

## High Frequency Monitor

### Multiple drivers

## Performance trends are consistent with an upturn

The global equity market rally continued [last week](#) (+1.0%) on renewed China stimulus sentiment, positive signs from the US labour market and services sector, and the persistent A.I. investment theme. [China](#) rallied 2.9% and the US rallied 1.4%. Global [sector performance](#) was consistent with an upturn in the Global Wave as Semis (+5.6%), Software (+2.6%) and Consumer Discretionary (+1.9%) led performance. The best performing [styles](#) last week were Momentum and Risk. The recent trough signal from our Global Wave macro indicators coupled with a recovery in the global earnings cycle bodes well for equity markets in 2024.

## Tactical Indicators remain positive

Despite a fall in the copper price last week (-3.7%), our [short-term Tactical Indicators](#) remain positive, driven by tighter Credit Spreads (-14bp), an appreciating AUD (+0.2%), lower volatility (VIX fell to 12.9), and lower US Initial Jobless Claims (-9000).

## Triple Momentum = Software, Insurance & Div Financials

Triple Momentum (earnings, price, news) is most positive for global Software, Insurance, and Diversified Financials, and most negative for Consumer Staples, Materials, and Energy. Among the 25 largest countries globally, Triple Momentum remains most positive for India and most negative for Hong Kong.

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

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



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

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12 February 2024

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

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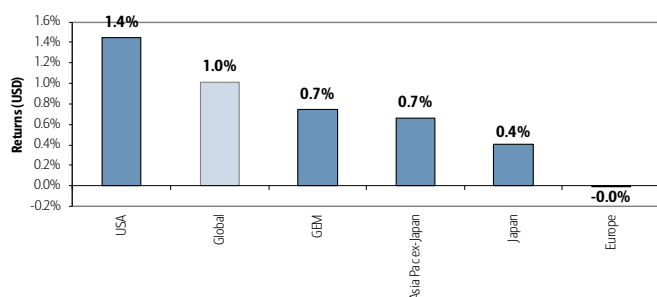
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# Market Performance

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

Last week: USA performed the best

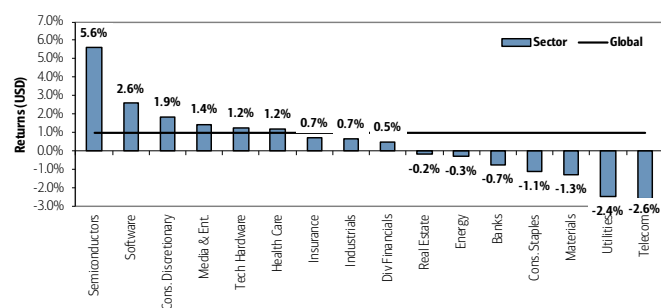


Source : BofA Global Quantitative Strategy, MSCI

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

Last week: Semiconductors performed the best

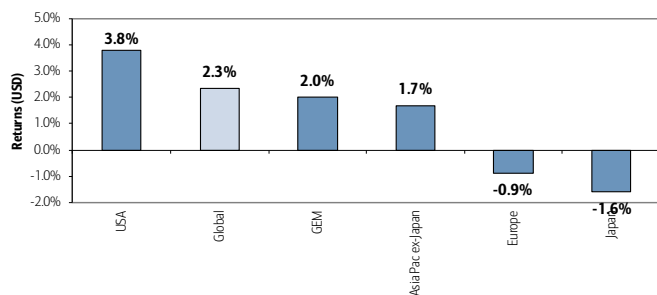


Source : BofA Global Quantitative Strategy, MSCI

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

Best performing region this month is The USA

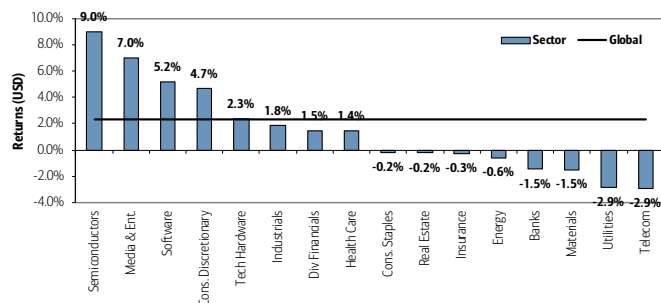


Source : BofA Global Quantitative Strategy, MSCI

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

MTD: Semiconductors has performed the best

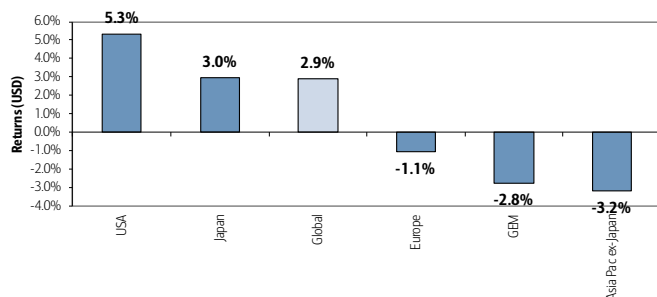


Source : BofA Global Quantitative Strategy, MSCI

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

Best performing region this year is The USA

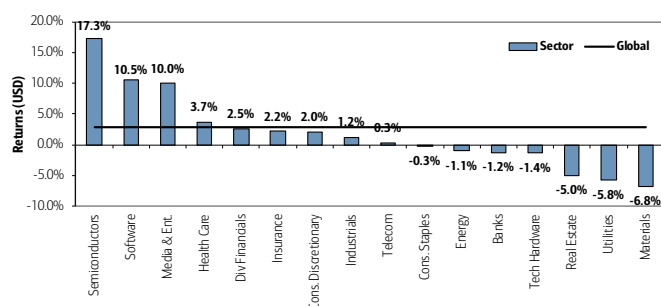


Source : BofA Global Quantitative Strategy, MSCI

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

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**

Last week: Semiconductors performed the best

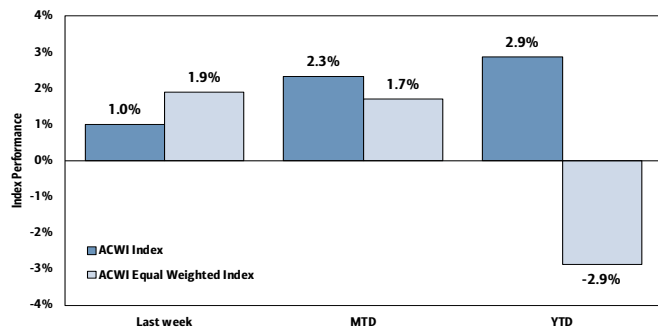
	Energy	Materials	Industrials	Cons. Discretionary	Cons. Staples	Health Care	Banks	Div Financials	Insurance	Software	Tech Hardware	Semiconductors	Telecom	Media & Ent.	Utilities	Real Estate	Country
Canada	-1.6%	-3.4%	2.3%	-1.6%	-0.2%	n/a	-0.7%	2.9%	-0.5%	-1.6%	n/a	n/a	-2.7%	n/a	-3.0%	-0.4%	-0.2%
USA	-0.2%	-0.1%	1.2%	1.4%	-1.3%	1.4%	-1.0%	0.5%	1.6%	2.6%	1.7%	6.3%	-4.3%	1.4%	-2.1%	0.1%	1.4%
Belgium	n/a	-1.0%	n/a	0.1%	5.3%	7.2%	1.9%	-1.2%	-3.2%	n/a	n/a	n/a	n/a	n/a	-4.5%	-2.0%	3.4%
Finland	-15.0%	-1.9%	0.0%	n/a	-2.1%	0.7%	-7.1%	n/a	2.6%	n/a	1.1%	n/a	-3.4%	n/a	-9.1%	n/a	-3.3%
France	-0.3%	-1.7%	1.0%	4.5%	-3.9%	0.7%	-5.4%	-1.4%	-1.9%	3.0%	n/a	6.1%	-4.2%	2.0%	-3.3%	1.3%	0.4%
Germany	n/a	-1.2%	-1.2%	0.7%	1.5%	0.8%	-2.9%	-3.5%	0.2%	2.8%	n/a	0.0%	-2.4%	-4.0%	-2.7%	-6.5%	-0.3%
Italy	-2.2%	n/a	3.3%	4.7%	5.0%	2.2%	3.1%	0.6%	-1.5%	n/a	n/a	n/a	-4.7%	n/a	-5.0%	n/a	1.1%
Netherlands	n/a	-2.8%	1.0%	4.6%	0.2%	-1.7%	-1.3%	17.3%	-2.8%	n/a	n/a	7.2%	-1.0%	1.1%	n/a	n/a	4.4%
Norway	-5.8%	-1.5%	11.5%	n/a	-2.1%	n/a	-2.8%	n/a	-1.5%	n/a	n/a	n/a	-1.0%	0.1%	n/a	n/a	-2.6%
Spain	1.8%	n/a	1.5%	-1.8%	n/a	-0.3%	-1.7%	n/a	n/a	n/a	n/a	n/a	-4.5%	n/a	-3.8%	n/a	-2.0%
Sweden	n/a	-0.5%	0.6%	2.0%	0.1%	-3.8%	0.8%	0.5%	n/a	n/a	0.3%	n/a	-5.5%	n/a	n/a	-3.3%	0.3%
Switzerland	n/a	-1.6%	-0.3%	3.2%	-4.0%	-2.6%	-5.0%	-4.8%	-2.0%	-1.2%	1.4%	n/a	-3.4%	n/a	-6.5%	-3.1%	-2.4%
UK	1.6%	-3.1%	1.0%	1.1%	0.6%	-3.2%	-2.1%	0.4%	-3.3%	1.8%	1.8%	n/a	-7.6%	0.6%	-4.5%	-3.4%	-0.8%
Australia	-3.1%	-2.8%	-0.6%	-1.3%	-2.3%	1.8%	0.8%	0.1%	1.3%	1.3%	n/a	n/a	-2.4%	1.1%	-1.5%	0.3%	-0.6%
Hong Kong	n/a	n/a	-0.1%	0.8%	1.0%	n/a	0.0%	4.0%	5.1%	n/a	n/a	n/a	-1.0%	n/a	0.1%	-1.0%	1.7%
Japan	0.3%	-2.2%	-1.5%	3.5%	-0.5%	0.5%	-1.8%	3.4%	0.4%	-1.0%	-1.6%	5.7%	1.6%	0.0%	-5.3%	0.6%	0.4%
Singapore	n/a	n/a	-1.0%	-0.3%	-6.9%	n/a	-0.4%	-4.3%	n/a	n/a	n/a	n/a	-4.4%	3.5%	-5.8%	-3.0%	-1.2%
China	0.1%	4.7%	4.3%	2.6%	4.4%	5.8%	0.9%	3.5%	3.0%	6.2%	5.2%	9.1%	4.2%	3.0%	-0.8%	-1.1%	2.9%
India	1.7%	-0.4%	-0.3%	1.8%	-1.6%	4.8%	-0.7%	-1.8%	2.5%	0.8%	n/a	n/a	-2.3%	6.0%	0.1%	0.4%	0.3%
Korea	-1.3%	0.7%	2.4%	2.3%	-1.1%	-2.4%	-0.2%	-1.1%	6.3%	-2.4%	-1.5%	6.3%	-1.4%	-5.2%	-0.2%	n/a	0.0%
Taiwan	-2.7%	-1.8%	-0.6%	-1.6%	-0.8%	-2.2%	-1.3%	-0.4%	-0.9%	n/a	-0.4%	n/a	0.0%	n/a	n/a	-1.3%	0.1%
Brazil	1.2%	0.3%	1.7%	1.9%	0.3%	-1.5%	-0.6%	1.3%	-3.8%	-3.3%	n/a	n/a	3.0%	n/a	2.2%	n/a	0.6%
Mexico	n/a	-6.1%	0.0%	n/a	-0.2%	n/a	2.4%	n/a	n/a	n/a	n/a	n/a	-4.6%	n/a	n/a	n/a	-1.1%
South Africa	-3.2%	-8.3%	-4.1%	3.2%	-3.3%	n/a	-0.5%	-2.4%	-1.3%	n/a	n/a	n/a	-3.0%	n/a	n/a	n/a	-2.3%
Global Sector	-0.3%	-1.3%	0.7%	1.9%	-1.1%	1.2%	-0.7%	0.5%	0.7%	2.6%	1.2%	5.6%	-2.6%	1.4%	-2.4%	-0.2%	1.0%
Europe Sector	0.0%	-2.0%	0.3%	2.7%	-1.2%	0.4%	-1.6%	-0.5%	-1.4%	2.7%	0.9%	6.4%	-3.8%	0.9%	-0.1%	-3.1%	0.0%
APxJ Sector	0.1%	-1.3%	1.1%	1.8%	0.0%	2.5%	0.1%	0.3%	3.0%	1.0%	-0.5%	1.5%	-1.5%	2.1%	-0.4%	-0.7%	0.7%
GEM Sector	0.8%	-0.7%	1.5%	2.2%	0.3%	2.9%	0.0%	-0.4%	1.6%	1.0%	-0.5%	1.5%	-1.1%	2.1%	-0.1%	0.3%	0.7%

Source : BofA Global Quantitative Strategy, MSCI

# Market Breadth

**Chart 8: ACWI Market Cap vs. Equal weighted index performance - last week/MTD/YTD**

Last week, ACWI index returned +1.0%, while Equal Weighted index returned +1.9%

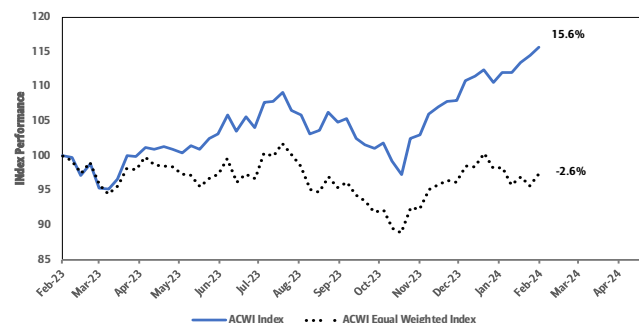


Source : BofA Global Quantitative Strategy, MSCI

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**Chart 9: ACWI Market Cap vs. Equal weighted index performance - last 12 months**

Last 12 months, ACWI index returned +15.6%, while Equal Weighted index returned -2.6%

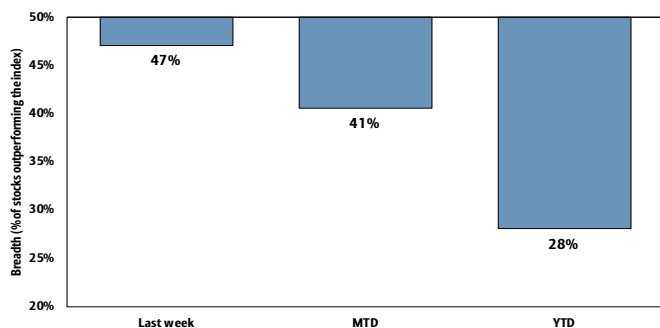


Source : BofA Global Quantitative Strategy, MSCI

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**Chart 10: Market Breadth - last week/MTD/YTD**

Last week, 47% of the stocks outperformed the index

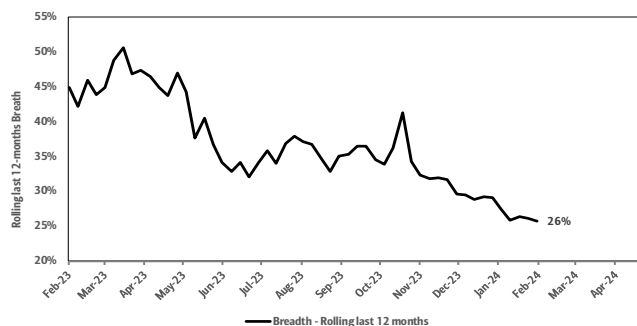


Source : BofA Global Quantitative Strategy, MSCI

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**Chart 11: Market Breadth - last 12 months**

Last 12 months, 26% stocks outperformed the index



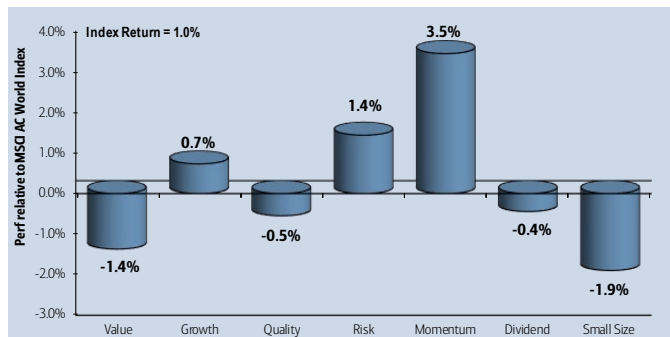
Source : BofA Global Quantitative Strategy, MSCI

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# Style Performance

**Chart 12: Global Quantessential Style Rel Performance: Last Week**

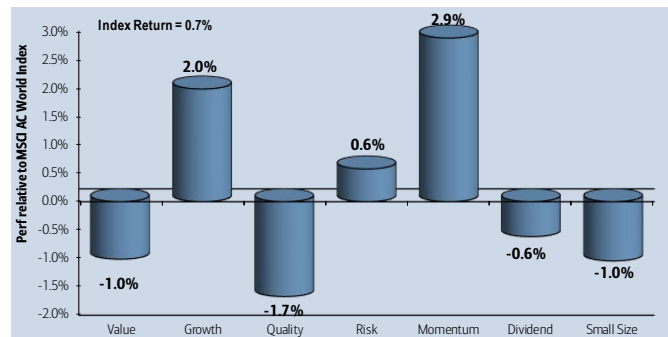
Last week: Momentum performed the best



Source : BofA Global Quantitative Strategy, MSCI, IBES, S&P, Worldscope, Bloomberg  
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**Chart 13: Asia Pac Quantessential Style Rel Performance: Last Week**

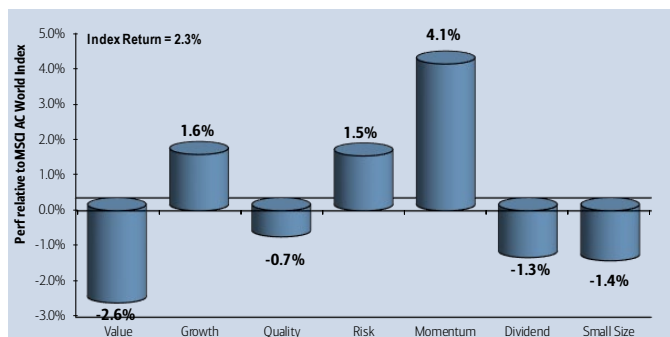
Last week the best performing style was Momentum



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

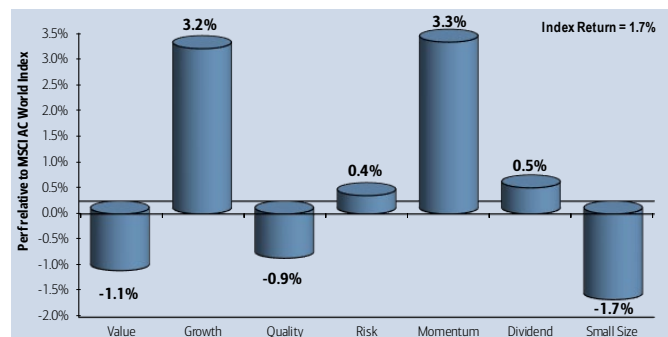
Momentum is the best performing style this month



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

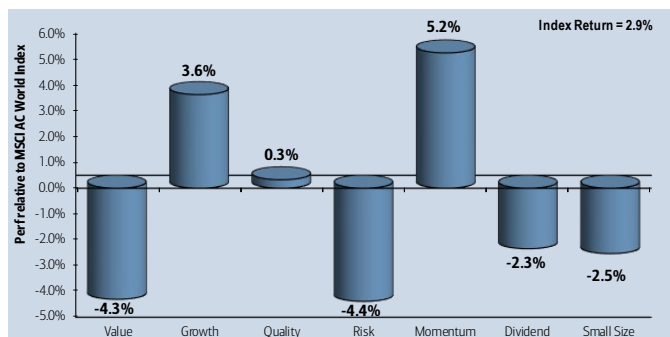
Momentum is the best performing style this month



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

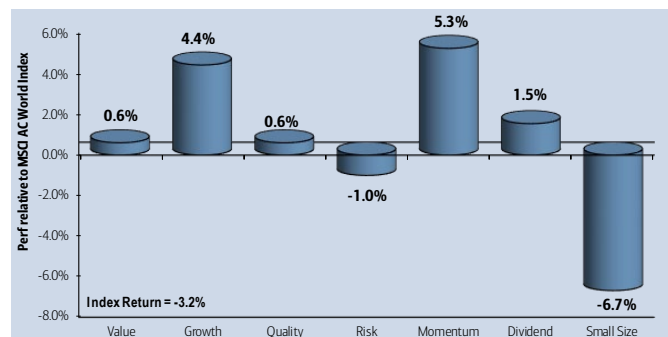
YTD: Momentum has performed the best



Source : BofA Global Quantitative Strategy, MSCI, IBES, S&P, Worldscope, Bloomberg  
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**Chart 17: Asia Pac Quantessential Style Relative Performance: YTD**

This year the best performing style is Momentum

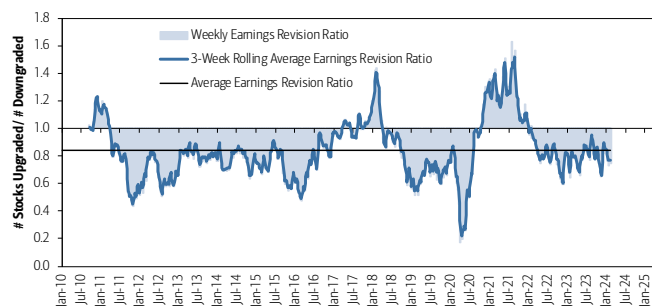


Source : BofA Global Quantitative Strategy, MSCI, IBES, S&P, Worldscope, Bloomberg  
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# Earnings Revision Ratio

**Chart 18: Global Earnings Revision Ratio - Weekly**

Earnings revisions fell in World last week

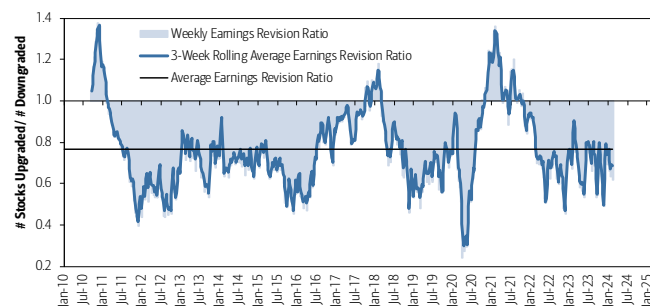


Source : BofA Global Quantitative Strategy, MSCI, IBES

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**Chart 19: Asia Pac Earnings Revision Ratio - Weekly**

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

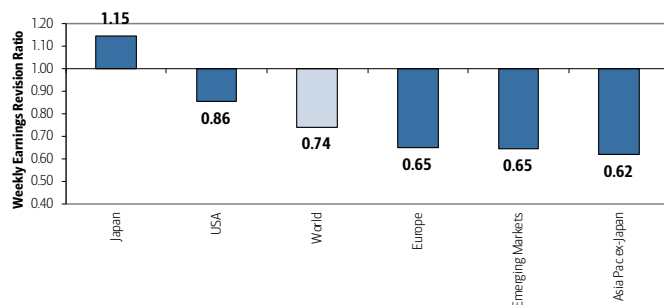


Source : BofA Global Quantitative Strategy, MSCI, IBES

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**Chart 20: Global Regions Earnings Revision Ratio - Weekly**

Asia Pac ex-Japan has the weakest earnings trend

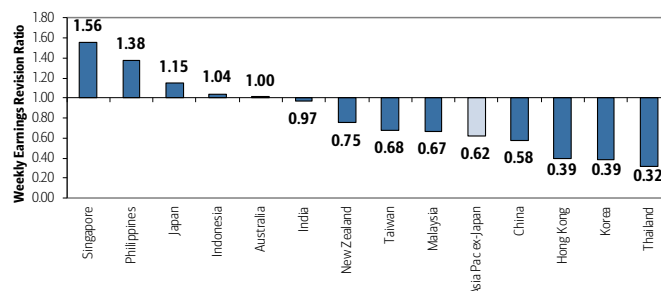


Source : BofA Global Quantitative Strategy, MSCI, IBES

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**Chart 21: Asia Pac Countries Earnings Revision Ratio - Weekly**

Singapore has the strongest earnings revisions in Asia

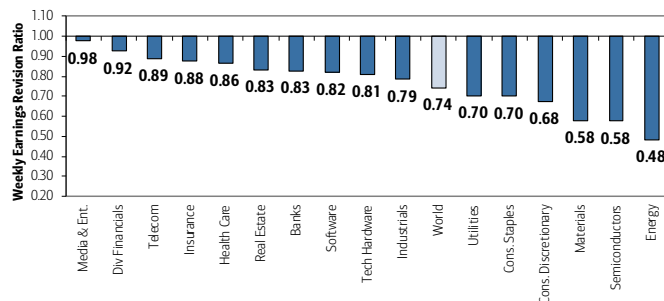


Source : BofA Global Quantitative Strategy, MSCI, IBES

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**Chart 22: Global Sectors Earnings Revision Ratio - Weekly**

Earnings Revision Ratio is strongest in Media &amp; Ent. sector globally

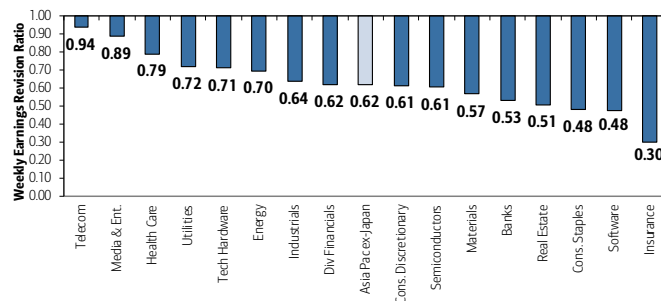


Source : BofA Global Quantitative Strategy, MSCI, IBES

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**Chart 23: Asia Pac Sectors Earnings Revision Ratio - Weekly**

Earnings trend is strongest in Telecom and weakest in Insurance



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

Regions/Sectors	Nov-23	Dec-23	Jan-24	Feb-24 - Wk1	Feb-24 - Wk2	Feb-24 - Wk3
World	0.66	0.82	0.73	0.81	0.76	0.74
USA	0.72	0.93	0.84	0.87	0.84	0.86
Europe	0.73	0.70	0.65	0.64	0.62	0.65
Japan	1.05	1.25	0.99	1.00	1.07	1.15
Asia Pac ex-Japan	0.49	0.69	0.63	0.78	0.66	0.62
Emerging Markets	0.55	0.74	0.67	0.79	0.71	0.65
Global - Banks	0.94	1.03	0.93	0.96	0.92	0.83
Global - Cons. Discretionary	0.73	0.82	0.81	0.68	0.69	0.68
Global - Cons. Staples	0.61	0.75	0.59	0.78	0.76	0.70
Global - Div Financials	0.57	1.11	0.97	0.93	0.86	0.92
Global - Energy	1.31	0.59	0.46	0.50	0.55	0.48
Global - Health Care	0.58	0.81	0.72	0.85	0.81	0.86
Global - Industrials	0.70	0.90	0.77	0.76	0.80	0.79
Global - Insurance	1.33	1.16	0.86	1.05	0.85	0.88
Global - Materials	0.34	0.66	0.55	0.73	0.59	0.58
Global - Media & Ent.	0.57	0.76	0.70	1.01	0.95	0.98
Global - Real Estate	0.68	0.73	0.77	0.99	0.89	0.83
Global - Semiconductors	0.41	0.79	0.57	0.85	0.68	0.58
Global - Software	0.81	0.93	0.90	0.89	0.72	0.82
Global - Tech Hardware	0.54	0.67	0.74	0.99	0.79	0.81
Global - Telecom	0.81	0.76	1.05	0.98	0.91	0.89
Global - Utilities	0.76	0.95	0.77	0.80	0.80	0.70
Global - Value	0.73	0.90	0.71	0.72	0.63	0.60
Global - Growth	1.13	1.19	1.05	0.99	1.20	1.13
Global - Quality	0.77	1.11	1.03	0.98	0.96	0.91
Global - Risk	0.70	0.74	0.66	0.71	0.73	0.72
Global - Momentum	1.42	1.56	1.47	1.16	1.46	1.46
Global - Dividend	0.64	0.69	0.58	0.59	0.52	0.53
Global - Small Size	0.56	0.67	0.61	0.64	0.53	0.53

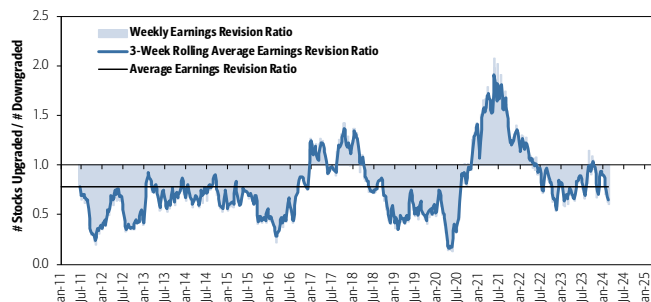
Source : BofA Global Quantitative Strategy, MSCI, IBES

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# Quantessential Styles: Earnings Revision Ratio

**Chart 24: Global Value Earnings Revision Ratio - Weekly**

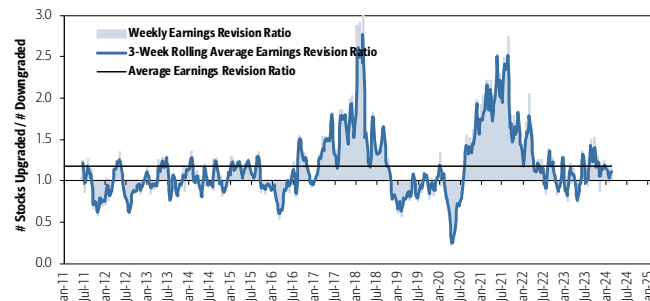
Earnings revisions for Value fell last week and remains below long term trend



Source : BofA Global Quantitative Strategy, MSCI, IBES, S&P, Worldscope, Bloomberg  
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**Chart 25: 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  
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**Chart 26: Global Quality Earnings Revision Ratio - Weekly**

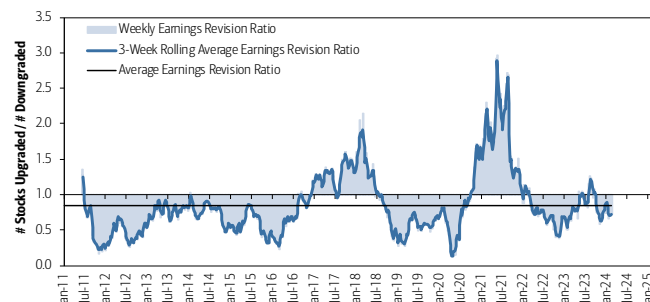
ERR fell in Quality last week and the trend moderated



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

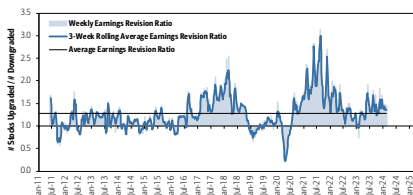
Earnings revisions fell in Risk last week, but the trend remains strong



Source : BofA Global Quantitative Strategy, MSCI, IBES, S&P, Worldscope, Bloomberg  
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**Chart 28: 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  
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**Chart 29: Global Dividend Earnings Revision Ratio - Weekly**

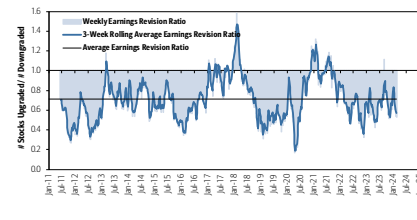
Earnings revisions improved in Dividend last week but remains below long-term average



Source : BofA Global Quantitative Strategy, MSCI, IBES, S&P, Worldscope, Bloomberg  
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**Chart 30: Global Small Size Earnings Revision Ratio - Weekly**

Earnings revisions fell in Small Size last week

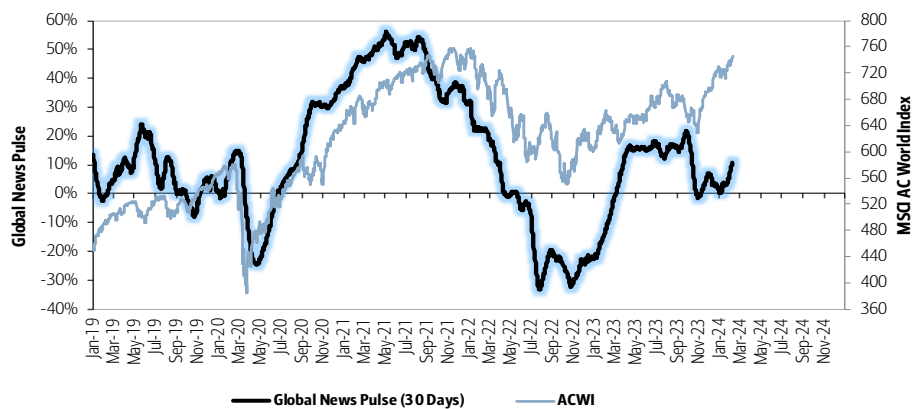


Source : BofA Global Quantitative Strategy, MSCI, IBES, S&P, Worldscope, Bloomberg  
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# NewsAlpha

**Chart 31: Global News Pulse (last 30 days)**

Globally news has improved at stock level in the last two weeks

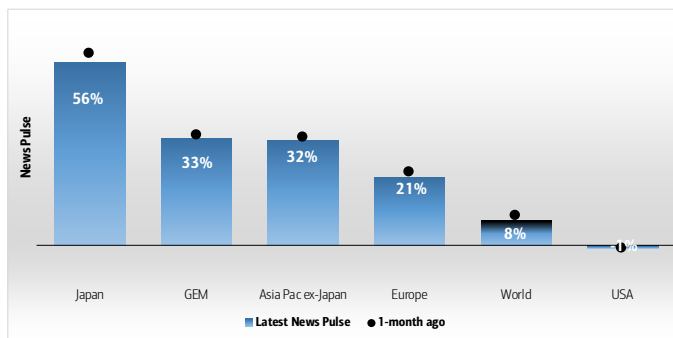


Source : BofA Global Quantitative Strategy, MSCI, Ravenpack

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

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

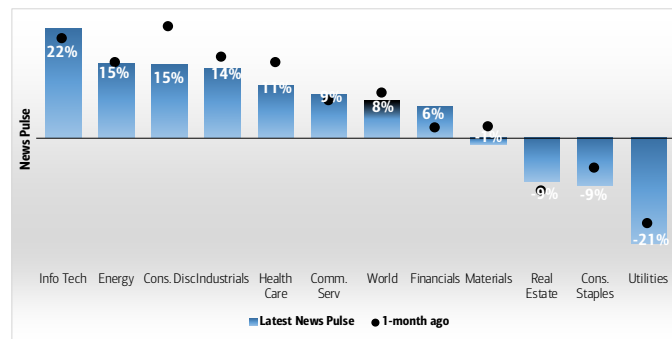


Source : BofA Global Quantitative Strategy, MSCI, Ravenpack

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**Chart 33: Global Sectors: Latest News Pulse**

Info Tech has the strongest News Pulse, while Utilities has the lowest Pulse

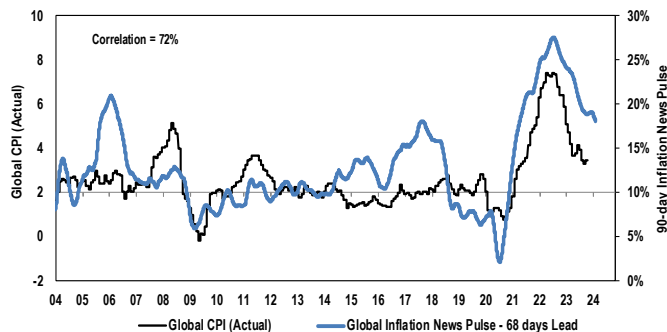


Source : BofA Global Quantitative Strategy, MSCI, Ravenpack

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

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

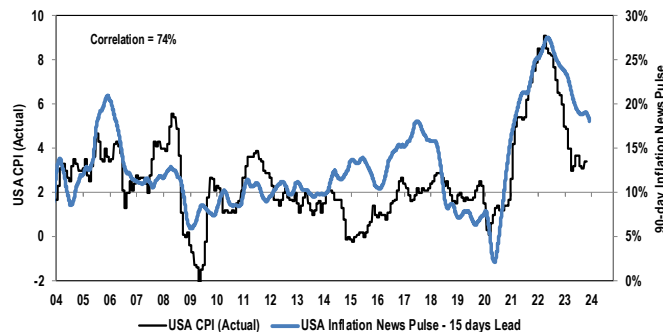


Source : BofA Global Quantitative Strategy, MSCI, Ravenpack

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**Chart 35: 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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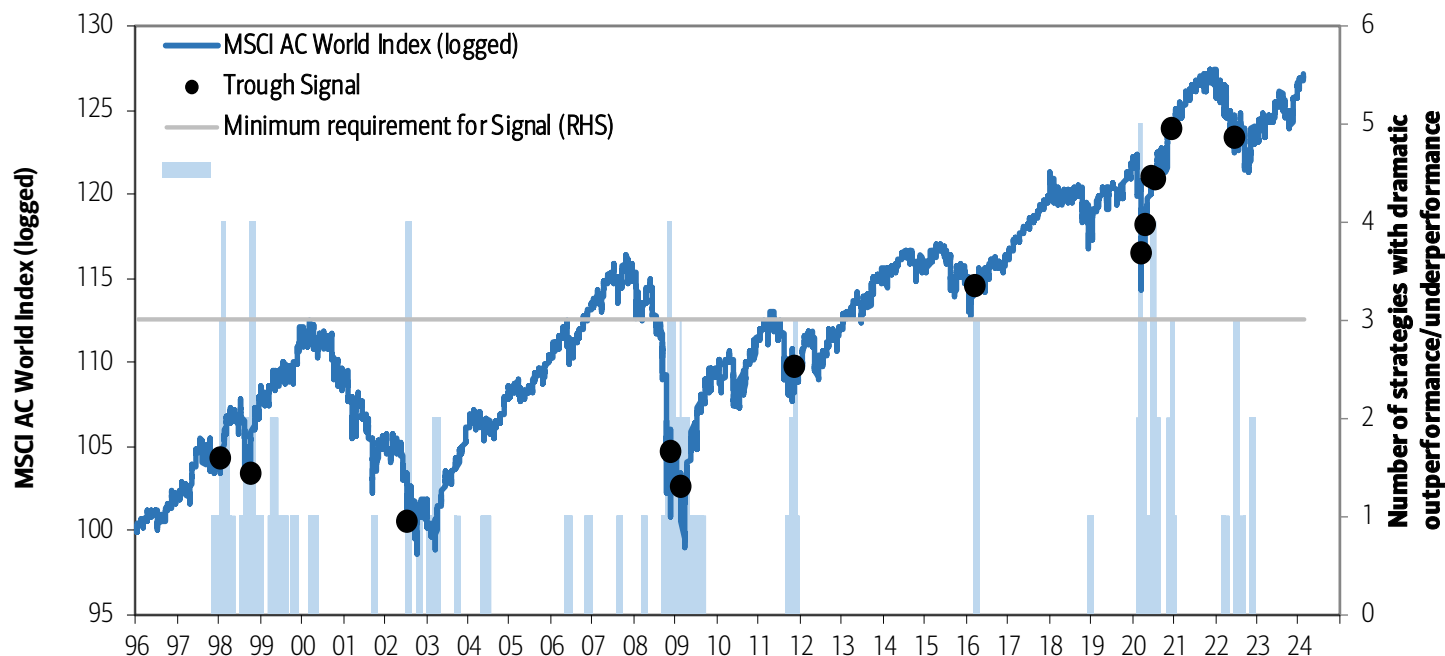
News aggregate is highest in Japan and Mexico



# Tactical Indicators

**Chart 38: Trough signals by the Market Trough Monitor vs. MSCI ACWI**

The most recent trough signal from the Market Trough Monitor would have occurred on 24-Jun-22

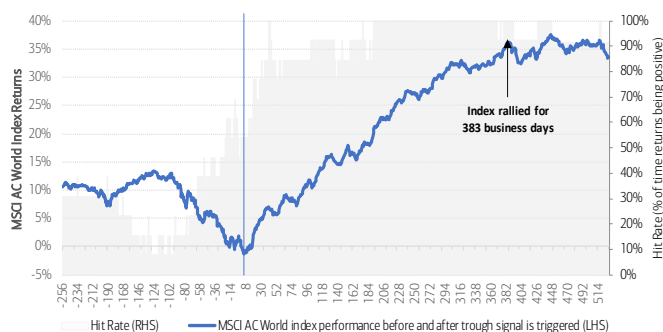


Source : BofA Global Quantitative Strategy, MSCI, Ravenpack, IBES, Worldscope, Exshare, S&P, Bloomberg

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**Chart 39: MSCI ACWI performance before & after trough signals from Market Trough Monitor**

ACWI averaged 28% in 12 months after the Market Trough Monitor triggered a trough signal



Source : BofA Global Quantitative Strategy, MSCI, Ravenpack, IBES, Worldscope, Exshare, S&P, Bloomberg

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**Table 3: Trough signals from the Market Trough Monitor and subsequent MSCI ACWI performance**

After MTS triggered, MSCI AC World Index averaged 29% returns in the subsequent 12 months

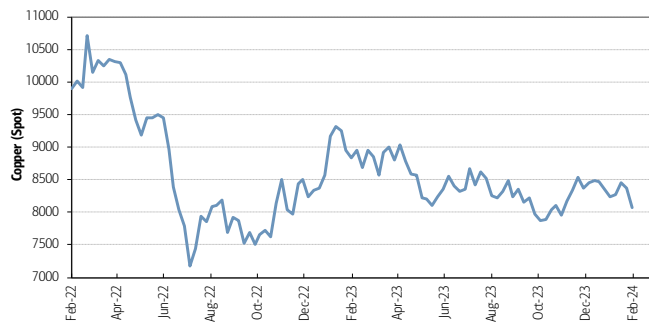
Signal Dates	Subs 1-month MSCI AC World Index returns	Subs 3-months MSCI AC World Index returns	Subs 6-months MSCI AC World Index returns	Subs 1-year MSCI AC World Index returns
24-Jun-22	-0.1%	-8.5%	-1.2%	10.3%
10-Dec-20	4.3%	6.9%	14.3%	17.6%
10-Jul-20	4.1%	9.2%	21.8%	33.6%
8-Jun-20	-0.6%	3.5%	16.0%	32.3%
15-Apr-20	2.3%	16.9%	24.8%	49.1%
12-Mar-20	8.8%	20.6%	33.6%	58.3%
7-Mar-16	1.6%	5.4%	9.5%	15.0%
9-Nov-11	-0.1%	8.7%	4.4%	6.7%
13-Feb-09	-6.5%	13.8%	27.3%	39.5%
10-Nov-08	-4.3%	-9.4%	0.1%	27.1%
22-Jul-02	9.7%	1.1%	1.0%	15.0%
8-Oct-98	15.8%	30.3%	36.0%	35.3%
22-Jan-98	7.5%	14.4%	15.2%	20.5%
<b>Average</b>	<b>3.3%</b>	<b>8.7%</b>	<b>15.6%</b>	<b>27.7%</b>
<b>Hit Rate (Pos Returns)</b>	<b>62%</b>	<b>85%</b>	<b>92%</b>	<b>100%</b>

Source : BofA Global Quantitative Strategy, MSCI, Ravenpack, IBES, Worldscope, Exshare, S&P, Bloomberg

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

Copper price fell (-3.7%)

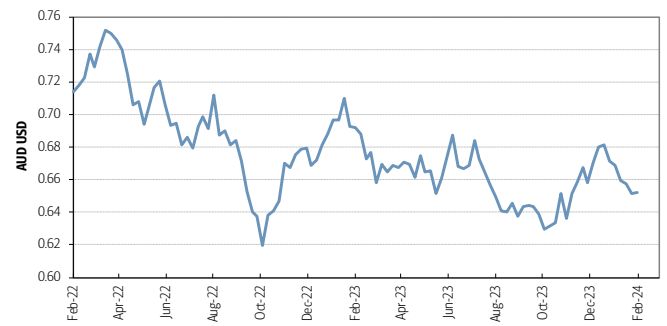


Source : BofA Global Quantitative Strategy, Bloomberg

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

AUD appreciated (+0.2%)

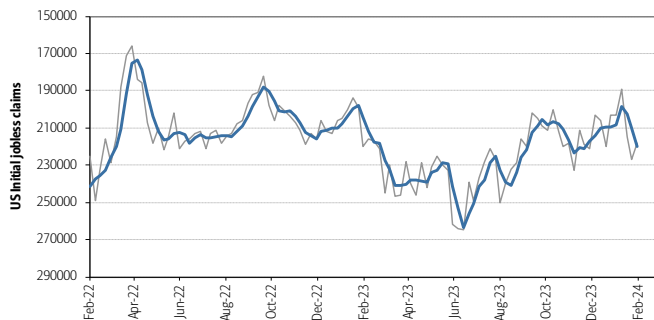


Source : BofA Global Quantitative Strategy, Bloomberg

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

US initial jobless claims fell by -9,000 to 218,000

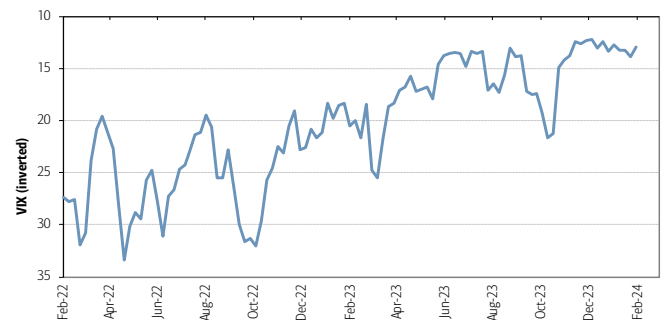


Source : BofA Global Quantitative Strategy, Bloomberg

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

VIX moved from 13.9 to 12.9

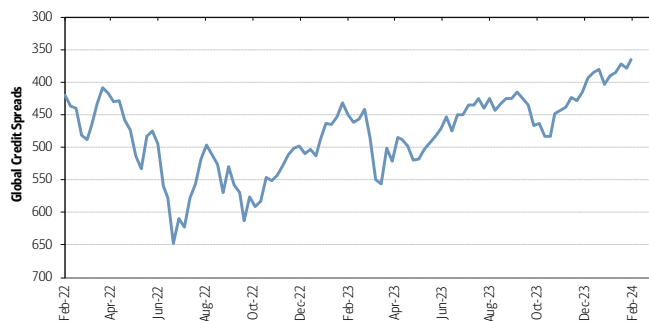


Source : BofA Global Quantitative Strategy, Bloomberg

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

Global credit spreads narrowed (-14 bps)

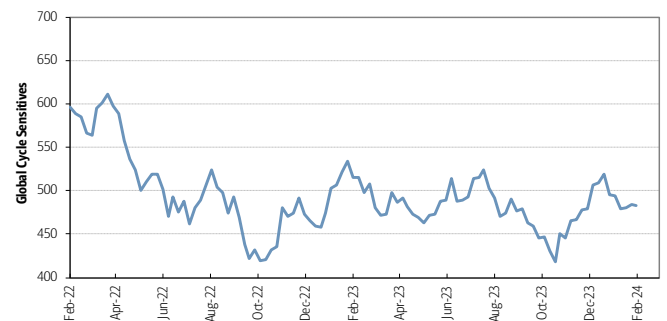


Source : BofA Global Quantitative Strategy, Bloomberg

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

Global Cycle Sensitives underperformed (-0.2%)



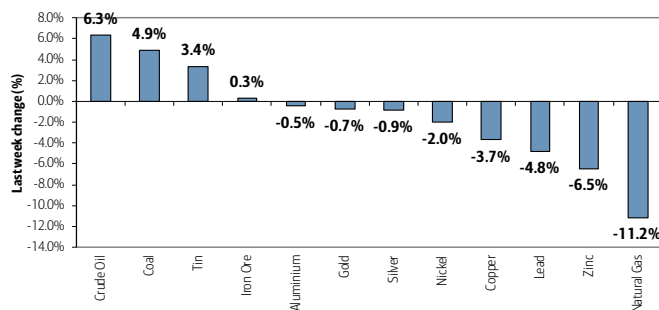
Source : BofA Global Quantitative Strategy, Bloomberg

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# Commodities

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

Natural Gas fell the most last week

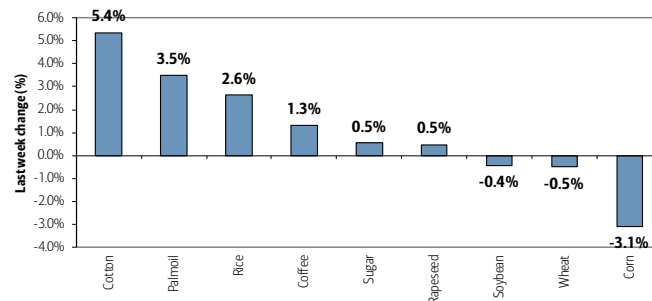


Source : BofA Global Quantitative Strategy, Bloomberg

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

Cotton increased the most last week

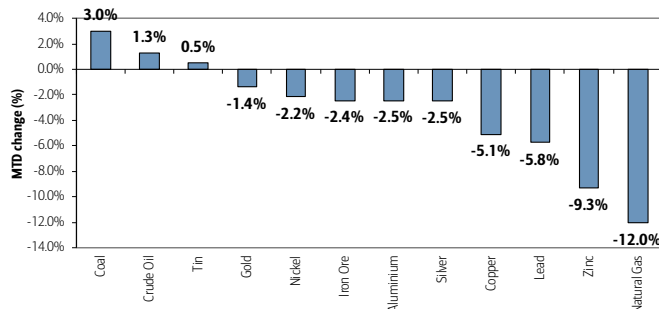


Source : BofA Global Quantitative Strategy, Bloomberg

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

Coal increased the most MTD

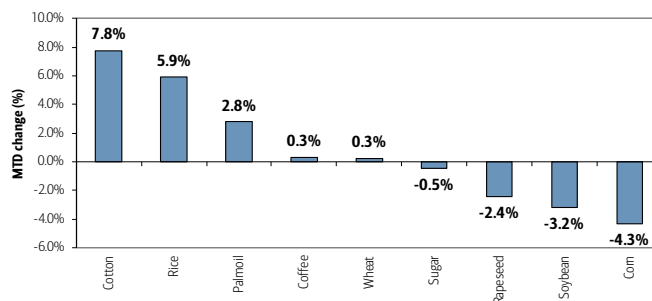


Source : BofA Global Quantitative Strategy, Bloomberg

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

Cotton increased the most MTD

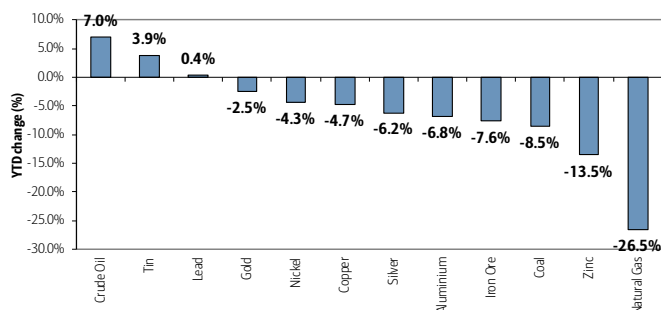


Source : BofA Global Quantitative Strategy, Bloomberg

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

Crude Oil increased the most YTD

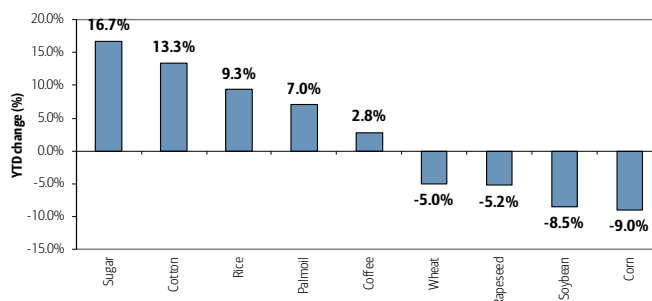


Source : BofA Global Quantitative Strategy, Bloomberg

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

Sugar increased the most YTD



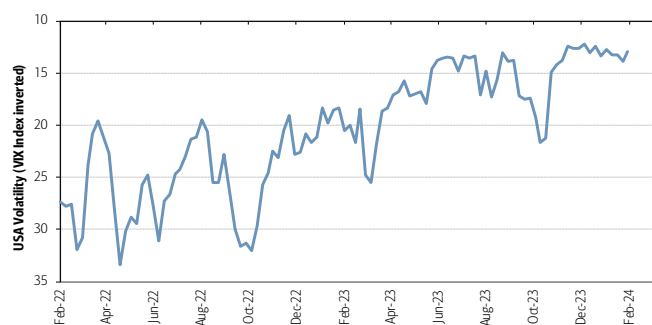
Source : BofA Global Quantitative Strategy, Bloomberg

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# Volatility

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

VIX Index moved from 13.9 to 12.9



Source : BofA Global Quantitative Strategy, Bloomberg

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

V2X Index moved from 14.0 to 14.0



Source : BofA Global Quantitative Strategy, Bloomberg

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

VNKY Index moved from 19.4 to 19.3



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 16.2

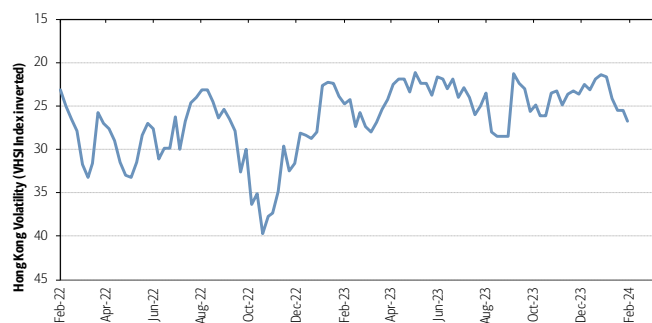


Source : BofA Global Quantitative Strategy, Bloomberg

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

VHSI Index moved from 25.5 to 26.7

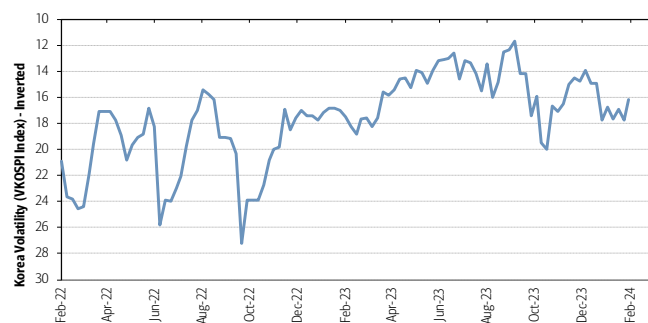


Source : BofA Global Quantitative Strategy, Bloomberg

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

VKOSPI Index moved from 17.8 to 16.2



Source : BofA Global Quantitative Strategy, Bloomberg

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# Rates

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

US 10-year yield up by 16 bps to 4.18%

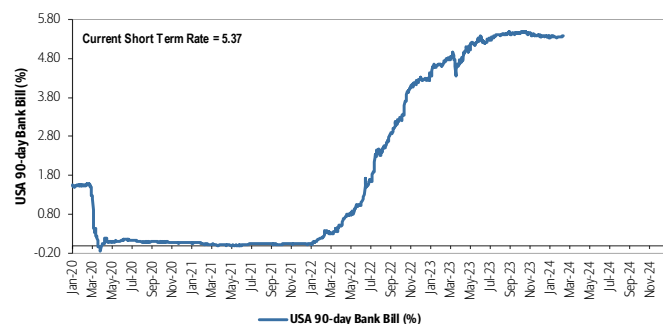


Source : BofA Global Quantitative Strategy, Bloomberg

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

US 90-day yield up by 1 bps to 5.37%

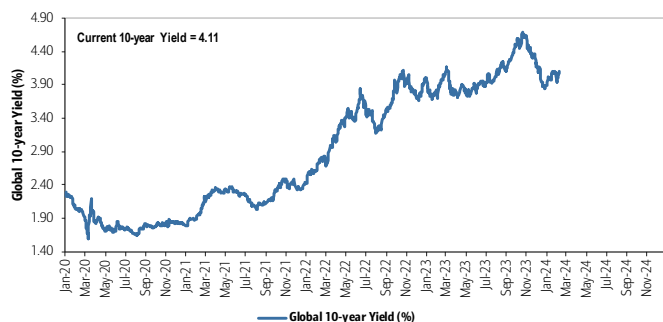


Source : BofA Global Quantitative Strategy, Bloomberg

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

Current 10-yr Global GDP weighted bond yield is 4.11%

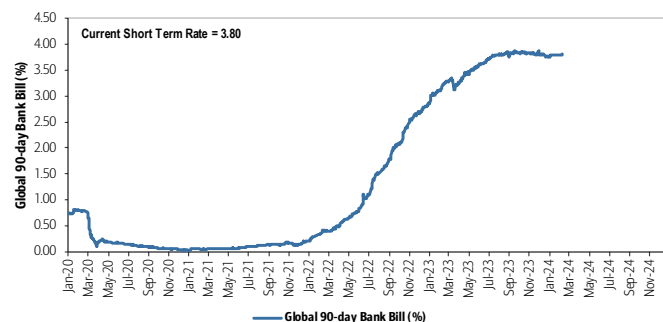


Source : BofA Global Quantitative Strategy, Bloomberg

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

Current 90d Global GDP weighted bond yield is 3.80%

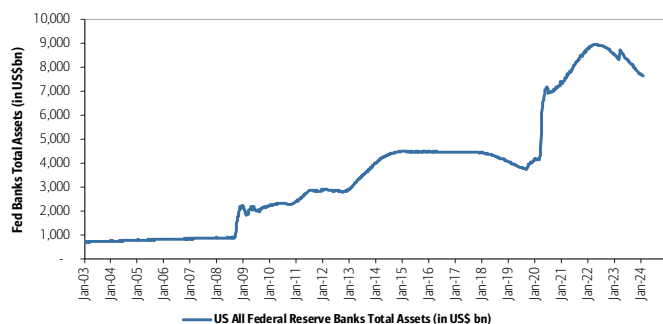


Source : BofA Global Quantitative Strategy, Bloomberg

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

Last week, Fed Reserve's balance sheet reduced by US\$-46bn

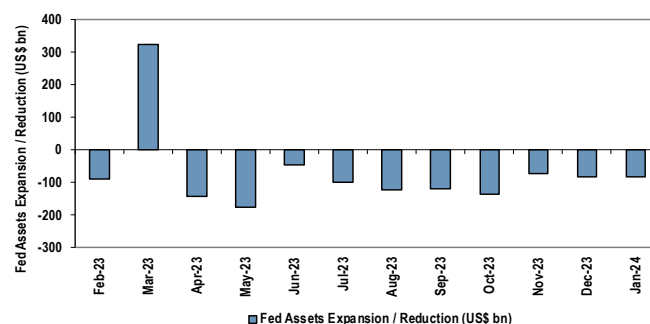


Source : BofA Global Quantitative Strategy, Bloomberg

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

Last month, Fed reduced the balance sheet by US\$ -81bn

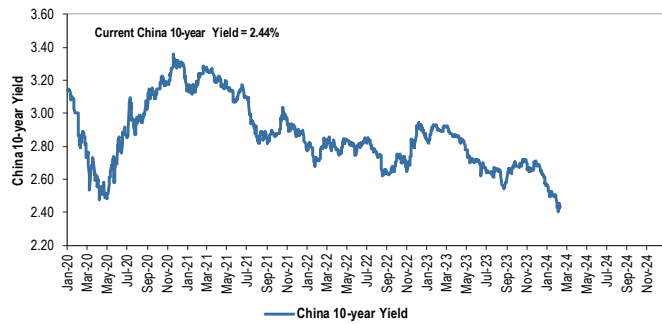


Source : BofA Global Quantitative Strategy, Bloomberg

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

Current China 10-year Yield = 2.44%

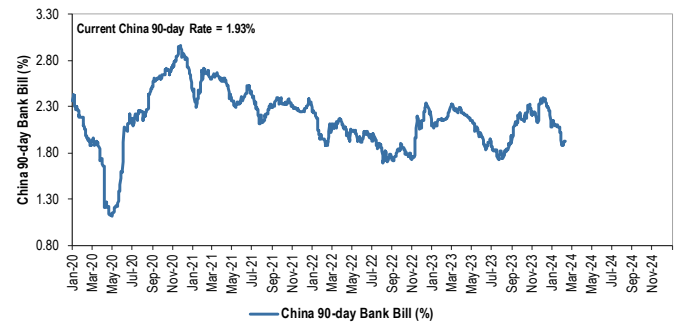


Source : BofA Global Quantitative Strategy, Bloomberg

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

Current China 90-day Rate = 1.93%



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 3.41%

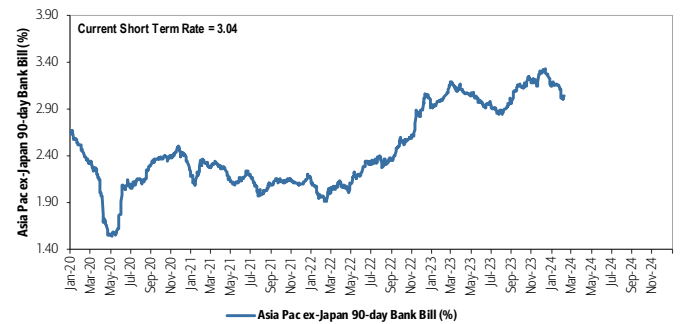


Source : BofA Global Quantitative Strategy, Bloomberg

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

Current 90d Asia Pac GDP weighted bond yield is 3.04%



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 -16.4%

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	22.4%	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	18.7%	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%
Banks	17.0%	-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%
Real Estate	16.4%	-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%
Health Care	14.5%	-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%
Utilities	13.3%	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%
Materials	12.2%	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	11.9%	-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	9.0%	-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%
Industrials	5.9%	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	1.9%	-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.	-1.2%	-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	-18.9%	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	-19.7%	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	-30.4%	-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	-35.2%	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	-16.4%	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	-13.5%	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	-14.7%	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	-25.2%	-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	-23.4%	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	-21.1%	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%

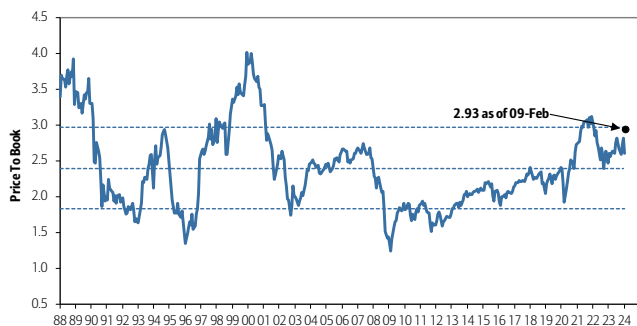
Source : BofA Global Quantitative Strategy, MSCI, Bloomberg

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# Valuation

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

The latest Global Price-to-Book ratio is 2.93

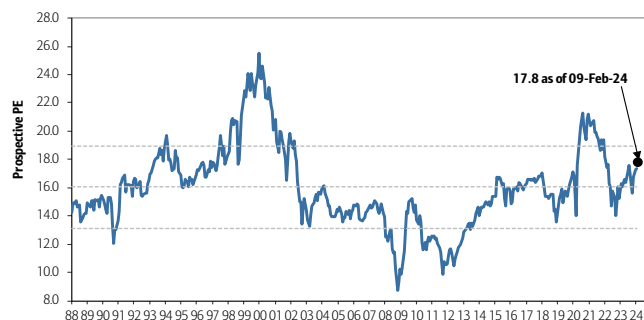


Source : BofA Global Quantitative Strategy, MSCI, IBES, Worldscope

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**Chart 69: Global Prospective PE**

The latest Global Prospective PE is 17.8

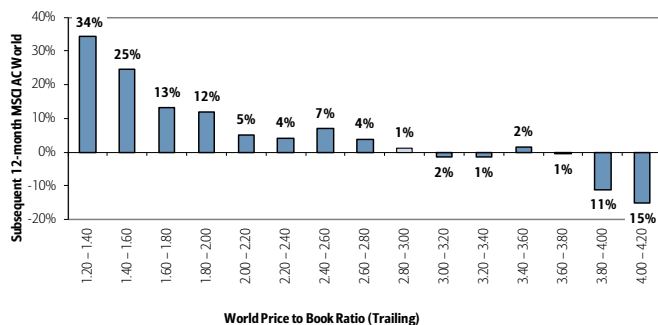


Source : BofA Global Quantitative Strategy, MSCI, IBES, Worldscope

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

For current PB level, MSCI ACWI returns 1% in the subsequent 12m on average

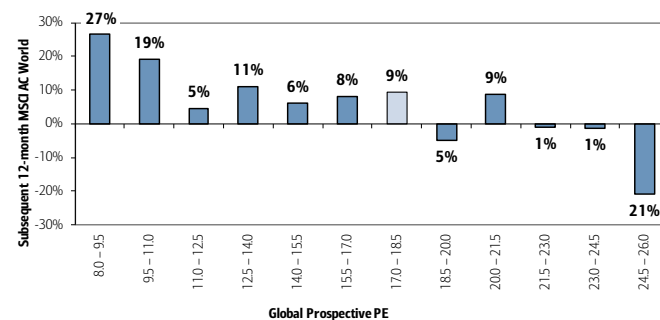


Source : BofA Global Quantitative Strategy, MSCI, IBES, Worldscope

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

For current PE level, MSCI ACWI returns 9% in the subsequent 12m on average

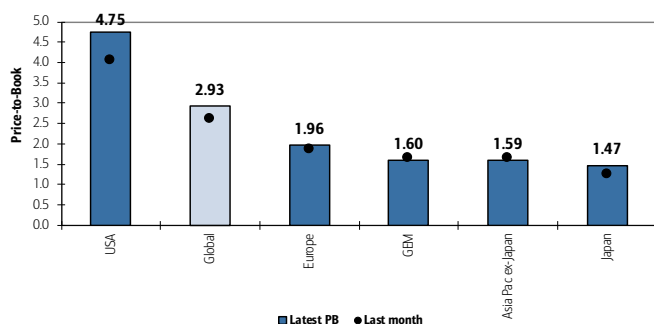


Source : BofA Global Quantitative Strategy, MSCI, IBES, Worldscope

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

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

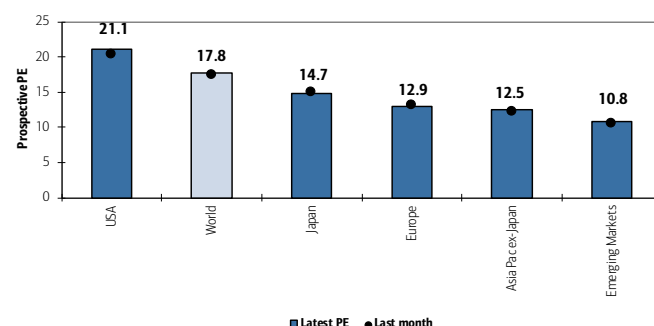


Source : BofA Global Quantitative Strategy, MSCI, IBES, Worldscope

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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

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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 is currently strongest for Software, Insurance, and Div Financials

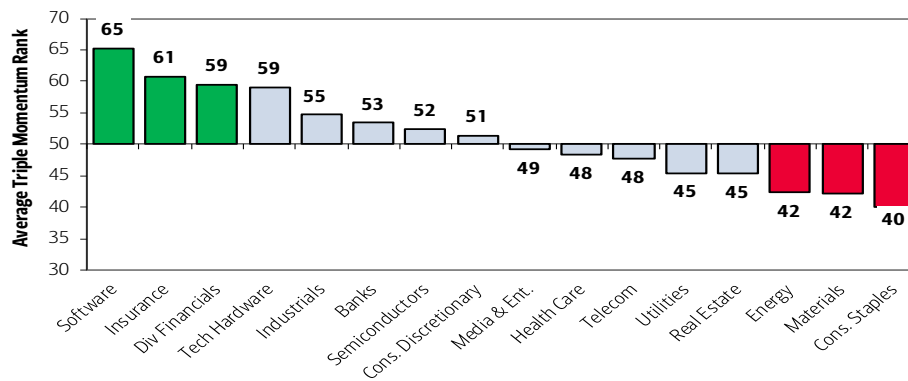
Average Triple Momentum Rank	Banks	Cons. Discretionary	Cons. Staples	Div Financials	Energy	Health Care	Industrials	Insurance	Materials	Media & Ent.	Real Estate	Semiconductors	Software	Tech Hardware	Telecom	Utilities	Region
Canada	13	47	36	73	37		42	64	20		53		60		41	21	41
USA	42	49	34	64	35	47	57	69	45	48	46	50	67	56	24	33	51
Belgium	52		59			48		52	2							79	50
Denmark	87	92	9			44	53		24							24	48
Finland			12		19	83	53	44	25					22		41	39
France	50	34	33	56	40	40	58	61	72	92	40	8	68		65	73	50
Germany	70	44	37	68		31	47	77	45	90	43	10	74		33	82	49
Italy	74	37			58	38	56								82	67	58
Netherlands	18	71	16	85		23	43	84	36	30		82			45		52
Spain	80	58			6	21	81								68	32	47
Sweden	51	29		78		5	44		28					21	18		38
Switzerland		21	43	31		47	37	57	45				95	83	25		44
UK	26	49	45	52	32	71	62	43	45	25	78		45	79		70	51
Australia	50	52	26	61	19	40	49	61	44	37	40		39		22	52	43
Hong Kong	13	38		14		93	48	35			32	15	100			19	35
Japan	87	57	40	77	78	48	59	71	58	49	62	73	53	48	65	52	57
Singapore	34	69	52	27			77			21	28				44	100	48
China	31	49	34	39	53	50	42	35	33	51	10	29	27	69	48	43	42
India	54	76	54	61	85	79	65	40	55	70	93		61		69	74	65
Korea	63	48	25	38	21	28	43		25	51				38	33	83	40
Taiwan		45		75	6		48	47	35			55		82	44		61
Brazil	62	39	54		86		89	63	65						82	52	62
Mexico	93		48				32		66						69		54
Poland			25		18		100			48						87	55
South Africa	72	43	85	46		96	47	59	36						32		53
Asia Pac ex-Japan	48	57	40	49	53	56	54	45	41	49	34	45	62	69	45	52	50
Emerging ex-Asia	66	48	52	46	53	86	56	67	49	48	97				60	66	59
Europe	47	44	44	56	23	43	51	58	39	53	53	58	69	45	40	49	47
Japan	87	57	40	77	78	48	59	71	58	49	62	73	53	48	65	52	57
United States	42	49	34	64	35	47	57	69	45	48	46	50	67	56	24	33	51
Global	53	51	40	59	42	48	55	61	42	49	45	52	65	59	48	45	

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

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**Chart 74: Global Sectors - Average Triple Momentum Rank**

Triple Momentum is currently strongest for Software, Insurance, and Div Financials



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

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**Chart 75: Regional-Sectors with the highest average (green) and lowest average (red) Triple Momentum Rank**

Triple Momentum highest for Emerging ex-Asia - Real Estate and lowest for Europe - Energy



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

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# Chart 76: Asia Pac ex-Japan Country-Sectors with the highest average (green) and lowest average (red) Triple Momentum Rank (Only country-sectors with minimum 3 stocks with Triple Momentum are included)

Triple Momentum highest for India - Energy and lowest for China - Real Estate



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

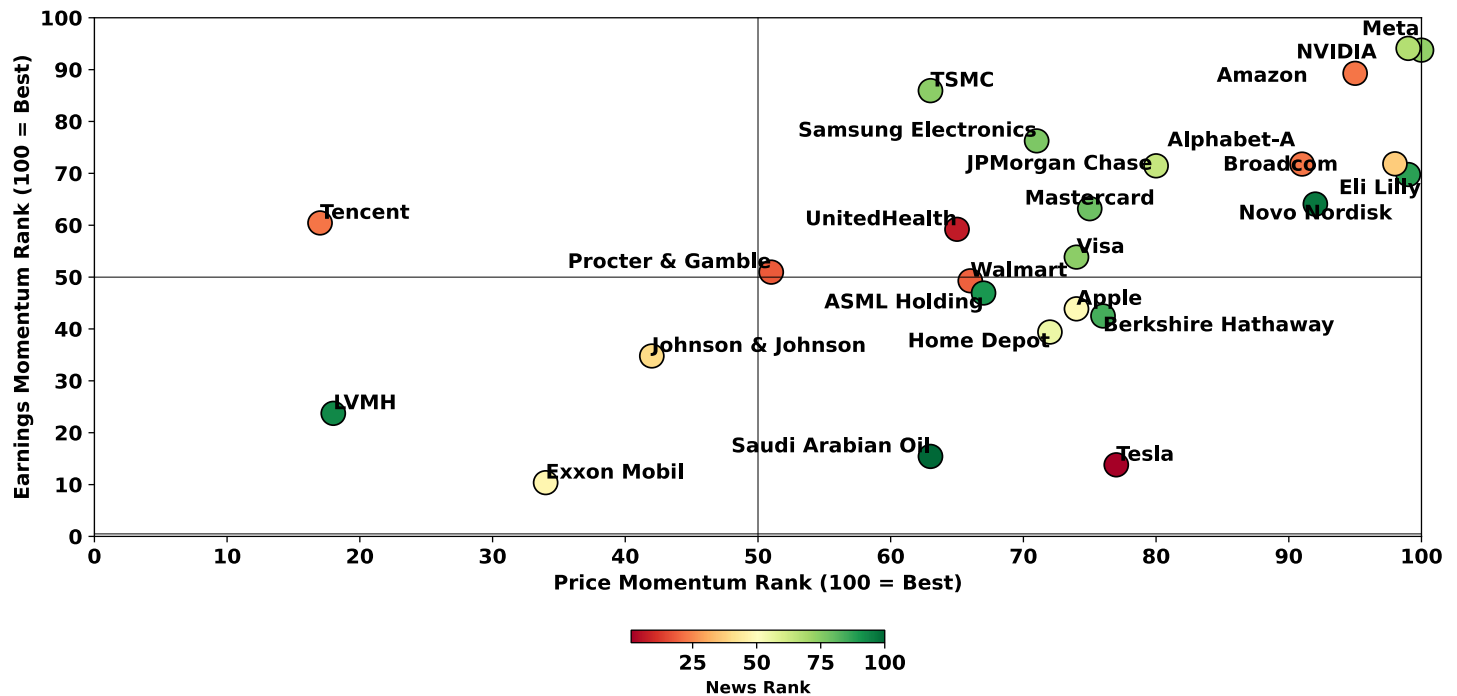
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## Global Regions: Triple Momentum Charts

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

Triple Momentum is most positive for Novo Nordisk, Eli Lilly and NVIDIA

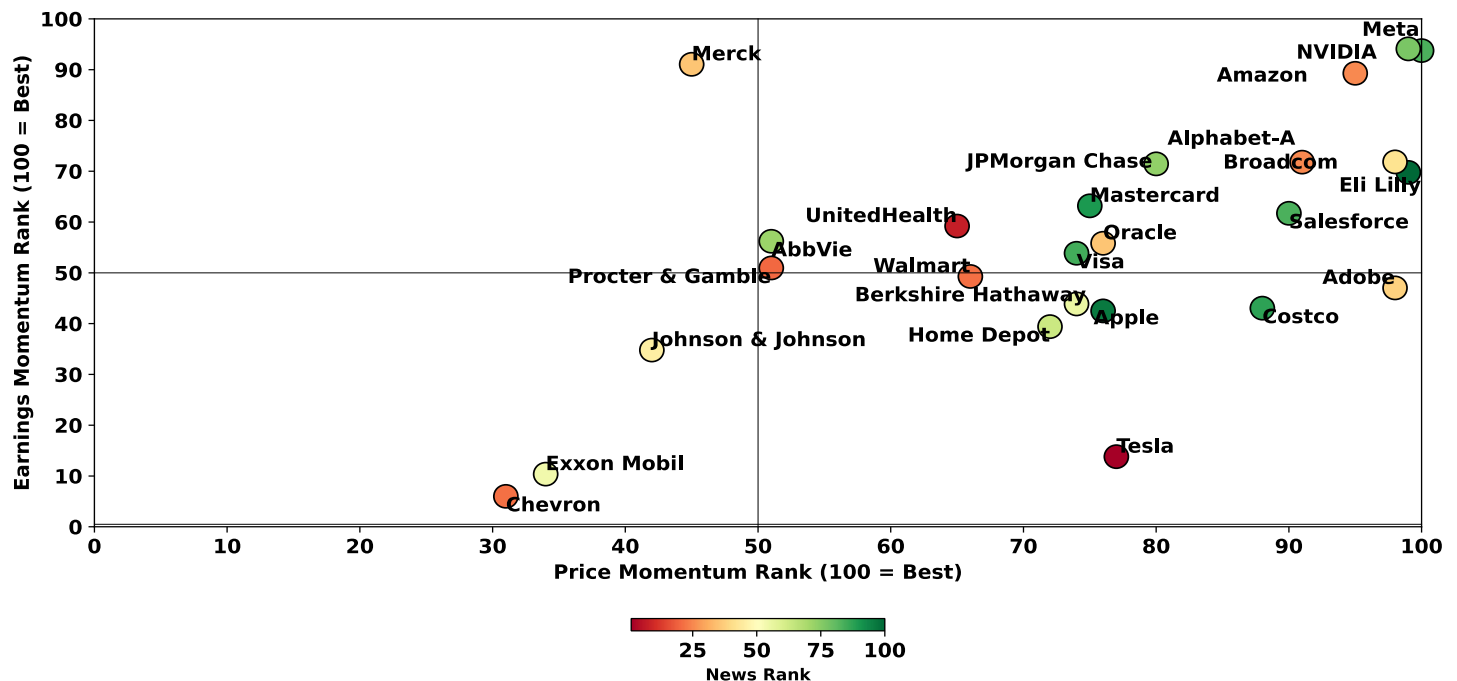


Source : BofA Global Quantitative Strategy, MSCI, IBES, FactSet, RavenPack

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

Triple Momentum is most positive for Eli Lilly, NVIDIA and Salesforce

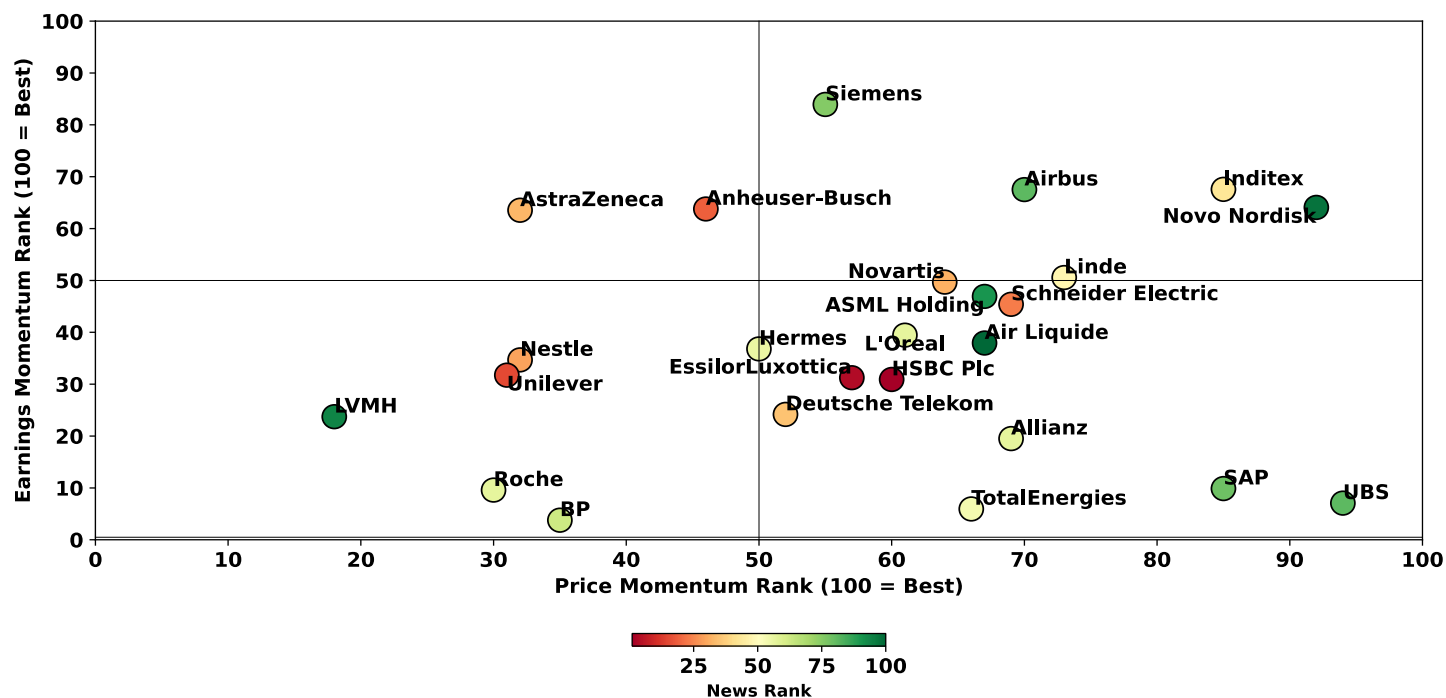


Source : BofA Global Quantitative Strategy, MSCI, IBES, FactSet, RavenPack

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

Triple Momentum is most positive for Novo Nordisk, Airbus and Siemens

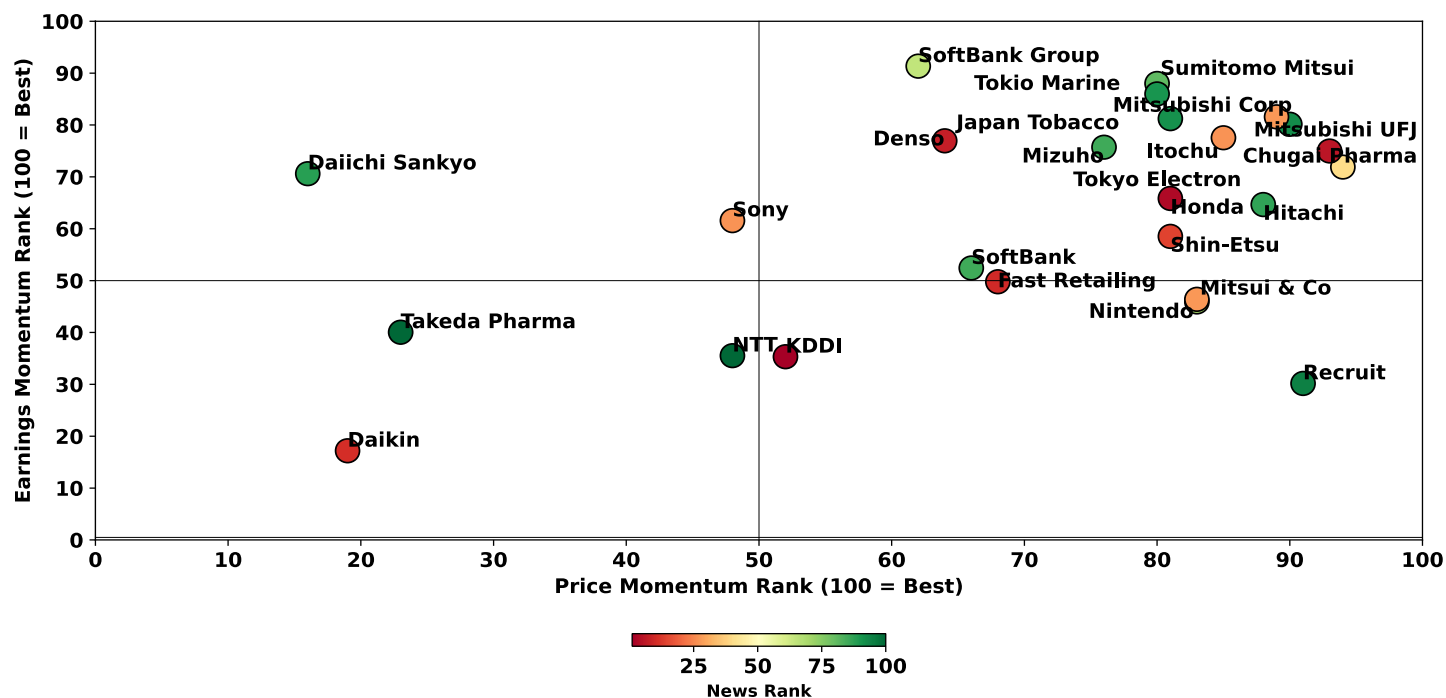


Source : BofA Global Quantitative Strategy, MSCI, IBES, FactSet, RavenPack

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**Chart 80: Japan: Earnings Momentum (vertical axis), Price Momentum (horizontal axis), News Momentum (colour)**

Triple Momentum is most positive for Mitsubishi UFJ, Tokio Marine and Japan Tobacco

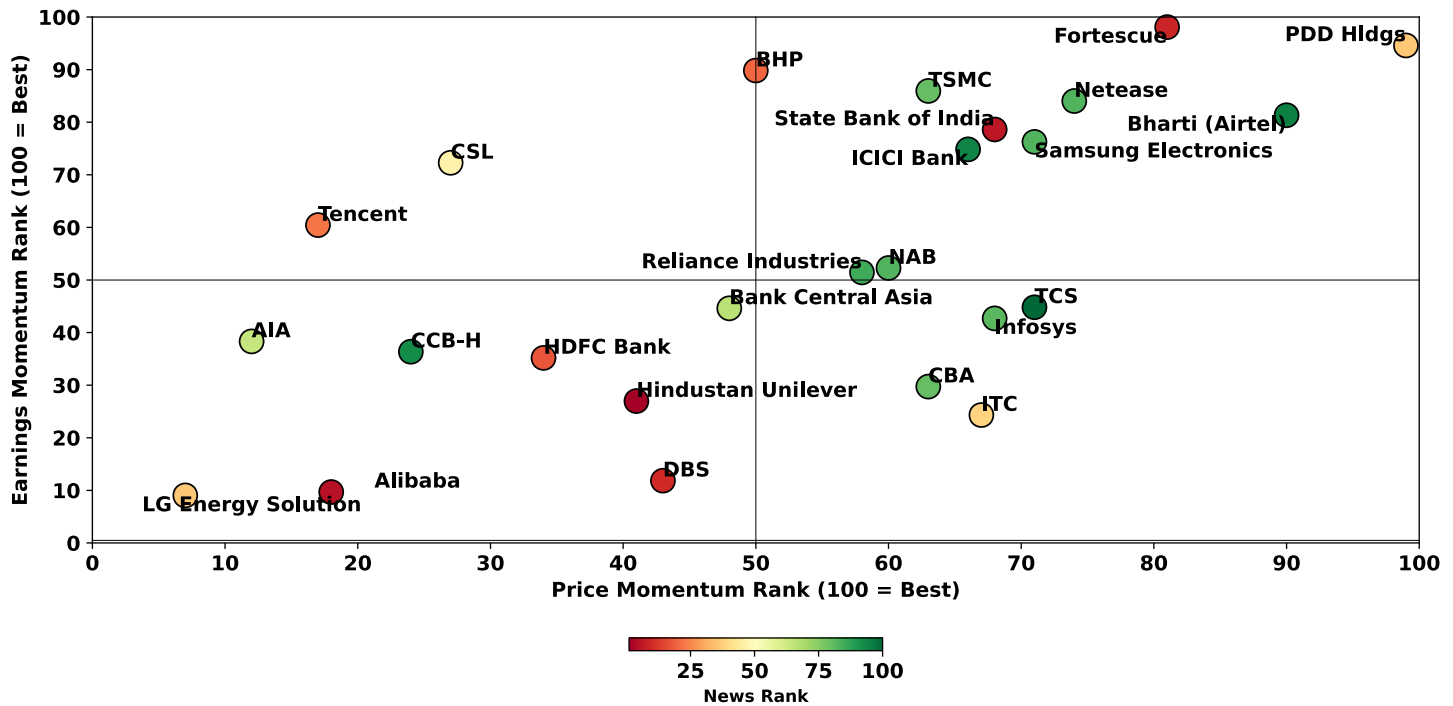


Source : BofA Global Quantitative Strategy, MSCI, IBES, FactSet, RavenPack

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**Chart 81: Asia Pac ex-Japan: Earnings Momentum (vertical axis), Price Momentum (horizontal axis), News Momentum (colour)**

Triple Momentum is most positive for Bharti (Airtel), Netease and ICICI Bank

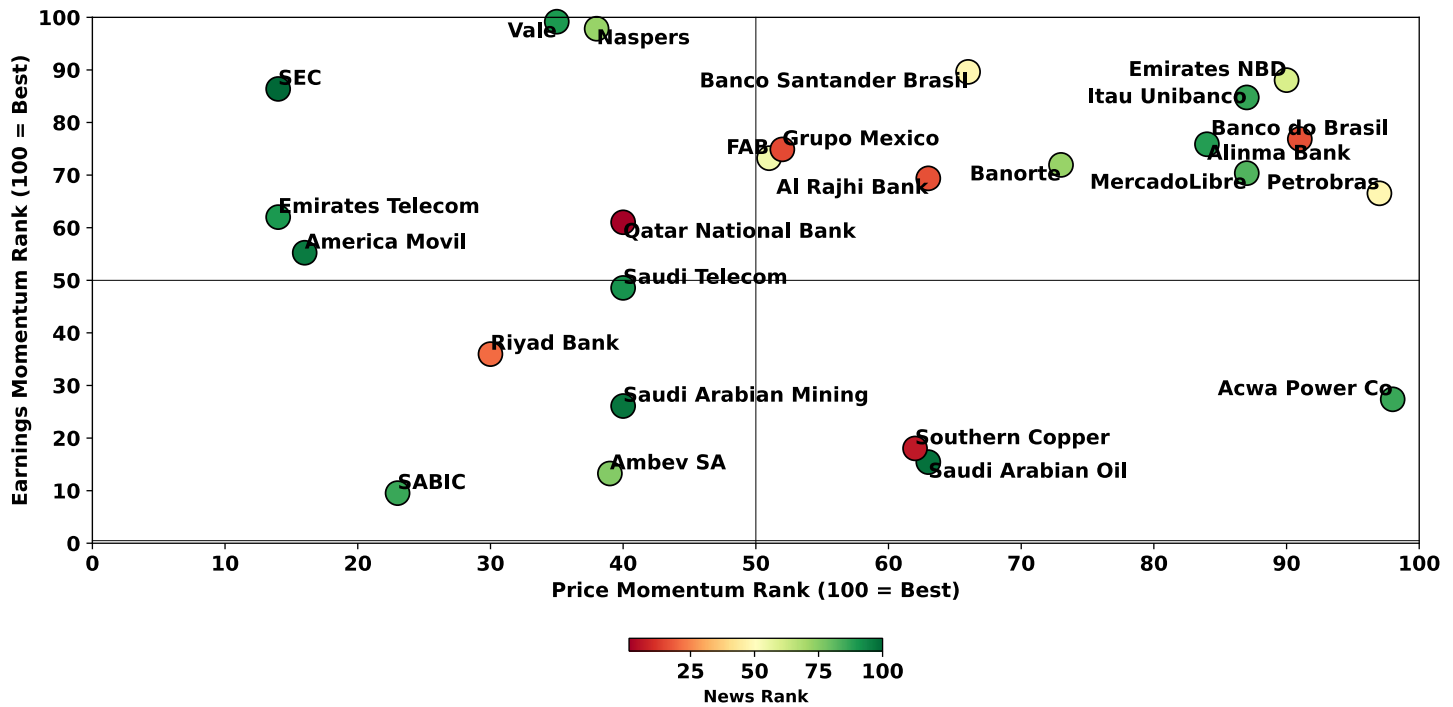


Source : BofA Global Quantitative Strategy, MSCI, IBES, FactSet, RavenPack

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**Chart 82: Emerging ex-Asia: Earnings Momentum (vertical axis), Price Momentum (horizontal axis), News Momentum (colour)**

Triple Momentum is most positive for Itau Unibanco, Alinma Bank and MercadoLibre



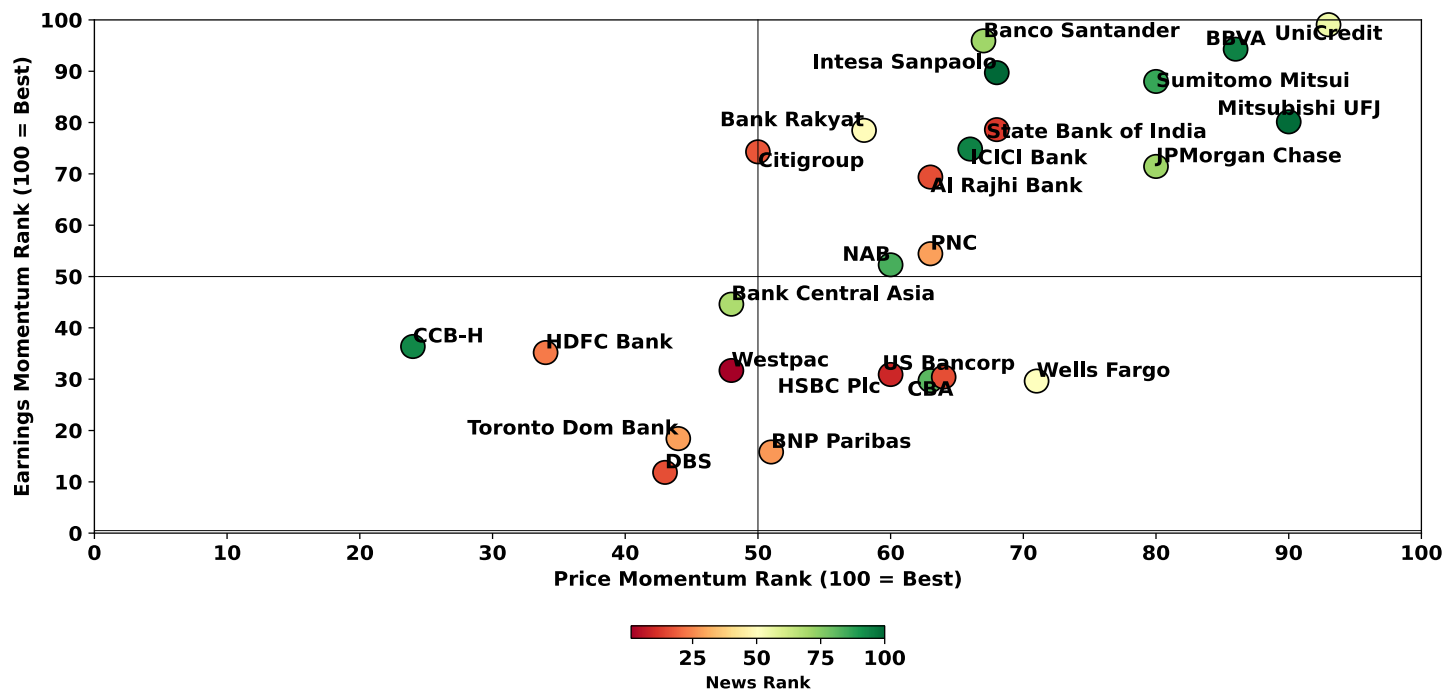
Source : BofA Global Quantitative Strategy, MSCI, IBES, FactSet, RavenPack

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## Global Sectors: Triple Momentum Charts

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

Triple Momentum is most positive for BBVA, Mitsubishi UFJ and Intesa Sanpaolo

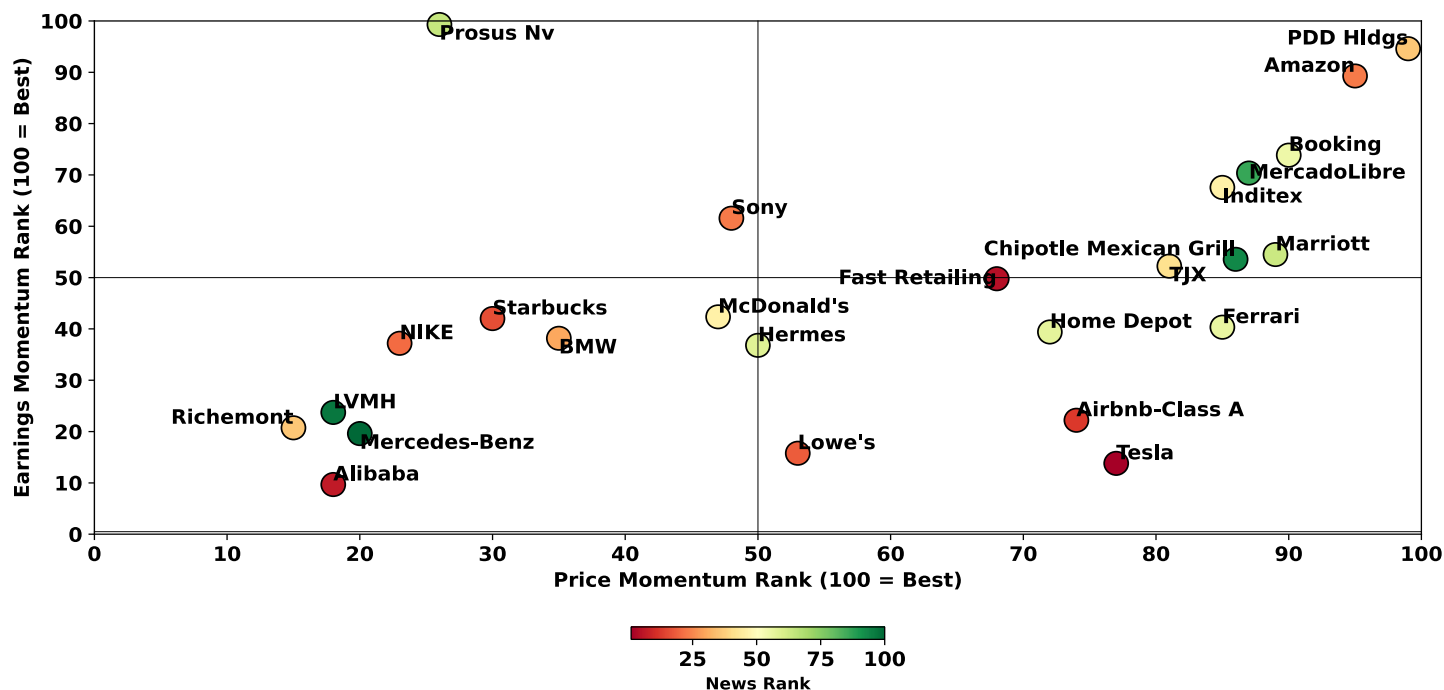


Source : BofA Global Quantitative Strategy, MSCI, IBES, FactSet, RavenPack

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**Chart 84: Consumer Discretionary: Earnings Momentum (vertical axis), Price Momentum (horizontal axis), News Momentum (colour)**

Triple Momentum is most positive for MercadoLibre, Chipotle Mexican Grill and Booking

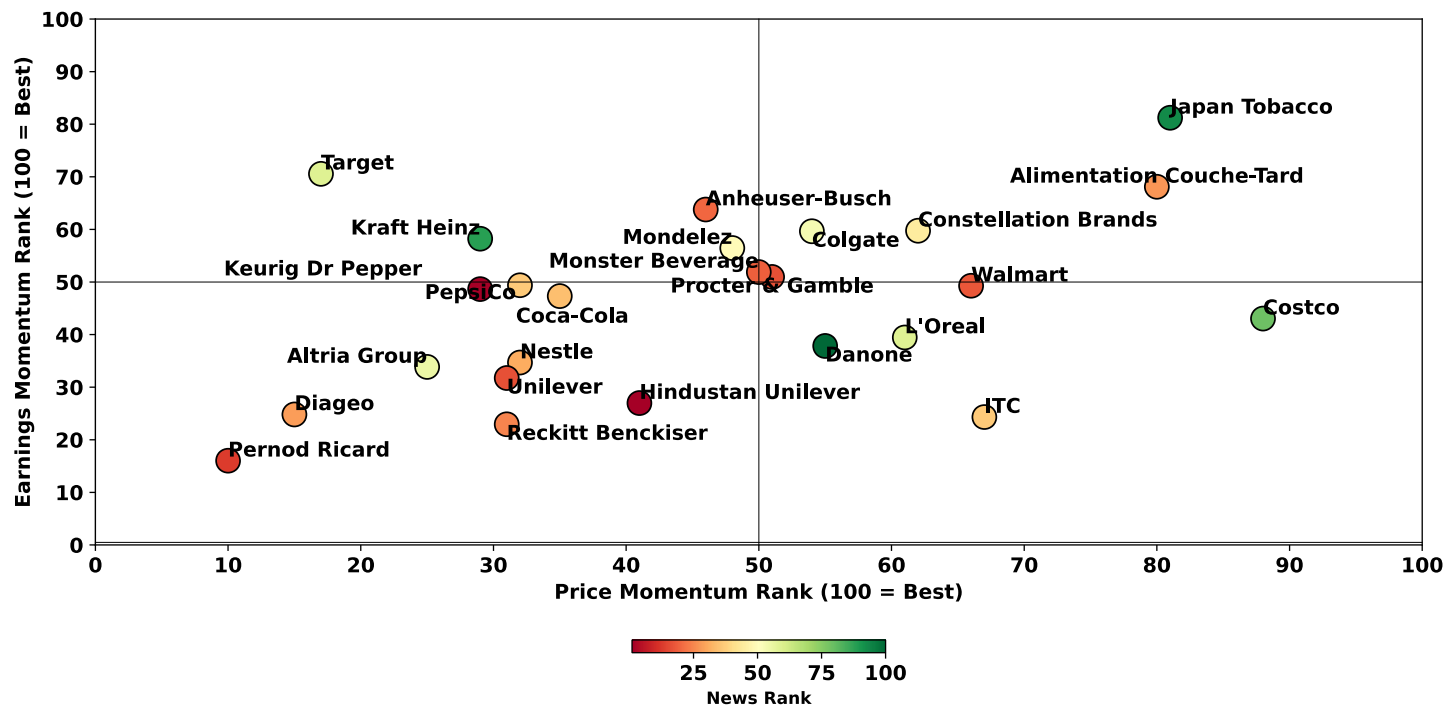


Source : BofA Global Quantitative Strategy, MSCI, IBES, FactSet, RavenPack

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**Chart 85: Consumer Staples: Earnings Momentum (vertical axis), Price Momentum (horizontal axis), News Momentum (colour)**

Triple Momentum is most positive for Japan Tobacco and Colgate

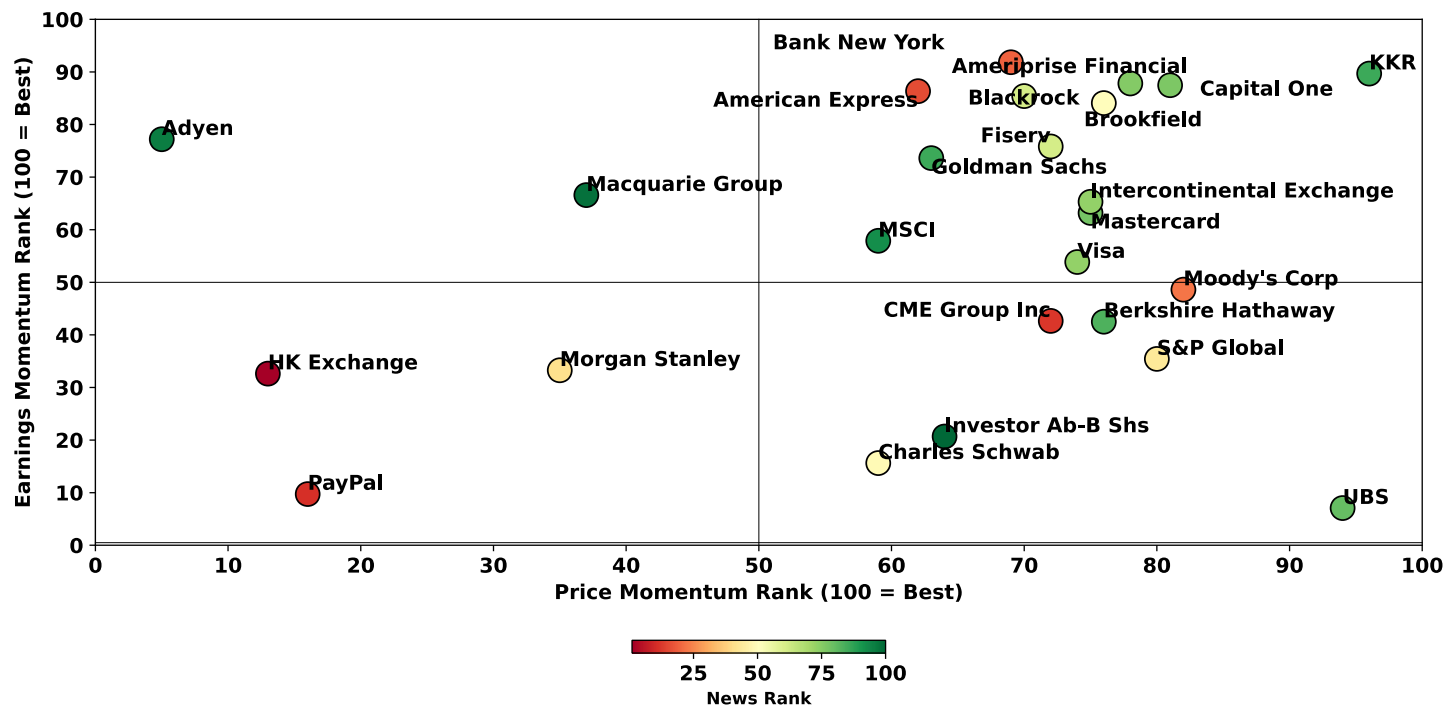


Source : BofA Global Quantitative Strategy, MSCI, IBES, FactSet, RavenPack

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

Triple Momentum is most positive for KKR, Capital One and Ameriprise Financial

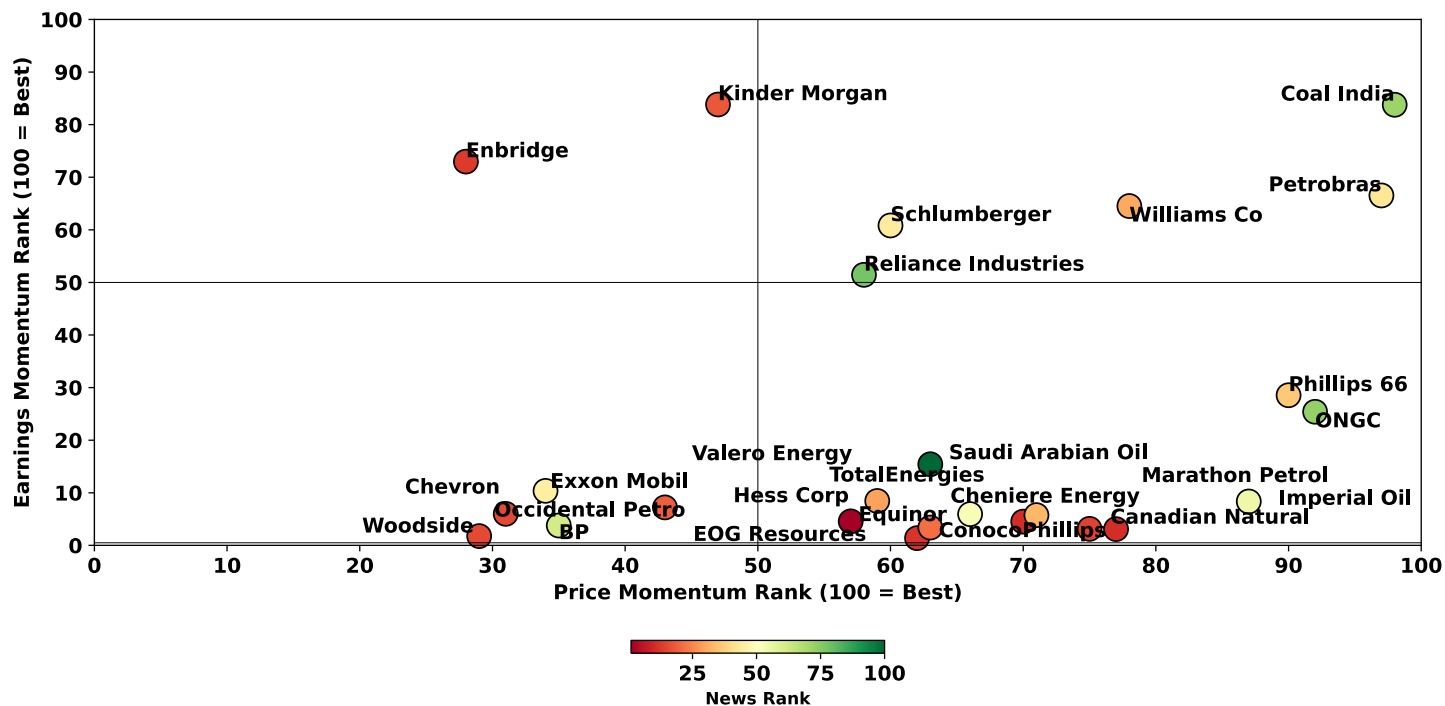


Source : BofA Global Quantitative Strategy, MSCI, IBES, FactSet, RavenPack

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

Triple Momentum is most positive for Coal India and Reliance Industries

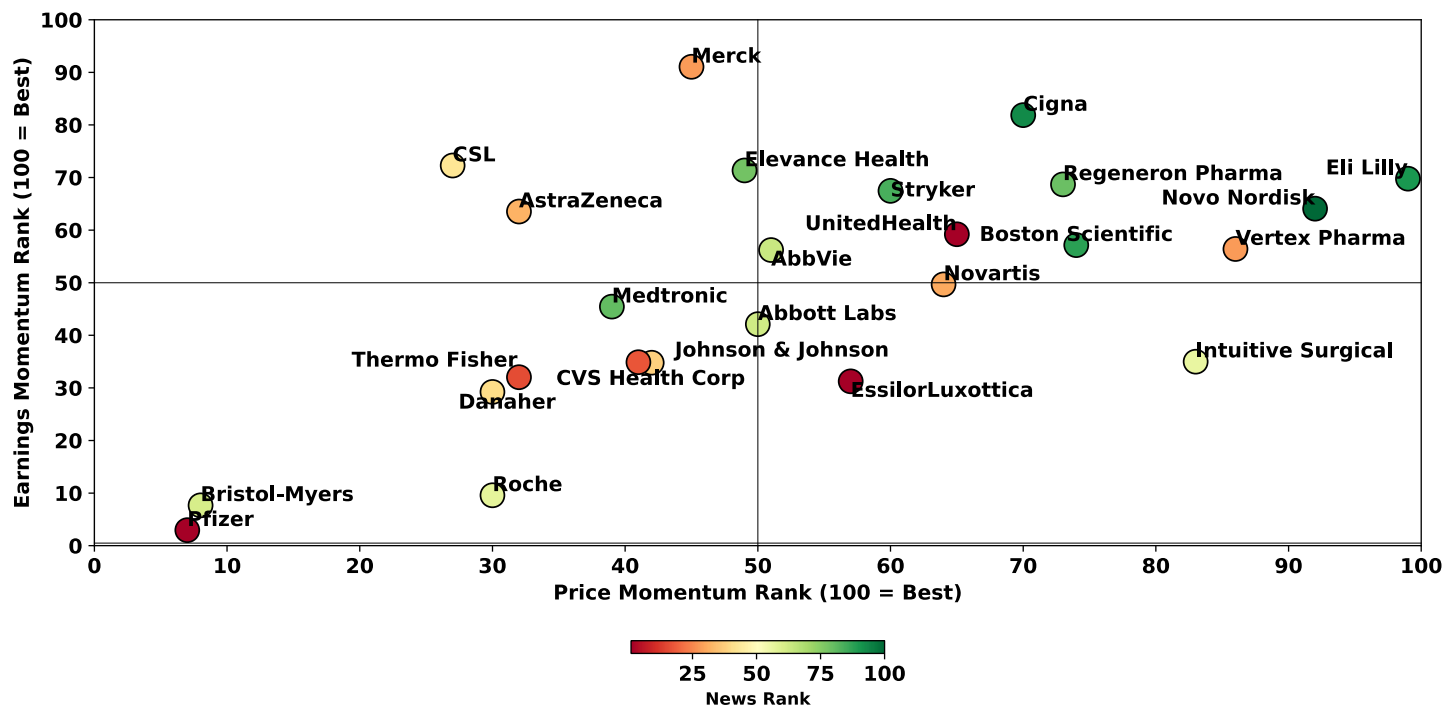


Source : BofA Global Quantitative Strategy, MSCI, IBES, FactSet, RavenPack

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**Chart 88: Health Care: Earnings Momentum (vertical axis), Price Momentum (horizontal axis), News Momentum (colour)**

Triple Momentum is most positive for Novo Nordisk, Eli Lilly and Cigna

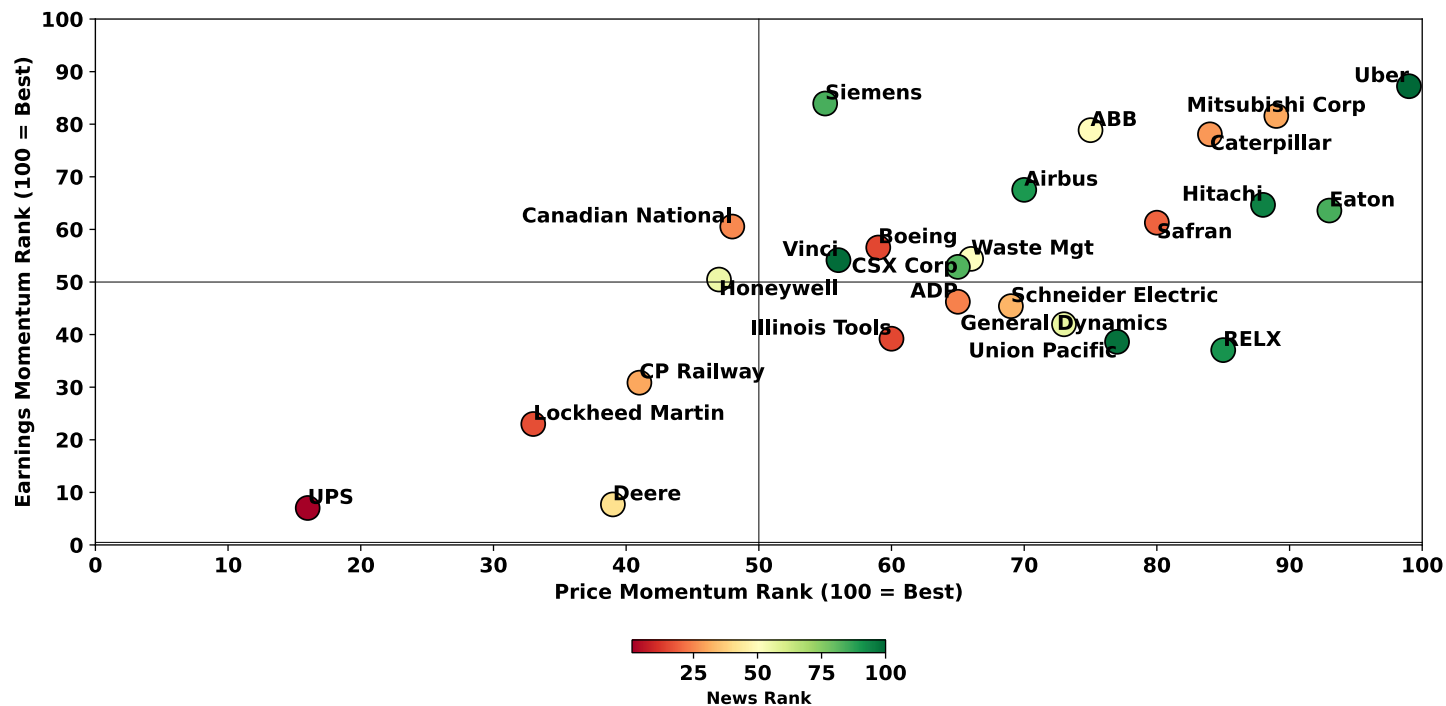


Source : BofA Global Quantitative Strategy, MSCI, IBES, FactSet, RavenPack

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

Triple Momentum is most positive for Uber, Hitachi and Airbus

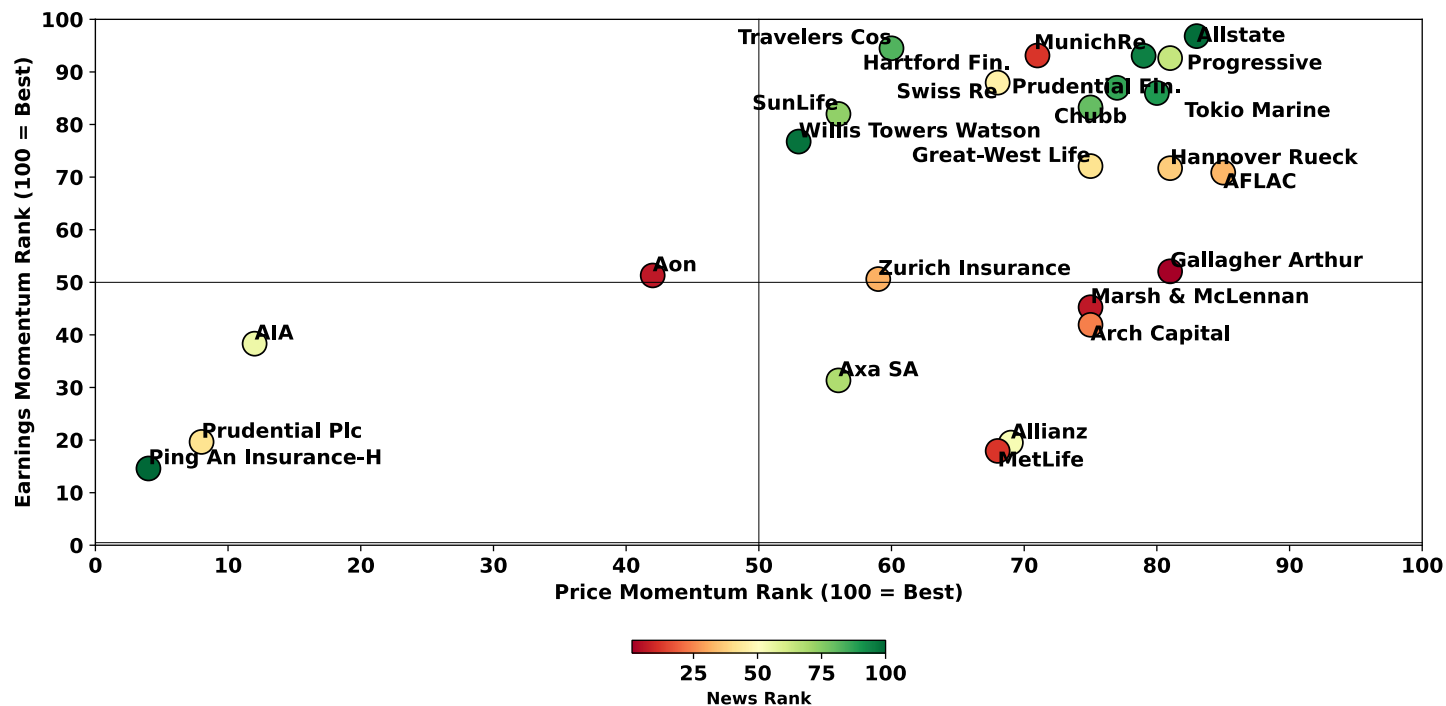


Source : BofA Global Quantitative Strategy, MSCI, IBES, FactSet, RavenPack

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

Triple Momentum is most positive for Allstate, MunichRe and Tokio Marine

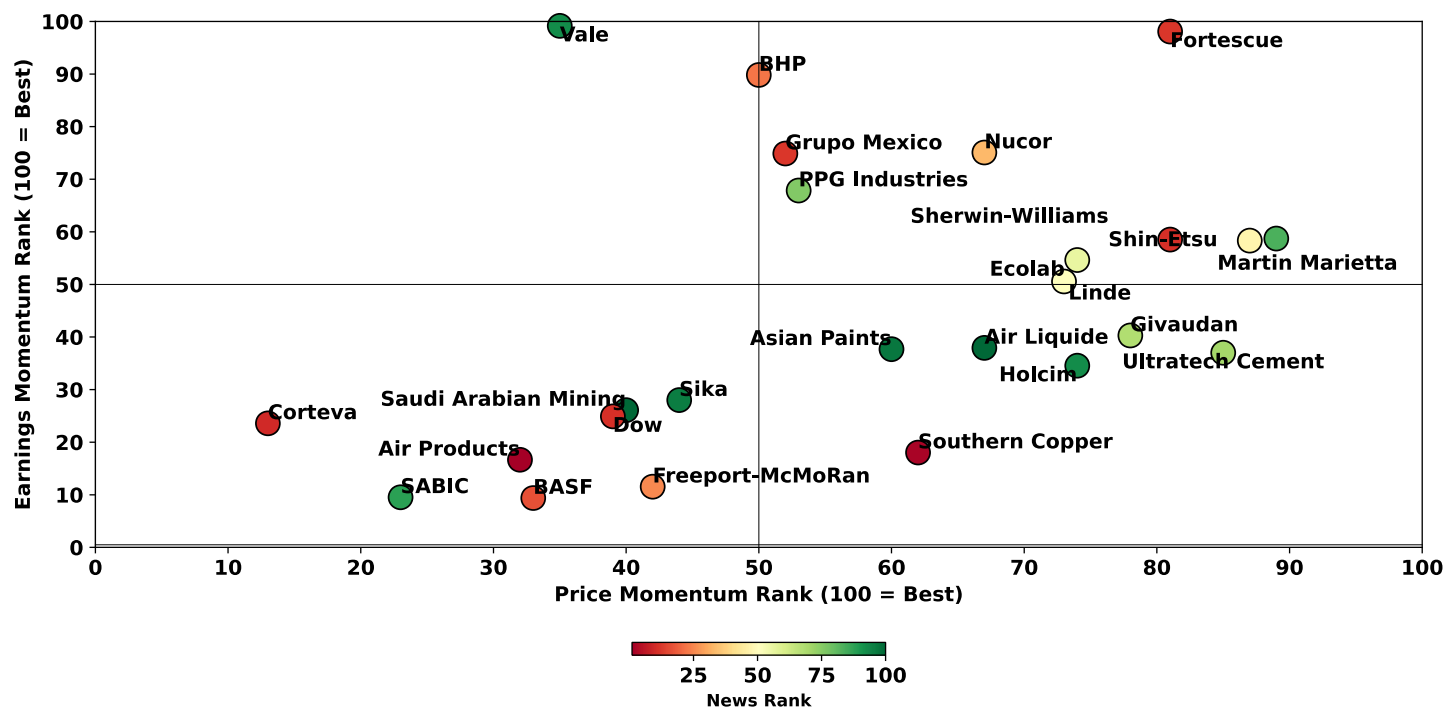


Source : BofA Global Quantitative Strategy, MSCI, IBES, FactSet, RavenPack

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**Chart 91: Materials: Earnings Momentum (vertical axis), Price Momentum (horizontal axis), News Momentum (colour)**

Triple Momentum is most positive for Martin Marietta, PPG Industries and Ecolab

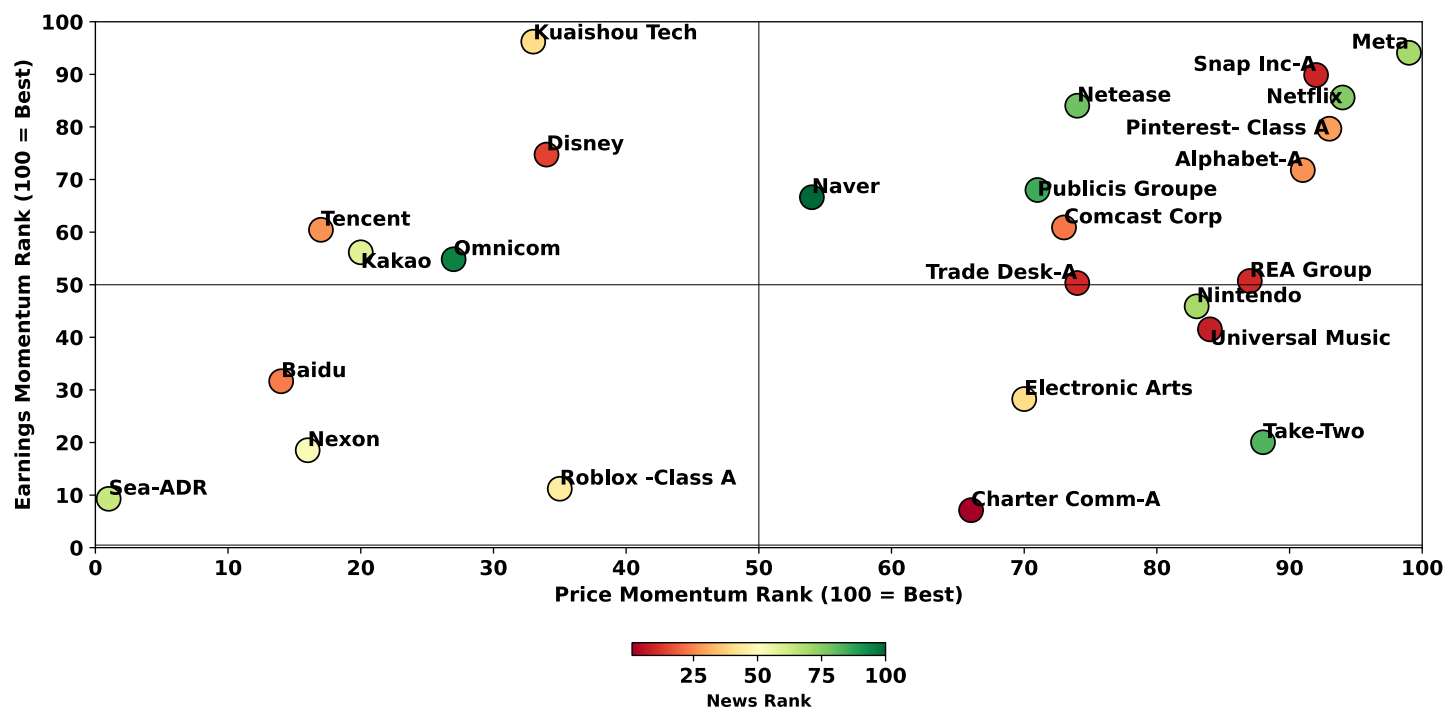


Source : BofA Global Quantitative Strategy, MSCI, IBES, FactSet, RavenPack

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**Chart 92: Media & Entertainment: Earnings Momentum (vertical axis), Price Momentum (horizontal axis), News Momentum (colour)**

Triple Momentum is most positive for Netflix, Naver and Netease



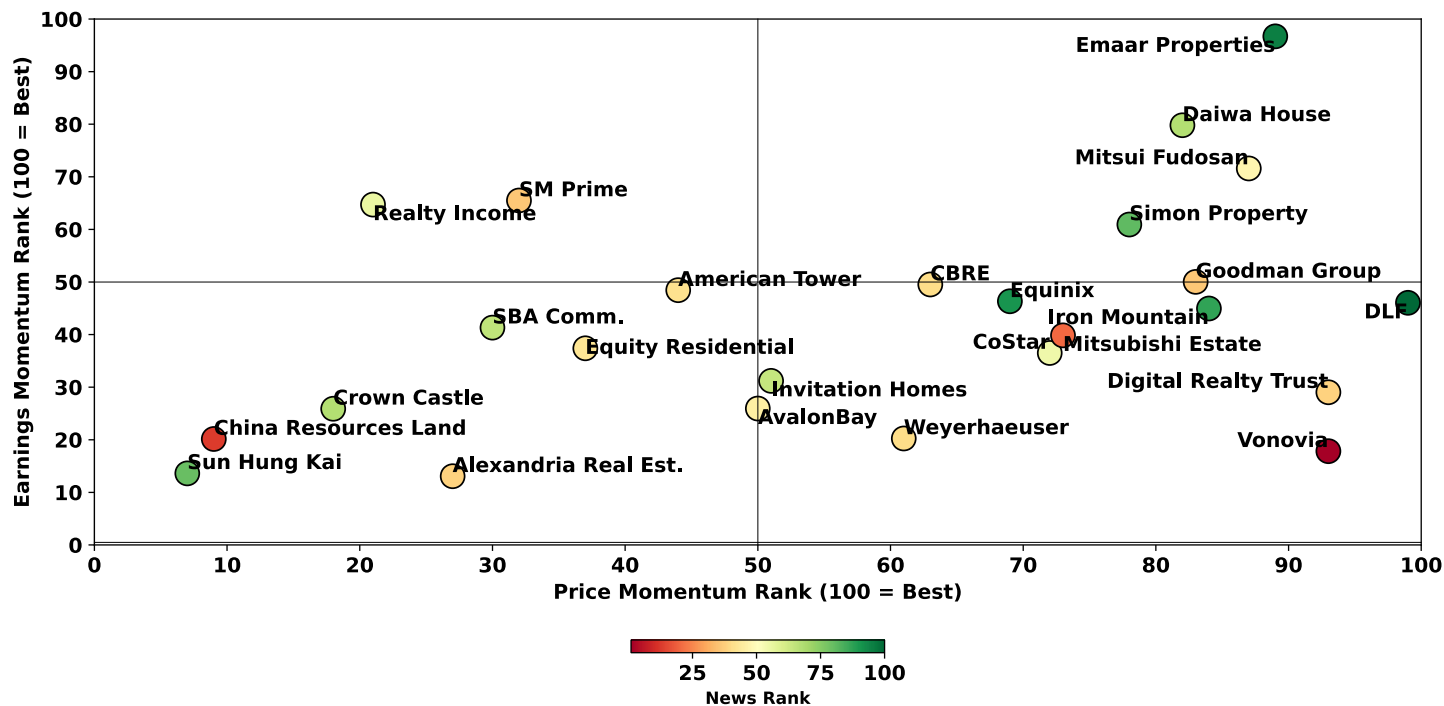
Source : BofA Global Quantitative Strategy, MSCI, IBES, FactSet, RavenPack

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**Chart 93: Real Estate: Earnings Momentum (vertical axis), Price Momentum (horizontal axis), News Momentum (colour)**

Triple Momentum is most positive for Emaar Properties, Simon Property and Daiwa House

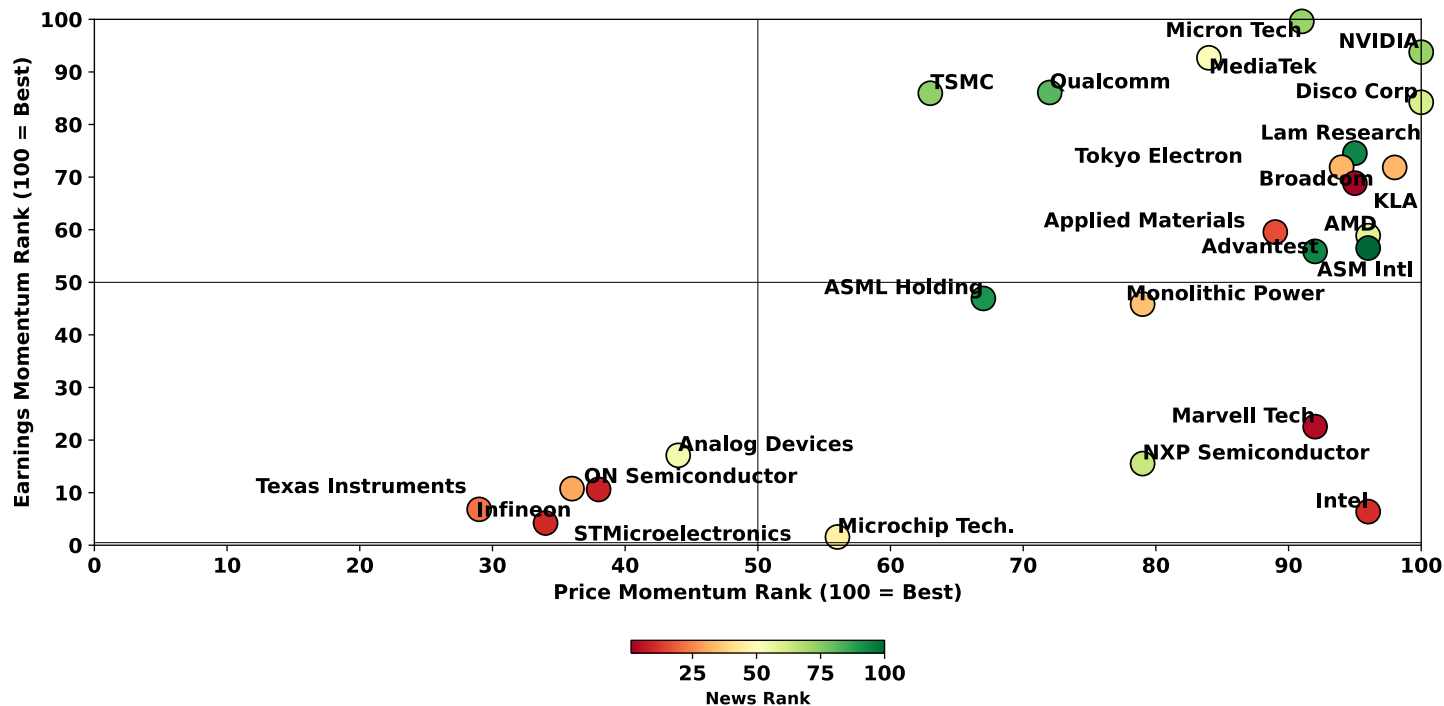


Source : BofA Global Quantitative Strategy, MSCI, IBES, FactSet, RavenPack

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

Triple Momentum is most positive for Advantest, Lam Research and NVIDIA

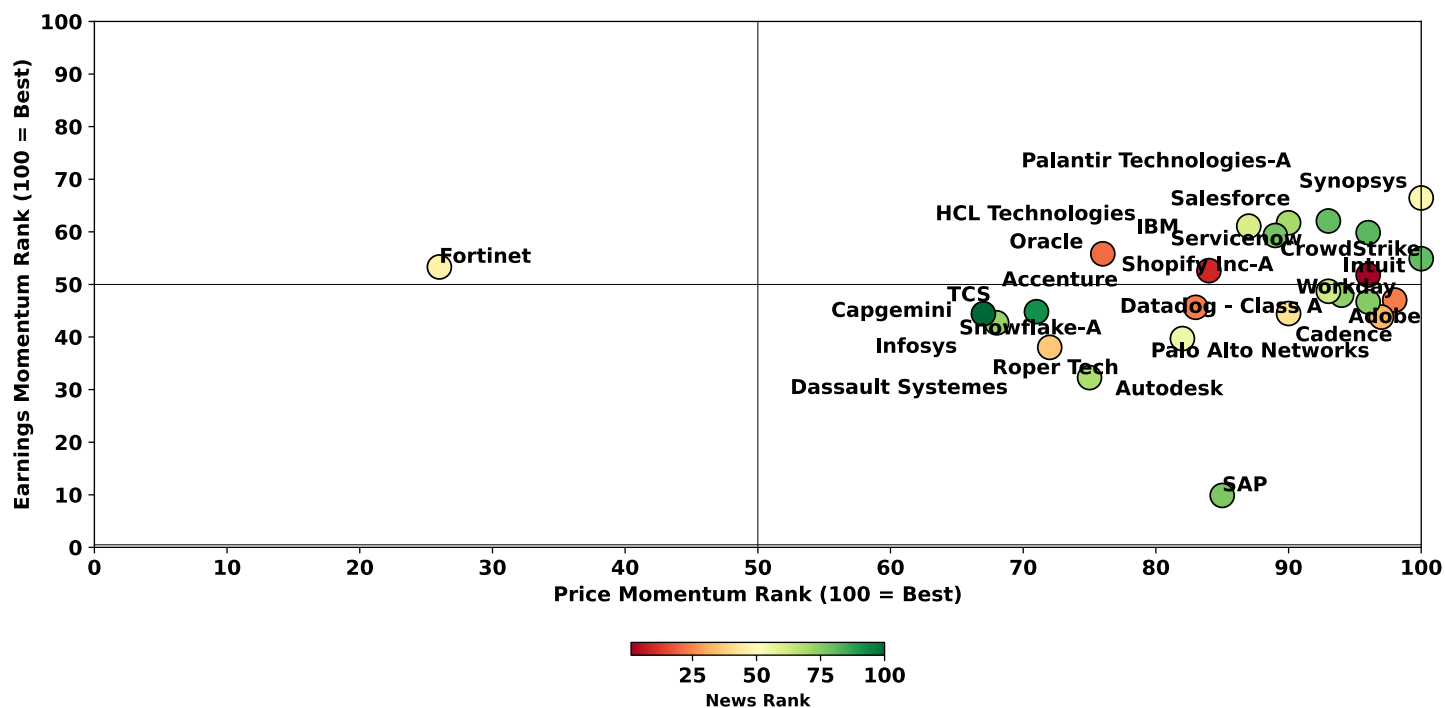


Source : BofA Global Quantitative Strategy, MSCI, IBES, FactSet, RavenPack

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

Triple Momentum is most positive for Servicenow, CrowdStrike and Synopsys

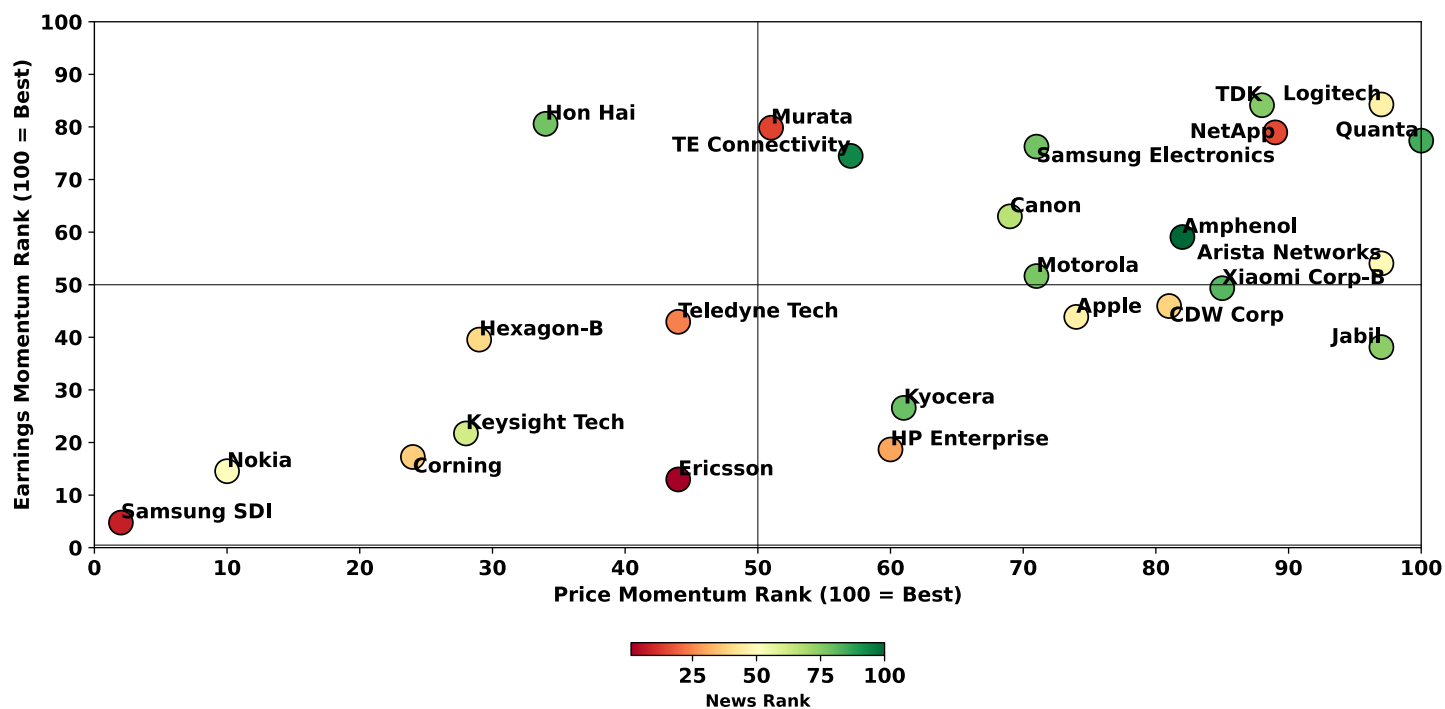


Source : BofA Global Quantitative Strategy, MSCI, IBES, FactSet, RavenPack

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**Chart 96: Tech Hardware: Earnings Momentum (vertical axis), Price Momentum (horizontal axis), News Momentum (colour)**

Triple Momentum is most positive for Quanta, Amphenol and TDK

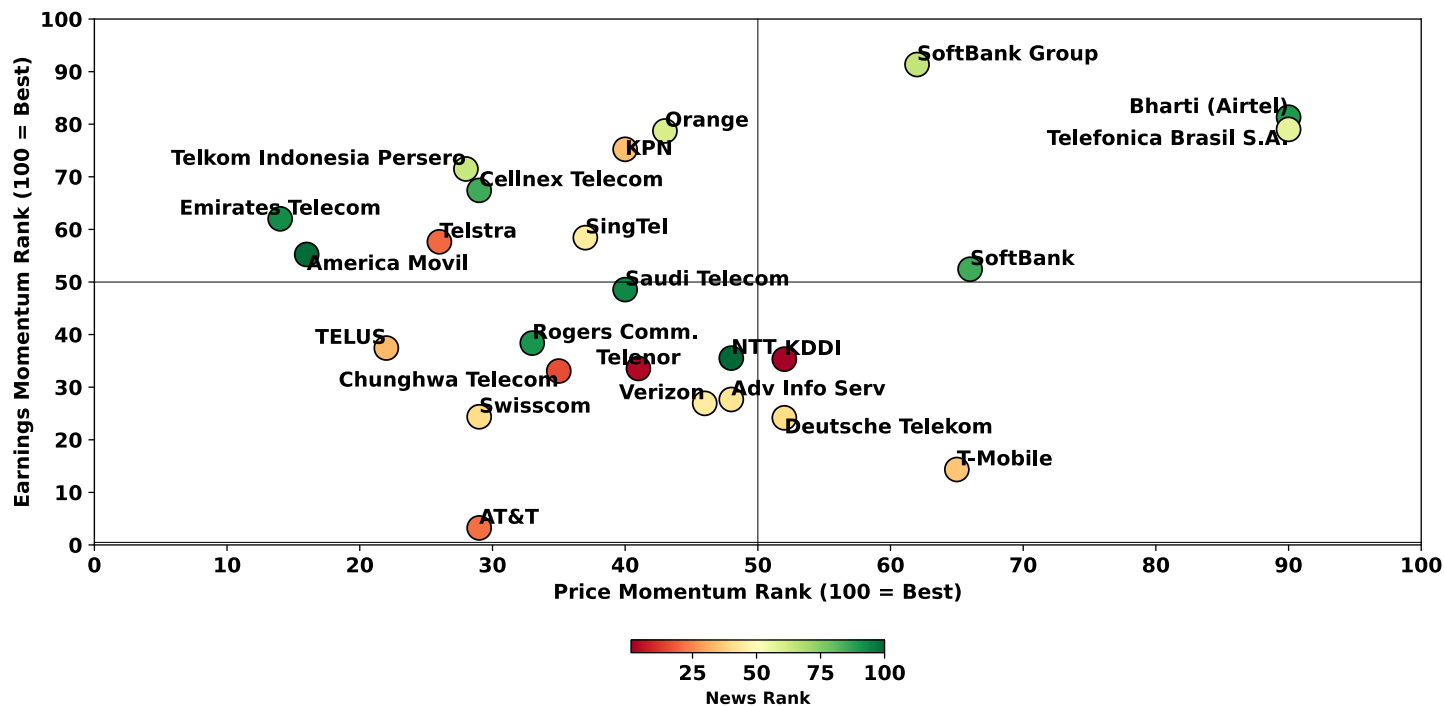


Source : BofA Global Quantitative Strategy, MSCI, IBES, FactSet, RavenPack

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**Chart 97: Telecom: Earnings Momentum (vertical axis), Price Momentum (horizontal axis), News Momentum (colour)**

Triple Momentum is most positive for Bharti (Airtel), SoftBank and Telefonica Brasil S.A.

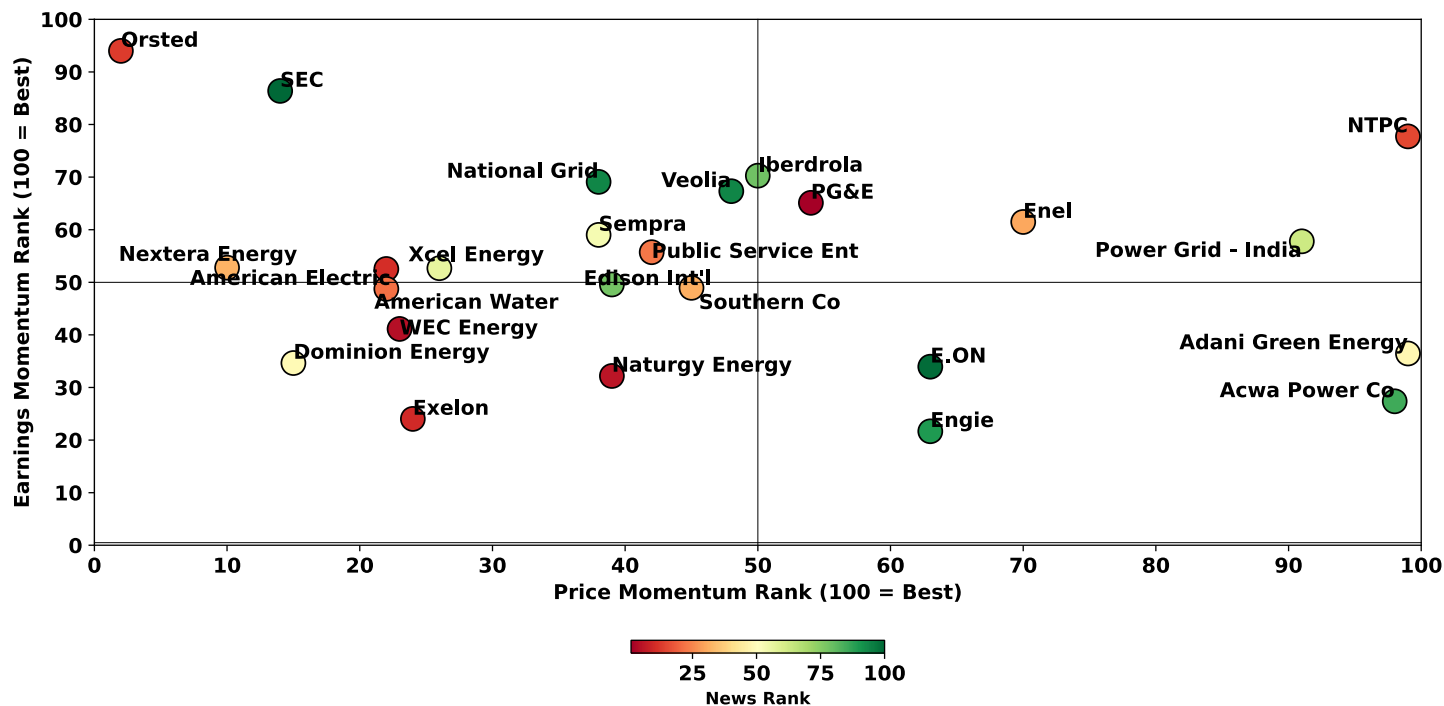


Source : BofA Global Quantitative Strategy, MSCI, IBES, FactSet, RavenPack

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

Triple Momentum is most positive for Power Grid - India



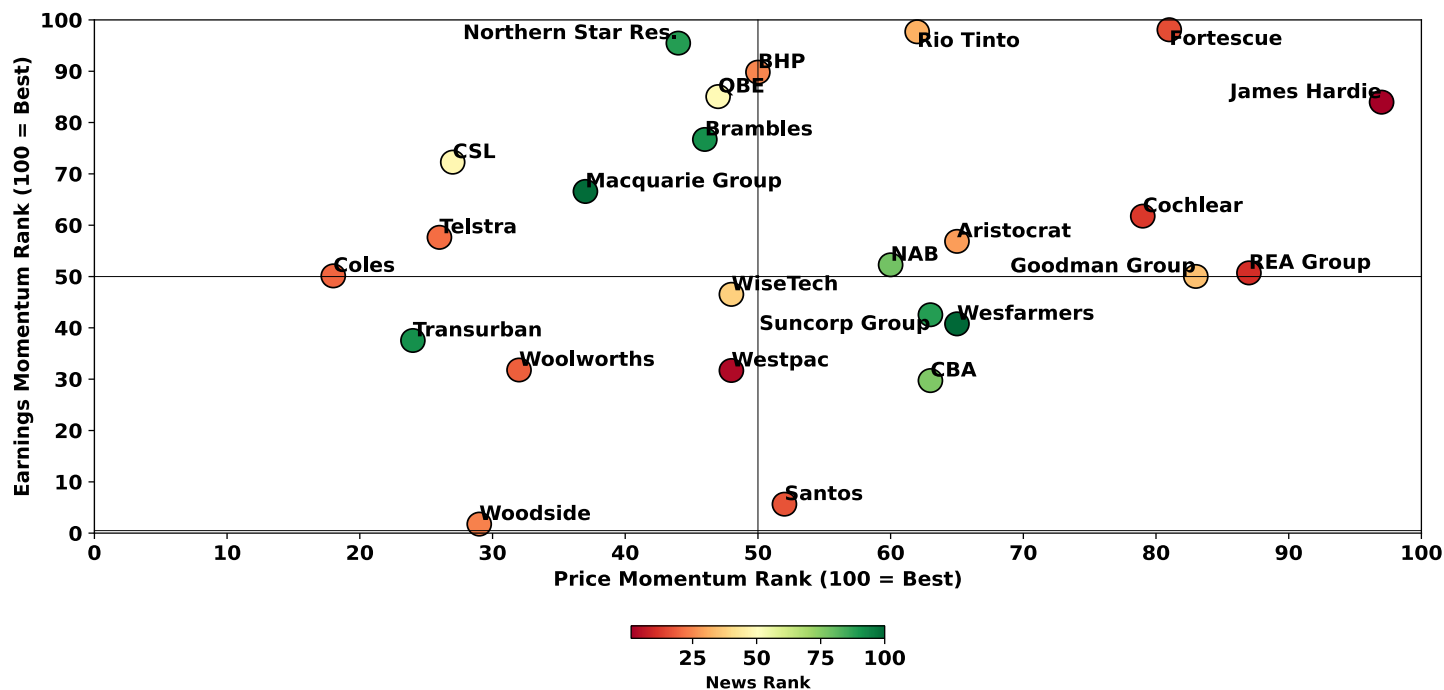
Source : BofA Global Quantitative Strategy, MSCI, IBES, FactSet, RavenPack

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## Countries: Triple Momentum Charts

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

Triple Momentum is most positive for NAB

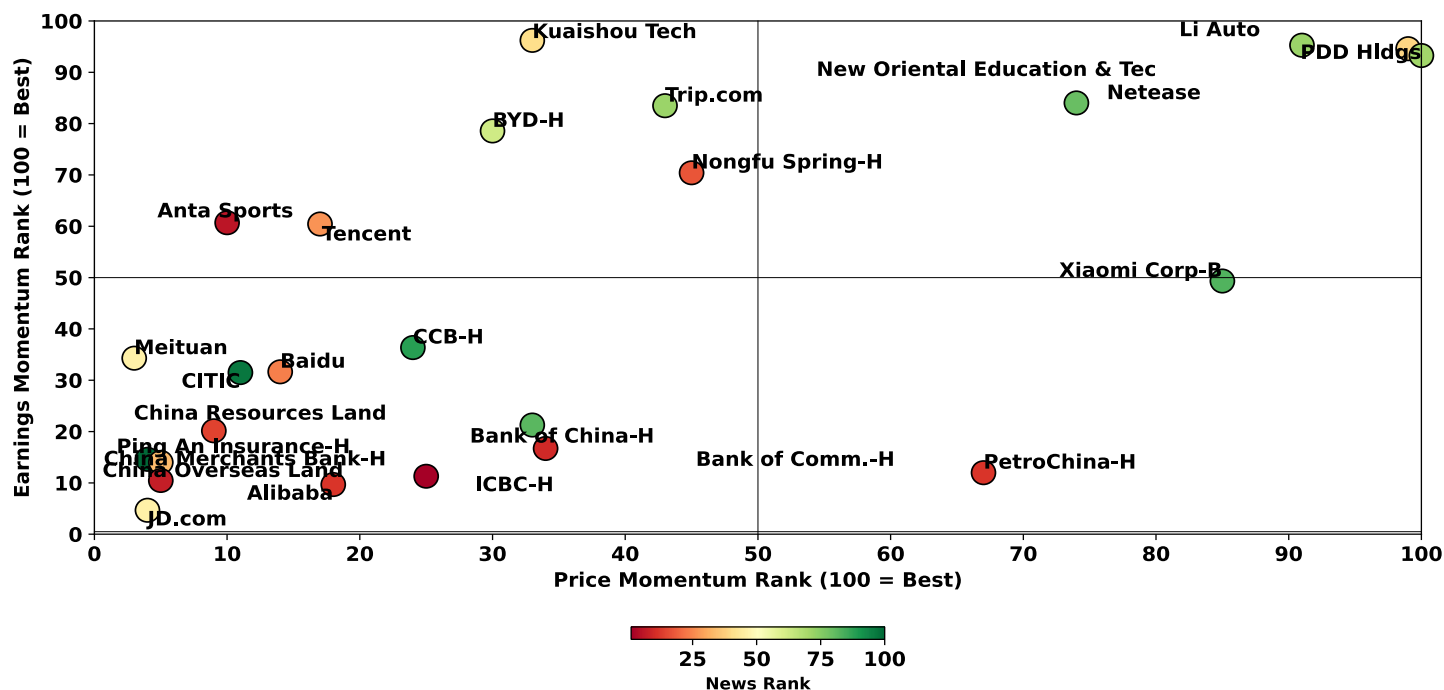


Source : BofA Global Quantitative Strategy, MSCI, IBES, FactSet, RavenPack

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

Triple Momentum is most positive for Netease, New Oriental Education & Tec and Li Auto

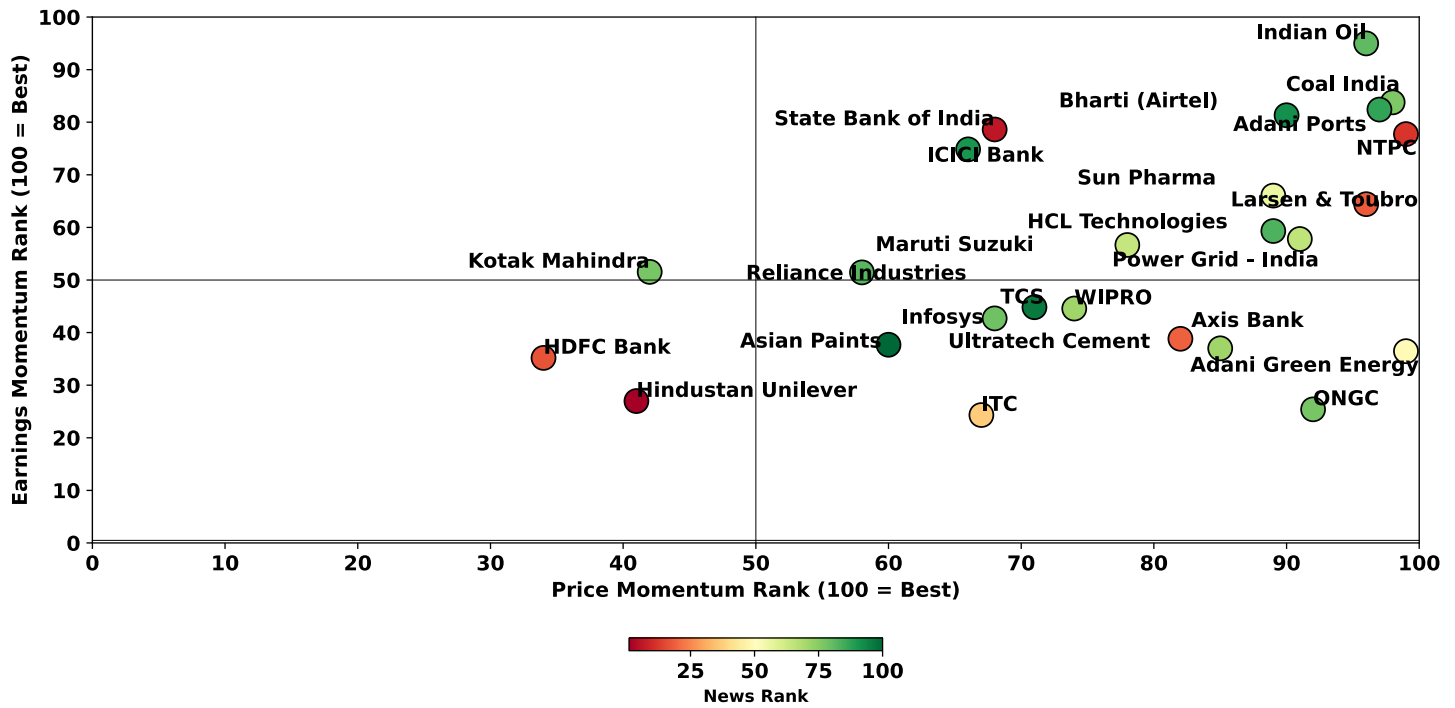


Source : BofA Global Quantitative Strategy, MSCI, IBES, FactSet, RavenPack

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**Chart 101: India: Earnings Momentum (vertical axis), Price Momentum (horizontal axis), News Momentum (colour)**

Triple Momentum is most positive for Adani Ports, Bharti (Airtel) and Indian Oil



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

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## Global Triple Momentum screens

**Table 6: 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)
Bluescope Steel	BSL AU	Australia	Materials	6,436	23.8
Innovent Biologics	1801 HK	China	Health Care	7,415	52.0
AAC Tech	2018 HK	China	Tech Hardware	2,721	16.5
Novo Nordisk	NOVOB DC	Denmark	Health Care	413,462	291.9
Credit Agricole	ACA FP	France	Banks	40,206	59.2
MunichRe	MUV2 GR	Germany	Insurance	58,984	111.3
Chinasoft Int'l	354 HK	Hong Kong	Software	1,769	13.8
Lupin	LPC IN	India	Health Care	8,893	18.2
Adani Ports	ADSEZ IN	India	Industrials	32,348	82.1
Interglobe Aviation	INDIGO IN	India	Industrials	14,431	33.0
Jindal Steel	JSP IN	India	Materials	9,355	18.0
Macrotech Developers	LODHA IN	India	Real Estate	12,646	16.2
Bharti (Airtel)	BHARTI IN	India	Telecom	75,789	62.4
Gail India	GAIL IN	India	Utilities	13,707	35.8
Tata Power	TPWR IN	India	Utilities	15,089	61.3
Mitsubishi UFJ	8306 JP	Japan	Banks	117,764	618.0
McDonald's (JP)	2702 JP	Japan	Cons. Discretionary	6,019	19.0
MHI	7011 JP	Japan	Industrials	23,101	230.7
Nippon Yusen	9101 JP	Japan	Industrials	15,699	202.9
Advantest	6857 JP	Japan	Semiconductors	33,591	396.2
Lasertec	6920 JP	Japan	Semiconductors	25,257	2263.6
Cemex SAB	CEMEXCPO MM	Mexico	Materials	11,648	35.0
Exor Nv	EXO NA	Netherlands	Div Financials	23,978	15.0
Aegon	AGN NA	Netherlands	Insurance	11,757	34.0
Budimex	BDX PW	Poland	Industrials	4,380	5.7
Sembcorp Ind	SCI SP	Singapore	Utilities	7,276	19.7
Standard Bank	SBK SJ	South Africa	Banks	17,517	29.9
Shinhan Financial	055550 KS	South Korea	Banks	17,135	24.6
Hanwha Aerospace	012450 KS	South Korea	Industrials	5,138	43.8
BBVA	BBVA SM	Spain	Banks	58,890	107.9
Sandoz	SDZ SW	Switzerland	Health Care	13,634	67.9
Asustek	2357 TT	Taiwan	Tech Hardware	10,706	73.3
Compal	2324 TT	Taiwan	Tech Hardware	5,045	45.3
Gigabyte Tech	2376 TT	Taiwan	Tech Hardware	6,832	221.0
Largan Precision	3008 TT	Taiwan	Tech Hardware	10,023	59.0
Wistron	3231 TT	Taiwan	Tech Hardware	11,513	347.5
Wiwynn	6669 TT	Taiwan	Tech Hardware	12,629	158.2
Emaar Properties	EMAAR UH	UAE	Real Estate	18,530	25.1
3i Group	III LN	United Kingdom	Div Financials	29,686	35.1
Rolls-Royce	RR/ LN	United Kingdom	Industrials	33,826	51.5
KKR	KKR US	United States	Div Financials	85,832	234.9
Uber	UBER US	United States	Industrials	144,906	1316.4
Allstate	ALL US	United States	Insurance	41,860	201.0
UiPath - Class A	PATH US	United States	Software	12,761	167.0

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

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**Table 7: 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)
IGO	IGO AU	Australia	Materials	3,531	36.6
Mineral Resources	MIN AU	Australia	Materials	7,267	44.3
Pilbara Minerals	PLS AU	Australia	Materials	7,123	99.1
OMV AG	OMV AV	Austria	Energy	13,919	14.3
Umicore	UMI BB	Belgium	Materials	5,427	11.0
First Quantum	FM CN	Canada	Materials	6,211	64.1
Pan American Silver	PAAS CN	Canada	Materials	4,735	13.4
China Feihe	6186 HK	China	Cons. Staples	4,255	7.8
Haitong Securities-H	6837 HK	China	Div Financials	1,578	3.9
Shandong Weigao-H	1066 HK	China	Health Care	2,758	7.0
China Pacific Insurance-H	2601 HK	China	Insurance	5,358	24.0
Anhui Conch-H	914 HK	China	Materials	2,622	12.8
China Overseas Land	688 HK	China	Real Estate	15,896	32.2
China Vanke-H	2202 HK	China	Real Estate	1,653	21.8
Longfor	960 HK	China	Real Estate	7,189	34.8
Yuexiu Property	123 HK	China	Real Estate	2,583	9.0
Sunny Optical	2382 HK	China	Tech Hardware	6,752	61.1
China Gas	384 HK	China	Utilities	4,705	6.8
Guangdong Invest.	270 HK	China	Utilities	3,569	7.7
Bayer	BAYN GR	Germany	Health Care	29,444	139.4
BOC HK	2388 HK	Hong Kong	Banks	25,250	20.9
Hang Lung Prop	101 HK	Hong Kong	Real Estate	4,786	7.3
UPL	UPLL IN	India	Materials	4,140	18.4
Aneka Tambang	ANTM IJ	Indonesia	Materials	2,167	4.4
Bank of Ireland	BIRG ID	Ireland	Banks	9,376	15.2
ICL	ICL IT	Israel	Materials	5,807	9.9
Diasorin	DIA IM	Italy	Health Care	5,248	15.8
ABN AMRO Bank	ABN NA	Netherlands	Banks	12,212	45.2
Randstad	RAND NA	Netherlands	Industrials	10,410	18.4
Saudi Kayan Petro	KAYAN AB	Saudi Arabia	Materials	3,588	5.9
Anglo Platinum	AMS SJ	South Africa	Materials	9,560	13.4
Sibanye Stillwater	SSW SJ	South Africa	Materials	2,932	20.6
Kakaopay	377300 KS	South Korea	Div Financials	4,821	9.7
L&F	066970 KS	South Korea	Industrials	3,856	91.5
NCSOFT	036570 KS	South Korea	Media & Ent.	3,380	24.3
Acciona SA	ANA SM	Spain	Utilities	6,506	12.9
Julius Baer	BAER SW	Switzerland	Div Financials	10,936	31.7
Clariant	CLN SW	Switzerland	Materials	4,105	10.6
SIG Group	SIGN SW	Switzerland	Materials	7,562	17.6
Burberry	BRBY LN	United Kingdom	Cons. Discretionary	5,836	24.3
Archer Daniels	ADM US	United States	Cons. Staples	28,440	267.5
APA Corp	APA US	United States	Energy	9,178	159.3
Humana	HUM US	United States	Health Care	45,880	674.2
Pfizer	PFE US	United States	Health Care	155,603	1079.8
UPS	UPS US	United States	Industrials	105,786	568.8

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

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## Asia Pace ex-Japan Triple Momentum screens

**Table 8: 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)
Bluescope Steel	BSL AU	Australia	Materials	6,436	23.8
Northern Star Res.	NST AU	Australia	Materials	9,936	39.5
AAC Tech	2018 HK	China	Tech Hardware	2,721	16.5
CGN Power-H	1816 HK	China	Utilities	3,183	8.5
China Power	2380 HK	China	Utilities	4,839	12.0
Akeso	9926 HK	Hong Kong	Health Care	4,392	23.6
Trent	TRENT IN	India	Cons. Discretionary	16,096	21.2
Indian Oil	IOCL IN	India	Energy	31,038	32.4
Lupin	LPC IN	India	Health Care	8,893	18.2
Adani Ports	ADSEZ IN	India	Industrials	32,348	82.1
Interglobe Aviation	INDIGO IN	India	Industrials	14,431	33.0
Jindal Steel	JSP IN	India	Materials	9,355	18.0
Macrotech Developers	LODHA IN	India	Real Estate	12,646	16.2
Bharti (Airtel)	BHARTI IN	India	Telecom	75,789	62.4
Gail India	GAIL IN	India	Utilities	13,707	35.8
Tata Power	TPWR IN	India	Utilities	15,089	61.3
Genting	GENT MK	Malaysia	Cons. Discretionary	3,987	4.2
Ayala Corp	AC PM	Philippines	Industrials	7,759	3.1
Sembcorp Ind	SCI SP	Singapore	Utilities	7,276	19.7
Shinhan Financial	055550 KS	South Korea	Banks	17,135	24.6
Coway	021240 KS	South Korea	Cons. Discretionary	3,445	6.0
Hanwha Aerospace	012450 KS	South Korea	Industrials	5,138	43.8
Korea Aerospace	047810 KS	South Korea	Industrials	3,603	18.5
Krafton	259960 KS	South Korea	Media & Ent.	7,792	17.5
Acer	2353 TT	Taiwan	Tech Hardware	4,500	55.2
Asustek	2357 TT	Taiwan	Tech Hardware	10,706	73.3
Compal	2324 TT	Taiwan	Tech Hardware	5,045	45.3
Largan Precision	3008 TT	Taiwan	Tech Hardware	10,023	59.0
Wiiwynn	6669 TT	Taiwan	Tech Hardware	12,629	158.2
Thai Oil	TOP TB	Thailand	Energy	3,516	16.3

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

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**Table 9: 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)
IGO	IGO AU	Australia	Materials	3,531	36.6
Mineral Resources	MIN AU	Australia	Materials	7,267	44.3
Pilbara Minerals	PLS AU	Australia	Materials	7,123	99.1
China Minsheng Bank-H	1988 HK	China	Banks	2,755	4.2
East Buy	1797 HK	China	Cons. Discretionary	3,029	48.8
China Feihe	6186 HK	China	Cons. Staples	4,255	7.8
Haitong Securities-H	6837 HK	China	Div Financials	1,578	3.9
Shandong Weigao-H	1066 HK	China	Health Care	2,758	7.0
WuXi Biologics	2269 HK	China	Health Care	9,414	135.5
China Pacific Insurance-H	2601 HK	China	Insurance	5,358	24.0
Anhui Conch-H	914 HK	China	Materials	2,622	12.8
China Overseas Land	688 HK	China	Real Estate	15,896	32.2
China Vanke-H	2202 HK	China	Real Estate	1,653	21.8
Longfor	960 HK	China	Real Estate	7,189	34.8
Yuexiu Property	123 HK	China	Real Estate	2,583	9.0
Flat Glass-H	6865 HK	China	Semiconductors	801	10.4
Sunny Optical	2382 HK	China	Tech Hardware	6,752	61.1
China Gas	384 HK	China	Utilities	4,705	6.8
Guangdong Invest.	270 HK	China	Utilities	3,569	7.7
BOC HK	2388 HK	Hong Kong	Banks	25,250	20.9
Hang Lung Prop	101 HK	Hong Kong	Real Estate	4,786	7.3
UPL	UPLL IN	India	Materials	4,140	18.4
Aneka Tambang	ANTM IJ	Indonesia	Materials	2,167	4.4
SK Bioscience	302440 KS	South Korea	Health Care	3,752	7.9
Hyundai Mipo	010620 KS	South Korea	Industrials	2,027	8.7
L&F	066970 KS	South Korea	Industrials	3,856	91.5
NCSOFT	036570 KS	South Korea	Media & Ent.	3,380	24.3
Samsung SDI	006400 KS	South Korea	Tech Hardware	19,932	107.1
Formosa Petro	6505 TT	Taiwan	Energy	22,571	4.6
Central Retail	CRC TB	Thailand	Cons. Discretionary	5,628	12.4

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 <sup>R1</sup>
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Neutral	≥ 0%	≤ 30%
Underperform	N/A	≥ 20%

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