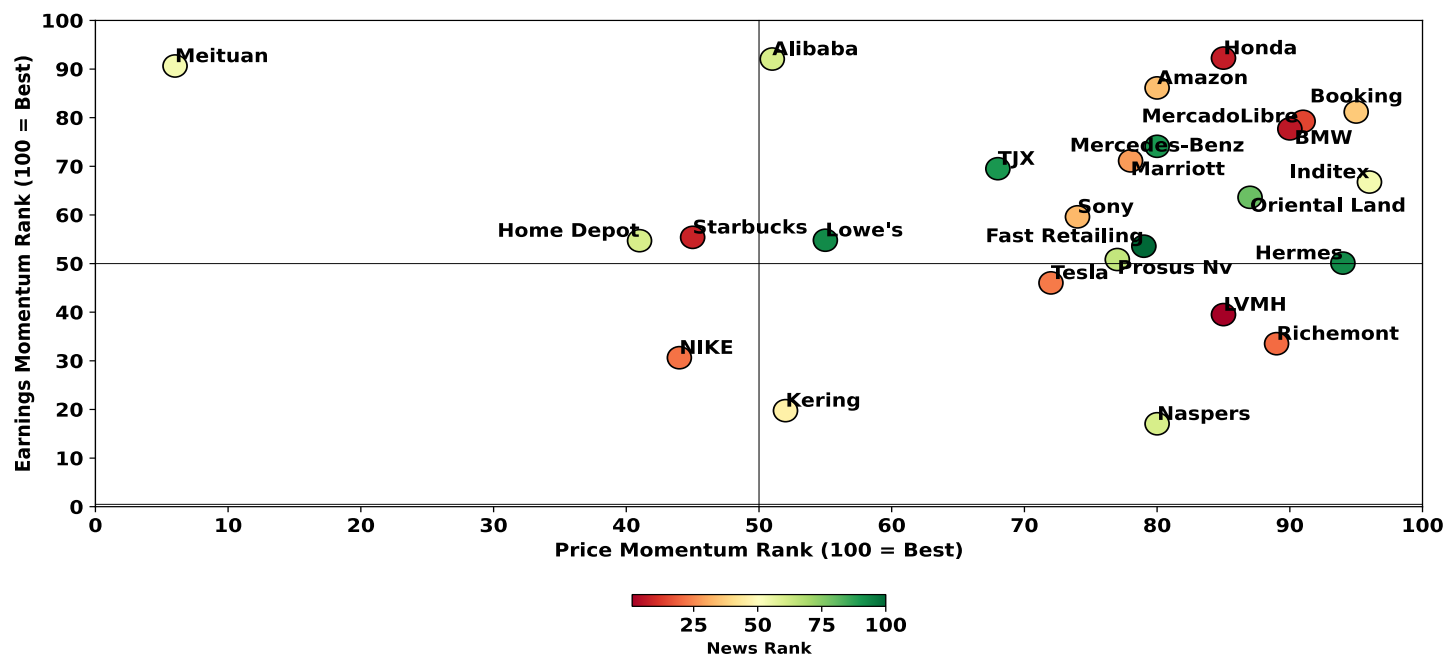


Source : BofA Global Quantitative Strategy, MSCI, IBES, FactSet, RavenPack

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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 Fast Retailing, Mercedes-Benz and Hermes

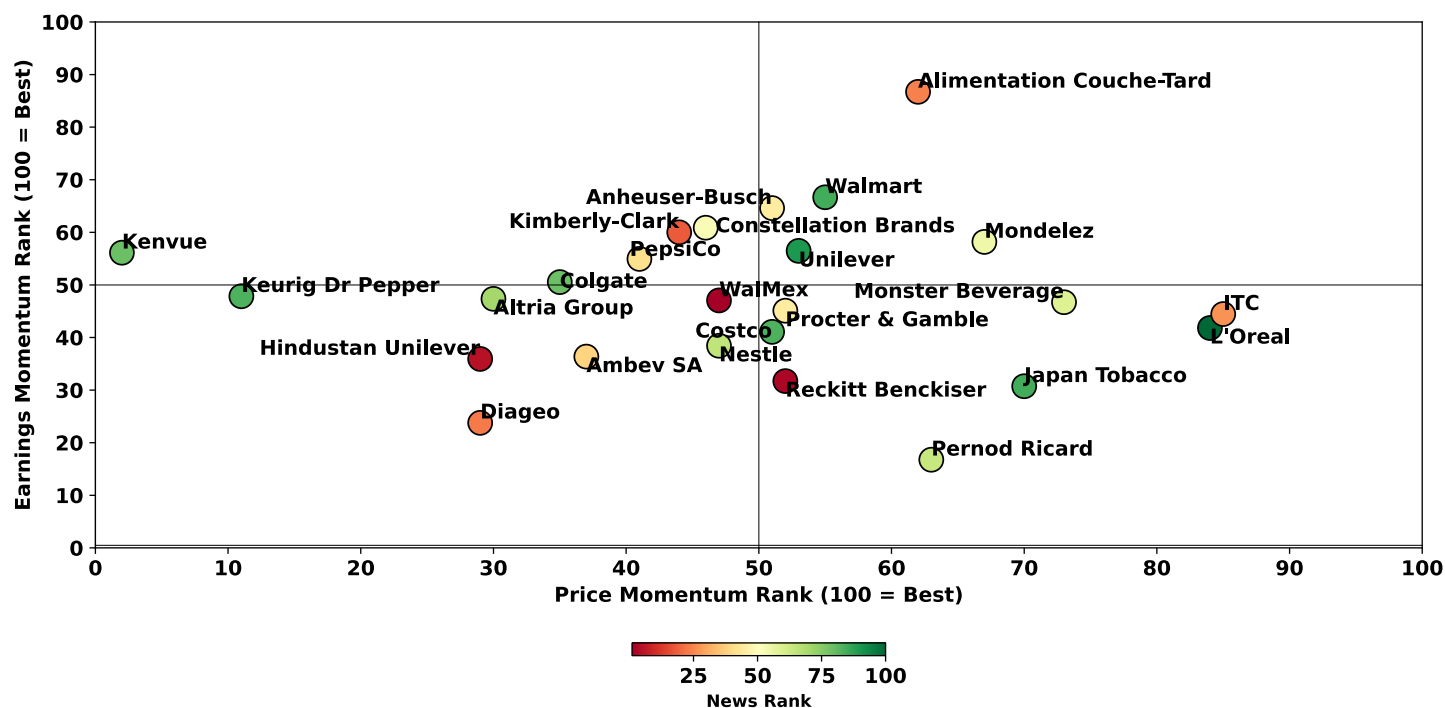


Source : BofA Global Quantitative Strategy, MSCI, IBES, FactSet, RavenPack

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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 Unilever, Walmart and Mondelez

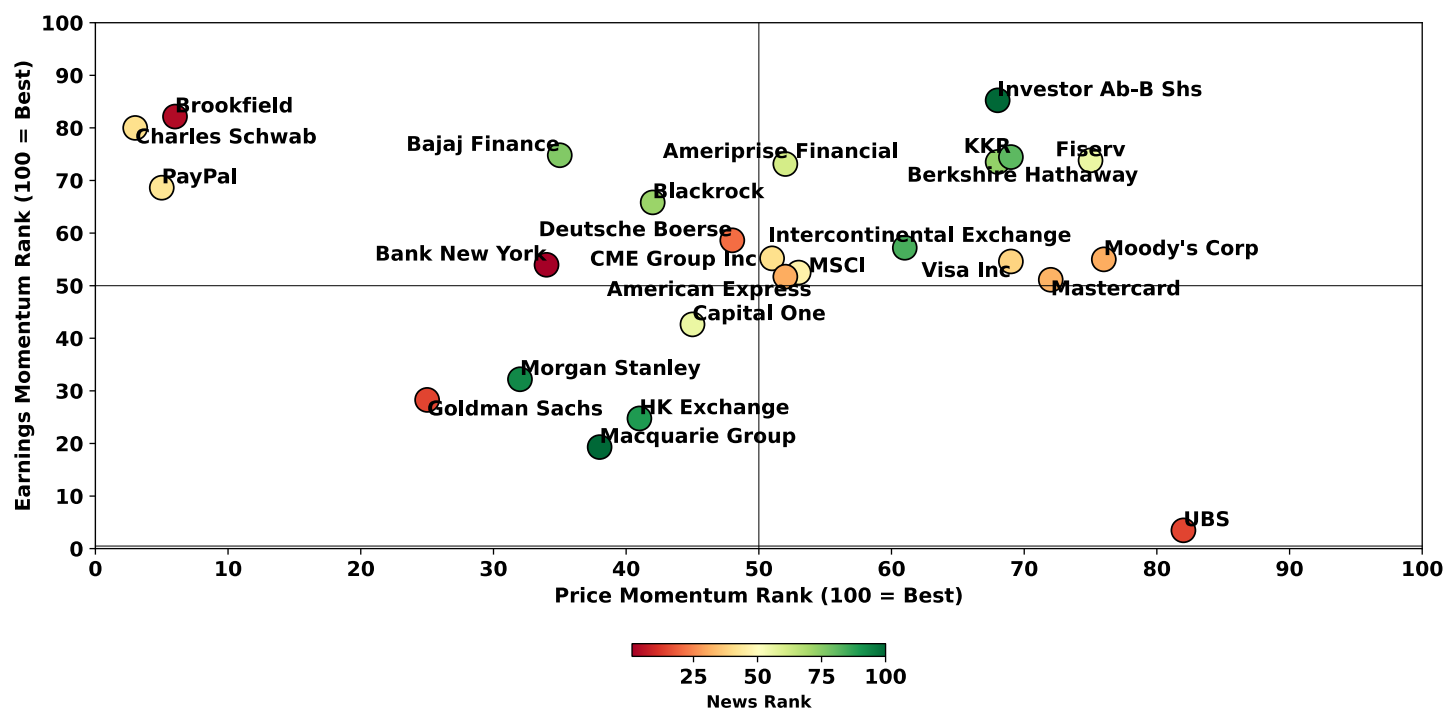


Source : BofA Global Quantitative Strategy, MSCI, IBES, FactSet, RavenPack

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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 Investor Ab-B Shs, KKR and Intercontinental Exchange

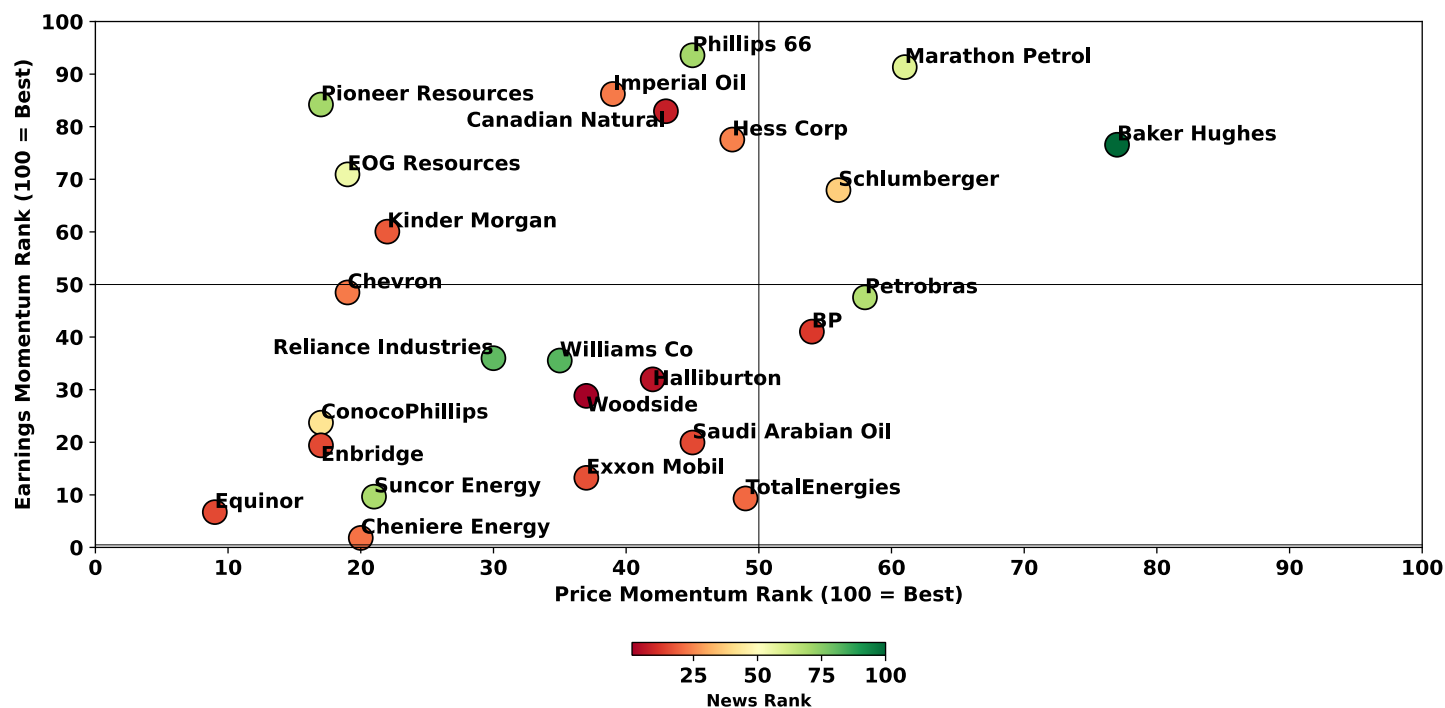


Source : BofA Global Quantitative Strategy, MSCI, IBES, FactSet, RavenPack

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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

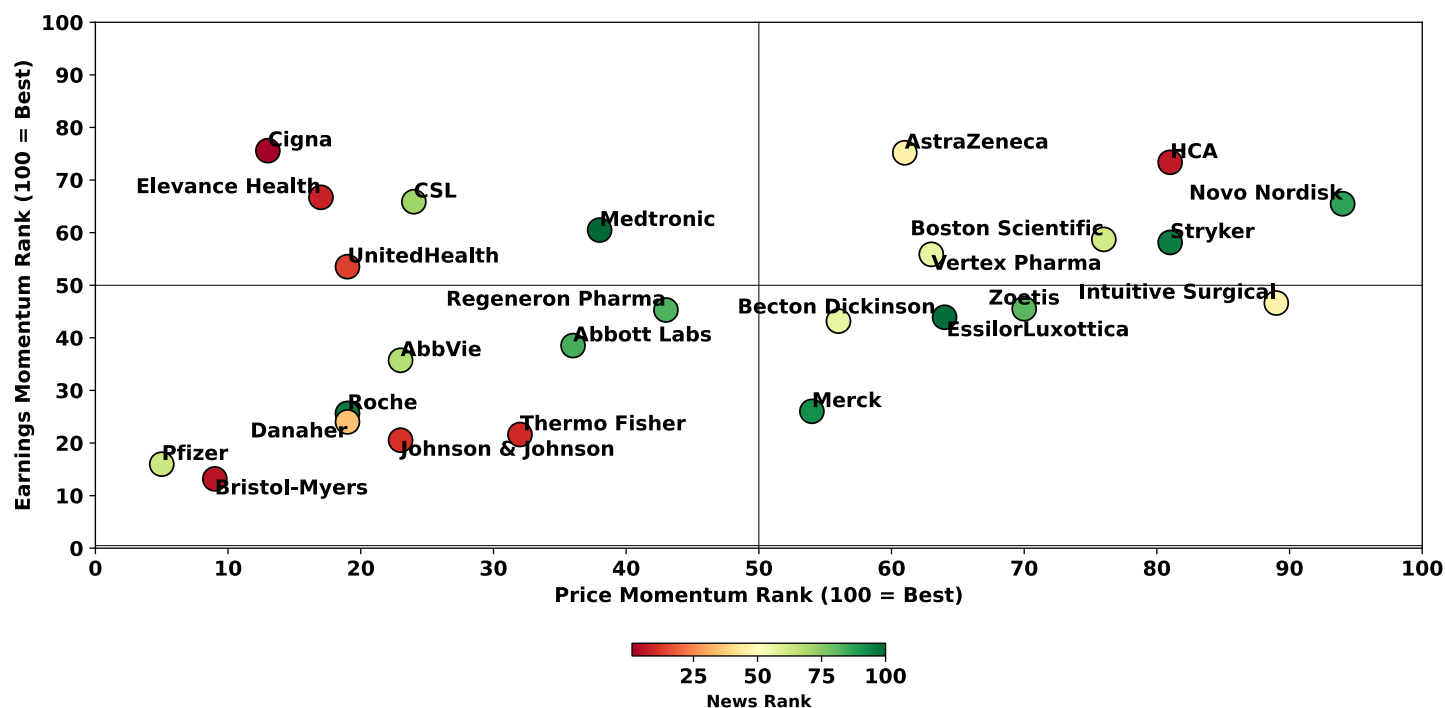


Source : BofA Global Quantitative Strategy, MSCI, IBES, FactSet, RavenPack

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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 Novo Nordisk, Stryker and Boston Scientific

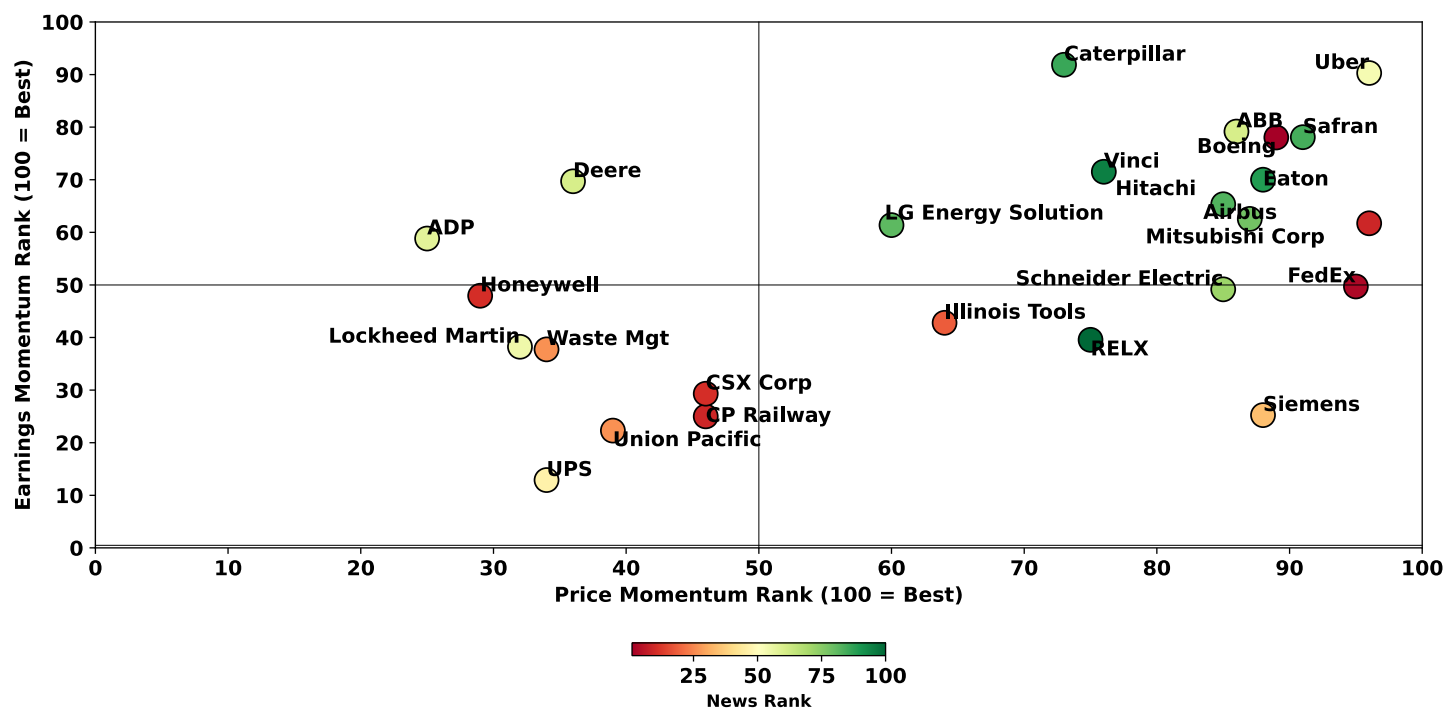


Source : BofA Global Quantitative Strategy, MSCI, IBES, FactSet, RavenPack

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

Triple Momentum is most positive for Vinci, Eaton and Caterpillar

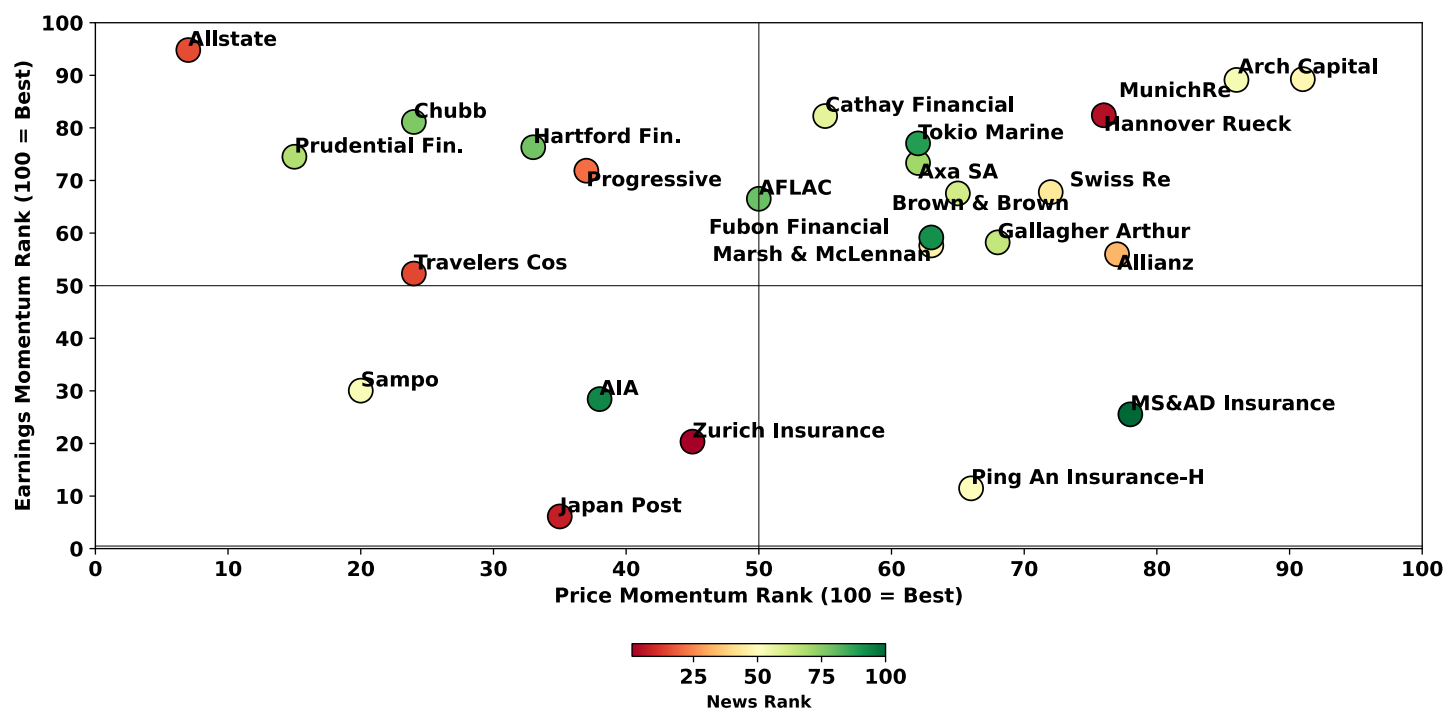


Source : BofA Global Quantitative Strategy, MSCI, IBES, FactSet, RavenPack

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

Triple Momentum is most positive for Tokio Marine, Fubon Financial and MunichRe

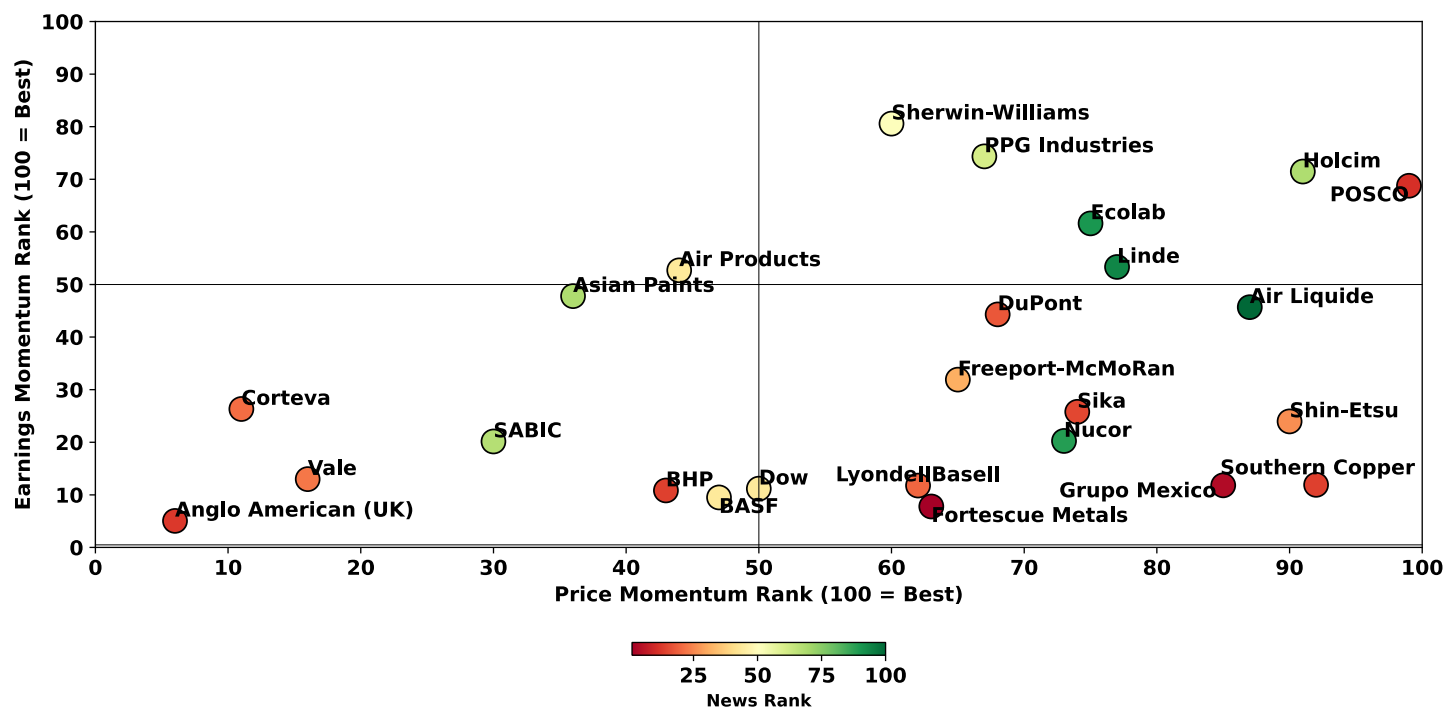


Source : BofA Global Quantitative Strategy, MSCI, IBES, FactSet, RavenPack

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

Triple Momentum is most positive for Linde, Ecolab and Holcim

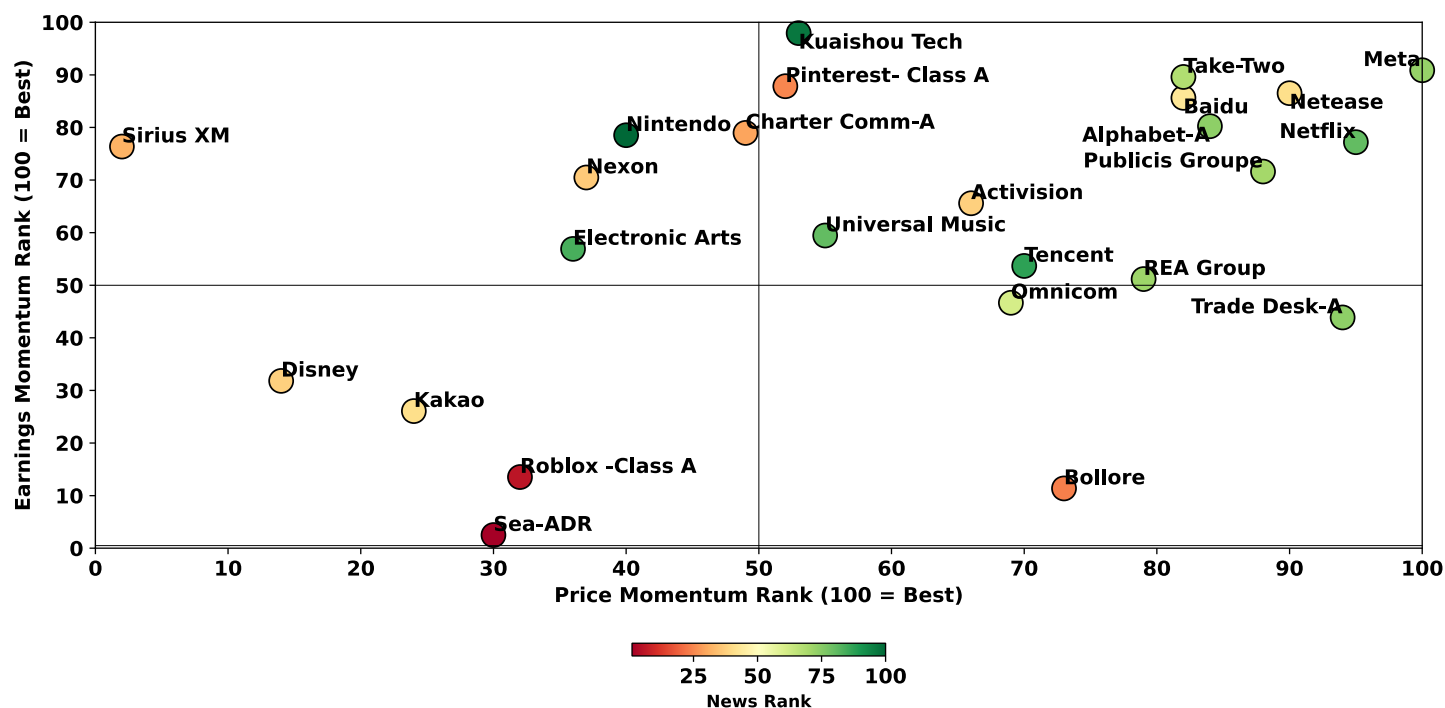


Source : BofA Global Quantitative Strategy, MSCI, IBES, FactSet, RavenPack

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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 Kuaishou Tech, Netflix and Alphabet-A

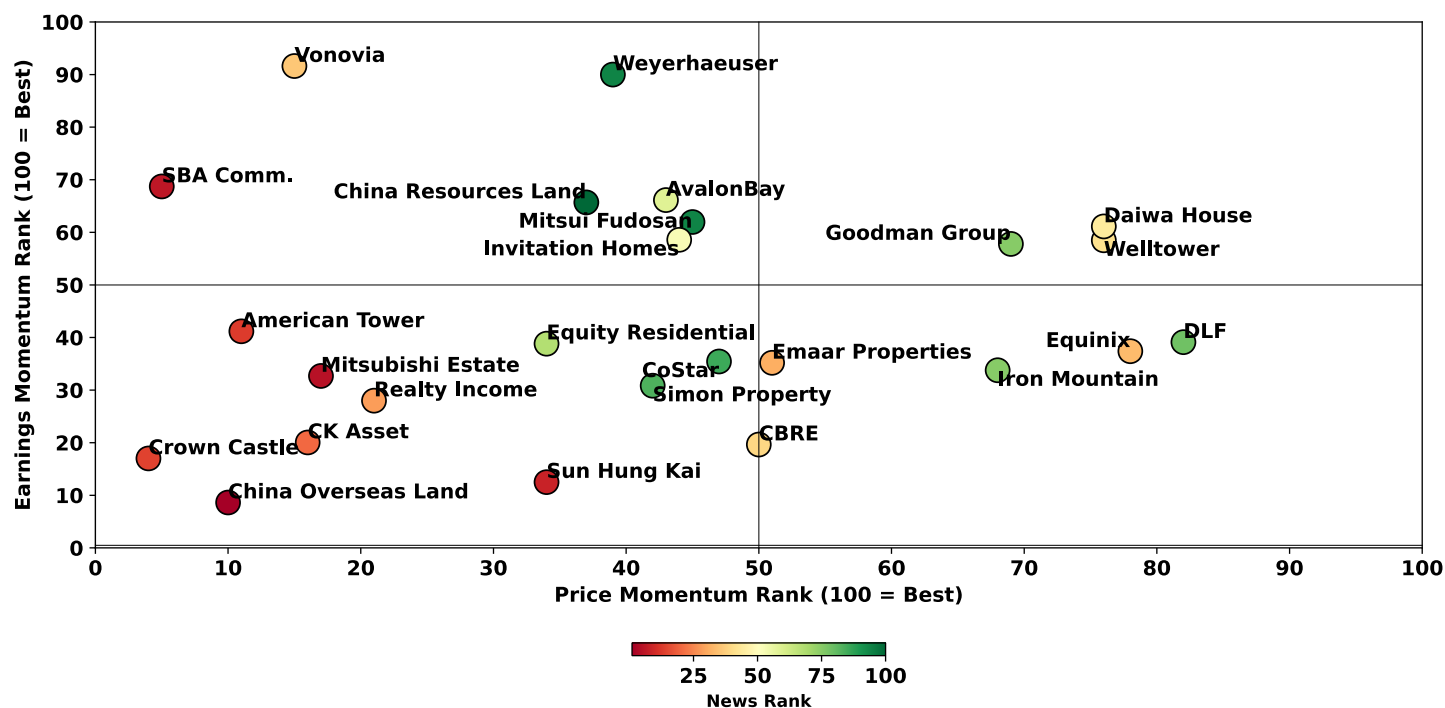


Source : BofA Global Quantitative Strategy, MSCI, IBES, FactSet, RavenPack

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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 Goodman Group

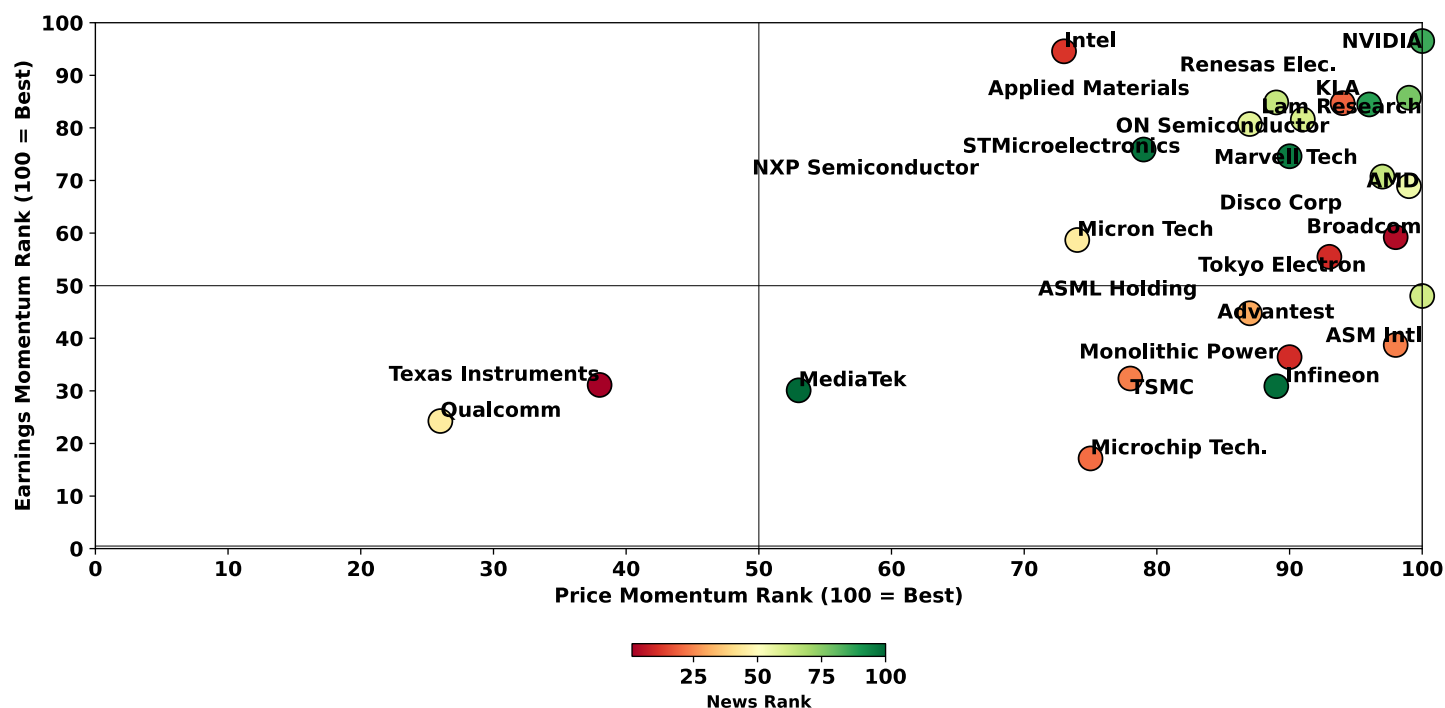


Source : BofA Global Quantitative Strategy, MSCI, IBES, FactSet, RavenPack

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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, Lam Research and Marvell Tech

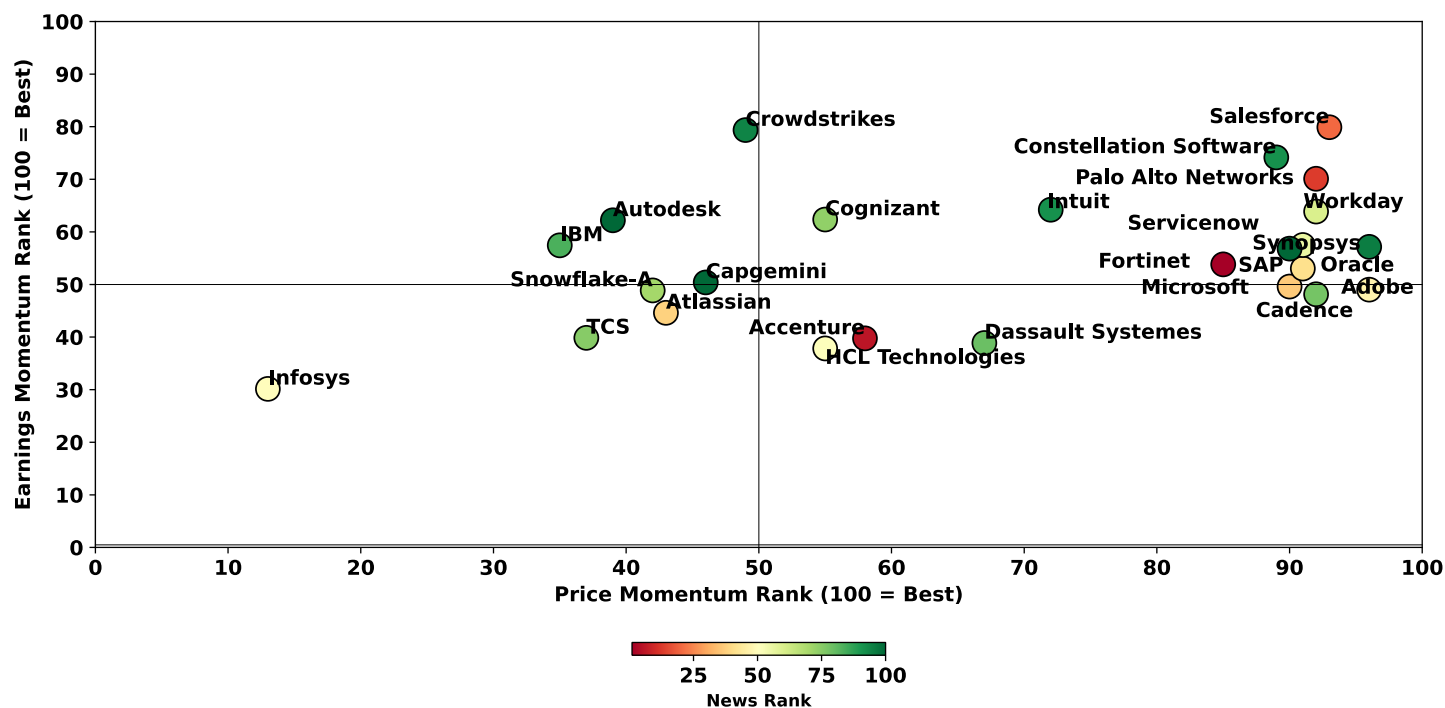


Source : BofA Global Quantitative Strategy, MSCI, IBES, FactSet, RavenPack

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

Triple Momentum is most positive for Constellation Software, Oracle and Synopsys

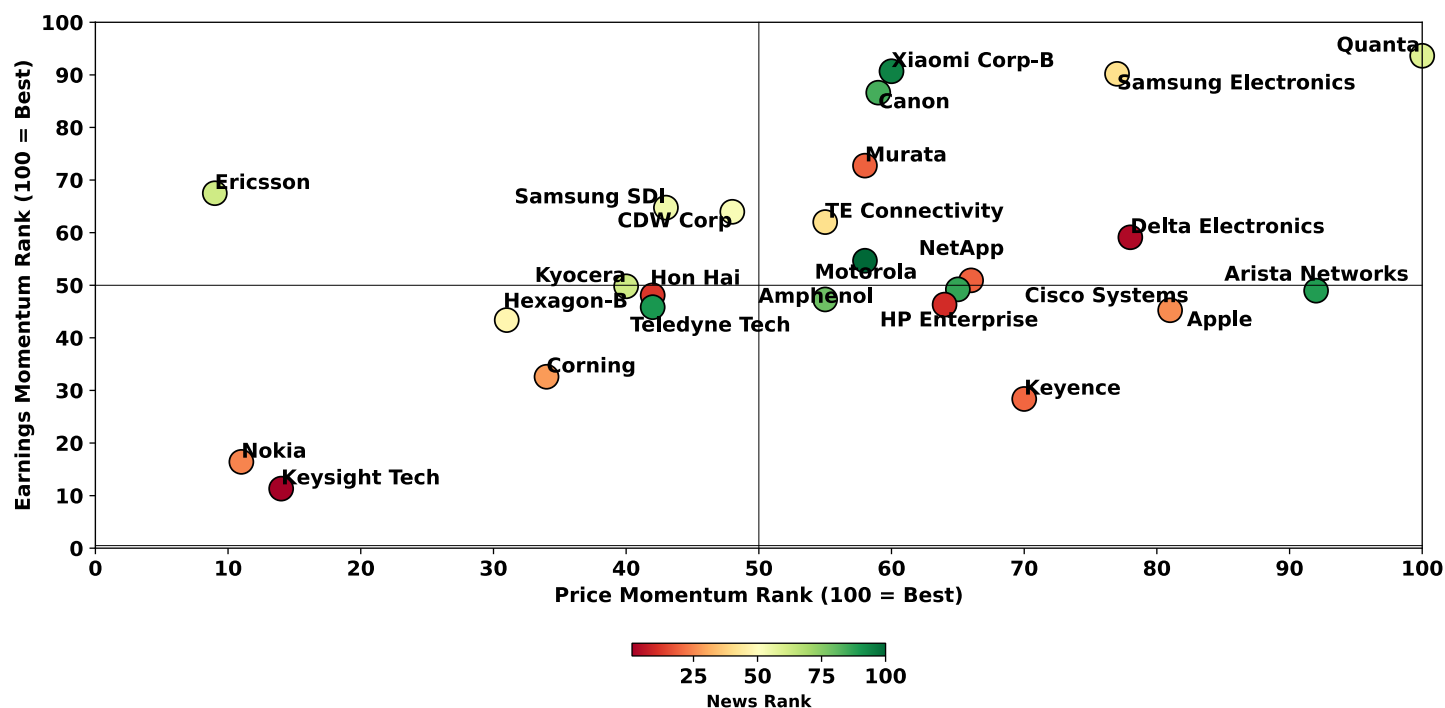


Source : BofA Global Quantitative Strategy, MSCI, IBES, FactSet, RavenPack

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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 Xiaomi Corp-B, Canon and NetApp

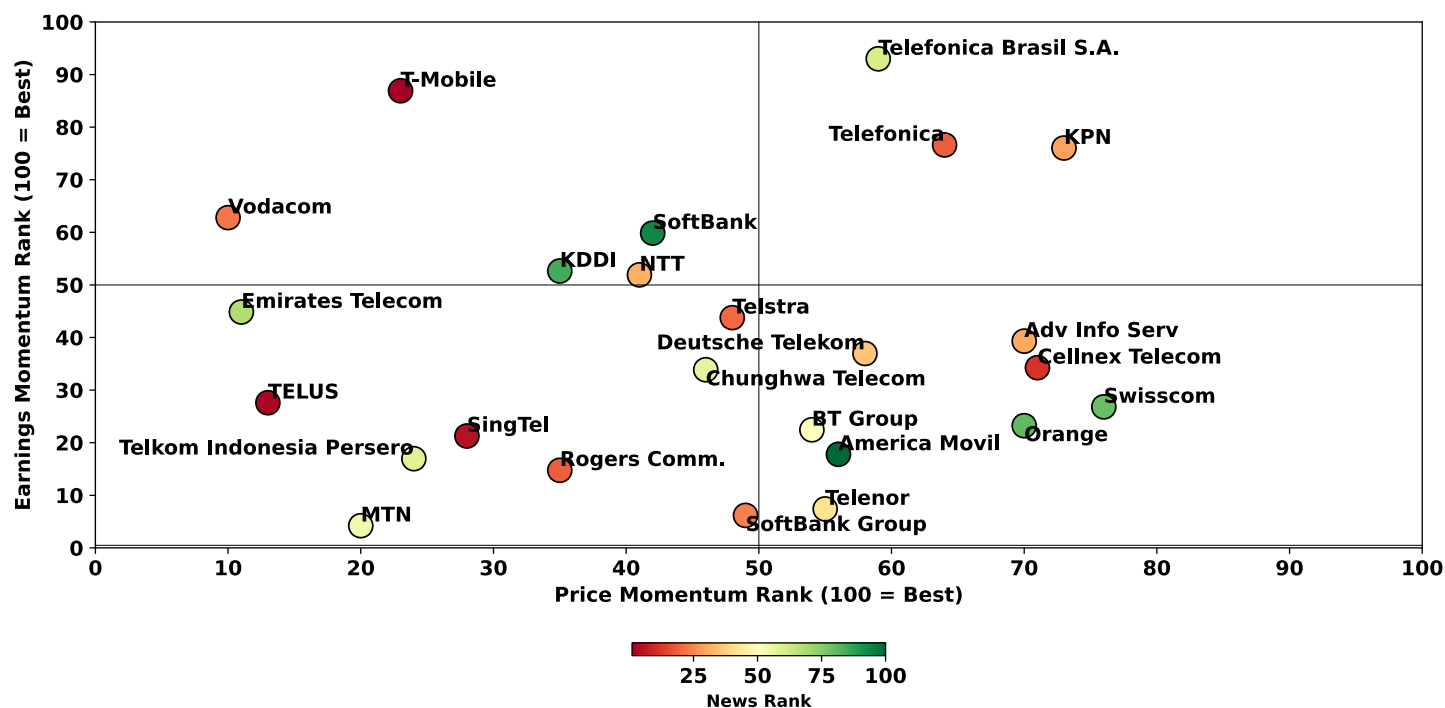


Source : BofA Global Quantitative Strategy, MSCI, IBES, FactSet, RavenPack

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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.

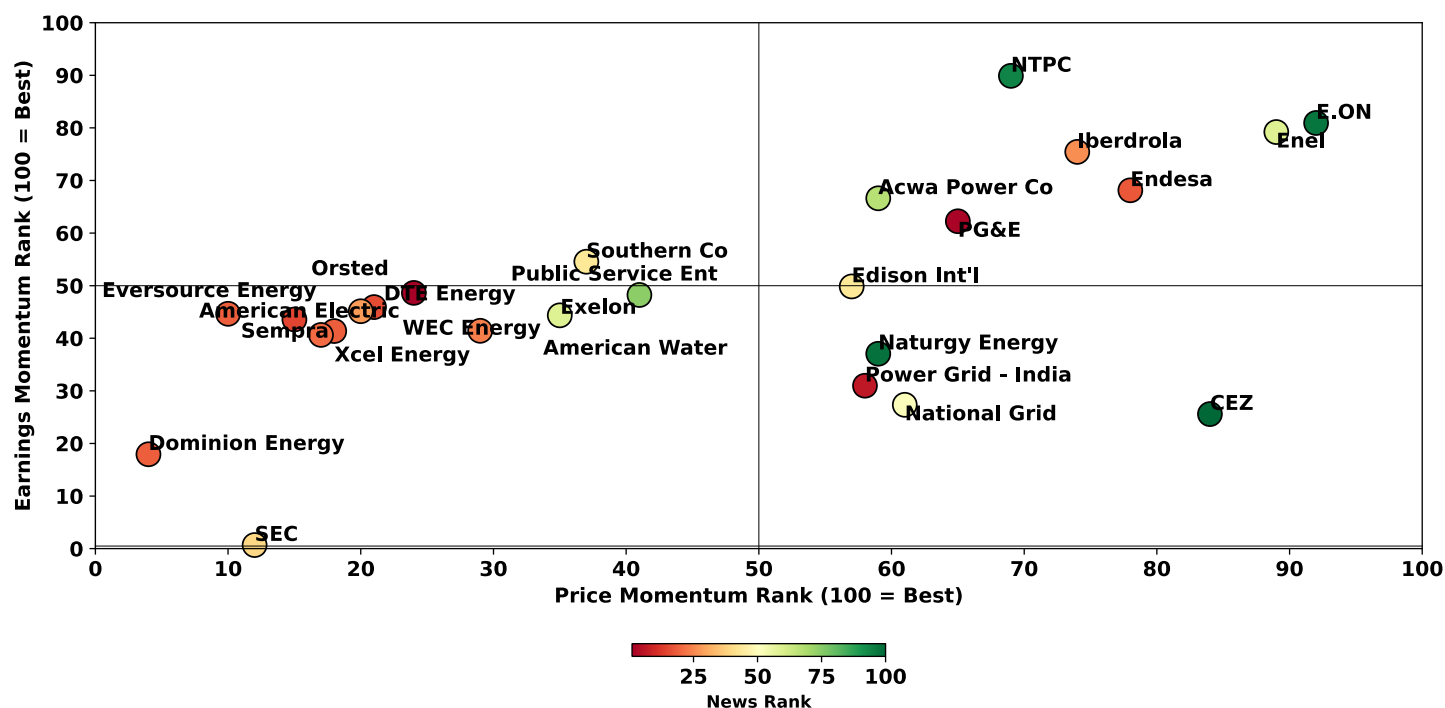


Source : BofA Global Quantitative Strategy, MSCI, IBES, FactSet, RavenPack

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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, NTPC and Enel



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

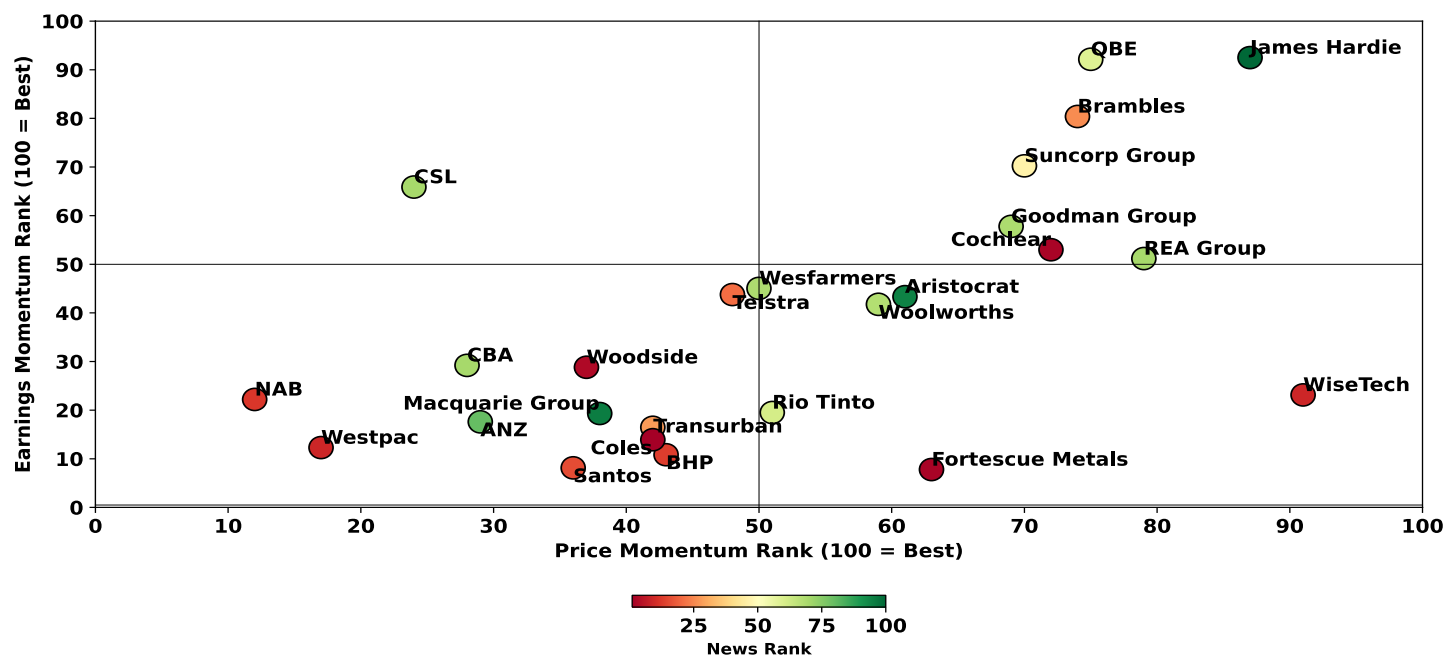
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Countries: Triple Momentum Charts

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

Triple Momentum is most positive for James Hardie, QBE and REA Group

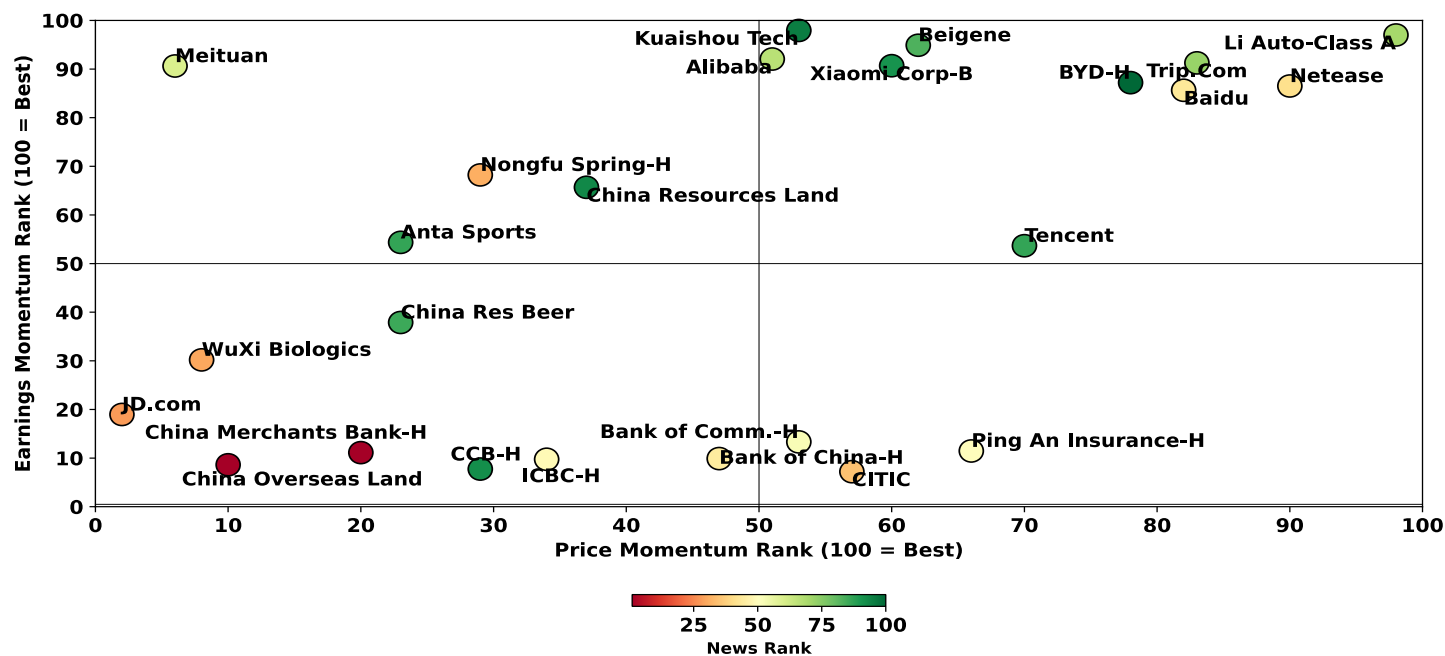


Source : BofA Global Quantitative Strategy, MSCI, IBES, FactSet, RavenPack

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

Triple Momentum is most positive for BYD-H, Kuaishou Tech and Beigene

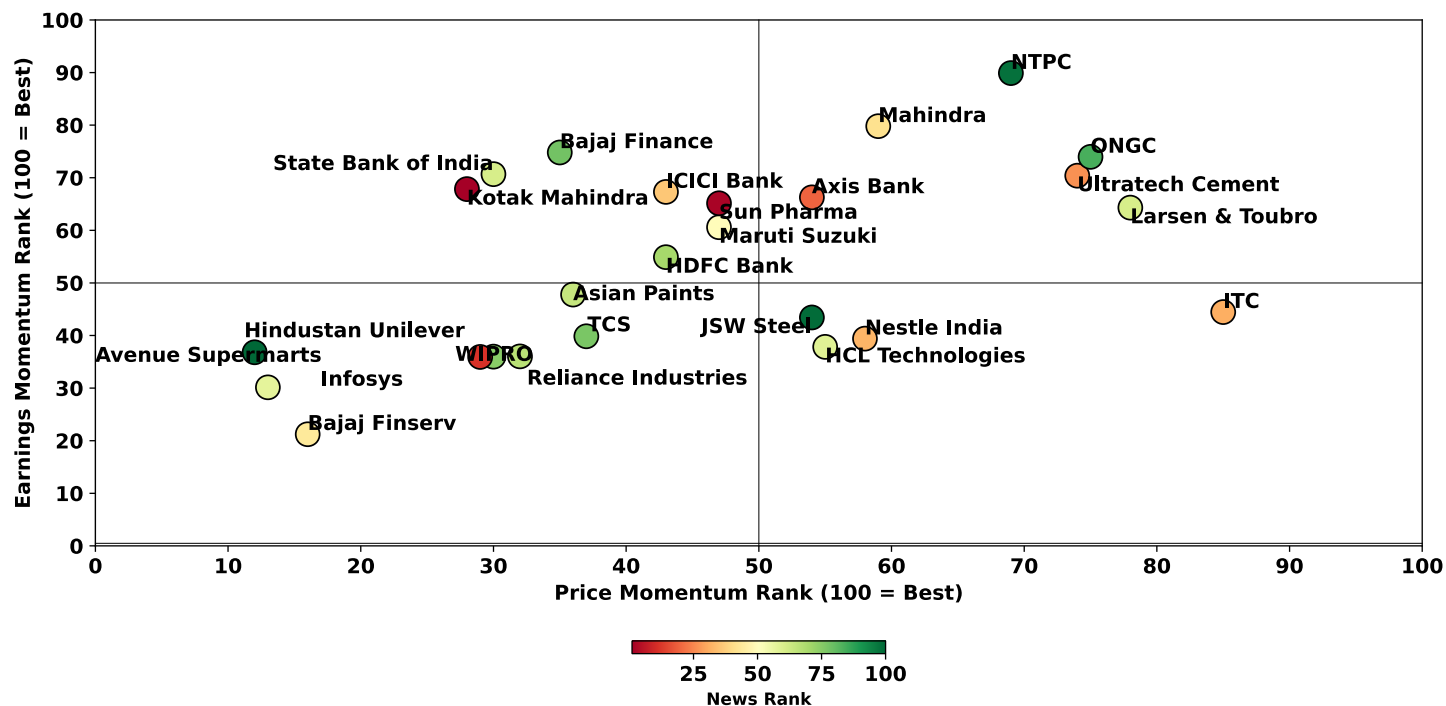


Source : BofA Global Quantitative Strategy, MSCI, IBES, FactSet, RavenPack

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

Triple Momentum is most positive for NTPC, ONGC 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)
James Hardie	JHX AU	Australia	Materials	12,990	45.3
Origin Energy	ORG AU	Australia	Utilities	9,383	41.6
Equatorial Energia	EQTL3 BZ	Brazil	Utilities	7,052	53.0
BYD-H	1211 HK	China	Cons. Discretionary	34,621	214.6
Haidilao	6862 HK	China	Cons. Discretionary	14,717	40.4
Minth Group	425 HK	China	Cons. Discretionary	3,253	6.4
Pop Mart International Group	9992 HK	China	Cons. Discretionary	4,334	15.1
Tal Education-ADR	TAL US	China	Cons. Discretionary	3,530	46.3
Vipshop-ADR	VIPS US	China	Cons. Discretionary	7,240	71.9
COSCO Shipping Energy-H	1138 HK	China	Energy	1,293	13.7
Sinotruk Hong Kong	3808 HK	China	Industrials	5,050	8.6
Alstom	ALO FP	France	Industrials	9,701	34.3
Klepierre	LI FP	France	Real Estate	7,475	20.0
Adidas	ADS GR	Germany	Cons. Discretionary	33,941	89.0
E.ON	EOAN GR	Germany	Utilities	32,377	64.4
Alpha Services	ALPHA GA	Greece	Banks	3,516	12.4
Mytilineos	MYTIL GA	Greece	Industrials	5,383	7.8
OTP Bank	OTP HB	Hungary	Banks	11,173	15.6
Power Finance	POWF IN	India	Div Financials	9,711	28.6
REC	RECL IN	India	Div Financials	8,576	27.8
Hindustan Petroleum	HPCL IN	India	Energy	4,453	12.6
Jindal Steel	JSP IN	India	Materials	8,588	19.3
Mediobanca	MB IM	Italy	Banks	10,979	29.7
Yamaha Motor	7272 JP	Japan	Cons. Discretionary	9,129	44.3
Dainippon	7912 JP	Japan	Industrials	7,859	25.0
T&D	8795 JP	Japan	Insurance	9,581	36.4
FEMSA	FEMSAUBD MM	Mexico	Cons. Staples	23,335	27.6
Elm Co	ELM AB	Saudi Arabia	Software	16,734	25.9
Etihad Etisalat	EEC AB	Saudi Arabia	Telecom	8,817	12.9
Meritz Financial	138040 KS	South Korea	Div Financials	8,589	21.9
NH Investment	005940 KS	South Korea	Div Financials	2,560	3.6
Hyundai Heavy Industries	329180 KS	South Korea	Industrials	8,336	15.5
Samsung Eng.	028050 KS	South Korea	Industrials	4,858	25.3
Samsung Heavy	010140 KS	South Korea	Industrials	5,432	41.9
China Airlines	2610 TT	Taiwan	Industrials	4,261	59.4
Accton Tech	2345 TT	Taiwan	Tech Hardware	8,051	46.8
Asustek	2357 TT	Taiwan	Tech Hardware	9,354	58.2
Gigabyte Tech	2376 TT	Taiwan	Tech Hardware	6,101	176.6
Pegasus Hava	PGSUS TI	Turkiye	Industrials	3,231	53.0
Coca-Cola HBC AG	CCH LN	United Kingdom	Cons. Staples	10,378	15.7
3i Group	III LN	United Kingdom	Div Financials	24,226	31.6
Rolls-Royce	RR/ LN	United Kingdom	Industrials	23,161	46.0
Centrica	CNA LN	United Kingdom	Utilities	11,248	31.5
Confluent	CFLT US	United States	Software	6,608	118.1
Super Micro	SMCI US	United States	Tech Hardware	14,731	583.8

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

Company Name	BBG Code	Country	Sector	MCAP (Total \$USm)	Avg Daily TO (6m \$US m)
South32	S32 AU	Australia	Materials	9,531	60.7
CSN	CSNA3 BZ	Brazil	Materials	3,169	24.0
Empresas Copec	COPEC CI	Chile	Energy	8,590	5.6
China Meidong Auto	1268 HK	China	Cons. Discretionary	910	5.5
China Tourism Group Duty F-H	1880 HK	China	Cons. Discretionary	1,597	20.8
Dongfeng Motor	489 HK	China	Cons. Discretionary	1,036	5.7
Li Ning	2331 HK	China	Cons. Discretionary	12,592	99.8
China Feihe	6186 HK	China	Cons. Staples	5,448	11.2
Hengan Int'l	1044 HK	China	Cons. Staples	4,195	6.4
Yanzhou Energy-H	1171 HK	China	Energy	5,104	40.2
Shandong Weigao-H	1066 HK	China	Health Care	4,147	8.8
Sino Biopharm.	1177 HK	China	Health Care	7,006	19.4
China Conch Venture	586 HK	China	Industrials	1,792	5.2
China Merchants Port	144 HK	China	Industrials	4,887	4.7
Anhui Conch-H	914 HK	China	Materials	3,663	18.8
China Resources Cement	1313 HK	China	Materials	2,209	2.8
Ganfeng Lithium-H	1772 HK	China	Materials	1,930	24.9
Nine Dragons	2689 HK	China	Materials	2,592	7.7
China Vanke-H	2202 HK	China	Real Estate	2,738	23.0
Country Garden Serv	6098 HK	China	Real Estate	4,274	53.8
Greentown China	3900 HK	China	Real Estate	3,129	8.0
Sunny Optical	2382 HK	China	Tech Hardware	8,632	52.3
Shenz Intl Hldg	152 HK	Hong Kong	Industrials	1,624	3.3
Chinasoft Int'l	354 HK	Hong Kong	Software	2,221	12.7
Container Corp	CCRI IN	India	Industrials	5,207	8.6
Cyberagent	4751 JP	Japan	Media & Ent.	2,930	37.3
Axiata Group	AXIATA MK	Malaysia	Telecom	4,809	2.3
Yara Int'l	YAR NO	Norway	Materials	9,784	22.7
Masraf Al Rayan	MARK QD	Qatar	Banks	5,411	8.9
Pepkor	PPH SJ	South Africa	Cons. Discretionary	2,976	8.4
African Rainbow	ARI SJ	South Africa	Materials	1,847	5.1
Anglo Platinum	AMS SJ	South Africa	Materials	8,293	21.5
Sibanye Stillwater	SSW SJ	South Africa	Materials	3,837	25.5
NCSOFT	036570 KS	South Korea	Media & Ent.	4,026	31.1
Far Eastern	1402 TT	Taiwan	Industrials	4,762	6.7
Wan Hai Lines	2615 TT	Taiwan	Industrials	4,055	19.5
Silergy Corp	6415 TT	Taiwan	Semiconductors	3,568	37.3
Zhen Ding Tech	4958 TT	Taiwan	Tech Hardware	2,853	12.4
Banpu Public	BANPU TB	Thailand	Energy	1,964	25.6
Indorama Ventures	IVL TB	Thailand	Materials	4,347	15.4
PTT Global Chem	PTTGC TB	Thailand	Materials	4,570	17.9
Estee Lauder	EL US	United States	Cons. Staples	35,708	444.8
Southwest Airlines	LUV US	United States	Industrials	17,573	242.3
FMC	FMC US	United States	Materials	9,435	114.3
Intl Flavors & Fragrances	IFF US	United States	Materials	17,532	172.2

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

Company Name	BBG Code	Country	Sector	MCAP (Total \$USm)	Avg Daily TO (6m \$US m)
James Hardie	JHX AU	Australia	Materials	12,990	45.3
Origin Energy	ORG AU	Australia	Utilities	9,383	41.6
Haidilao	6862 HK	China	Cons. Discretionary	14,717	40.4
Minth Group	425 HK	China	Cons. Discretionary	3,253	6.4
Pop Mart International Group	9992 HK	China	Cons. Discretionary	4,334	15.1
Tal Education-ADR	TAL US	China	Cons. Discretionary	3,530	46.3
Vipshop-ADR	VIPS US	China	Cons. Discretionary	7,240	71.9
COSCO Shipping Energy-H	1138 HK	China	Energy	1,293	13.7
Sinotruk Hong Kong	3808 HK	China	Industrials	5,050	8.6
JOYY-ADR	YY US	China	Media & Ent.	1,997	15.9
Kuaishou Tech	1024 HK	China	Media & Ent.	29,280	160.0
Samvardhana Motherson	MOTHERSO IN	India	Cons. Discretionary	8,133	16.2
Power Finance	POWF IN	India	Div Financials	9,711	28.6
REC	RECL IN	India	Div Financials	8,576	27.8
Hindustan Petroleum	HPCL IN	India	Energy	4,453	12.6
Ashok Leyland	AL IN	India	Industrials	6,499	23.7
Bharat Elec	BHE IN	India	Industrials	12,629	21.4
Jindal Steel	JSP IN	India	Materials	8,588	19.3
NTPC	NTPC IN	India	Utilities	28,086	30.9
Hyundai Mobis	012330 KS	South Korea	Cons. Discretionary	16,654	34.3
Meritz Financial	138040 KS	South Korea	Div Financials	8,589	21.9
NH Investment	005940 KS	South Korea	Div Financials	2,560	3.6
Hyundai Heavy Industries	329180 KS	South Korea	Industrials	8,336	15.5
Samsung Eng.	028050 KS	South Korea	Industrials	4,858	25.3
Samsung Heavy	010140 KS	South Korea	Industrials	5,432	41.9
China Airlines	2610 TT	Taiwan	Industrials	4,261	59.4
Accton Tech	2345 TT	Taiwan	Tech Hardware	8,051	46.8
Asustek	2357 TT	Taiwan	Tech Hardware	9,354	58.2
Gigabyte Tech	2376 TT	Taiwan	Tech Hardware	6,101	176.6
Bumrungrad Hospital	BHTB	Thailand	Health Care	5,707	16.1

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

Company Name	BBG Code	Country	Sector	MCAP (Total \$USm)	Avg Daily TO (6m \$US m)
South32	S32 AU	Australia	Materials	9,531	60.7
China Meidong Auto	1268 HK	China	Cons. Discretionary	910	5.5
Dongfeng Motor	489 HK	China	Cons. Discretionary	1,036	5.7
Li Ning	2331 HK	China	Cons. Discretionary	12,592	99.8
China Feihe	6186 HK	China	Cons. Staples	5,448	11.2
Hengan Int'l	1044 HK	China	Cons. Staples	4,195	6.4
Yanzhou Energy-H	1171 HK	China	Energy	5,104	40.2
Shandong Weigao-H	1066 HK	China	Health Care	4,147	8.8
Sino Biopharm.	1177 HK	China	Health Care	7,006	19.4
China Conch Venture	586 HK	China	Industrials	1,792	5.2
China Merchants Port	144 HK	China	Industrials	4,887	4.7
China Resources Cement	1313 HK	China	Materials	2,209	2.8
Ganfeng Lithium-H	1772 HK	China	Materials	1,930	24.9
Nine Dragons	2689 HK	China	Materials	2,592	7.7
Country Garden Serv	6098 HK	China	Real Estate	4,274	53.8
Greentown China	3900 HK	China	Real Estate	3,129	8.0
Sunny Optical	2382 HK	China	Tech Hardware	8,632	52.3
Shenz Intl Hldg	152 HK	Hong Kong	Industrials	1,624	3.3
Hua Hong	1347 HK	Hong Kong	Semiconductors	3,310	33.4
Axiata Group	AXIATA MK	Malaysia	Telecom	4,809	2.3
Sea-ADR	SE US	Singapore	Media & Ent.	19,937	376.0
NCSOFT	036570 KS	South Korea	Media & Ent.	4,026	31.1
Nien Made	8464 TT	Taiwan	Cons. Discretionary	2,799	4.2
Far Eastern	1402 TT	Taiwan	Industrials	4,762	6.7
Wan Hai Lines	2615 TT	Taiwan	Industrials	4,055	19.5
Nan Ya Plastics	1303 TT	Taiwan	Materials	16,758	12.6
Silergy Corp	6415 TT	Taiwan	Semiconductors	3,568	37.3
Zhen Ding Tech	4958 TT	Taiwan	Tech Hardware	2,853	12.4
Banpu Public	BANPU TB	Thailand	Energy	1,964	25.6
Indorama Ventures	IVL TB	Thailand	Materials	4,347	15.4

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 ^{R1}
Buy	≥ 10%	≤ 70%
Neutral	≥ 0%	≤ 30%
Underperform	N/A	≥ 20%

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